Decentralized Autonomous Organizations
and Organizational Approaches

Christian Ziegler, M.Sc.
Blockchain Salon, 12.05.2023
1. What is a DAO
2. Industry examples
**What are DAOs?**

**Decentralized**
- Based on a public Blockchain
- Decentralized on infrastructure level
- Decentralized on application level

**Organizations**
- Updates on code through democratic voting
- Smart contract code at the core
- Code is open source
- Storage of value
- Transaction of value
- Rewards externals for work

**Autonomous**
- Autonomous Decision making
- Autonomous execution
- Has Notary
- Predetermined voting rules
- Transparency

Source of Content: Own creation [Isabell Welpe, Christian Ziegler]
Industry Examples of DAOs

Source of Image and Content: [Logos respective DAOs, Christian Ziegler]
Industry Examples of DAOs
MakerDAO

- has decentralized governance
- Governs Dai, a decentralized stablecoin.
MakerDAO

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Source of Content: Own creation [Isabell Welpe, Christian Ziegler]
Recap: Stablecoins
Arbitrage behavior around USDC

1. Mint $1 worth of USDC from Circle by turning in USD.
2. Sell USDC on the open market above peg.
3. Claim $1 worth of USD from Circle.
4. Pocket the difference between mint and purchase price.
5. Buy USDC below peg.

Source of Image and Content: https://research.thetie.io/the-terra-triforce-rise-of-the-lunatics/
Recap: Stablecoins - DAI

$1\Theta = 1\$$

* Except when it's not

Source of Image [MakerDAO], Source of Content: [MakerDAO & Christian Ziegler]
Built on Ethereum
Anyone with a crypto wallet can generate DAI and use the system
Maker is permissionless by design
Vaults - Generating DAI

A Vault Is a Tool That Lets the Owner Deposit Collateral and Generate Dai

Source of Image: [MakerDAO], Source of Content: [MakerDAO & Christian Ziegler]
Configuring the Vault

- **Deposit** of 20 Eth (Assume 1 Eth = 1732$ | total: 34646$)
- **Liquidation** is at 0$ since no DAI is borrowed
- **Withdrawal** until 20 ETH
- **Generation** of 19,248.23 DAI with this Vault
- **Collateral** is 180%
  - For every 1 DAI you borrow, you need 1.8 DAI in Securities
  - If you fail to hold this margin, you get liquidated
Liquidations

Automated Maker Protocol auctions intended to ensure there is always more collateral covering all outstanding debt.

A liquidation is triggered when a vault becomes undercollateralized.

Flip - Undercollateralized Vault auctions

Flop - Sell MKR to cover system bad debt / recapitalize system

Flap - System surplus auctions. Buy MKR and burn with surplus Dai.
Keeping DAI Stable

PSM: Swap collateral directly for DAI at a fixed rate
DSR: Earn interest on locked DAI

Source of Image: [MakerDAO, Coinmarketcap]. Source of Content: [MakerDAO & Christian Ziegler]]
### How MKR plays into this – Initial Sales

<table>
<thead>
<tr>
<th>Secondary Token Sale</th>
<th>Value</th>
<th>Date</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$12.00M</td>
<td>Dec 2017</td>
<td>Private</td>
</tr>
<tr>
<td>12/15/2017 - 12/15/2017</td>
<td>$300 per MKR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included in the private round was Andreessen Horowitz and Polychain Capital joined by Distributed Capital Partners, Scanate, FBG Capital, Wyre Capital, Walden Bridge Capital, and 1confirmation</td>
<td></td>
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</tbody>
</table>

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</tr>
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<tbody>
<tr>
<td></td>
<td>$15.00M</td>
<td>Sep 2018</td>
<td>Private</td>
</tr>
<tr>
<td>09/24/2018 - 09/24/2018</td>
<td>60.00K MKR Allocated</td>
<td>$250 per MKR</td>
<td></td>
</tr>
<tr>
<td>The token sale was direct to a16z Crypto</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Secondary Token Sale</th>
<th>Value</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$27.50M</td>
<td>Dec 2019</td>
<td>Private</td>
</tr>
<tr>
<td>12/19/2019 - 12/19/2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tokens were sold to Paradigm and Dragonfly Capital in order to help expand into Asian markets.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source of Content: [Messari](https://messari.io/asset/maker/profile/launch-and-initial-token-distribution)
How MKR plays into this - Tokenomics

Launch Style: Centralized Distribution  
Distribution Date: 11/25/2017  
Initial Supply: 1,000,000

MakerDAO Governance

Source of Image [MakerDAO], Source of Content: [MakerDAO & Christian Ziegler]
MKR Tokenomics

