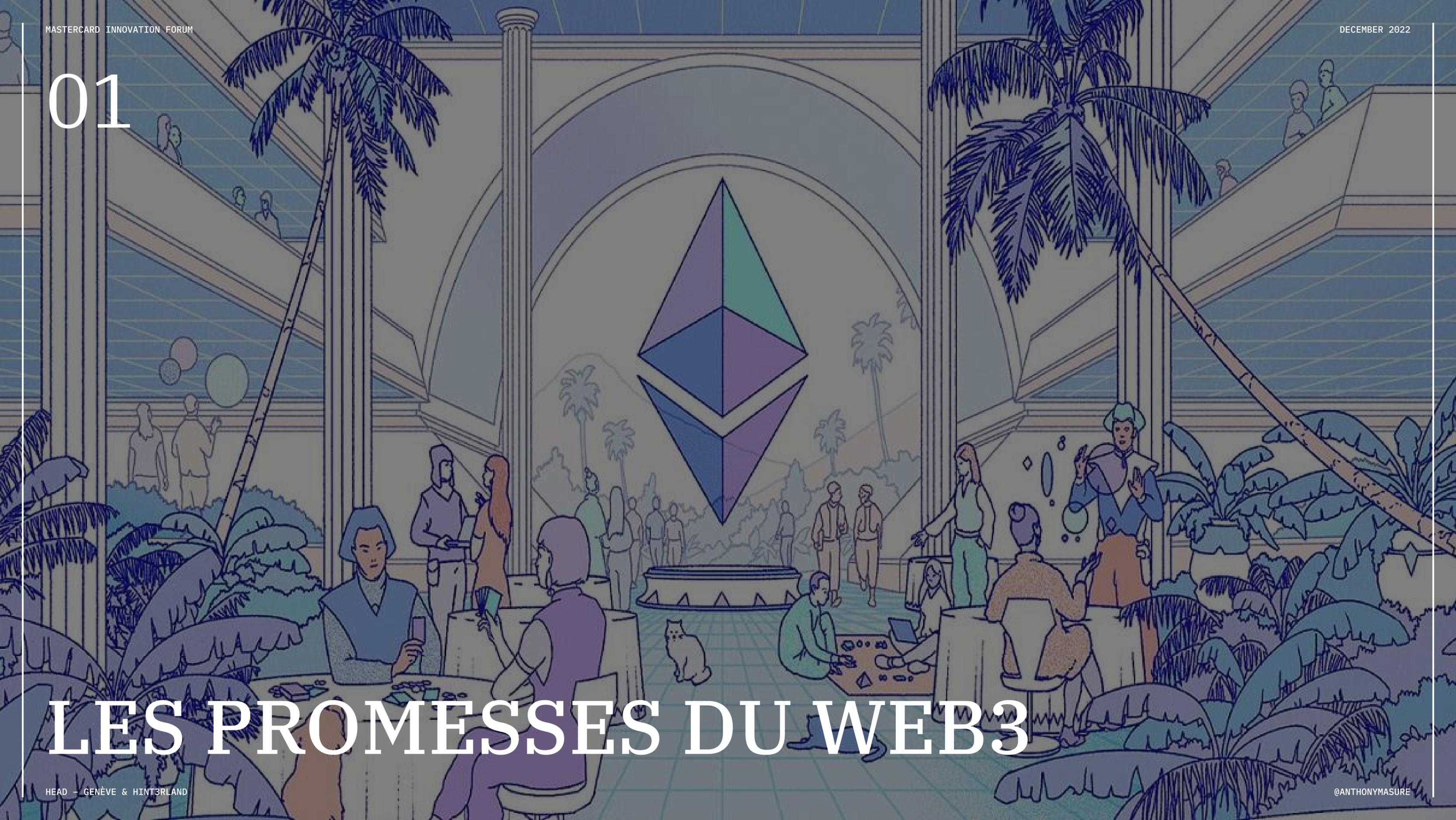


**Anthony Masure** | Responsable de la recherche à la HEAD – Genève, cofondateur du studio Hint3rland  
Mastercard Innovation Forum, 8 décembre 2022

# VERS DES ORGANISATIONS DÉCENTRALISÉES ET COLLABORATIVES

01

# LES PROMESSES DU WEB3



# DU WEB 1.0 AU WEB3

Au fil des années, le Web 2.0 (2005) a concentré la valeur produite par les internautes et leurs données personnelles.

Le Web3 renoue ainsi avec l'idéal de décentralisation du premier Web (1989) et pourrait modifier en profondeur les modèles économiques du numérique.



Web 1.0 : **CONSULTER**  
Économie de l'information



Web 2.0 : **CRÉER**  
Économie de l'échange



Web3 : **CONTRÔLER**  
Économie de la propriété



# BITCOIN (2008)

Bitcoin apparaît en 2008 comme une réponse aux crises bancaires avec une promesse d'émancipation et d'autogestion.

## Bitcoin: A Peer-to-Peer Electronic Cash System

Satoshi Nakamoto  
satoshin@gmx.com  
www.bitcoin.org

**Abstract.** A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.

### 1. Introduction

Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it still suffers from the inherent weaknesses of the trust based model. Completely non-reversible transactions are not really possible, since financial institutions cannot avoid mediating disputes. The cost of mediation increases transaction costs, limiting the minimum practical transaction size and cutting off the possibility for small casual transactions, and there is a broader cost in the loss of ability to make non-reversible payments for non-reversible services. With the possibility of reversal, the need for trust spreads. Merchants must be wary of their customers, hassling them for more information than they would otherwise need. A certain percentage of fraud is accepted as unavoidable. These costs and payment uncertainties can be avoided in person by using physical currency, but no mechanism exists to make payments over a communications channel without a trusted party.

What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud, and routine escrow mechanisms could easily be implemented to protect buyers. In this paper, we propose a solution to the double-spending problem using a peer-to-peer distributed timestamp server to generate computational proof of the chronological order of transactions. The system is secure as long as honest nodes collectively control more CPU power than any cooperating group of attacker nodes.

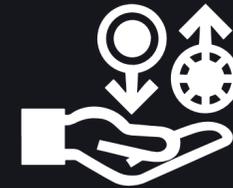
# ETHEREUM (2015)

Ethereum élargit les principes de Bitcoin pour passer d'une monnaie à un système de valeurs paramétrable.



## 01 **TOKENS**

Jetons multi-usages



## 02 **ICO**

Levées de fonds décentralisée



## 03 **SMART CONTRACTS**

Contrats programmés



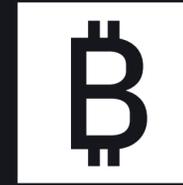
## 04 **DAPP**

Applications décentralisées



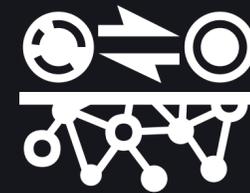
# WEB3 ROADMAP

Le Web3 propose un écosystème **TOUT-EN-UN** : un système monétaire (*Bitcoin*) au sein d'un système économique (*DeFi*) pour échanger des propriétés numériques (*NFT*). Le tout, géré par un nouveau système de gouvernance (*DAO*) par des identités numériques (*DID*).



