

A Work Project, presented as part of the requirements for the Award of a Master's degree in  
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FROM CENTRALIZED TO DECENTRALIZED: AN EXPLORATION OF CHALLENGES IN  
ADOPTING DECENTRALIZED AUTONOMOUS ORGANIZATION STRUCTURES

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## **Abstract**

This work investigates Decentralized Autonomous Organizations (DAO) and the adoption of their characteristics in traditional companies. As the total amount of DAOs steadily increased over time, the literature on this specific transformation process did not. This work uses a qualitative research method consisting of four interviews with industry experts and a secondary data analysis. The results show that the factors DAO's level of effectiveness as well as technical complexity and effort to solve legal challenges influence the successful transformation from a centralized company to a DAO. Additionally, it has been found that only one company transformed itself until now.

**Keywords:** *Decentralized Autonomous Organization (DAO), Blockchain Technology, Organizational Structure, Transformation Challenges, Business Model Adaptation*

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## **1 Introduction**

As society evolves over time and technology enables humanity to exchange information worldwide, new ways for humans to organize themselves are emerging. The adaptation of blockchain technology in organizational structuring is an attempt to organize people in a decentralized and autonomous form (Buterin 2013a). Currently, Decentralized Autonomous Organizations (DAO) emerge from the collaboration of individuals to follow a common objective (DuPont 2019). Despite the many perceived benefits of adapting DAO structures (Hassan and Filippi 2021), only one company has performed the transformation into a DAO until now.

This research was motivated by the upcoming adoption of blockchain technology and the evolution of legal frameworks which could potentially make this transformation more common. This research seeks to explore the factors influencing the successful transformation of a centralized company into a Decentralized Autonomous Organization. To pursue this research, a qualitative approach consisting of four interviews and a secondary data analysis has been chosen, as it allows the exploration of transformation possibilities and the achievement of fundamental insights.

This work will first explore factors that influence the success of a transformation from a centralized, legally registered company into a Decentralized Autonomous Organization. It will then identify the number of companies that have fully decentralized themselves based on blockchain technology.

## 2 Literature Review

### 2.1 History of Decentralized Autonomous Organizations

The first forms of decentralized corporate and governance structures already appeared in literature in the early 70s in multiple papers (Shubik 1962; Beckhard 1966; Freeland and Baker 1975). The strive for decentralization was motivated by the possibility to directly reward people in a professional manner when they make responsible decisions (Shubik 1962). By decentralizing the decision-making process in a company, the net output of all individual decisions would be more value-adding to the company in comparison to a top-down decision-making process. The first academical mentions of fully decentralized and automated organizations appeared first in 1997 as part of a multi-agent system consisting of IoT applications (Dilger 1997). However, the historical approaches to decentralized governance and structures showed several characteristics, that also the DAOs running on a blockchain show.

In 2008, with the introduction of the Bitcoin blockchain (Nakamoto 2008), technology inventions enabled concepts of fully decentralized organizations to emerge. The concept of a DAO got public attention after a blog post by the cofounder of Bitcoin Magazine and the later Ethereum founder Vitalik Buterin (Buterin 2013b). By implementing the underlying principle of code-is-law (Lessig 2000) onto the blockchain, self-executing code is used to define the DAOs governance (Hassan and Filippi 2021). By using the so-called smart contracts on a blockchain of a DAO, the underlying immutability, transparency, and the ecosystem of the used blockchain also count into the technical aspects of the DAO (Wright 2021).

### 2.2 Definition of Decentralized Autonomous Organizations

As there are several coexisting definitions of the blockchain-based DAO concept, literature has not yet decided on one definition.

DAO as a “virtual entity that has a certain set of members or shareholders which [...] have the right to spend the entity's funds and modify its code.” (Buterin 2013a). Emerged from that, several differing definitions came up, which are for the following work summed up:

A Decentralized Autonomous Organization is a blockchain-based organization that is based on the participation (Santana and Albareda 2022) of individuals who share a common goal (DuPont 2019). Participation is based on propositions inside the organization (Singh and Kim 2019), the use of voting-rights (S. Wang et al. 2019; Hsieh et al. 2018) and the fulfillment of tasks (Zhao et al. 2022). The so-called governance set the playbook of the DAO (S. Wang et al. 2019) and is based on smart contracts on the blockchain (Filippi and Wright 2018).

An individual can participate in a DAO by acquiring tokens of the DAO (Hsieh et al. 2018), and participate in the decision-making process. By working on tasks, which the DAO decided on, an individual or a group of individuals can also solve defined tasks to get reimbursed for their effort (Zhao et al. 2022). The value and currency of the reimbursement should democratically be decided by the DAO. The underlying idea of a specific DAO usually gets published in the form of a whitepaper which was written by a conglomerate of people having a similar goal in mind (DuPont 2019).

### 2.3 Characteristics of a Decentralized Autonomous Organization

Generally, there are two different types of DAOs to differentiate between: the algorithmic and the participatory DAO (Wright 2021). According to Wrights' Taxonomy of DAOs, blockchain protocols such as Bitcoin and Ethereum and non-upgradeable smart contract protocols are considered algorithmic DAOs, as they “defer entirely to software to structure and coordinate social interactions”. Participatory DAOs in comparison are used for traditional commercial purposes, such as for-profit DAOs operating and working with external companies. According to the author,

this concept consists of an underlying governance token on a blockchain that allows upgradeable smart contracts and is based on voting processes.

