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23. Decentralized autonomous organizations in the public sector: opportunities and risks

Olivier Rikken, Marijn Janssen, and Zenlin Kwee

INTRODUCTION

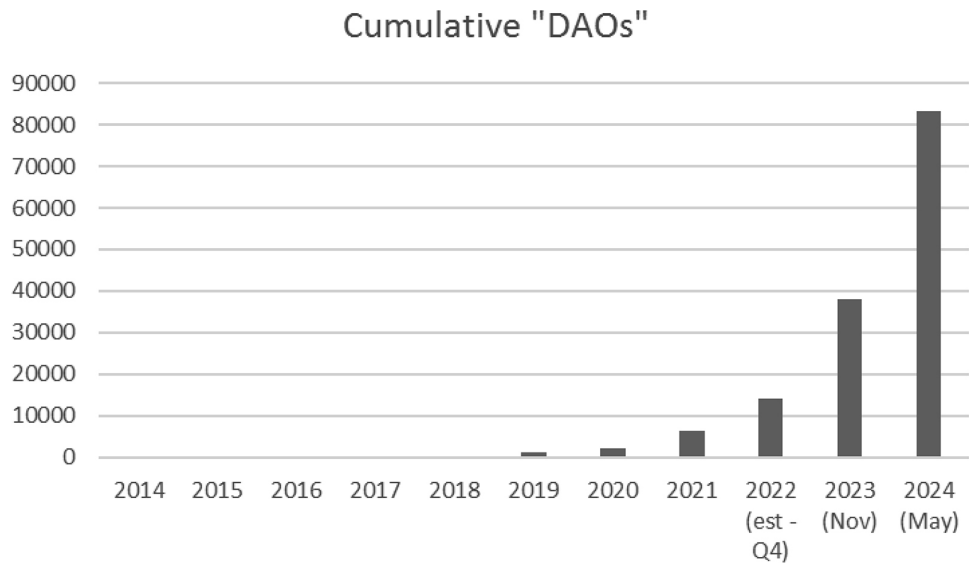
Since the introduction of blockchain technology through the implementation of the Bitcoin protocol (Nakamoto, 2008) in 2009, its potential uses have expanded far beyond cryptocurrencies, with new protocols and applications being implemented at a fast pace. Subsequently, the introduction of smart contract functionalities (Rikken et al., 2018; Zsabo, 1996) in second-generation blockchain infrastructures after Bitcoin, through protocols like Ethereum (Buterin, 2013), introduced around 2015, opened up many new use cases for innovative applications. These smart contracts are programmable accounts that form the basis of decentralized applications (Antonopoulos & Wood, 2018).

Due to the important blockchain characteristics of transparency, immutability, and provenance (Ali, et al., 2021; Frizzo-Barker, et al., 2020), blockchain-based applications can inherently contribute to various important public values, such as openness and ‘transformation of interest to decisions’ (Jørgensen, & Bozeman, 2007). Blockchain-based applications have evolved from direct transactional applications, like cryptocurrencies, to conditional transactional applications, like escrow smart contracts and product passports, potentially redefining products and services in various industries, like the finance industry (Al-Megren et al., 2018; Mohanta, Panda & Jena, 2018; Rikken, Janssen, & Kwee, 2019). One of the most advanced applications of blockchain technology is ‘decentralized autonomous organizations’ or DAOs (Rikken, Janssen, & Kwee, 2023b; Wright, 2020), which are organizations without hierarchy where operations are autonomously executed by code.

In this chapter, we explain what DAOs are, what DAOs are used for in general and explore how DAOs can be used in the public sector. We then describe various DAO governance setup possibilities and plot various DAO governance setup configurations on the potential public sector DAO uses. Finally, we further explore the opportunities and risks for public sector DAOs and present our conclusions.

BACKGROUND

The idea of DAOs was first proposed by Daniel Larimer in 2013 as a decentralized autonomous company or DAC. Larimer’s idea was to establish for-profit organizations, following the ‘code = law’ principles. This means that large parts of organizations’ operations were coded and autonomously executed, eliminating formal management structures (Larimer, 2013; Wright, 2020), and decisions were largely coded in predetermined business rules. Later, Vitalik Buterin coined the term DAO, envisioning a much broader scope of organizations, including those with non-profit purposes. Operational performance has largely shifted from



Source: Estimation May 2024 – Rikken, Janssen, Kwee.