## 01 CRYPTOMONNAIES

Système de valeur



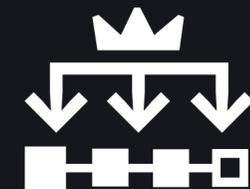
## 02 DEFI

Système d'économie



## 03 NFT

Système de propriété



## 04 DAO

Système de gouvernance



## 05 DID

Système d'identité

## *Conclusion*

Le Web3 propose un système de valeur paramétrable bien plus vaste que l'aspect monétaire

02



**BLOCKING**

\*\*\*\*\*



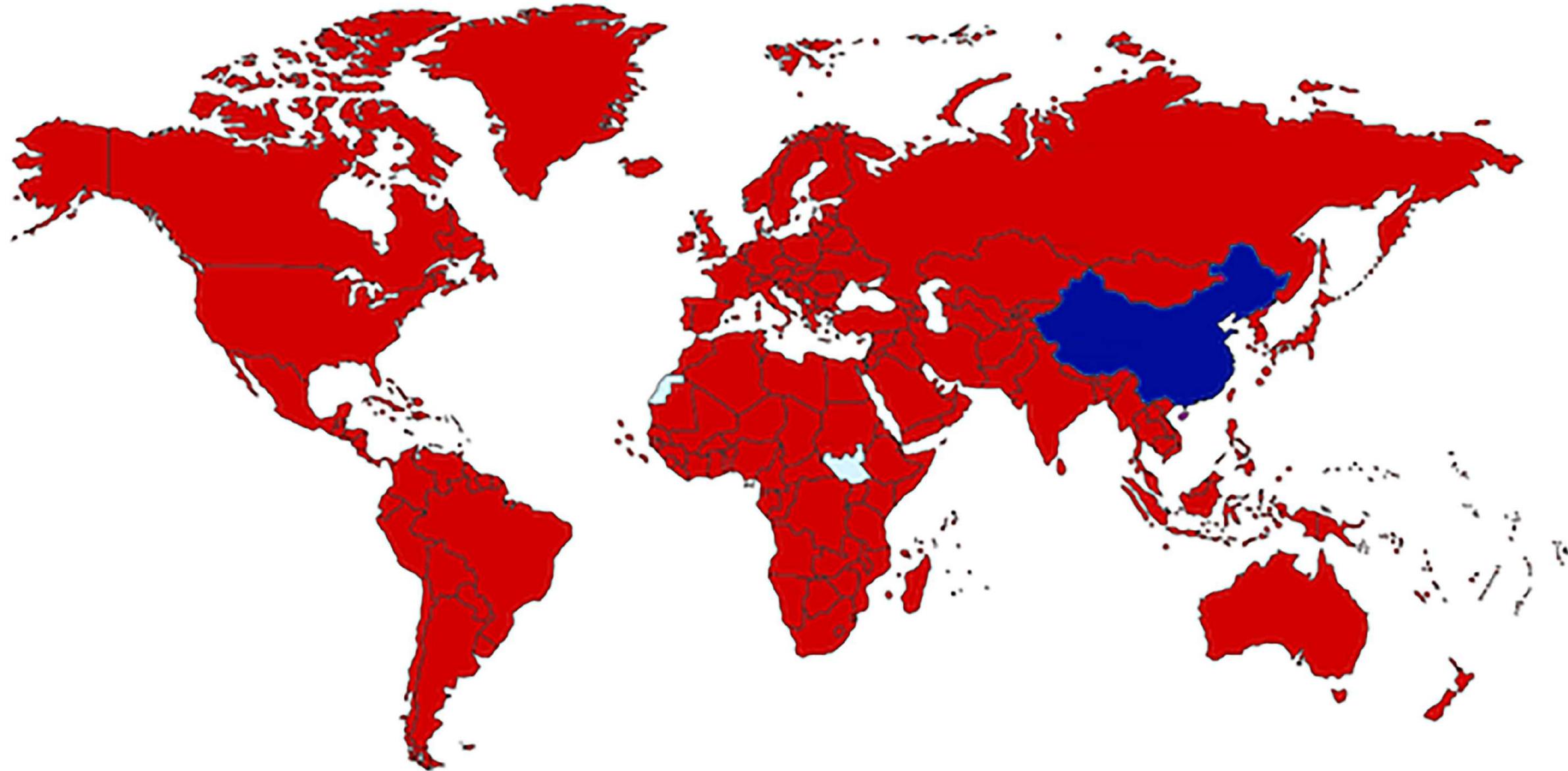
**BANNED**



# LA GOUVERNANCE EN PÉRIL



**Persistence des États-Nations**  
Mais un monde aux contours contextualisés



**Le nouvel ordre du virtuel : Google vs Baidu**  
Hégémonie politique du Web

*Conclusion*

Reprendre le pouvoir et le  
partager suivant des règles  
préalables et auditables