Independent of the type of DAO, a DAO must show the following characteristics in parity to its name: decentralized, autonomous and organized (S. Wang et al. 2019).

### **Decentralized**

The more decentralized an organization is, the more distributed are the involved entities inside the organization. Usually, decentralization based on blockchain technology is associated with transparency and therewith brings security, detects fraudulent actions and sets basic governance rules for the participants (Beck 2018).

Typically, in the blockchain environment, there are different assessments of how to quantify decentralization in a DAO (Axelsen, Jensen, and Ross 2023). According to their proposition, there are five dimensions of decentralization in a DAO: Token-weighted voting, Infrastructure, Governance, Escalation and Reputation. This implicates a variety of different forms decentralization appearing inside a DAO. However the most commonly used meaning of decentralization in an ideal DAO the decision making process is decentralized and democratized among the voters (S. Wang et al. 2019). By being regionally unbound, not taking people's ethical or cultural background into consideration DAOs can consist of very diverse people.

With geographical decentralization also comes the absence of a physical headquarter, indicating the possibility to exist and scale its tasks globally (Wright 2021). Participants are able to work online from everywhere. As contributors and shareholders are able to participate in this process, some form of peer-to-peer governance can be achieved (Hsieh et al. 2018).

### **Autonomous**

In regard to DAOs, autonomy is achieved by the automated execution of code and by following the defined governance. As the rules of the DAO are stored on the blockchain, the code can be written

in a matter where the code can execute itself (Beck 2018). Therewith automated actions can be triggered. By programming self-triggering “smart” contracts on the underlying blockchain, the participants of DAO organize themselves. (Singh and Kim 2019). The underlying source code can be deployed on public as well as private blockchains which have the ability to run smart contracts (Hassan and Filippi 2021). As those contracts are placed on a blockchain, they can only be changed with the consensus of the DAO’s voters (Filippi and Wright 2018). As they execute themselves when all necessary parameters are positive, they run independent from the actions of individuals or groups and can only be changed by consensus of the voters.

### **Organized**

Smart contracts can be used to build the overall (self-)governance of the organization (Filippi and Hassan 2016). The strategic goal of the DAO can also get democratically voted within the shareholder of the DAO (El Faqir, Arroyo, and Hassan 2020). Those can be seen as a conglomerate of people or investors using their stakes of the organization to either benefit from financial or operational success. Inside the DAO different roles can be defined and elected. With different roles might also come along different rights and obligations for the assigned participant (Wright 2021). In the process of a DAO creation, the whitepaper indicates the proposed organization’s structure, even though it can be changed later by the voters (DuPont 2019). While Decentralized Fund DAOs show flat hierarchies and mostly vote directly on investment decisions, other applications, such as the Aragon DAO use workstreams and workstream budgets to allocate the organization’s funds (van Vulpen, Siu, and Jansen 2022). Depending on the workstream’s governance, they then get further distributed to contributors who solve tasks for the DAO.

Summing up the partly broad characteristics, a DAO should not be seen as a specific of business model or a particular corporate structure, that can be used for many different applications (Hassan and Filippi 2021).

## 2.4 Implementing DAO Characteristics to a Company

As of May 2023 there exist 12.866 decentralized autonomous organizations worldwide with a total treasury of \$ 23.7B (DeepDAO 2023). The most applications of DAOs in business are cryptocurrency investments and joint venture funds (Santana and Albareda 2022). However, the decentralization of a company with DAO characteristics is not a widely adopted process and research topic. Research focusing on peer-review paper consisting of keywords *DAO transformation, corporate decentralization, company to DAO* show no results studying the transformation. This leads to the main research question:

**RQ: What are factors influencing the successful transformation of a centralized company into a Decentralized Autonomous Organization?**

Research has shown, that there is a general research gap referring to a comparison of DAOs and traditional organizations and how they compete with each other (Bellavitis, Fisch, and Momtaz 2023). According to a meta-analysis consisting of 222 papers about DAOs, decentralization in organizations can lead to reduction of transaction costs (Santana and Albareda 2022). Literature also shows, that disintermediation due to the use of blockchain technology in the organization can reduce agency costs (Bellavitis, Fisch, and Momtaz 2023). An example for that is the reduction of bureaucratic processes like the onboarding of a participant to a DAO. Becoming a token-holder of a DAO and therewith gaining voting rights could theoretically be realized by only performing a few clicks (Wright 2021).

However, literature also indicates, that DAOs introduce new forms of transaction costs such as inflexibility costs, oracle costs, and security costs (Murray et al. 2021). This aligns with the idea, that general decentralization implemented in a suboptimal circumstance and in the wrong

application can harm the outcome of an organization's activity (Prud'homme 1995). For this purpose, the organization's effectiveness is defined as the ability to reach the organization's goals. This leads to the first influencing factor (IF) that the level of the DAO's effectiveness is influencing the success of a transformation.