Figure 23.1 Growth of the number of perceived DAO projects 2014–2024

humans to smart contracts that execute code, while humans can still make decisions at the periphery of organizations (Buterin, 2013, 2014).

Growth and (Current) Developments

Since the inception of the idea of DAOs, there has been exponential growth in the number of DAO projects. The first DAOs were created around 2014, but especially after the rise of DAO deployment platforms like Aragon¹ and DAOHaus² around 2018/2019, there was a sharp rise in the number of DAO projects. Through these platforms, users can deploy a DAO without the need to code the smart contracts, but by simply filling in a few parameters online. The smart contracts are then automatically created. The exponential growth in the number of ‘perceived’ DAO projects is displayed below in Figure 23.1.

The term ‘perceived’ is deliberately chosen because many DAO projects are still experimental, triggering considerable debate about what constitutes a DAO and whether they are truly decentralized and/or autonomous. The rise of the so-called ‘off-chain’ governance DAOs, which are affiliated with tools like Snapshot, has led to a decline in autonomy. These off-chain governance tools address high transaction costs associated with activities, such as voting. However, decisions made by the community in DAO projects are no longer executed autonomously. This raises the question of whether these projects can still be considered DAOs

¹ <https://aragon.org>

² <https://daohaus.club>

(Feichtinger et al., 2023; Rikken, Janssen, & Kwee, 2023b). There is ongoing scientific debate about whether this lack of autonomy also leads to increased centralization (van Vulpen, Siu, & Jansen, 2024).

Other developments within DAOs are the rise of multiple DAO deployment platforms and multiple blockchain infrastructures upon which DAOs can be deployed. In the early years, they were predominantly deployed on the Ethereum network; however, nowadays, deployment on multiple blockchain networks is possible. (El Faqir, Arroyo & Hassan, 2020; Peña-Calvin et al., 2024; Rikken, Janssen, & Kwee, 2023a). Furthermore, the variety of governance element setup possibilities, like possible decision models and incentive structures, has risen strongly in recent years (Rikken, Janssen, & Kwee, 2024).

What Constitutes a DAO

Despite the attention on DAOs and the rapid growth of perceived DAO projects, there is still no consensus on what constitutes a DAO (Hassan & De Filippi, 2021). Earlier definitions explained decentralized as running on blockchain infrastructure and where the participants are in control of decision-making (Beck, 2018; Kypriotaki, Zamani, & Giaglis, 2015). Although there is no minimum number of participants or level of decentralization, research shows that a higher number of participants contributes positively to long-term viability (Rikken, Janssen, & Kwee, 2023b). The autonomous part relates to the autonomous execution of decisions and operational business rules through smart contracts (DuPont, 2017; Hassan, & De Filippi, 2021; Honigman, 2019).

Rikken, Janssen, and Kwee (2023b) integrated existing definitions and characteristics and combined this with empirical research of 1635 DAOs to identify the lowest common denominator from a functional perspective and combined this into a comprehensive, unified definition:

A DAO is a system in which storage and transaction of value and notary (voting) functions can be designed, organized, recorded, and archived and where data and actions are recorded and autonomously executed in a decentralized way. (Rikken, Janssen, & Kwee, 2023b, pp. 7–8)

DAO can thus be used to organize and execute voting and safeguard a common treasury. The outcome of voting should be autonomously executed, that is, through smart contracts on a blockchain infrastructure. This can result in the transaction of value. All actions, that is, transactions of value and votes, are also recorded on a decentralized infrastructure like blockchain.

DAO USES

Although originally intended for use as DACs, the number of uses or business objectives for DAOs has risen strongly with the rise in deployed DAOs. Many DAOs are actively involved in the so-called decentralized finance industry, with prominent examples like Balancer and Uniswap. DAOs are also used for charitable purposes, like MedHack DAO, and for grants or research and development, like FestDAO. DAOs are also deployed to manage infrastructures, like optimism collective DAO. Given the variety of DAOs' uses or business objectives,