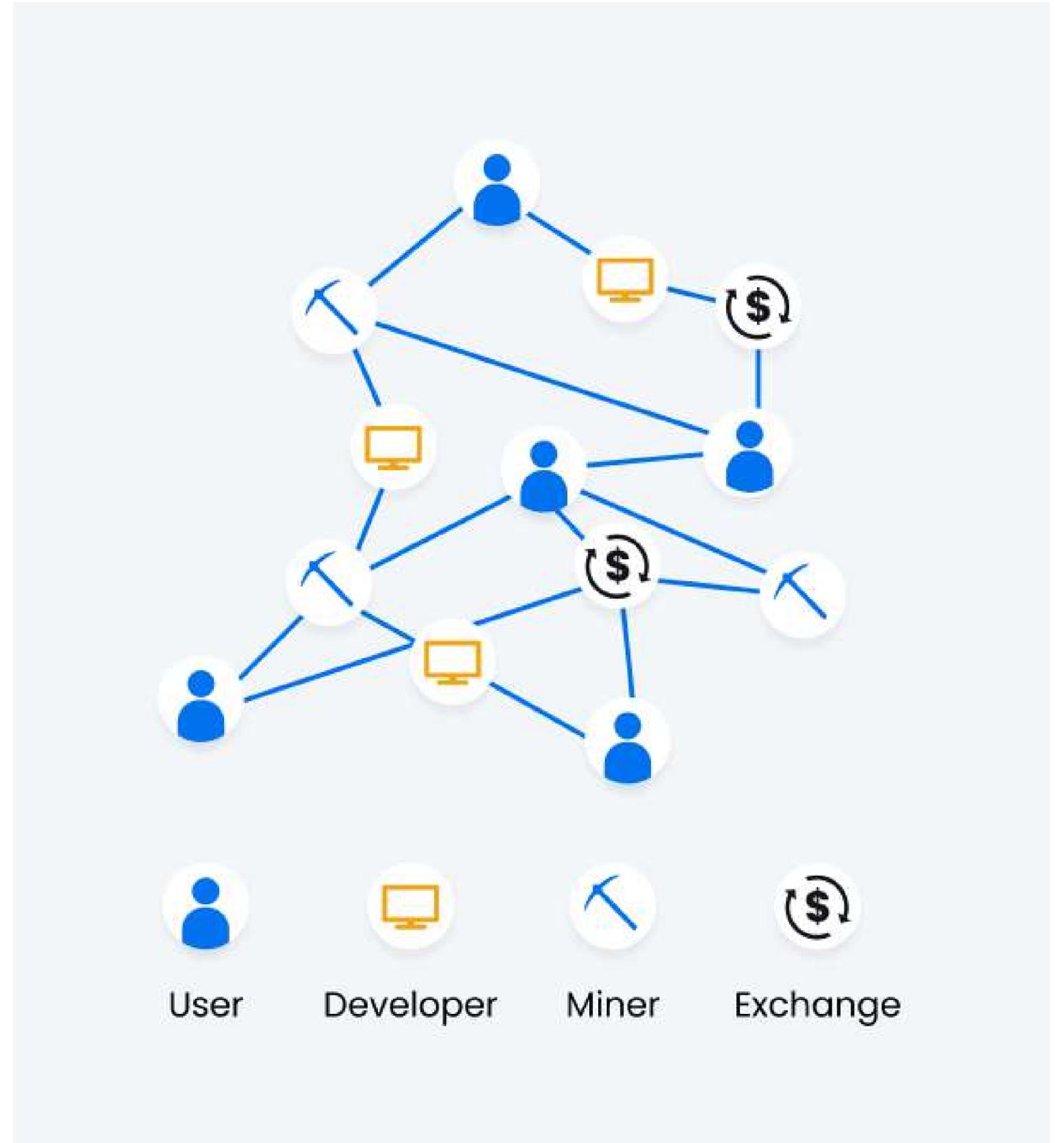
03

# PRINCIPES D'UNE DAO

# PRINCIPES CLÉ D'UNE DAO

- Rédaction des règles de fonctionnement
- Attribution des tokens
- Émission des tokens
- Plateforme de votation
- Attribution des gains
- Suivi et audit des actions





## *Conclusion*

Créer une DAO est plus  
compliqué (mais plus intéressant)  
qu'une collection d'images