### **IF1: The level of effectiveness inside DAOs.**

Analyzing the ways in which a DAO in comparison to a company work, several differences appear. In a company, employees are usually obligated to work due to an employment contract. In exchange to the work that mostly is defined by the company's management, the employee is paid a regular salary. In comparison to that, participants in a DAO do not have a contract that obligates them to work for the organization. The overall goal and connected tasks to that are defined by a consensus of the token-holders. If a participant solves a task for the DAO, he gets rewarded in form of funds which the organization has access to (Arroyo et al. 2022). Traditional human resource research indicates, that pay is one of the most important motivator for employees (Rynes, Gerhart, and Minette 2004). Based on the idea that a distribution of an organization's joint profit incentivizes the contributors (Shubik 1962), a DAO has to define a governance, of how people can be motivated to participate and make the right decisions. Especially in the beginning of the DAO, its tokens have to be distributed in a way that it satisfies the former equity holder of the company as well as the former employees (DuPont 2019). In analogy to DuPont, it can be said, that the owners of the company to transform defines the DAOs governance and the blockchain in combination with the participants keeps it running on the long term. Research has shown, that in general digital transformation processes, the management's leadership should not underestimate their people orientation (Weber, Büttgen, and Bartsch 2022). But, as the leadership team might lose its contract-

based authority over the employees, a different approach must be found. However, as a DAO is not organized as a company including the management level, some of the employer motivating factors such as managerial appreciation, job security and career-oriented job-advancement cannot be fulfilled in a DAO. This leads to the next influencing factor that the degree of the employee's commitment and participation is necessary for a successful DAO transformation.

**IF2: The degree of the employee's commitment and participation.**

As the first glimpse of Decentralized Autonomous Organizations appeared (Shubik 1962; Beckhard 1966; Freeland and Baker 1975) before blockchain technology was invented (Nakamoto 2008), it can be deduced that further challenges arise with the adaption of that technology to DAOs. These challenges get supported by an event known as the DAOhack (DuPont 2017). Literature also differs between two different types of governance: on and off-chain governance (Reijers et al. 2021). This indicates that not every rule of the DAO is transferable onto the blockchain. But not only the governance, but also the company's tangible and non-tangible assets need to be put into the DAO if a full transformation is pursued. Given this research gap, it raises the technical challenge on how those assets can be positioned on a blockchain-based environment. The complexity of mapping these challenges securely on the blockchain leads to the next influencing factor:

**IF3: Complexity to realize the technical implementation.**

The technical implementation of DAO structures implies high effort for the transforming company. Using blockchain technology as a basis for DAOs also raises the question of how legality can be achieved. Several authors discuss the legal challenges that occur from the absence of global legal

regulations (Filippi and Wright 2018; Werbach 2018). However, some countries introduced some corporate forms, which technically allow the registration and existence of DAOs (Mienert 2021). According to Mienert, the states of Delaware, Vermont and Wyoming introduced some form limited liable companies, which allow the existence of DAOs. Additionally, the Cayman Islands, British Virgin Islands were mentioned as possible locations to register DAOs as companies. Another approach to achieve legality is the usage of foundations in Switzerland. However, Mienert points out, that there is no one fits all solution for the legal registration. The rising legal possibilities gets also supported by the annual industry report by the venture capital fund a16z crypto “State of crypto – 2023” claiming that DAO structures are increasingly becoming a legal entity (Matsuoka et al. 2023). As the ability to register a DAO somewhere might help to gain traction, labor rights and inside this organizational form are still not yet defined (S. Wang et al. 2019).

Even though there are DAO applications, which are currently running, literature still indicates the absences of full legality. The unclear literature leads to the challenge of implementing legal frameworks, which comply with the legislation. This leads to the fourth influencing factor:

**IF4: Effort to solve legal challenges.**

### 3 Methodology

To evaluate the underlying research question and the corresponding influencing factors a qualitative research design has been chosen. This method is suitable for the application in this work, due to the complexity of DAOs and the exploration of novel processes. The research design is based on the conduction of interviews and a secondary data analysis.

#### 3.1 Interviews

The interviewees were picked based on relevant attributes. The relevant attributes are the experience and involvement in DAOs. Furthermore, the final interviewees were purposely sampled, as they show complementary experiences regarding DAOs. Their experiences range from creating DAOs to involvement in the transformation process, exploration of transformation possibilities and participation in regular DAOs. In total, four different people were interviewed as shown in table 1. None of the interviewees wanted to be mentioned publicly.

*Table 1: Description of the Interviewees.*

#	Position	Company	Type of experience	Interview code
1	Former director of engineering and later engineering workstream lead	Decentralized exchange for cryptocurrencies (former centralized, now DAO)	Involvement in the transformation process	I-1
2	Co-Founder	Metaverse aggregator DAO	Creation of DAOs	I-2
3	COO	Web3 onboarding company	Exploration of possibilities to DAO transform the company	I-3
4	Founder	Decentralized Venture Capitalist	Early participant of transformed DAO	I-4

To conduct the interviews, a semi-structured approach has been chosen. The guideline of the interviews consisted of the following topics based on the literature review: general assessment of transforming a company to a DAO, assessment of a DAO's level of effectiveness, evaluation of the importance of employees in the process, technological challenges, legal hurdles.

Based on the influencing factors IF1-IF4 a deductive coding approach has been chosen. The thematic analysis is based on the themes: DAO's effectiveness (T1), employee's commitment and participation (T2), technological challenges (T3), legal challenges (T4).

