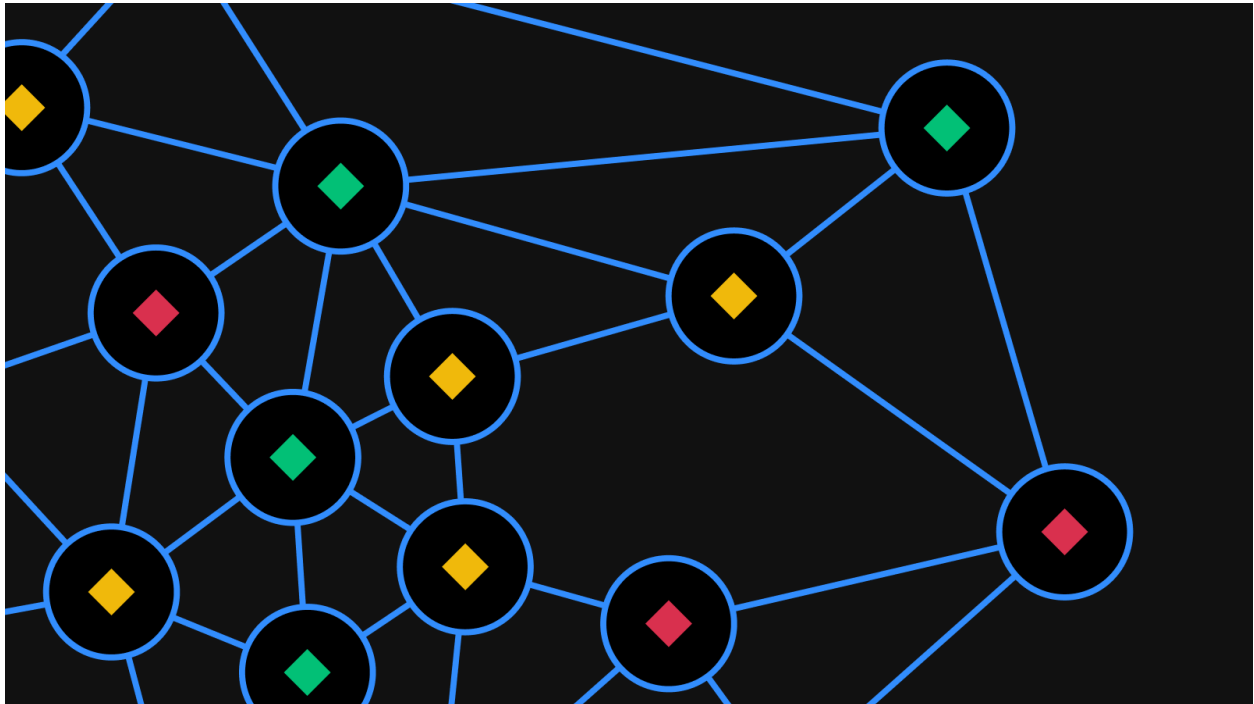


DAO



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DECENTRALIZATION.

Decentralization is one of the most essential characteristics of digital currencies. This implies they are distributed over a multitude of computers, networks, and nodes rather than being controlled by a single organization like a government or central bank. Virtual currencies, in many circumstances, make use of their decentralized state to achieve degrees of anonymity and security that are normally unattainable to traditional currencies and transactions.

The acronym DAO stands for Decentralized Autonomous Organization. The idea for DAOs stemmed from the concept of decentralization made possible by blockchain technology. The construction of DAOs originates ultimately from blockchain technology. Here's how;

- Blockchain technology enables automated trusted transactions and value exchanges.
- Blockchain technology introduced smart contracts (Smart contracts are simply programs stored on a blockchain that run when predetermined conditions are met. They are typically used to automate the execution of an agreement so that all participants can be immediately certain of the outcome without an intermediary's involvement or time loss.)

After people discovered the possibilities that smart contracts offered, it provided a solution to the question “How can we exchange values in a trusted environment?”

Blockchain enables automated trusted transactions and value exchanges, but even so, internet users around the world want to organize themselves in a “Safe and effective way to work with like-minded folks, around the globe”.

about the invention of what we know as a **Decentralized Autonomous Organization**.

To comprehend DAOs, you must first comprehend the technology that underpins them. Blockchain technology and smart contracts, which are collections of code that operate on the blockchain, are used by the majority of DAOs.

A blockchain is a decentralized digital ledger. While blockchains are most known for publicly documenting transactions of various cryptocurrencies, such as bitcoin, and other digital assets, such as NFTs, they may also be utilized in various other ways.

The blockchain can serve as a backbone for DAOs, maintaining the structure and regulations on-chain.