Table 23.1 *Overview of categorization of DAO business objectives*

Business Objective Category	General Description	DAOs' business objectives as described in various sources
Economic	Initiatives that are aimed at making a profit.	DeFi, Play2Earn, Venture, Investments, CCO, Media, Developer, Work, Co-ownership, Product
Social	Initiatives that are aimed at bringing a group together to obtain a common goal with a social bond in the background, without a specific profit in mind.	Clubs, Social, Matching, Hackathon
Research & Development	Initiatives aimed to gather information or to develop knowledge that can be used by others, with no specific profit goal.	Grants, Oracle
Human	Initiatives that are aimed at improving general purposes without any profit goals.	Charities, Philanthropy, Basic, Impact
National	General utilities on a national level, political parties and notary functions.	Political, Restructuring the basis of governance and democracy—notary functions
Global	Global general utilities like blockchain infrastructures and virtual worlds.	Metaverses, Infrastructure
Art	Art creation, ownership and trading-related business objectives.	NFT platforms, Art
Other	Other business objectives than the 7 other categories. Either the DAO has combined business objectives or does not fit the other descriptions as they facilitate a too narrow function or single process.	Web3 Platforms, One Issue, Validator, Collector, Wallet, Automating Enforcement of Ethical Policies in business processes

Source: Taken from Rikken, Janssen, & Kwee, 2024, p. 112).

Rikken, Janssen, & Kwee (2024) proposed categorizing these business objectives of DAOs, as shown in Table 23.1.

Potential Uses of DAOs in the Public Sector

As shown in the previous section, the possible uses of DAOs are extremely broad. Traditionally, governance in the public sector was highly hierarchical. However, there has been more emphasis on hybrid forms that stimulate networked participation, although scholars observe fluctuations between hierarchical and non-hierarchical structures (Christensen, 2012; Hill & Lynn, 2004).

Due to the possibility of adding transparency and increasing direct democracy with DAOs, one could use various DAO objectives in the public sector. DAOs are beginning to show potential across several areas of public governance. They present opportunities for improving citizen-to-government interaction and citizen participation in decision-making processes. For

example, in participatory budgeting, DAOs allow citizens to directly vote on the allocation of public funds, promoting transparency and trust. DAOs are also being tested in government-to-government collaborations, enhancing decision-making and internal processes (Diallo et al., 2018; Van Wijngaarden, 2024). Early initiatives explore the use of DAOs for managing public goods and digital commons (van Vulpen & Jansen, 2023), offering decentralized governance models that foster democratization, transparency, and joint ownership. Additionally, the concept of decentralized political parties is emerging, aiming to create more transparent and democratic political processes, with the potential to address challenges like bureaucracy and lack of clarity in decision-making and adhere to the Whole of Government philosophy (Christensen, 2012). Particularly, we identify key areas where DAOs could be of specific interest to the public sector. Figure 23.2 shows these areas: internal democratization, citizen participation, management of commons, and decentralized parties.

Internal Democratization—Public Servant Participation

The most straightforward implementation possibility of DAOs in the public sector, in terms of involved actors and potential change management, would be using DAOs for internal democratization of existing public bodies and institutions. By using DAOs, one can improve employee participation across departments, simplify and streamline processes, make optimal use of digitization, and increase the speed of decision-making. In this way, one can go beyond traditional hierarchical structures and bureaucratic processes. This could then increase efficiency in government-to-government operations. The use of DAOs for internal democratization can directly contribute to the ideas related to the whole of government approach (Christensen, 2012; Dunleavy et al., 2006).

In setting up such a DAO, the participants can be employees from various departments and hierarchical levels within the organization, who normally are not used to working together. Any of these participants can propose a decision for improvements or projects. Through the DAO structure, all participants can vote on this proposal, and the outcome of the vote can typically result in the allocation of resources requested, for example, the internal budget in money or time to perform the actions as proposed. Besides the potential opportunities as mentioned above, decisions made by the DAO are implicitly and directly supported cross-organizationally due to the nature of the participants.

By focusing on internal democratization through DAOs, one can gradually get used to working in a DAO structure in a relatively safe environment. The first experiments of internal

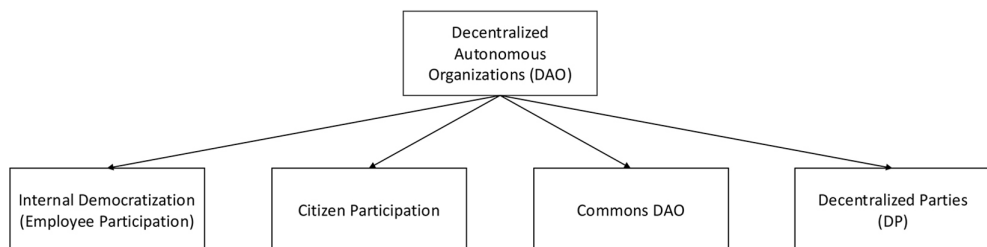


Figure 23.2 Potential DAO usage in the public sector

DAOs can be seen in the Netherlands within the national police. Also, the United Nations Internet Governance Forum has set up a pilot to showcase the possibilities of DAOs in the public sector³.