### 3.2 Secondary Data Analysis

To evaluate the overall relevance of DAOs that have been transforming themselves from a traditional company, a secondary data analysis has been performed additionally. On a variety of different industry related websites and forums as seen in table 2 the following keywords have been used to find possible matches: *Decentralized Autonomous Organization Transformation, DAO transformation, Decentralizing companies, Decentralized Autonomous Organization spin off, DAO spin off, Decentralized Autonomous Organization hybridity, DAO hybridity, blockchain based company.*

Table 2: Industry related websites used for the secondary data analysis.

#	Website	Relevance
1	Coindesk.com	News platform regarding cryptocurrencies and the blockchain industry
2	Coinbase.com	Exchange for cryptocurrencies and blog for blockchain-related topics
3	Entrepreneur.com	Magazine about entrepreneurship, corporate management, and trends.
4	Reddit.com	Social-news-aggregator
5	Thedefiant.io	News platform for web3, cryptocurrencies and blockchain industry

## 4 Findings

### 4.1 Results of the Interviews

The coded results of the interviews have been summarized in table 3.

Table 3: Interview results after coding.

Theme	Number of arguments			Number of mentions		
	<u>total</u>	<u>pro</u>	<u>con</u>	<u>total</u>	<u>pro</u>	<u>con</u>
T1	15	7	8	17	7	10
T2	9	3	6	10	3	7
T3	6	4	2	8	6	2
T4	7	5	2	11	7	4
	37			46		

Throughout the analysis of the interviews, different arguments have been found supporting and contradicting the influencing factors. The number after the argument indicates the amount an argument has been mentioned. Regarding T1, a total of seven supporting arguments (7) have been mentioned supporting IF1: The time-consuming effort to establish the governance over time (I-2), the absence of administrative overhead (I-1), the quorum<sup>1</sup> (I-4), token threshold<sup>2</sup> (I-4) and the possibility of majority attacks (I-4). Additionally, the absence of centralized access to standardization, databases, and knowledge (I-2) has been mentioned, as well as the loose communication as an effectiveness harm have been mentioned (I-3). Contradicting IF1 eight different arguments (10) have been mentioned: the people fit (I-2, I-3, I-4), high transparency (I-3, I-4), the acceleration of operations (I-1) and the reduction of overhead costs (I-3) and unfalsifiability (I-4). Additionally, a higher degree of innovativeness (I-1), the ability to raise funds more effectively (I-2) and information asymmetry (I-1) have been named.

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<sup>1</sup> Minimum amount of different voting members needed for a proposal to be accepted.

<sup>2</sup> Minimum number of tokens needed for a proposal to be accepted.

Regarding T2, three arguments (3) have been mentioned in favor of IF2: the individual decision of being part of the transformation (I-2), the proof of work results (I-3) and sharing common goals (I-3). Against this influencing factor, six arguments (7) have been mentioned: the possibility to incentivize people (I-1, I-2), the possibility to contract people as freelancers (I-2), the organization of people inside of teams or work streams (I-2), the trust in the organization due the code as law (I-4), the benefit of fewer people (I-1) and the benefit of new people (I-4).

Regarding T3, four arguments (6) in favor of IF3 have been mentioned: dealing with forkability<sup>3</sup> (I-1, I-4), the amount of time needed to fully set up the DAO (I-1, I-3), the absence of truly decentralized architecture and servers (I-1), and higher complexity of implementation when transforming a company in comparison to the pure creation of a DAO (I-2). Against the IF3 two arguments (2) were mentioned: the possibility to run a centralized architecture (I-2) and the availability of basic DAO tools such as forums and token-issuing platforms (I-3).

Regarding T4, five arguments (7) supporting IF4 have been mentioned: the absence of extensive DAO recognition (I-2, I-3, I-4), absence of taxation laws for contributors (I-4), absence of legislation regarding privacy inside DAOs (I-3), the decoupling of equity and token-backing in LLCs (I-4) and building legally compliant frameworks is effort intensive (I-2). Two arguments (4) have been mentioned against this influencing factor: the registration of a DAO is possible (I-1, I-2, I-3) and the possibility to tax the contributor's remuneration through freelancing contracts (I-2). 37 unique arguments have been mentioned in a total of 46 mentions.

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<sup>3</sup> Forkability describes the ability to create a clone of the open-source code.

## 4.2 Results of the Secondary Data Analysis

A web search indicated the existence of only one DAO that claims to be fully decentralized after a DAO transformation as shown in table 4.

Table 4: Findings of the secondary data analysis.

Website	Article	Author	Last updated	Referring company/DAO	Degree of Decentralization
Coindesk.com	ShapeShift, DAOs and the Future of Work	Jeff Wilser	14.09.2021	ShapeShift AG to ShapeShift DAO	Full
Medium.com	Defi Insight: ShapeShift's transformation from a centralized platform to a DAO	ITSA e.V.	07.07.2022	ShapeShift AG to ShapeShift DAO	Full

Further research showed, that the former ShapeShift AG, an exchange for crypto assets, strived for a full decentralization towards the ShapeShift DAO in 2021 (International Token Standardization Association e.V. 2022). To achieve that, the ownership and operations of ShapeShift products have been transferred to the Fox Foundation in Liechtenstein (ShapeShift 2022). The ownership of the Fox Foundation was then distributed among users by giving away FOX tokens to its users (Wilser 2021). Those tokens give the owners voting rights inside the organization.