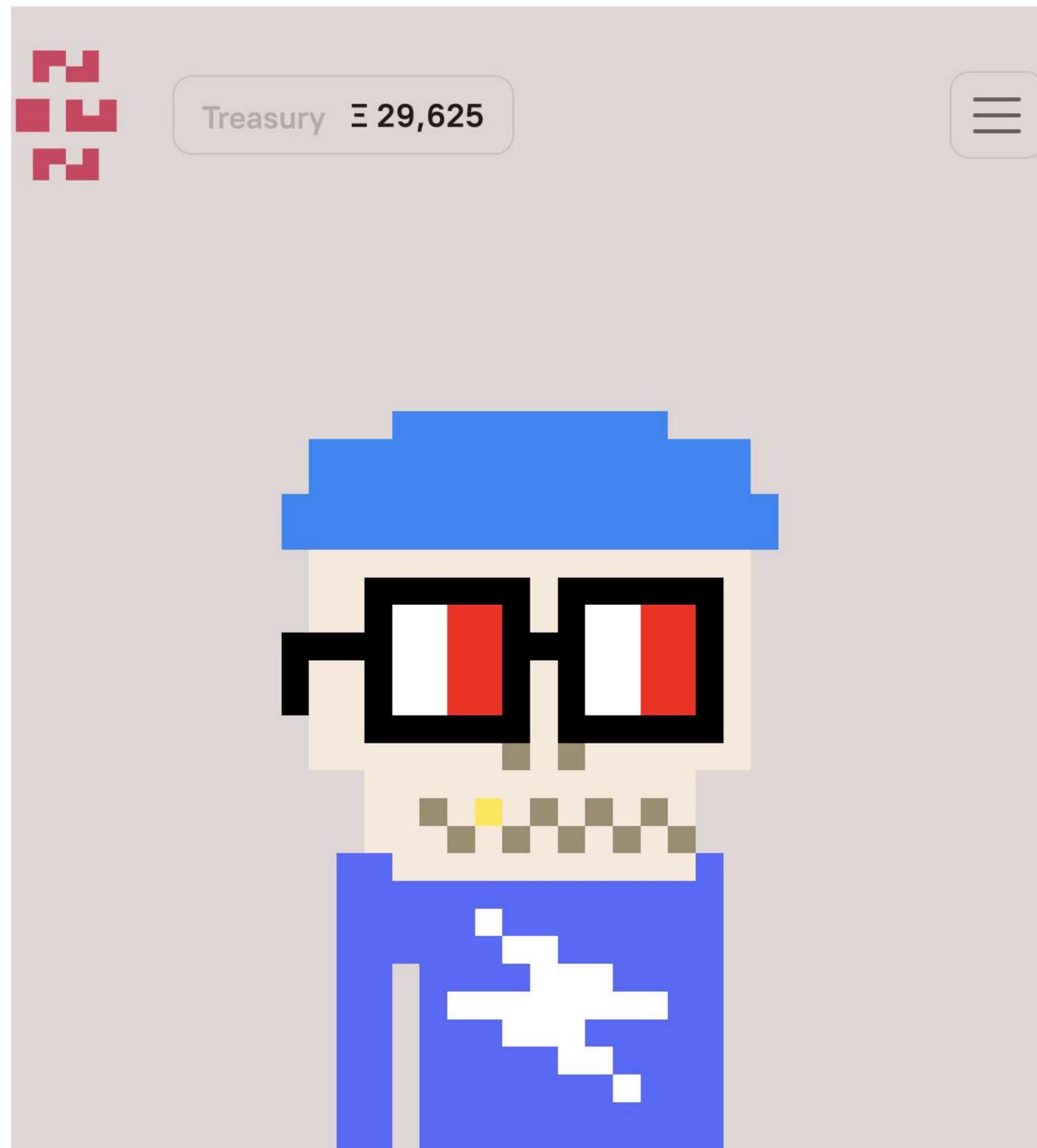
04

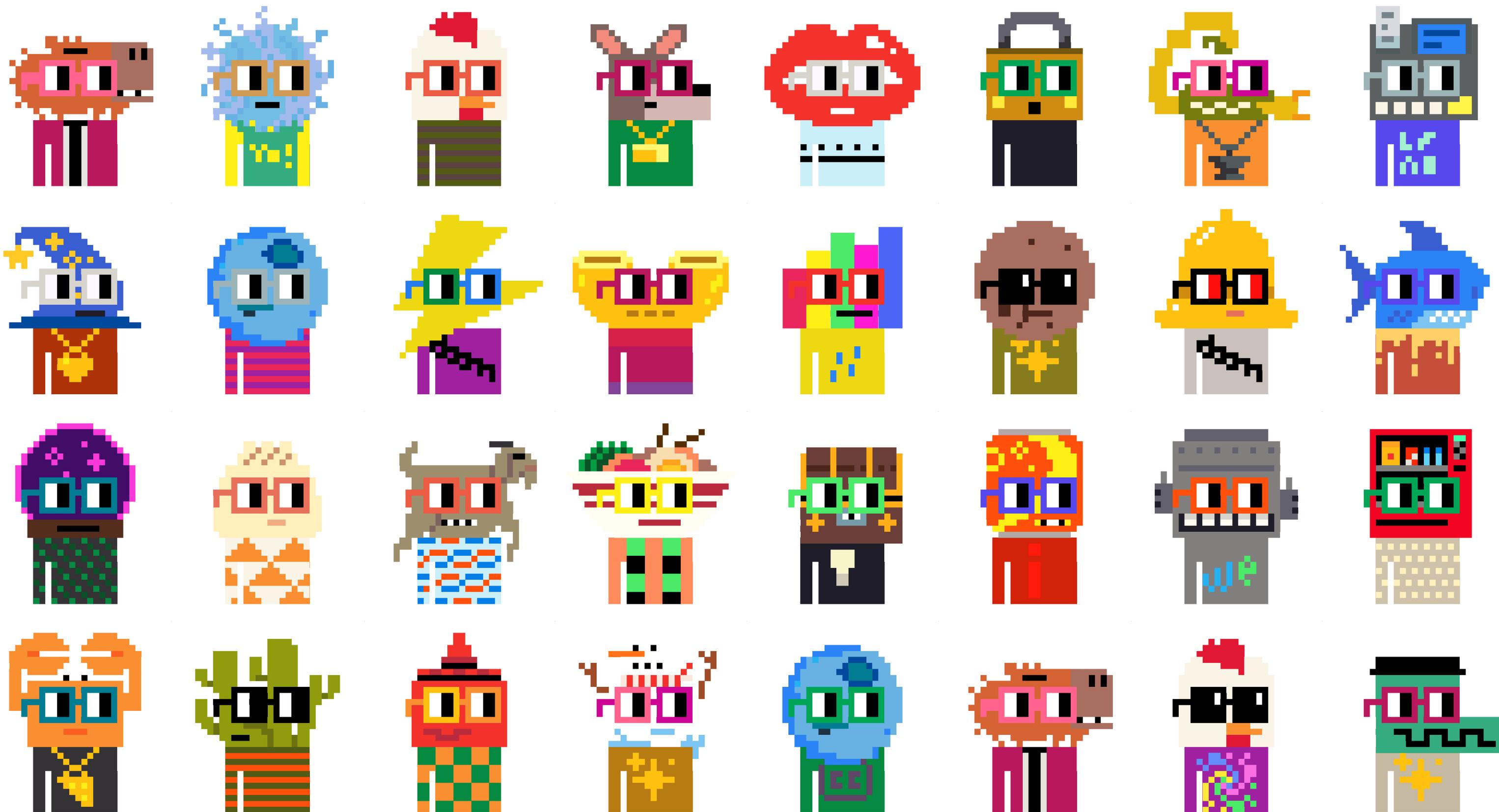


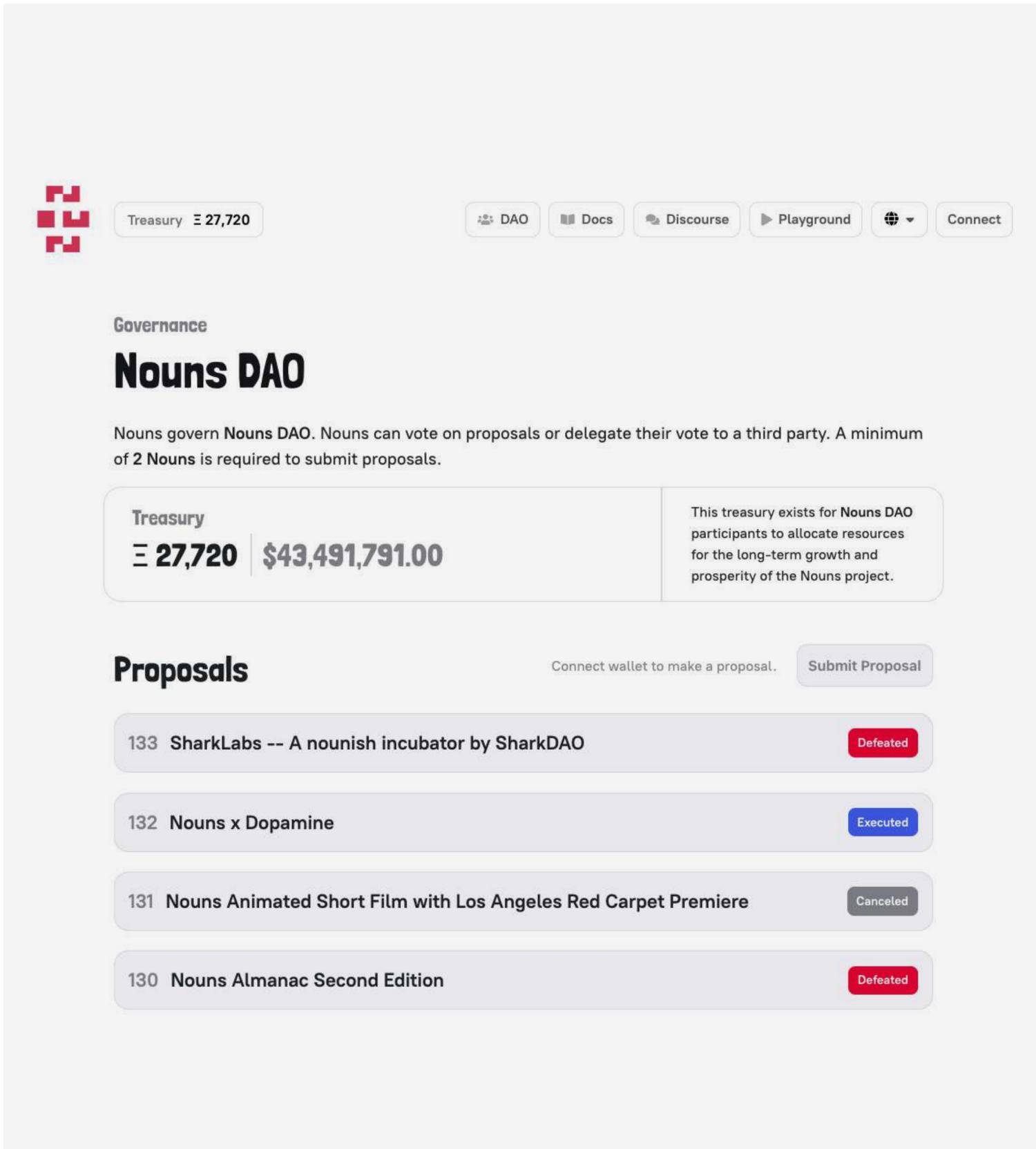
# ÉTUDE DE CAS: NOUNS DAO

# NOUNS DAO (2021)

Ce projet propose une cagnotte alimentée par la vente aux enchères quotidienne d'un NFT, qui permet de financer, par votes, des initiatives très diverses telles que de la curation d'art ou des causes sociales.