Citizen Participation

Another possible use of DAOs within public sector governance is related to increasing efficiency and trust in citizen-to-government operations through decentralized autonomous citizen participation organizations (DACPOs). According to Rikken et al. (2022), DACPOs can contribute to enhancing trust between public organizations and citizens. Building on the idea of participative budgeting initiatives first implemented in the 1980s (Sintomer, Herzberg, & Röcke, 2008), DACPOs could provide a promising solution to address challenges associated with these initiatives. Such challenges have included information asymmetry, lack of empowerment, loss of control and autonomy, and lack of personal characteristics (Engelfried et al., 2021; Gret & Sintomer, 2005; Sintomer et al., 2008).

Within a DACPO, the public organization, in partnership with citizens, can set up a DAO wherein public funds, such as a local subsidy for neighborhood improvement, can be deposited. Through the proposal stream, any citizen eligible in this particular DAO can initiate proposals for the allocation of (parts of) the budget themselves. Through the notary (voting) function, the citizens can vote, and with a positive outcome, the budget is autonomously allocated to the proposal's goal. One could opt for a pure principal-agent (Eisenhardt, 1989) setup, where the public body is the principal and the citizens act completely as the agent, or see this as a form of public-citizen partnership, where (employees of) the public body also have a vote in the DACPO next to the citizens.

The inherent transparent nature, direct voting by the participants, and autonomous execution of decisions by means of smart contracts could help overcome the challenges as witnessed in earlier participative budgeting initiatives (Rikken et al., 2022). However, although there are not many examples of DACPOs in practice, certain initiatives, like the *cabin.city* DAO⁴ have already been set up to support real-life communities that organize themselves through a DAO and where the community jointly decides over various decisions, including joint budget allocation.

Management of Commons

Commons refers to publicly accessible resources such as land, water, and air, but it can also refer to software or digital commons (Birkinbine, 2020; Ostrom, 1990). Another use case of DAOs for the public sector is for the 'ownership' and management of commons. The possibility of using blockchain and DAOs for commons is already studied by various scholars (Papadimitropoulos, 2022; Rozas, Tenorio-Fornés, Díaz-Molina, & Hassan, 2021; Rozas, Tenorio-Fornés, & Hassan, 2021; van Vulpen & Jansen, 2023).

Due to their inherent nature, DAOs can address challenges in global commons such as power distribution, coordination and cooperation, transparency and collective agreements

³ https://en.acnnewswire.com/article.asp?art_id=88247

⁴ <https://cabin.city/>

(Rozas, Tenorio-Fornés, & Hassan, 2021). This is particularly noticeable in digital commons, for instance, open-source software or digital infrastructure development and maintenance (Rozas, 2021; van Vulpen & Jansen, 2023). Some scholars even argue that DAOs could play a significant role in ambitious initiatives such as ‘saving the planet’ (Ducrée et al., 2020).

Although few examples of Commons DAOs exist, one could argue that various blockchain infrastructures are already DAO-governed commons. Possible examples are DAOs like Optimism Collective DAO⁵, which manages the Optimism protocol, and Arbitrum DAO, which manages the Arbitrum protocol⁶.

Decentralized Parties

One of the most progressive ideas in the use of DAOs in the public sector is decentralized parties (DePa). The idea of decentralized parties was first introduced in 2021 by Andrey Sergeenkov. Sergeenkov argues that in this way, transparency and accountability can be designed by default in political parties. Actions are autonomously executed if the right conditions are met or as a result of user activity or verified party members. Through coded rules and tokenized incentive mechanisms, the participants’ contributions should be positive and in line with the parties’ values as determined by their participants. Sergeenkov argues that setting up a Decentralized Party creates a party that truly reflects the views of all participants of that party (Sergeenkov, 2021).

