

Why do shareholders have so little say in the companies they own?

The corporate governance problem:

- Shareholders vote once a year at annual meetings
- Board of directors appoints the CEO
- Management controls day-to-day decisions
- Shareholders cannot see how money is spent in real time

When governance fails:

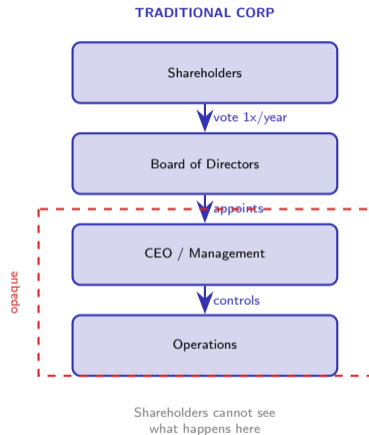
- **Enron (2001)**: \$74 billion lost, executives hid debt off-balance-sheet
- **Wirecard (2020)**: €1.9 billion in cash that never existed
- **FTX (2022)**: \$8 billion in customer funds misappropriated
- In each case, boards and auditors failed to prevent fraud

The core tension:

Shareholders own the company but cannot observe or control what managers do between annual meetings.

Key insight: Corporate governance relies on trusting people. DAOs propose replacing that trust with code.

Traditional governance puts layers of delegation between owners and operations — each layer adds cost, delay, and opacity.



Imagine 10,000 owners voting on a \$50K decision — in 72 hours, with automatic execution

The scenario:

A decentralised protocol earns \$2 million per year in fees. Someone proposes: “Hire a marketing agency for \$50,000 to expand into Asia.”

What happens in a DAO:

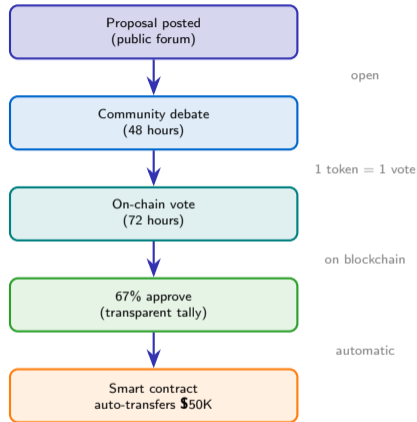
- 1 Proposal posted on governance forum (public, transparent)
- 2 Community discusses for 48 hours
- 3 On-chain vote opens — 10,000 token holders can vote
- 4 Vote lasts 72 hours — each token = one vote
- 5 Result: 67% approve
- 6 Smart contract automatically transfers \$50,000 to the agency
- 7 No CEO needed. No board meeting. No middleman.

In a traditional company:

Board discusses behind closed doors, CEO decides, shareholders learn about it in the next quarterly report.

The difference: Every decision is public. Every vote is recorded. Every transfer is auditable.

A DAO replaces board meetings with public proposals, annual votes with continuous governance, and CEO decisions with smart contract execution.



What is a DAO and how does token-based voting replace boards and managers?

Definition: Decentralised Autonomous Organisation (DAO)

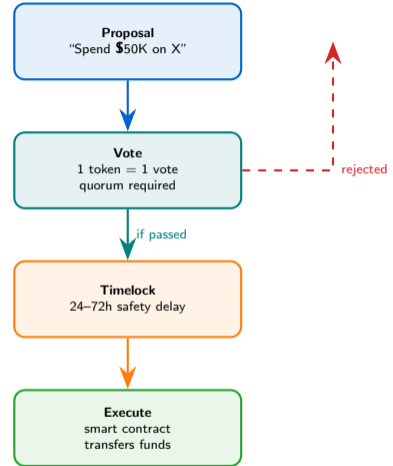
An organisation governed by token holders through on-chain voting, where proposals are executed automatically by smart contracts. Treasury funds are controlled by code, not by individuals.

Core components:

- 1 **Governance token:** 1 token = 1 vote (like shares, but with direct voting power)
- 2 **Proposal system:** anyone with enough tokens can submit a proposal
- 3 **Quorum:** minimum percentage of tokens must vote for validity
- 4 **Timelock:** delay between vote passing and execution (safety buffer)
- 5 **Treasury:** smart contract holding funds, released only by vote

Key differences from corporations:

- No board of directors — token holders vote directly
- No CEO — execution is automatic or delegated by vote
- Treasury is on-chain — every transaction visible
- Global membership — anyone can buy tokens



How does MakerDAO govern a \$8B+ protocol with token votes instead of a board?