**Treasury**  $\Xi$  27,720

DAO Docs Discourse Playground Connect

### Governance

# Nouns DAO

Nouns govern Nouns DAO. Nouns can vote on proposals or delegate their vote to a third party. A minimum of 2 Nouns is required to submit proposals.

**Treasury**

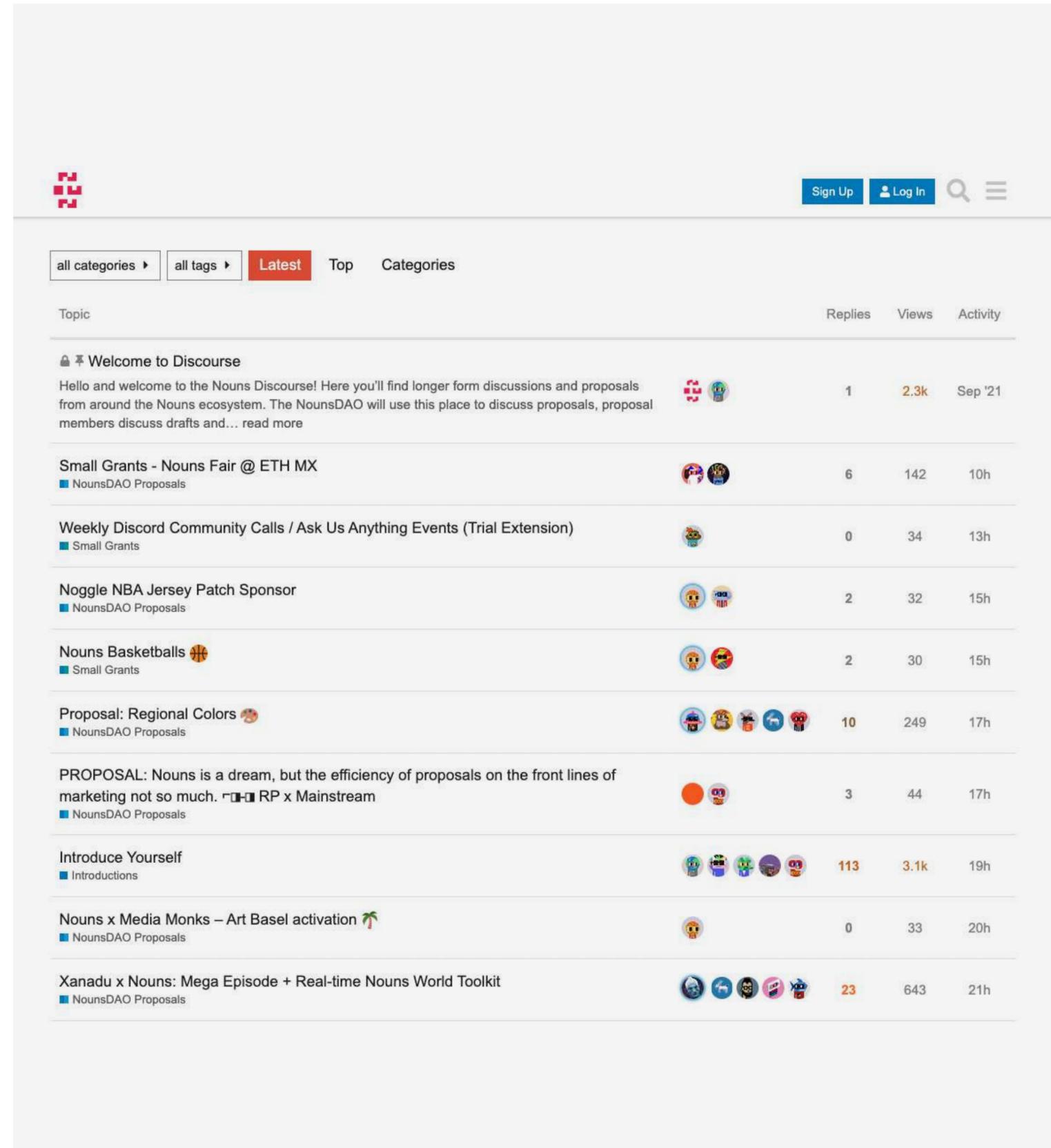
$\Xi$  27,720 | \$43,491,791.00

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

### Proposals

Connect wallet to make a proposal. [Submit Proposal](#)

- 133 SharkLabs -- A nounish incubator by SharkDAO Defeated
- 132 Nouns x Dopamine Executed
- 131 Nouns Animated Short Film with Los Angeles Red Carpet Premiere Canceled
- 130 Nouns Almanac Second Edition Defeated



Sign Up Log In

all categories all tags **Latest** Top Categories

Topic	Replies	Views	Activity
<p><b>Welcome to Discourse</b></p> <p>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</p>	1	2.3k	Sep '21
<p><b>Small Grants - Nouns Fair @ ETH MX</b></p> <p>NounsDAO Proposals</p>	6	142	10h
<p><b>Weekly Discord Community Calls / Ask Us Anything Events (Trial Extension)</b></p> <p>Small Grants</p>	0	34	13h
<p><b>Noggle NBA Jersey Patch Sponsor</b></p> <p>NounsDAO Proposals</p>	2	32	15h
<p><b>Nouns Basketballs</b></p> <p>Small Grants</p>	2	30	15h
<p><b>Proposal: Regional Colors</b></p> <p>NounsDAO Proposals</p>	10	249	17h
<p><b>PROPOSAL: Nouns is a dream, but the efficiency of proposals on the front lines of marketing not so much. RP x Mainstream</b></p> <p>NounsDAO Proposals</p>	3	44	17h
<p><b>Introduce Yourself</b></p> <p>Introductions</p>	113	3.1k	19h
<p><b>Nouns x Media Monks – Art Basel activation</b></p> <p>NounsDAO Proposals</p>	0	33	20h
<p><b>Xanadu x Nouns: Mega Episode + Real-time Nouns World Toolkit</b></p> <p>NounsDAO Proposals</p>	23	643	21h

# PROPOSITION 1

← Proposal 1 Executed

## Donate 5 ETH each to 6 Charities

Proposed by [nounders.eth](#) at [0xf9252](#)



**Threshold** Threshold  
1 votes

**Ended** 10:11 PM GMT+2  
October 10, 2021

**Snapshot** Taken at block  
13057048

### Description

#### Past Discussions

- [Original proposal with emoji consensus](#)
- [SharkDAO adds Coral Restoration Foundation](#)
- [4156 adds GiveCrypto](#)

As the first test of Nouns DAO governance and to demonstrate to the community how the ecosystem works, we will donate 5 ETH each to 6 charities. With the exception of Coral Restoration Foundation and GiveCrypto, these charities were chosen because they have publicly available Ethereum donation addresses. Coral Restoration Foundation was recommended by SharkDAO and their representative Goldy.mov generated an address on the charity's site. GiveCrypto was recommended by 4156 and he generated an address on the charity's site.