There are not many clear examples of active DePas yet. The concept, however, has inspired potential political initiatives like 3OH DAO⁷. This initiative aims to create a quasi-direct democracy to influence policymakers and politicians through the use of political action committees (ThreeOH, 2022). One could also argue that DAOs that run the core software development behind virtual worlds or metaverses, although not real-world countries, are de facto DePas, of which Decentraland⁸ is arguably the most predominant example.

HOW CAN DAOS BE ORGANIZED?

How a DAO is set up and for which purpose seems to be important for the long-term viability of DAOs. Certain combinations of DAOs’ business objectives and governance elements seem to have a positive or negative effect on the long-term viability of that specific DAO (Rikken et al., 2024). Even the infrastructure where the DAO is built can influence the long-term viability of DAOs (Rikken et al., 2024). Although by many, a DAO is perceived as one organizational form, in practice, due to differences in the setup of governance elements like decision model and incentives, the infrastructure upon which a DAO is deployed, and the business objective of a DAO, one cannot approach a DAO as a ‘one size fits all’ organizational solution.

⁵ <https://www.optimism.io/>

⁶ <https://ethereum.foundation/>

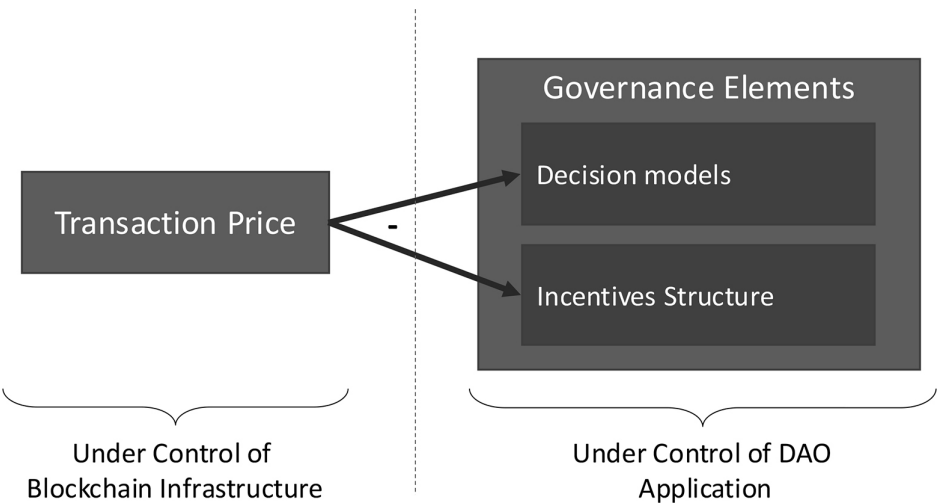
⁷ <https://api-new.whitepaper.io/documents/pdf?slug=threeoh-dao>

⁸ <https://decentraland.org/>

No One Type of DAO

When designing a DAO, there are many elements one should carefully take into account (Figure 23.3). Besides the question of whether the business objectives suit a direct democratic model with autonomous executions of decisions as DAOs entail, there are two important elements one needs to consider. The first is the infrastructure in which a DAO is deployed; the second is the setup of the internal governance elements of the decision model and incentives.

The choice of infrastructure is important due to the fact that the entanglement of infrastructure and application leads to dependency of infrastructure elements in the governance of the application (Rikken et al., 2019). This materialized in multiple ways. The immutability of code, where, after deployment, if no precautions are taken, the application, in this case the DAO, for corrective governance actions, becomes dependent on the governance structure of the infrastructure without having formal power. A clear example of this happening is the ‘theDAO’ incident, where due to misuse of smart contract code, a lot of value was drained out of the DAO, but for corrective action, the participants could only act by reaching out to the governance structure of the infrastructure on which ‘theDAO’ was deployed on (DuPont, 2017; Rikken et al., 2019). Another way is through the transaction price. If one wants to perform actions, like voting, in a DAO, as stated earlier, one needs to do so by sending a transaction to the blockchain infrastructure. The transaction price on an infrastructure can fluctuate due to various reasons (price of cryptocurrency, but also the price setting by the infrastructure governance for so-called ‘gas’ or calculation fees). If prices go up, this could negatively influence the willingness or even possibilities as a result of too high transaction prices for tokenholders in a DAO to participate in, for example, the voting process (Arnaucube, Kampa, & Baig, 2022; Faqir-Rhazoui, Ariza-Garzón, Arroyo, & Hassan, 2021; Rikken, Janssen, &



Note: Based on the theory of long-term viability influencing factors of DAOs.
Source: Rikken et al., 2024, p. 135.