MakerDAO (rebranded to Sky in 2024):

- Created DAI, the largest decentralised stablecoin
- Total Value Locked: ~\$5–7 billion (Source: DeFi Llama, 2026)
- Governed entirely by MKR token holders
- No CEO, no board, no headquarters

What MKR holders vote on:

- **Collateral types:** which assets can back DAI
- **Stability fees:** interest rates on DAI loans
- **Liquidation ratios:** when to sell collateral
- **Protocol upgrades:** smart contract changes
- **Budget allocations:** funding for development teams

Scale of governance:

- 300 governance proposals voted on in 2024
- Approved \$70M+ in annual budget for 20+ sub-DAOs
- Decisions that would take months in a corporation happen in weeks

Key insight: MakerDAO proves that a multi-billion dollar financial system

can operate without a traditional management structure.

MakerDAO manages \$8B+ with token votes instead of a board — the most successful experiment in decentralised corporate governance to date.

Metric	MakerDAO / Sky
TVL	~\$5–7B (DeFi Llama)
Stablecoin	DAI
Gov. token	MKR
Proposals/yr	300
Annual budget	\$70M+
Sub-DAOs	20+
Employees	0 (contributors only)
Headquarters	None
Legal entity	Cayman foundation

The paradox: MakerDAO has no employees, yet it manages more assets than most banks. “Contributors” are funded by governance votes, not employment contracts.

Rebranding: In 2024, MakerDAO rebranded to Sky and introduced “SubDAOs” — smaller governance units for specific functions.

How does a DAO proposal go from idea to execution — step by step?

The governance pipeline (typical DAO):

Step 1 — Forum discussion:

Anyone posts a proposal on the governance forum. Community debates merits, risks, and alternatives for 3–7 days.

Step 2 — Temperature check (Snapshot):

Off-chain vote to gauge support (Snapshot is a platform for off-chain, gasless governance voting). No gas fees. Simple majority needed.

Step 3 — Formal proposal:

If temperature check passes, a formal on-chain proposal is submitted. Requires minimum token threshold (e.g., 10,000 tokens).

Step 4 — On-chain vote:

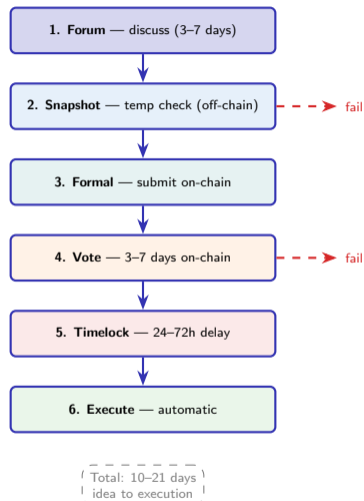
Token holders vote for 3–7 days. Quorum typically 4–10% of supply. Supermajority (66%) often required.

Step 5 — Timelock:

24–72 hour delay before execution. Allows users to exit if they disagree.

Step 6 — Execution:

Smart contract executes the approved action automatically. No human intervention.



A DAO governance pipeline takes 10–21 days from idea to execution — slower than a CEO decision, but faster and more transparent than annual shareholder votes.

What can go wrong with DAOs — from the \$50M hack to 3% voter turnout?

The DAO hack (June 2016):

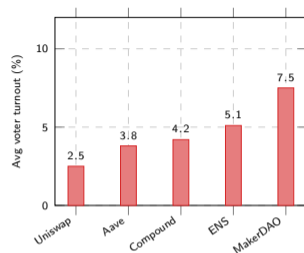
- “The DAO” raised \$150 million in ETH — largest crowdfund ever
- Attacker exploited a **re-entrancy attack**: the attacker’s contract calls the victim’s withdrawal function repeatedly before the balance is updated — like an ATM dispensing cash before checking your account
- \$50 million drained before community could react
- Ethereum hard-forked to reverse the hack (creating Ethereum Classic)
- Lesson: “code is law” until the code has a bug

Voter apathy:

- Average DAO voter turnout: 3–5% of token supply
- Most token holders never vote — they are speculators, not governors
- Low turnout means a small group can control outcomes

Other attack vectors & governance failures:

- **Flash loan attacks**: borrow tokens, vote, return tokens in one transaction
- **Whale dominance**: top 10 wallets often hold 40–60% of governance tokens
- **Governance capture (Mango Markets, Oct 2022)**: A. Eisenberg drained \$117M via oracle manipulation and voted his own governance



Turnout figures vary per proposal; source: DeepDAO governance trackers (deepdao.io). Even the best-governed DAOs rarely exceed 10% participation.