Good governance by MKR holders is rewarded with:

- MKR tokens buy back from surplus buffer
- MKR token price increase

Surplus achieved with…

- Stability Fee
- Liquidation Penalties
- Auctions
# MIPs Portal

## MIPs List

<table>
<thead>
<tr>
<th>#</th>
<th>TITLE</th>
<th>SUMMARY</th>
<th>STATUS</th>
<th>LINKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>Liquid AAA Structured Credit &amp; Money Ma...</td>
<td>MIP90 will (i) onboard and activate a DAI 500MM RWA vault for the purpose of acquiring US...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>Monetalis - Arrow Andalusian</td>
<td>MIP89 will onboard and activate a DAI 300M RWA vault and acquire BlackRock/Invesco ETF...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>Monetalis - Redwood Friesian</td>
<td>MIP88 will (i) onboard and activate a DAI 225M RWA vault for the purpose of acquiring USDC...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>bUSD Decentralized Rewards</td>
<td>MIP87 will enable MakerDAO to deploy 100M of Maker's idle USDC into the Origin Dollar (bUS...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>CoinShares USDC Institutional Rewards</td>
<td>MIP86 will establish a secured and flexible first collaboration between CoinShares and Maker...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>Activate Protocol-Owned Vault Emulation</td>
<td>This MP activates the preliminary implementation of the Protocol-Owned Vault...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Recognized Launch MetaDAO Clusters</td>
<td>MIP83 is a part of the Endgame Plan Approval MIP Set that configures the Clusters of the MetaDAO...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>Monetalis/Coinbase Appaloosa</td>
<td>MIP82 will onboard and activate a DAI 500M RWA vault for the purpose of acquiring USDC vi...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>Coinbase USDC Institutional Rewards</td>
<td>MIP81 will onboard an account representing MakerDAO to Coinbase Prime and transfer 33%...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>The MKR Compensation Guidelines</td>
<td>MIP80 describes how MKR will be used to recruit, retain and align interest in the Maker comm...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>MIP76: MakerDAO Redux</td>
<td>Makership Redux is a 15M pool allocated across Liquidity Pools to support DAI liquidity UTIL...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Permissionless Open Market Operations</td>
<td>MIP74 defines the process used to agree and action Permissionless Open Market Operation...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>RWA - Delegated Collateral Attachment</td>
<td>MIP72 authorizes 6is Capital as a Real World Asset Arranger for MakerDAO to cause comm...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Check a Proposal yourself!

https://mips.makerdao.com/mips/details/MIP84#MIP84c12

Source of Image [MakerDAO], Source of Content: [MakerDAO & Christian Ziegler]
Voting and Ratification

https://vote.makerdao.com/polling/QmTmS5Nf

Source of Image: [MakerDAO], Source of Content: [MakerDAO & Christian Ziegler]
### Voting by Address

https://vote.makerdao.com/polling/QmTmS5Nf

<table>
<thead>
<tr>
<th>ADDRESS</th>
<th>OPTION</th>
<th>VOTE %</th>
<th>MKR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shadow Delegate</td>
<td>Yes</td>
<td>27.3%</td>
<td>38,758 MKR</td>
</tr>
<tr>
<td>Flip Flop Flap Delegate LLC</td>
<td>Yes</td>
<td>11.7%</td>
<td>16,577 MKR</td>
</tr>
<tr>
<td>0x05e79...6019</td>
<td>No</td>
<td>10.7%</td>
<td>15,160 MKR</td>
</tr>
<tr>
<td>StableNode</td>
<td>Yes</td>
<td>9.2%</td>
<td>13,084 MKR</td>
</tr>
<tr>
<td>schuppi</td>
<td>Yes</td>
<td>8.1%</td>
<td>11,482 MKR</td>
</tr>
<tr>
<td>Flipside Governance</td>
<td>Yes</td>
<td>6.4%</td>
<td>9,017 MKR</td>
</tr>
<tr>
<td>Feedblack Loops LLC</td>
<td>Yes</td>
<td>5.8%</td>
<td>8,268 MKR</td>
</tr>
<tr>
<td>Penn Blockchain</td>
<td>Yes</td>
<td>5.3%</td>
<td>7,489 MKR</td>
</tr>
<tr>
<td>mthonkasalo &amp; teemulau</td>
<td>Yes</td>
<td>4.7%</td>
<td>6,640 MKR</td>
</tr>
<tr>
<td>Hasu</td>
<td>No</td>
<td>4.3%</td>
<td>6,103 MKR</td>
</tr>
<tr>
<td>ACREinvest</td>
<td>No</td>
<td>2.2%</td>
<td>3,100 MKR</td>
</tr>
<tr>
<td>Blockchain@Columbia</td>
<td>No</td>
<td>1.3%</td>
<td>1,813 MKR</td>
</tr>
<tr>
<td>ChicagoDAO</td>
<td>Yes</td>
<td>1.1%</td>
<td>1,500 MKR</td>
</tr>
</tbody>
</table>