## 5 Discussion

### 5.1 Evaluation of Influencing Factors

The following part will discuss the results of the interviews to evaluate the influencing factors and their relevance to the research question.

There are principles in a DAO, which harm the organization's ability to reach its goals, such as the effectiveness in the decision-making process mentioned by Interviewee 4. In a top-down hierarchy, decisions could be made faster. But as mentioned by Interviewee 1, the overall effectiveness of a

DAO's operations based on its innovativeness could be improved strongly. Out of the total seventeen mentions regarding the effectiveness of decentralized organizations, ten of them are related to the DAO's governance. This indicates a dependency of the organization's effectiveness to the DAOs governance. As the governance of a DAO is not universally static and can be changed, the effectiveness harming arguments could theoretically be solved over time. With the evolution of DAOs and the probable emergence of best practices, the effort that exists in a DAO to find optimal governance could potentially be reduced in the future. However, based on the current status of the evolution of DAOs, the level of effectiveness inside a DAO influences a successful transformation. As employees are an important stakeholder in traditional companies, their role in a transformation process is not to be underestimated. However, the number of mentions given in the interviews (7 con vs 3 pro) indicate that the success of a DAO transformation might not be highly depending on every employee's participation and commitment. As Interviewee 1 mentioned, a transformation is even possible when the majority of employees leave the company throughout the process. Supported by the arguments given by Interviewee 1 and 4, that organizations even benefit from fewer, newer, and more committed people contributing to the new organizational form, the influence of IF2 is evaluated low.

The implementation of blockchain technology as underlying structure of a DAO does already implicate challenges in the creation process of a DAO as shown in I-2. However, as Interviewee 3 mentioned, there are specific applications, which can be used to govern a DAO and issue tokens. Supporting arguments were mentioned six times against two times. Given the results of the interviews, the influence of IF3 gets strengthened. It needs to be mentioned that the arguments do not only relate to the availability of advanced tools but also the efforts to implement the technology onto the blockchain. It gets further supported by Interviewee 1, as the DAO, he was involved in, is already two years into the transformation process and still faces challenges to achieve full

decentralization. Based on the results of the interviews, the complexity of realizing the technical implementation has a strong influence on the success of transforming a company to a DAO. However, in alignment to Interviewee 1, 2 and 3 it needs to be mentioned that depending on the degree of decentralization and the type of a certain DAO, a full decentralization might be possible. Interestingly, there were contradictions in the results of the influence based on the effort to implement a legal framework for DAOs. As interviewees 2, 3 and 4 mentioned that legal registration of a DAO is not truly possible, the legal framework of the DAO created by Interviewee 2 is working without any bigger legal issues even though they are not legally recognized as a DAO. Also, the structure mentioned by Interviewee 1 and comparably described in 4.2 seems to work out without being legally regulated by any state. Given the broad definition of DAOs and the variety of applicable cases, legal uncertainty remains. Based on the contradicting results and the absence of a consensus between the interviewees, a strong influence onto the success of a transformation is suspected by IF4.

Summing the results of this discussion up, it can be said that based on this research the influence of the employee's commitment and participation throughout the process of decentralizing a company on the success is not very strong. In contrast, the influence of the other factors is suspected to be strong. The level of effectiveness inside the DAO, the degree of the employee's commitment and participation and the effort to solve legal challenges seem to have a strong influence on the success of the transformation process.

Based on the confirmation of these three influencing factors and the only existence of one DAO which has transformed from a centralized company, the research question can be answered as the following:

This work found the existence of three factors that influence a successful transformation from a centralized company to a Decentralized Autonomous Organization. However, the existence of additional influencing factors cannot be excluded based on the research design.

## 5.2 Limitations

The literature on DAOs itself is highly limited. As such, for some parts of the thesis, not only peer-reviewed primary data was used. The results of the secondary data analysis are highly dependent to the used websites, which could also lead to a distortion of the analysis' outcome. The qualitative research also shows limitations as only four people were interviewed throughout the process. Also, the variety of different backgrounds of the interviewees, which were chosen to achieve diverse insights, might influence the results of the qualitative approach negatively. It might be possible that more factors influence the success of a DAO transformation. Lastly it needs to be mentioned that the overall concept of a DAO based on blockchain technology is quite novel. This could lead to a change in the academic consensus in the future and to further adaptations of the DAO characteristics and use cases.

## 5.3 Directions of future research

Based on the results of the exploration of factors influencing the success of transforming a company to a DAO, the following research could be conducted in the future:

Quantitative research about the effectiveness of the organization's decision-making processes and operations could deepen the understanding of the functionality inside DAOs. Especially the voting-mechanisms seems to be a very important part of the DAO's governance. An exploration of the process to implement decentralized structures in the form of a case study could further explore challenges regarding the transformation process. To fully evaluate the legality of DAOs, the

evaluation of different legal frameworks as a doctrinal research approach would support the academical understanding.

## **6 Conclusion**

As technologies evolve over time, new applications of these appear. The application of blockchain technology was also used in the last years to achieve the characteristics of a Decentralized Autonomous Organization. However, as this concept is quite new, the adoption of DAOs is still moving forward. This work contributes to the current state of research by exploring factors which influence the success of transforming a company to a DAO and evaluating how many companies have transformed themselves until now.