Figure 23.3 Elements to be considered in designing a DAO

Kwee, 2024). As transaction prices can differ significantly per infrastructure, the choice of infrastructure is important in the setup of the DAO.

The governance or voting is done through token-based voting systems, where, in general, the DAOs work with systems where a token represents a vote. Within the token-based system, one can distinguish various implementations. The most important distinction is between weighted voting and non-weighted voting.

Within a non-weighted voting system, every account, representing a single participant, has one token and thus one vote. The tokens are bound to one account and can be referred to as membership-like voting systems. In weighted voting systems, the most important distinction can be made between so-called share-like or reputation-based voting systems. In both systems, the number of tokens per account, and thus participants, can differ depending on their voting power. The difference between share-like models and reputation-based models is that in share-like models, the tokens are transferable and thus tradable; in reputation-based models, they cannot be transferred to other accounts. In share-like models, one can buy or sell voting power, whereas in reputation-based models, one can earn additional reputation but also lose reputation (Rikken, Janssen, & Kwee, 2023a).

Besides the above, one other important element regarding decision models is the ability to delegate voting power. In delegation models, a token holder can (temporarily) delegate their voting power to another account so they can vote on their behalf.

Besides the above-described types of decision models, there are many other new ones, like conviction voting models (Emmett, 2019) or quadratic voting (Lalley & Weyl, 2018), but these forms are not in widespread use within DAOs (Rikken, Janssen, & Kwee, 2024).

The second governance element is around incentives. Within DAOs, we can distinguish three main incentive types for participation in governance: direct incentives, indirect incentives, and no or absence of incentives. In direct incentive structures, tokenholders are incentivized by either payment in fee or, in share-like models, more (tradeable) tokens or by gaining additional reputation. In indirect incentive structures, the incentive comes from a higher value of the (tradeable) token as a result of good governance. With no incentives, there is no direct incentive nor indirect incentive mechanism at all, as tokens are not tradeable and no direct incentives are given (Rikken, Janssen, & Kwee, 2023a).

DAOs, as a result of the numerous possible choices in governance setup, deployable infrastructures and business objectives, are thus not to be approached as one organizational type. The choices can influence the legal structure under which a DAO can operate (Rikken, Gideonse, & Putman, 2023), but also can influence the long-term viability of DAOs (Rikken, Janssen, & Kwee, 2024). Also, the type of decisions and participation level influence the viability of DAOs (Appel & Grennan, 2023; Zhao et al., 2022). A proper design of a DAO's governance and operational setup is thus crucial.

DAO Governance Possibilities in the Public Sector

Although little research is done on DAOs' governance setups in the public sector specifically, especially regarding the four abovementioned categories, based on other research, there can be indications of suitable governance and infrastructural setups for the mentioned categories (Rikken, Janssen, & Kwee, 2024), taking public values and goods into account. An overview of possible mappings of governance and infrastructural elements per DAO possibilities in the public sector is presented in Table 23.2.

Table 23.2 *Mapping possible governance and infrastructure choices and public sector DAO possibilities*

DAO: Usage categories	Infrastructural Choices	Governance— Decision Models	Governance— Incentives
Internal Democratization	Low-cost permissionless or permission infrastructure	Membership / Reputation No Delegation	No / Direct (Reputation)
Citizen Participation	Low-cost permissionless	Membership No Delegation	No
Commons	Permissionless – dependent on mission commons	Membership / Reputation Delegation	No / Direct (Reputation or Fee)
Decentralized Parties	Permissionless or permissioned	Membership / Reputation Delegation	No / Direct (Reputation)

OPPORTUNITIES AND RISKS

The opportunities for DAOs are manifold. As shown in the previous section, DAOs within the public sector can contribute to the improvement of government-to-government participation by means of internal democratization initiatives, the improvement of citizen-to-government participation by means of DACPOs, DePa, and the management of commons. As stated, the inherent characteristics of DAOs of direct participation by their tokenholders and elements, like transparency, by means of the underlying blockchain infrastructure being used, directly contribute to important public values of direct democracy, participation, and openness.