### Charity List

The order of the charities below matches the order of addresses in this proposal's *targets* attribute

1. [Coral Restoration Foundation](#)
  - [0x0e09ceb98492715ec5b080d2b95b5004ddf43947](#) (Generated by Goldy.mov)
2. [Freedom Of The Press Foundation](#)
  - [0x998f25be40241ca5d8f5fcf3591b5ed06ef3be7](#)
3. [Internet Archive](#)
  - [0xfa8e3920daf271dab92be9b87d9998ddd94fef08](#)
4. [Rainforest Foundation US](#)
  - [0x54334ebc8c9ef04bc28d614caa557143ed8afc87](#)
5. [Tor Project](#)
  - [0x532fb5d00f40ced99b16d1e295c77cda2eb1bb4f](#)
6. [Give Crypto](#)
  - [0x8313f8408e04bf45d167620b10f4f29110f94509](#) (Generated by 4156)

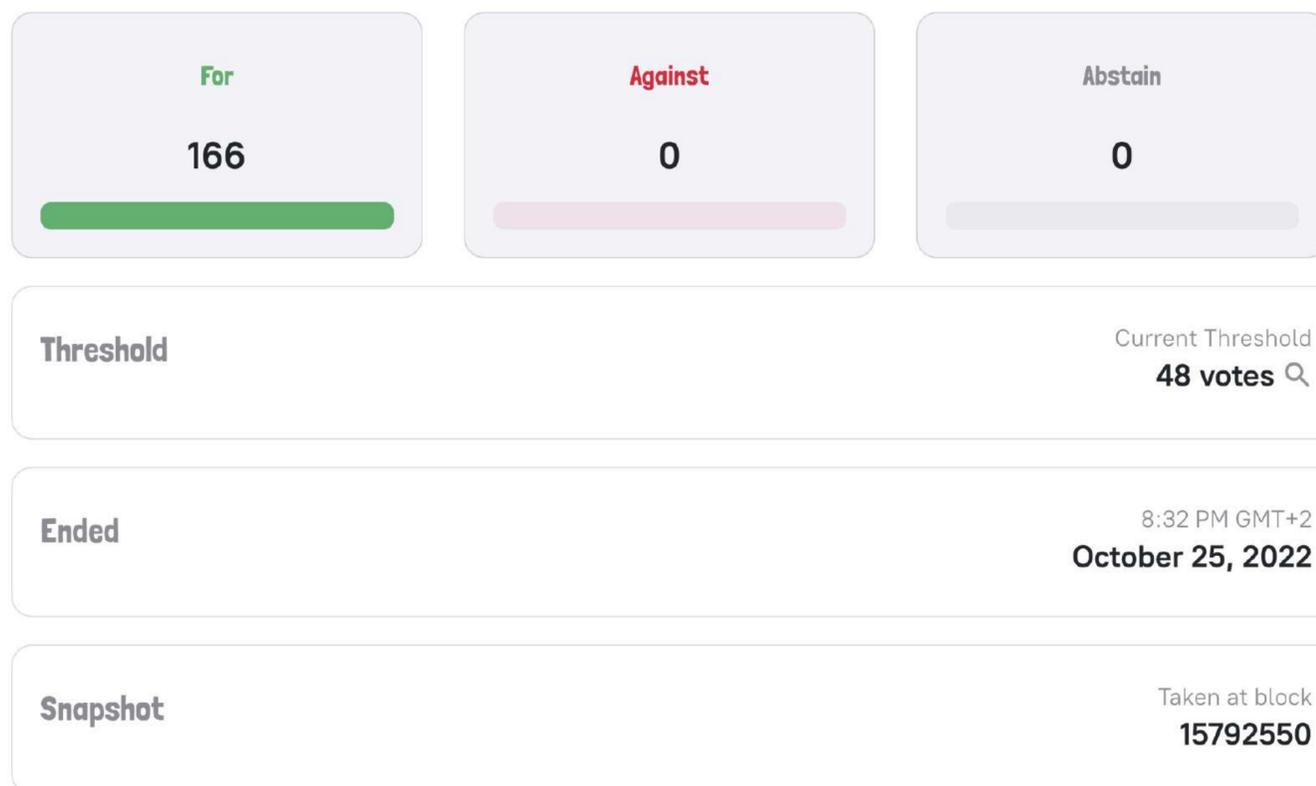
### Proposed Transactions

1. [0x0e09ceb98492715ec5b080d2b95b5004ddf43947](#).transfer(5.0 ETH)
2. [0x998f25be40241ca5d8f5fcf3591b5ed06ef3be7](#).transfer(5.0 ETH)
3. [0xfa8e3920daf271dab92be9b87d9998ddd94fef08](#).transfer(5.0 ETH)
4. [0x54334ebc8c9ef04bc28d614caa557143ed8afc87](#).transfer(5.0 ETH)
5. [0x532fb5d00f40ced99b16d1e295c77cda2eb1bb4f](#).transfer(5.0 ETH)
6. [0x8313f8408e04bf45d167620b10f4f29110f94509](#).transfer(5.0 ETH)

# PROPOSITION 161

## Set Voting Period to 5 days and Voting Delay to 2 days

Proposed by [0x47...c7e9](#) at [0xbefa2](#)



## Description

As the number of nouncers and nouns sub-communities increase, we will see more proposals appear on-chain without prior off-chain coordination.

This is a proposal to:

- set 'Voting Delay' to be 2 days. This is a minor change that accounts for block times changing to 12 seconds after the merge.
- set 'Voting Period' to 5 days, so that nouncers have more time to diligence proposals and to decide how they will vote.