There is usually a hierarchy in traditional organizations. A formal board of directors determines the structure, executives, or higher management, who have the capacity to make changes. Decentralized autonomous organizations, or DAOs, are not governed by a single person or entity. Each DAO's rules and governance are written in smart contracts on the blockchain and cannot be modified until the DAO's members choose to do so.

Members of each DAO can vote on choices jointly, usually on an equal footing, rather than a chosen few having the bulk of say.

Now that we have a clear picture of how the technology behind DAOs and how they operate, it is necessary at this point to make an attempt at defining what a DAO means;

A decentralized autonomous organization (DAO) is a non-centralized organization. The community is managed by a set of rules enforced on a blockchain, and decisions are made from the bottom up.



DAOs are Internet Native Organizations that are cooperatively owned and governed by their members. They have built-in treasuries that may only be accessed with the members' permission. Decisions are made by proposals that the group votes on over a set period of time. Internet Native Organizations should not be mistaken for DAOS because not all Internet Native Organizations are DAOs but all DAOs are internet native organizations.

A DAO will typically function without any hierarchical structure. Every member of the DAO will usually stand on equal footing. There's no CEO who can authorize spending based on their own whims and no chance of a dodgy CFO manipulating the books. Everything is out in the open and the rules around spending are baked into the DAO via its code.



HISTORY OF DAOs

Historically, humans and organizations have repeatedly attempted to coordinate economic and social interactions. With recent digital advancements in most fields, it's unsurprising to see the emergence of a technological model governing organizational structure.

To some, the Bitcoin (BTC) network is the earliest example of a DAO there is. The network scales via community agreement, even though most network participants have never met each other. It also does not have an organized governance mechanism, and instead, miners and nodes have to signal support. However, Bitcoin is not seen as a DAO by today's standards. The earliest iteration of a modern-day DAO was built on top of the ethereum blockchain.

People who have known about the term DAO since its inception will probably have a bit of scepticism about the topic, this is due to the collapse of the first DAO in 2016. The organization was known as "THE DAO" created to be a decentralized and automated organization. It functioned as a sort of open-source venture capital fund, with no normal management structure or board of directors. The DAO was unaffiliated with any nation-state in order to be totally decentralized, even though it used the Ethereum network. The DAO launched in late April 2016 thanks to a month-long crowd sale of tokens that raised more than \$150 million in funds. At the time, the launch was the largest crowdfunding fundraising campaign of all time.

By May 2016, the DAO held a massive percentage of all ether tokens that had been issued up to that point (up to 14%, according to reporting by The Economist). At roughly the same time, however, a paper was published that addressed several potential security vulnerabilities, cautioning investors from voting on future investment projects until those issues had been resolved.



Later, in June 2016, hackers attacked the DAO based on these vulnerabilities. The hackers gained access to 3.6 million ETH, worth about \$50 million at the time.

This prompted a massive and contentious argument among DAO investors, with some individuals suggesting various ways of addressing the hack and others calling for the DAO to be permanently disbanded. This incident also figured prominently in the hard forking of ethereum that took place shortly thereafter. This hard-fork led to the division of the ethereum network into Ethereum Classic (ETC) and Ethereum (ETH).

Following the contentious argument over the DAO's future and the massive hacking incident of earlier in the summer, in September 2016, several prominent digital currency exchanges de-listed the DAO token, marking the effective end for the DAO as it was initially envisioned. The hack undermined some people's trust in both the Ethereum coin and DAOs in general.

This incident created a bad reputation for DAOs. However, in mid-2021 there was a resurgence of DAOs all around the crypto world. In 2021, The Maker Foundation, an icon in the crypto industry as the original champion of DAO, announced that it was officially turning operations over to MakerDAO (creator of the DAI stablecoin) and would dissolve by the end of the year. A lot of other blockchain projects also started making plans to operate a DAO or transition into a DAO.



HOW DAOs OPERATE.

A DAO's smart contract is its backbone. The contract establishes the organization's norms and safeguards the group's funds. No one may modify the rules after the contract is live on the blockchain except by a vote. It will fail if someone attempts to do something that isn't covered by the code's rules and logic. Because the treasury is also specified by the smart contract, no one may spend the money without the permission of the organization. This eliminates the requirement for a central authority in DAOs. Instead, the group makes choices together, and payments are automatically allowed when votes are passed. This is possible because smart contracts are tamper-proof once they go live on the blockchain. You can't just edit the code (the DAOs rules) without people noticing because everything is public.

You often acquire governance tokens, which are cryptocurrencies connected to a specific project, to get voting power or membership in a DAO. In certain DAOs, governance tokens are only available through organized investment rounds, and demand can sometimes outstrip supply. Members may often possess stock in the DAO and help determine its future by holding these tokens.