Comparison: US presidential elections see 60% turnout. Corporate shareholder votes average 70–80%. DAO governance participation is an order of magnitude lower.

Where are DAOs today — \$25B in treasuries across thousands of organisations?

DAO ecosystem (early 2026; Source: DeepDAO, deepdao.io):

- ~\$20–25 billion in DAO treasuries globally
- Thousands of active DAOs across DeFi, NFTs, social, grants
- Largest: Uniswap (\$3B+), Optimism (\$2B+), Arbitrum (\$2B+)

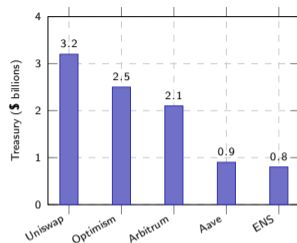
Major DAO categories:

- **Protocol DAOs:** Uniswap, Aave, Compound — govern DeFi protocols
- **Grant DAOs:** Gitcoin, Optimism RetroPGF — fund public goods
- **Social DAOs:** Friends with Benefits — membership communities
- **Investment DAOs:** The LAO, MetaCartel — collective investing
- **Service DAOs:** RaidGuild — decentralised agencies

Legal recognition:

- Wyoming (US): DAO LLC law (2021)
- Marshall Islands: DAO Act (2022)
- Switzerland: association structure used by many DAOs
- EU: no specific DAO framework yet

DAOs collectively manage **\$25B+** in treasuries — comparable to a mid-sized bank, but governed by token votes instead of a board of directors.



Treasury values fluctuate with token prices; source: DeepDAO (deepdao.io).

Trend: DAOs are increasingly funding real-world activities — grants for open-source software, legal defence funds, and even venture investing.

Do DAOs create democratic organisations or just a new form of plutocracy?

The democracy argument:

- Anyone can buy tokens and participate in governance
- Every proposal and vote is publicly recorded
- Treasury spending is transparent and auditable
- No insider deals — all decisions are on-chain

The plutocracy argument:

- 1 token = 1 vote means the wealthy dominate
- Top 10 wallets often hold 40–60% of governance power
- Founders and VCs receive large token allocations at launch
- Flash loans allow temporary “governance power” rentals
- 3–5% turnout means decisions are made by insiders

Emerging solutions:

- **Quadratic voting:** cost of votes increases quadratically (reduces whale power)
- **Delegation:** token holders delegate to active voters
- **Reputation-based:** voting power earned through participation

• ~~Time-weighted:~~ longer holding = more voting power

DAOs prove that transparent governance is possible — but 1-token-1-vote replicates the wealth concentration problem it was designed to solve.

TRANSPARENT

All votes on-chain

Treasury auditable

Open participation

CONCENTRATED

Whales dominate votes

3–5% turnout

VC token allocations

Key insight: DAOs are more transparent than corporations but not more democratic. Transparency and democracy are different properties.

**DAOs replace boards with on-chain voting —
but 3–5% turnout shows that decentralising power
does not automatically create engaged governance.**

What DAOs solve

- Transparent treasury
- Public decision-making
- Global participation
- No insider control (in theory)

What DAOs do not solve

- Voter apathy
- Wealth concentration
- Legal accountability
- Fast crisis response

What comes next

- Quadratic voting
- Delegation systems
- Legal frameworks
- Hybrid DAO-corp models

DAOs are an experiment in organisational design — the transparency is real, but the governance challenge of motivating participation remains unsolved.

Discussion Question

Your university student association has 5,000 members and a €200,000 annual budget. You are tasked with designing a DAO to govern it.

Design decisions:

- How should governance tokens be distributed? One per student? By participation?
- What decisions require token votes vs delegation to elected representatives?
- How do you prevent a small group of active members from controlling all decisions?
- Should votes be anonymous or public? What are the trade-offs?

Further Reading

- DeepDAO analytics: deepdao.io
- Buterin (2021), "Moving beyond coin voting governance"
- El Faqir et al. (2020), "An Overview of Decentralized Autonomous Organizations on the Blockchain"