It was found that the factors of DAO's efficiency, complexity in technical implementation and effort to solve legal challenges are influencing the success of a DAO transformation. The influence of the employee's commitment and participation could not be shown. Additionally, it was found that only one company has transformed itself until now. The research question can be answered as follows: The relevance of three factors influencing the successful transformation of a traditional company to a DAO has been explored.

The results contribute to the understanding of DAOs itself and the possibilities to decentralize companies. Even though four different perspectives with various experiences, ranging from participation to transformation, have been consulted to evaluate the influencing factors, the number of interviewees might limit the outcome of this work. It cannot be confirmed that no further factors exist. Future research in a variety of research areas regarding DAOs is important, as the concept and adoption are currently evolving fast.

As this evolution takes time and organizations must evaluate if a DAO transformation is an option, the future will show how companies will adopt DAO characteristics. It is going to be interesting to see how DAOs really change the way people organize themselves in the long term.

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## 8 Appendix

### 8.1 Transcript I-1

Interviewer: Hey, thank you for taking the time today.

Interviewee 1: Thank you for the invitation.

Interviewer: Can you maybe briefly explain what your job at \*censored\* was?

Interviewee 1: Right. So, from 2017 on I was the Director of Engineering at \*censored\*. And then, with the transformation to the DAO in 2021 I was elected as the workstream lead for the engineering workstream until last year.

Interviewer: Can you maybe give me a quick review of the whole transformation process?

Interviewee 1: We really started the decentralization in July of 2021. We've been talking about it for a bit, but that's when we did the big airdrop, the big announcement, and all of that.

Interviewer: What were the reasons for you to decentralize?

Interviewee 1: Mostly we were being out-innovated. And we noticed that the DAOs were innovating really quickly. And we were also losing our community base. And so DAOs are pretty good in building communities, innovating more quickly and there was a third reason. Reduced administrative overhead.

Interviewer: From your experience, would you say, that with the better innovation power, also overall the organization was more effective?

Interviewee 1: Even though we innovated more quickly, some of the organizational matters can take longer because you're not in consensus. But you know your major decisions are going to be put out for vote so the decisions take longer. And so, like, particularly when it came around to like cutting budget, you know, we needed to stop spending so much money so that we can survive longer. To do that, that took longer. Some decisions take longer in a DAO.

Interviewer: So after the budget cuts, how is it now going months after the budget cut?

Interviewee 1: Correct. Well basically. That was after the first nine months after the transformation we were still spending frankly a lot of money back then. Crypto was still like doing really well, and there was a lot of hype. It was right after that talk that the downturn started and then it took us another nine months to be able to cut the budget to a reasonable level. So right now we've got the budget reduced to a manageable size, but we spent a lot of money getting it to that point. But I mean, this can also happen in a centralized organization. You sometimes need to cut a bunch of budget. And you get worried how we're going to be able to do all the things that we've been doing. But one of the things you learn is like gosh, we kind of grew too fast. Anyway, we have a lot of excess. Well, basically, so even though we want to cut, I would say we're doing as much as we have been doing before. So, we cut the marketing budget, so we are not doing as much as we did before. But we are still doing a lot. We're doing just as much as we were before. Maybe we're not doing as much marketing. We're probably not doing as much marketing as we were before, but we are still doing a lot.

Interviewer: It sounds like you have seen a lot at \*censored\*. How was the transformation for you as a former employee of the \*censored\* and then workstream lead at \*censored\* DAO?

Interviewee 1: Yeah, I was an employee of \*censored\* with a regular contract. So, listen. First thing was, it was very exciting. Very. In the beginning, we didn't know exactly and even I didn't know what exactly was going to happen. I thought it was going to be just chaos and anarchy and people are just going to start doing things. But turns out that that's not true. DAOs need structure, right? And so. We've still created a structure, but the difference is not only the structure itself but also the way decisions are made in that structure. So, like we don't have a people team, there were no benefits or anything like that, so we had to figure out how to do that. Anyone who wanted to work full-time for the DAO had to go figure out how to get benefits on there and then it turns out that there's all kinds of options for that. So, that was actually not that big of a hurdle. You can still

have health insurance and dental insurance, and all that kind of stuff. And then, like, yeah, career tracks and all that kind of stuff are just not given as much. And of course that's part of the considerations of working there. But you still get to see what it's like to work in this totally different environment, which is something that you can't get in a higher global organization. And you get to vote on all these major decisions of how money is spent. Everybody gets to vote on that, which you don't get in a hierarchical organization. So, you get your own sense of things in a DAO that you don't have like that, in those traditional companies. Of course they have a lot of stability, you know where you fit. They've been around for a couple centuries, so you kind of know how this works.

Interviewer: So, when talking about the employees, were there also people who left the organization during the transformation?

Interviewee 1: For sure. There were plenty of people who said they don't want to be any part of that and we knew it was going to happen. But that was not a problem, because we knew that the DAO would not be able to support the amount of employees that worked at \*censored\* before. It would not have been possible.

Interviewer: Can you give an estimated number of people who left during the process?

Interviewee 1: Yeah, I don't have the numbers, but would estimate 50 maybe 75% of people. But it was the way it needed to be. Really. No one had a problem with that.

Interviewer: With that amount of people leaving the company, didn't you suffer from a loss of knowledge of just workforce?

Interviewee 1: No, actually there were enough people that had the knowledge to keep it going. So, that was OK.

Interviewer: Given that, would you consider the transformation also consideration the HR-perspective as successful?