![Maker DAO Token](image)

*Source of Image [MakerDAO], Source of Content: [MakerDAO & Christian Ziegler]*

\[38758 \times 903 = 35M€\]
Ending it
https://vote.makerdao.com/esmodule

Emergency Shutdown Module
The ESM allows MKR holders to shutdown the system without a central authority. Once 150,000 MKR are entered into the ESM, emergency shutdown can be executed. Read the documentation here.

Total MKR Burned
0.00052 of 150,000 MKR

No Account Connected You have no MKR in the ESM
ONE NOUN, EVERY DAY, FOREVER.
**NounsDAO**

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Source of Content: Own creation [Isabell Welpe, Christian Ziegler]
Nouns Auction

Noun 501

Current bid: ₿ 29.00
Auction ends in: 2h 57m 18s

Help mint the next Noun

Place bid

₿ 29.58 or more

degenbird.eth ₿ 29.00

justtheflamingo.eth ₿ 0.06

View all bids
## Nouns Governance

<table>
<thead>
<tr>
<th>Treasury</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>29,625</td>
<td>$47,988,349.00</td>
</tr>
</tbody>
</table>

This treasury exists for Nouns DAO participants to allocate resources for the long-term growth and prosperity of the Nouns project.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nouns x MrBeast</td>
<td>Pending</td>
</tr>
<tr>
<td>Nouns Builder Protocol</td>
<td>Active</td>
</tr>
<tr>
<td>NounsOTG x Stoopid Buddy x Rose Parade</td>
<td>Queued</td>
</tr>
<tr>
<td>Nouns x Never Sit Still</td>
<td>Defeated</td>
</tr>
<tr>
<td>NFT Fest Australia</td>
<td>Executed</td>
</tr>
</tbody>
</table>

## Preliminary Discussions

https://discourse.nouns.wtf/

<table>
<thead>
<tr>
<th>Topic</th>
<th>Replies</th>
<th>Views</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎤 Welcome to Discourse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hello and welcome to the Nouns Discourse! Here you'll find longer form discussions and proposals from around the Nouns ecosystem. The NounsDAO will use this place to discuss proposals, proposal members discuss drafts and... read more</td>
<td>1</td>
<td>3.1k</td>
<td>Sep '21</td>
</tr>
<tr>
<td>NSFW: DinoNouns</td>
<td>Interactive On-chain NFT</td>
<td>8</td>
<td>474</td>
</tr>
<tr>
<td>Small Grants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explorer Grants Trial - 2nd Draft</td>
<td></td>
<td></td>
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<tr>
<td>Proposal: Pod Production</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>NounsDAO Proposals</td>
<td></td>
<td></td>
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<tr>
<td>NSFW: Nouns Archive Center</td>
<td></td>
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<tr>
<td>Small Grants</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Looking at helping Obasi John a delegate attend COP27, also to advise soft and bridge solutions (EEPI, Mooletech and Carbonclean systems.com as well as End electro-agriculture and brine shrimp to sequester carbon, increase productivity and provide feedstock</td>
<td>4</td>
<td>33</td>
<td>1d</td>
</tr>
<tr>
<td>NounsDAO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Grants: NounsDAO Chinese</td>
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<tr>
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<tr>
<td>NounsDAO x Meowki</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Nouns Voting

Proposal 162 - Executed

Nouns Fair @ ETHSanFrancisco
Proposed by noun22 - 62 at 0xb95ac

Switch to delegate view

For 168

Against 0

Abstain 0

Threshold 48 votes

Current Quorum

Ended 11:17 AM GMT+2
October 26, 2022

Snapshot

Taken at block 15797966

Other notable DAOs

**Uniswap**
- Governs the Uniswap DEX
- Distributes Grants

**Aave**
- Governs the Aave Lending Protocol
- Distributes Grants

**Gitcoin**
- Community for Builders
- Distributes Grants

**EduDAO**
- Distributes Funds to Universities
- Connects University Groups

**GenesysGo**
- Host Solana RPC Infrastructure
- Is an Infrastructure DAO

**Friends with Benefits**
- Exclusive Community of Individuals
- Entry requires application and a token stake

Source of Images [Respective DAOs] - Source of Content: [Christian Ziegler from their Websites]
We are PretzelDAO – a community of builders baked in Munich at home in Web3.
PretzelDAO

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