However, besides the clear opportunities, one also has to consider various potential risks. The participation in DAOs is done through token holders. Various research shows that despite the democratic intention of DAO setups, voting power often concentrates unevenly (Feichtinger et al., 2023; Peña-Calvin et al., 2024). Many DAOs seem to have a high voting power concentration with a few account holders holding the majority of voting power, even going so far as dictatorships controlled by a single tokenholder (Fisch & Momtaz, 2022; Rikken, Janssen, & Kwee, 2023a). Therefore, transparency regarding the distribution of voting power, measured by metrics such as the Gini coefficient (Feichtinger et al., 2023; Peña-Calvin et al., 2024), is crucial to be made known to all participants to understand the balance of power within DAOs.

Another risk in token-based voting is that many DAO tokenholders, due to the usage of blockchain-based infrastructures, hold their tokens on accounts. Although the DAO in itself can hold a principle of X votes per account, based on its governance setup, it is difficult to determine if a person holds multiple accounts and, thus, in practice, has more voting power than it appears at first sight (Fritsch, Müller, & Wattenhofer, 2022; Rikken, Janssen, & Kwee, 2023a). This can pose a sybil attack risk. This could be mitigated by introducing the concept of proof of humanity, where a participant must prove that the person is really behind that account (van Vulpen et al., 2024).

The concept of proof of humanity, especially taking the inherent element of transparency within DAOs into account due to the underlying blockchain-based infrastructures, could pose a risk. As voting is transparent, one can see the voting behavior of individuals. Although within blockchain infrastructures, one can see the transactions of an account number, if one adds proof of humanity to the individual accounts, this could pose a privacy risk if designed incorrectly. A possible solution could be in blind signature solutions like Blind-OVOTE (Arnaucube et al., 2022), although these are not commonly available yet.

Transparency could also pose a risk of strategic behavior in voting, as voting progression in DAOs is transparent as well. During the vote, the way the vote is going is often transparent, and thus, this could lead to strategic behavior by voters, for instance, when the voter suspects the vote to go the wrong way in their perception, to withhold from voting, as this then could lead to not reaching quorum and thus no vote outcome. The quorum element could pose an important risk, and voter fatigue is always something to be considered. Voter fatigue within DAOs refers to the situation where voters are no longer interested or willing to vote on (governance) decisions (Tan et al., 2023). If a too-high quorum is set, this could mean that no decisions can be made in practice due to voter fatigue. Too low a quorum runs the risk of not having a representative vote. A possible mechanism to mitigate this is the possibility of delegating votes. In this way, individuals can delegate their voting weight to someone else, but can always reset their voting weight to another delegate.

The business objective of a DAO can influence its long-term viability, where non-economic purpose DAOs seem to have better long-term viability than DAOs with an economic or for-profit objective (Rikken, Janssen, & Kwee, 2024). This poses an opportunity for DAOs in the public sector, as public sector initiatives are non-profit or not-for-profit by nature. A risk for DAOs could be that the business objective or goal of the DAO is too complex for the participants to understand what they are governing. Although the transparency of DAOs, including the transparency of proposals to vote on, does not necessarily mean that all the participants understand the proposal. Thus, although transparency of information implies equality of information, this does not necessarily happen. Also, with an ever-increasing boundary as the size of the community might grow, this could become a challenge, for example, in common DAOs (Rozas, Tenorio-Fornés, & Hassan, 2021).

CONCLUSIONS

DAOs offer many opportunities for the public sector, both government-to-government and citizen-to-government, like increased efficiency and support over departments and institutions, decreasing bureaucracy and adhering to the whole government. Although most initiatives of DAOs in the public sector are early stage, predominantly active in inter- and intra-government organizational collaboration, they can also clearly contribute to managing commons, increase public-private collaboration, citizen participation, and participative budgeting initiatives, adhering to public values by means of increased transparency and direct democracy.

Deploying a DAO in the public sector is neither a silver bullet nor a panacea. Inherent elements like immutability and, with that, less potential adaptability of business processes can influence agility. Also, not all (business) objectives seem suitable for democratization through a DAO. Furthermore, a DAO should not be approached as one organizational form. A careful design process of the DAO, considering governance design aligned with that DAO's specific

scope, goal, or business objective, is crucial to mitigate risks of inresponsiveness, undemocratic decision-making, or privacy issues. A proper design can enhance its long-term viability and ensure the explicit embedding of public values in the DAO. And while few DAO initiatives are active in the public sector, one can make analogies and learn valuable lessons from existing DAOs in the Web3 industry.

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