If a DAO doesn't use governance tokens. In that case, it may accept an investment of other forms, like in ether, the native coin of the ethereum blockchain, since the majority of DAOs are built on the ethereum network. Each DAO is structured differently, but usually, when joining a DAO, you agree to the code in place. It isn't easy to change that code, and any changes typically require a vote between members. To make a decision, you don't need to wait for a quorum or a sufficient number of individuals to vote. It works in a similar way to the internet, with a loose consensus. A decision is made if there are more persons who support a proposal. While it varies from DAO to DAO, the weight of a member's vote usually depends on the amount they contributed to the project.



WHY DO WE NEED DAOs.

DAOs offer significant benefits over traditional organizations since they are internet-native. Some of those advantages include;

DAOS	TRADITIONAL ORGANIZATIONS
Usually flat and fully democratized.	Usually hierarchical.
Voting is required by members for any changes to be implemented.	Depending on the structure, changes can be demanded from a sole party, or voting may be offered.
Votes are tallied and outcomes implemented automatically without the need of a tested intermediary.	If voting is allowed, votes are tallied internally and the outcome of voting must be handled manually.
Services offered are handled automatically in a decentralized manner(for example, distribution of philanthropic funds).	Requires human handling or centrally controlled automation, prone to manipulation.
All activity is transparent and fully public.	Activity is typically private and limited to the public.

Other than the above-listed differences between DAOs and traditional organizations, a major advantage of DAOs is that they solve a major dilemma in the business world, known as;

- **The Principal-Agent Dilemma:** this dilemma is a conflict in priorities between a person or group(the principal) and those making decisions and acting on their behalf (the agent). An example is when the agent (the CEO) works in a way that's not in line with the priorities and goals determined by the principal (the stakeholders) and instead act in their own self-interest.



Another common example of the principle-agent dilemma is when the agent takes too much risk since the principal is responsible. A trader, for example, might employ excessive leverage to pursue a performance bonus, knowing that the company will pay any losses. DAOs solve the dilemma through what is known as community governance. Stakeholders aren't forced to join a DAO and only do so after understanding its rules. They don't need to trust any agent acting on their behalf and instead work as part of a group whose incentives are aligned. The nature of a DAO incentivizes token holders not to be malicious or act against the general interest, so their interests are aligned. They will want to see the network flourish because they have a stake in it. It would be against their self-interest to act against it.



EXAMPLES OF DAOs

Over the last few years, the adoption of decentralized autonomous organizations have gained pace and are now completely integrated into many blockchain initiatives. DAOs are used in the decentralized finance (DeFi), NFT, Blockchain and layer2 arena them become fully decentralized. A substantial amount of DAOs, are decentralized networks built on top of the Ethereum blockchain, are responsible for launching cryptocurrency-backed stablecoins. In some cases, the organizations that initially launched these DAOs slowly give away control of the project to the DAO, in such an instance even the creators would not be able to make decisions to change the project. Once it becomes a DAO, token holders can actively vote on governance proposals to hire new contributors, add new tokens as collateral for their coins or adjust other parameters.

Here are a few examples of well-known DAOs:

- **MakerDAO:** DeFi's largest central bank has been a mainstay of the DeFi sector. And due to the importance of its native algorithmic stablecoin DAI, Maker has also become vital for all things decentralized finance. The project's DAO is now entering new and interesting territory for the crypto industry: onboarding real-world assets (RWAs). On June 7, holders of the platform's governance token MKR voted to begin using tokenized versions of freight-shipping invoices, agricultural real estate, short-term trade receivables, and revenue-based loans for small businesses.
- **PleasrDAO:** a decentralized group of NFT artists and collectors who have been pooling funds to acquire culturally relevant digital art.
- **UniswapDAO:** Since launching its governance token in September 2020, the industry's most popular decentralized exchange has become a very influential DAO. When the DAO voted to reduce trading fees for some stablecoin swaps, volume soared.



- LexDAO: It's a group of "legal engineering professionals," some of whom are, in fact, attorneys who want to build tools that blockchain projects can use in place of some basic and often inaccessible expensive legal services. For instance, the DAO's LexLocker is an escrow system for holding deposits while goods or services are delivered without needing to rely on a bank or another third party. The group has even come up with a method for providing an arbitration service that renders a decision through a multi-sig panel of LexDAO legal engineers.
- DecentralandDAO: decentraland has a decentralized governing body in charge of its more than 90,000 parcels of land. The DAO is a hybrid of homeowners association and a city planning committee. Everyone in the DAO has voting power based on how much virtual property they own.
- ConstitutionDAO: it was a group effort to buy a copy of the U.S. Constitution. Despite failing to win a highly rare copy of the U.S. Constitution auctioned by Sotheby's, ConstitutionDAO succeeded in vaulting the concept of DAOs into mainstream culture. It revealed the power of community organization and speed at which DAOs can fundraise, showed how crypto groups can have real sway in the world, and has since inspired several similar ventures.
- BitDAO: it is the world's largest treasury with about \$2.5 billion invested in it. It is a unique giant in the DAO ecosystem. Not only has it managed to amass \$2.5 billion through continued mega raises, it has also attracted big name investors such as Alan Howard and Peter Thiel.
- BeetsDAO: BeetsDAO is a 58-person community born within the larger EulerBeats NFT community that has a serious obsession with all music-based NFTs. Like some of the other DAOs on this list, BeetsDAO is,



at its core, primarily pooling funds for group investments. But on a few occasions, it's also been responsible for commissioning new art and music.