Interviewee 1: Yeah, I mean like it was almost 2 years ago now that the transition started. And yeah, I would say we're almost fully transformed. The company also set up that foundation, the Lichtenstein Foundation to help, and so that organization is still assisting the DAO in a small way. But I'd say that I would call the transformation a success, even though we're not fully through it yet. I guess we'll see like, but it's been pretty successful so far.

Interviewer: Maybe we can shift a little to the technical aspects of that transformation. Talking about the decentralization of the architecture and servers for example.

Interviewee 1: Well, that's the part that's still operated by the foundation and what we're doing is we're decentralizing at all of it. So, the front end. Really all the DAO does is maintain the open-source code base. The front end can be run by anybody. But currently, the foundation runs an instance of it and then there is the back end. Currently, we depend on the foundation to run the back end. However, we have spun off a new project, another DAO that is creating the code base to run the back end in a decentralized fashion. So, you won't require any one entity to run.

Interviewer: But once you decentralize and open-source also the back end, don't you see the threat of forkability? Because there are other decentralized organizations whose codes just have been forked and then operated with lower fees for example.

Interviewee 1: Uh, it's a very good question. It is a threat. We don't think it's anybody else who is going to. I mean. If that did wind up happening, it might wind up being a success that there are multiple people running it then. So, it's an interesting question now. Because we're not, we're not generating much revenue yet, but we have ideas. We put some revenue-generating mechanisms into the code, and yeah, someone could fork it and change that. But if it drove more users and made it more successful in a lot of ways, I think that would just create some partnership opportunities. That not necessarily have to be a threat.

Interviewer: Now, after the technical aspects, could we also maybe elaborate on the decision of why you choose Lichtenstein, as the country to register the foundation?

Interviewee 1: These were these decisions that were not mine to make. So, and I'm not a super expert to be able to comment on, like why Liechtenstein versus somewhere else and kind of the whole legal aspect of it is nothing that I'm really able to talk to with any expertise.

Interviewer: Another aspect of the legality is the payments after the transformation. How have you been paid in the end?

Interviewee 1: So, we have this idea of budget proposals. So, budget proposals, as long as it gets voted for approval, are the way the people spend the Dao's money. So, we standardized on four months budget proposals for each department. So, for example, in the engineering workstream proposal, it said that I would get paid a certain amount every month to be able to perform specific duties. And it was only good for four months, right? So, it was not exactly task-based, but it was time-based linked with given certain duties.

Interviewer: Based on your experience is it possible to copy a regular company through a DAO?

Interviewee 1: Maybe, I mean, I don't know why you would put that on the Blockchain. I mean the whole point of the blockchain is that it brings together economics and decision-making. And combined in the token, the token is the economic driver and it's also how you get decision-making weight power in a decentralized organization. So, if you're going to have a hierarchical organization with the CEO and executive team and all that. I don't know why you would need that to be on the blockchain because you don't need the voting mechanism or the other pieces like the autonomous aspect of DAOs. DAOs where the vote can have code in it such that if the vote passes, the code automatically executes and takes care of what the vote says it's going to do. Whereas in a traditional company, there's central administration, there's centralized power, and there's centralized administration to be able to execute. So, I just don't see why you should want to do so. I mean sure

you can have a traditional company that has a token and is doing something on chain, but I think it doesn't make sense.

Interviewer: Coming now to the end of our interview, what do you think looks like the future of DAOs? Would mass adoption be a thing?

Interviewee 1: I don't think it's going to mass adopt. I don't think every organization should be a DAO. I think there are plenty of companies out there that will do best as a company. I think it's a specific use case that will work and now we're kind of figuring that out. What is the use case that means you should be a top-down versus a centralized? And nobody knows the answer to that, because DAOs are too young. We don't know if they're going to be successful yet or not. But I think as we continue to experiment, we will find out and I think it's even going to probably be a small percentage of organizations that will want to be a DAO. But I think they will be an important part of the societal makeup, and I also think that they are providing more information into basically how humans collaborate and coordinate in general. And beyond, I think there are lessons from DOAs that we will be using in all kinds of organizational structures from learning about this new coordination and collaboration mechanism. So, I think that's really the biggest key that they are an important organizational experiment to pay attention to and take the learnings from. And let's see how those learnings can apply to everything that we as humans do.

Interviewer: Is there anything else left, you feel like you want to mention in the end?

Interviewee 1: Yeah. I would just say that it was really chaotic in the beginning and that the learning from DAOs, even though they're decentralized, they still need structure. I think that was the key lesson. It's not just that everything is ad hoc and chaotic. So yeah, I just wanted to make sure that that came across.

Interviewer: Thank you very much for your time and experience. I really appreciate it.

## 8.2 Transcript I-2

Interviewer: Hello. Thank you for your willingness to share your experience with me today.

Interviewee 2: Hey. Let's see where we are going today.

Interviewer: So, when it comes to a traditional company transforming to a DAO. What upsides do you see from that decentralization?

Interviewee 2: It is a different perspective, than just creating a DAO. Definitely it's more difficult to start off with an existing company and transforming later on than directly creating a DAO. There is a difference especially in the complexity grade of an organization in shifting to a DAO. Think about the structure and the whole company itself. From scratch, it's easier. Also, from legal grounds and from the operational ground.