## Proposed Transactions

1. [0x6f3e6272a167e8accb32072d08e0957f9c79223d](#).\_setVotingDelay(14400)
2. [0x6f3e6272a167e8accb32072d08e0957f9c79223d](#).\_setVotingPeriod(36000)

*Conclusion*

Nouns DAO préfigure de  
nouvelles formes d'organisations

05

# LA GOUVERNANCE EN ENTREPRISE

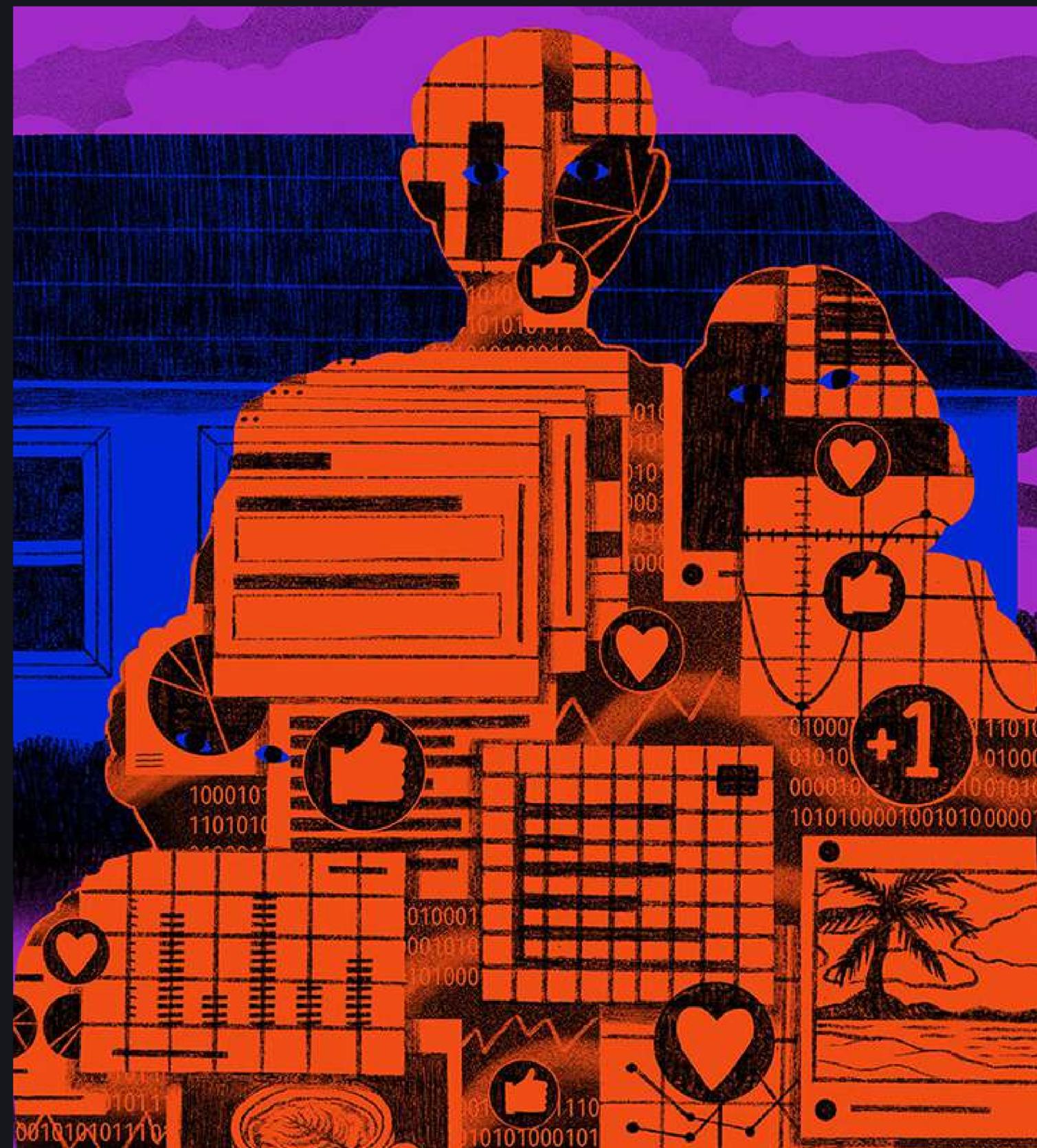
## PROBLÈMES ACTUELS : DIRECTION D'ENTREPRISE

- Verticalité de la gouvernance et manque d'implication du personnel
- Opacité des décisions à l'échelle des collaborateurs
- Manque de transparence et de suivi de l'application des décisions
- Dispersion géographique du board et des collaborateur·trices (multinationales et Covid)



# PROBLÈMES ACTUELS : RELATIONS CLIENTS

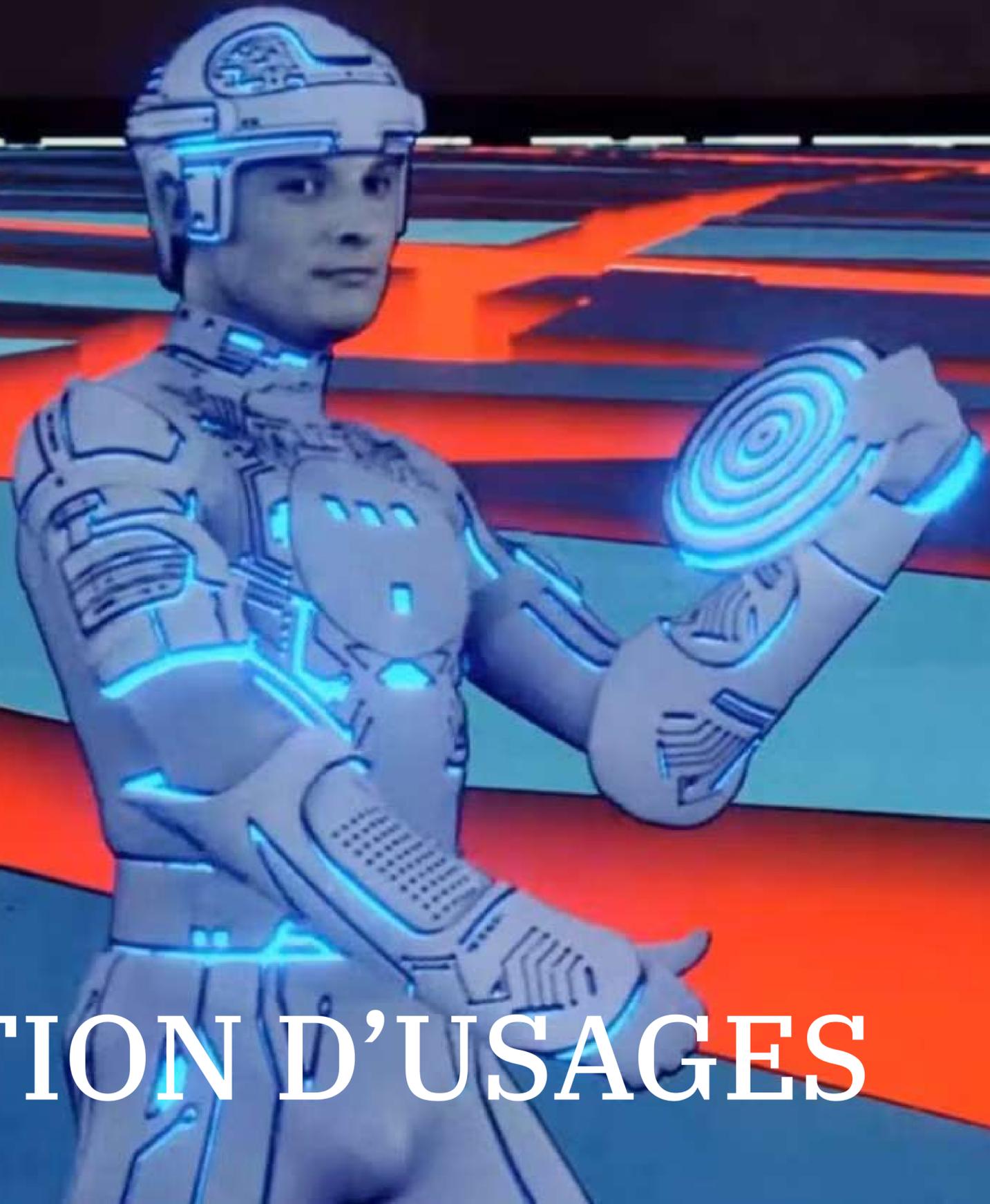
- Valeurs éthiques des entreprises en décalage avec la société civile
- Forte attente d'une transparence au niveau RSE (*greenwashing*, inclusivité, etc.)
- Séparation client / entreprise
- Difficulté à créer des communautés impliquées
- Pas d'intéressement aux résultats de l'entreprise