- HerstoryDAO: this DAO collects and funds projects by black women and non-binary artist.
- Dash: The popular digital currency Dash is an example of a decentralized autonomous organization because of the way it is governed and the way its budgeting system is structured.
- MolochDAO: MolochDAO is focused on funding Ethereum projects. They require a proposal for membership so the group can assess whether you have the necessary expertise and capital to make informed judgments about potential grantees. You can't just buy access to the DAO on the open market.



CRITICISMS OF DAOs.

Despite the rise in the popularity of DAOs, they still have a long way before they can garner mainstream adoption.

- Majority of DAOs today fail; this is because most of them are operating in uncharted territory.
- It's always possible that the governance token value for a DAO may hit zero. Potential investors should do their homework first and only spend what they can afford to lose.
- DAOs can be distributed across multiple jurisdictions, and there's no legal framework for them. Any legal issues that may arise will likely require those involved to deal with numerous regional laws in a complicated legal battle.
- Also MIT Technology review revealed that "it considers it a bad idea to trust the general public with important financial decisions.
- The DAO hack also raised concerns about flaws in smart contracts and how they can be capitalized on because flaws in smart contracts are often difficult to fix even if they are spotted.
- DAOs will also need to overcome many potential regulatory and legal challenges, especially in the U.S. There are several unknowns regarding how potential legal framework across the U.S. could impact DAOs and how they operate. In July 2017, for example, the United States Securities and Exchange Commission issued a report in which it determined that The DAO sold securities in the form of tokens on the Ethereum blockchain without authorization, violating portions of securities law in the country.
- DAOs are creating governance and regulatory issues since they sidestep written agreements and other legal formalities by relying on code. Risks of distributive governance, as well as liability constraints, are among these concerns.



- Finally, DAOs rely on people and community engagement as what incentivizes members to keep coming back. Community culture can deteriorate if the core team loses interest or if tokens and prices dominate conversation, which can halt a DAO's progress.



WHAT DOES THE FUTURE HOLD FOR DAOS?

Interest in decentralized autonomous organizations continues to grow rapidly as people are realising the potential DAOs hold. DAOs are changing the way we think about how organizations work, because of their unique structure. DAOs promise to enable a focus on community rather than just a focus on profit.

- DAOs are desirable because they are easily accessible, can quickly pool and distribute funds, simplify voting processes, and decrease the need for manual fraud monitoring. They reduce organizational frictions and the likelihood of fraudulent behavior by making group choices more transparent and autonomous. They let members to collaborate peer-to-peer and quickly trade value without the need for a centralized body since they are digitally native and simple to join.
- In comparison to traditional companies, DAOs have a democratized organization. All the members of a DAO need to vote for any changes to be implemented, instead of implemented changes by a sole party (depending on the company's structure).
- The governance of DAOs is based on community, while traditional companies' governance is mostly based on executives, Board of Directors, activist investors. etc. DAOs' operations are fully transparent and global, meanwhile, traditional companies' operations are private, only the organization know what is happening, and they are not always global.
- While there are numerous unanswered questions about legality, security, and structure, some experts and investors predict that this sort of organization could eventually gain traction, maybe even replacing traditional organizations.
- DAOs as open economies will power the X-to-earn trend, which will make work more flexible, fluid, and playful than the 9-5s we are accustomed to.



- The recent wave of mainstream, institutional investment in DAOs is also a sign of growth for the industry. It also shows the potential for more widespread adoption, leading to potential competition with traditional businesses and organizations.
- DAOs have the potential to enable a wide range of previously unimaginable business models. This opens the door to all kinds of autonomously formed and operated enterprises, such as distributed venture capital companies, decentralized hedge funds, decentralized governments, decentralized public utilities, decentralized gaming guilds and virtually any other decentralized institution your mind can conjure up.

As internet-native organizations, DAOs have the potential to change the way corporate governance works completely. While the concept matures and the legal gray area they operate in is cleared, more and more organizations may adopt a DAO model to help govern some of their activities. DAOs will face substantial challenges in the real world, but the desire to organize businesses differently exists, and the potential advantages are undeniable.



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