## *Conclusion*

Créer une DAO est plus  
compliqué (mais plus intéressant)  
qu'une collection d'images

06



# PROJECTION D'USAGES

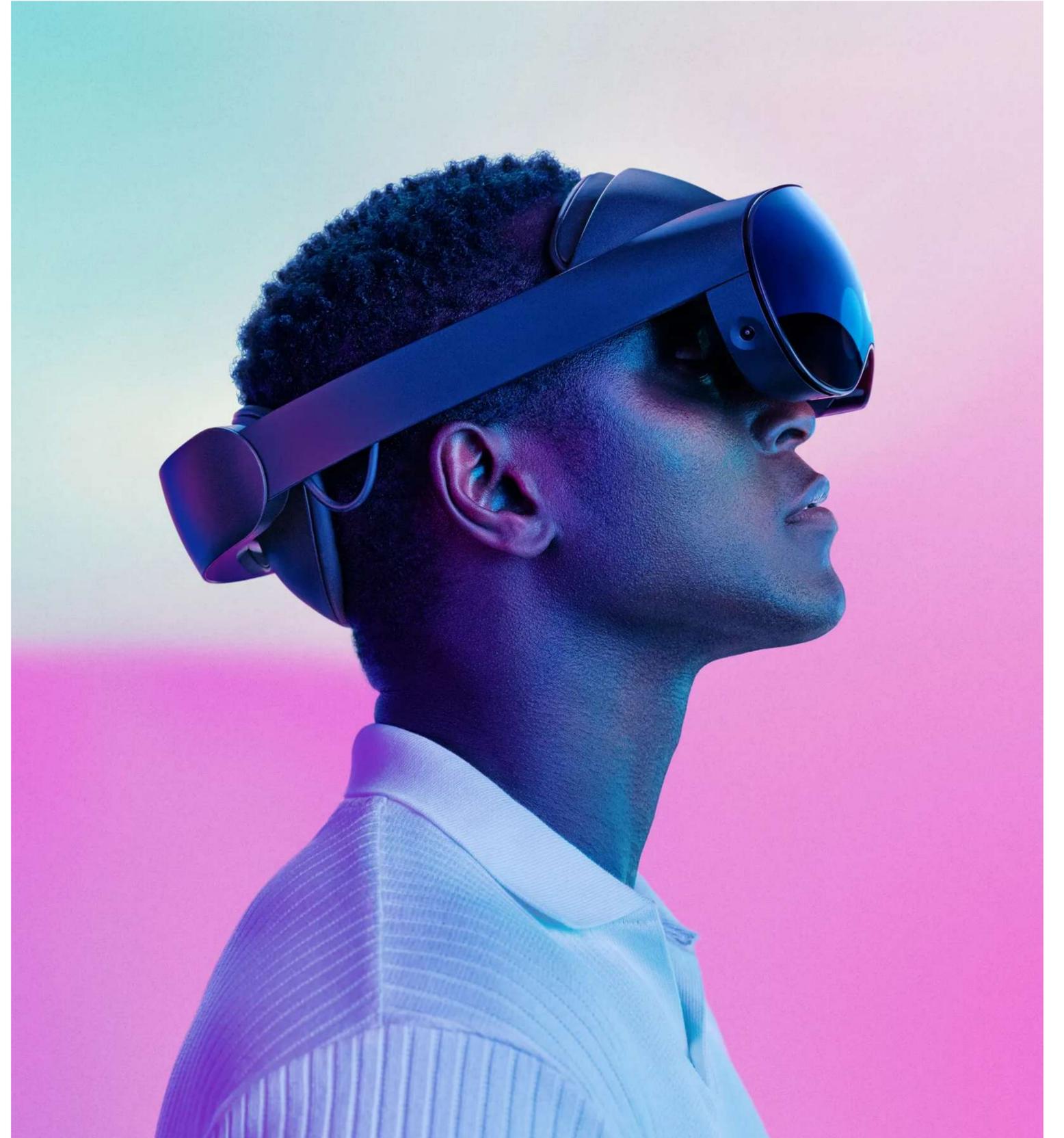
## VOTATION MIGROS (2022)

La Migros pourrait proposer à ses sociétaires de voter de façon bien plus régulière. Les votes pourraient être pondérés en fonction du montant des achats.



# OCULUS (2012)

Les plateformes de *crowdfunding* pourraient proposer aux contributeurs de participer aux décisions stratégiques et d'être intéressés aux résultats.



*Conclusion*

Les DAO permettent davantage de  
transparence, de participation et  
de redistribution

07



# LIMITES ET DANGERS

# LIMITES ET DANGERS

- Design des *dashboards* et des plateformes de vote
- Gestion des clés privées (barrière technique)
- Vote censitaire (attribution des tokens)
- Décisions en dehors du cadre légal des États-nations



# VERS DES ORGANISATIONS DÉCENTRALISÉES ET COLLABORATIVES

MASTERCARD INNOVATION FORUM, 8 DÉCEMBRE 2022



**@AnthonyMasure**

Responsable de la recherche à la HEAD – Genève, HES-SO  
Cofondateur du studio Hint3rland

— **HEAD**  
**Genève**