Interviewer: Do you think the targeted decentralization in a DAO can affect the organization's effectiveness?

Interviewee 2: I mean, I really see advantages from being able to enabling people from different geographical areas to work. And at the same time, that structure helped us to get funds. That were the most important reasons. And then we looked for some structures to govern on. Then all the different steps followed that like using ERC-20 tokens which are governance tokens. So one token equals one vote. And so on... Does that answer your question?

Interviewer: Can you maybe elaborate on if decentralization is improving the decision-making process inside the company?

Interviewee 2: Yeah. In the end, it's about the governance. What we did is implementing regular proposition structures where our members, so the token holder, can vote on. And then the wallet is connected to Snapshot and you can vote and such. Tokens that a wallet has given them voting power, but in the beginning when we opted for the structure, our members did not directly have access to the tokens. They have them in their wallets, but they are locked and vested. So, the DAO

contributors would receive their tokens over a time of 6 years let's say. This enables some sort of term commitment for the members. Because we pay our contributors not only in our own token and they are fairly independent from the market value of the token, we can really look into the governance challenges that we have. What hinders our operations? What hinders our growth? And what are we doing good?

Interviewer: When you think about the technical side of a DAO transformation. Could you imagine what challenges are evolving?

Interviewee 2: As mentioned earlier, you have to dismantle the whole company and restructure everything in the new DAO. That's a lot of work. Of course, some things can stay, like server architecture, databases, and such, but in the end, it will be a company disguised in a DAO mask. So, I think a full Decentralized Autonomous Organization, with all the theoretical possibilities and options, does not exist yet.

Interviewer: What do you think about the idea of information asymmetry in a DAO? Can't too much transparency also hinder the overall information flow and generate an information asymmetry?

Interviewee 2: Yes, but that can even be in a centralized structure, no? From my experience, I feel the way of information distribution is even more efficient in centralized structures. In a big company, people with access can access information on databases and such in one click. And I speak realistically after creating a DAO. DAOs are not a structure that works on every company. We can learn from taking the good things from centralized entities and the good things from decentralized structures. You know, if we can bring the standardization, access to databases, and knowledge on-chain then we can really benefit from those possibilities. So, when we can use the benefits of a centralized company and uses advantages of decentralized organizations, we can solve the just mentioned issues.

Interviewer: Talking about solving issues, how did you manage to register the DAO? And especially where?

Interviewee 2: Yea, so we went for a hybrid solution. So, this DAO was initially shaped and implemented by an incubator and accelerator, which is also us. This economic company is based in the Netherlands. That helped us to get over the legal hurdles like invoices and such. But of course, on the road to decentralizing that entity, we first explored some possibilities in the states. The first possibilities that show off are Wyoming and Delaware with the LLCs and such. We figured that it is a simple solution, but in the end, it is an LLC again. So, it doesn't really solve the problem itself. Marshall Islands might be interesting to explore a little bit more. But in the end, Liechtenstein was the best solution. If you read about the Token Act in Liechtenstein, it allows the tokenization of assets. And with that, we build an operational structure in the Netherlands and all the token-related things work in Liechtenstein. And for token sales or fundraising something on the Virgin Islands make sense. Good luck raising crypto funds in Europe. But when I look at our structure, it's not a problem, but it's not a thousand percent clear. We still need the possibility to register a company as an entire entity, because we are not really recognized. But I'm convinced that our legal frameworks work for now.

Interviewer: How many participants do you have by now?

Interviewee 2: So, let me think. 60 active participants, about 1000 members who hold tokens. And then we also have some active contributors. And we really operate as a company, a decentralized company. We have our work groups like the metaverse development team, analytics working groups, marketing, and business development. And in there, people come together to address topics and then we have task lists with things that have to be done. To-dos and Job descriptions. And it's important to mention our working groups are public. We came together on Discord. Well, in the

beginning we started to organize ourselves on Telegram, then we used Discord for external communication, and for the core contributors we also have a slack to organize.

Interviewer: And in what legal relationship do you stand with your contributors? And how do you pay them?

Interviewee 2: So yeah, each contributor is working on a remuneration basis. That means, they are freelancers and get paid based on the service they are providing for us. We have kind of freelancing contracts and know their addresses. So they just get paid for the work they are doing. And we have people mostly in America and Europe like Columbia, Germany, Austria, and Switzerland.

Interviewer: In regard to taxation, how do the contributors do that?

Interviewee 2: It's the contributor's responsibility to check their local rules and laws. The DAO just pays them according to a freelancer contract. They have to declare where they are based. They have the contract and they send us invoices and yeah. That works.

Interviewer: Now I'm already coming to the last questions. In what currencies do you pay your freelancers?

Interviewee 2: In the very beginning, as we had no revenue as such, we were vesting. That means we were not really paying them, we made people part of the DAO. They just received tokens. And now, as the funding is cleared and they make revenues, we now pay them in USDCs.

Interviewer: Finally, thinking about the future outlook on DAOs, what do you think will it look like?

Interviewee 2: DAOs are a good approach to building a company today. But governance is the biggest challenge. As we did in the beginning, I could talk about governance for hours. Governance, governance, governance. But we should be very clear about one thing. A DAO is not a structure for every company.

Interviewer: Thank you very much for your time.

### 8.3 Transcript I-3

Interviewer: Hello, thank you for taking your time to help me for my Master's thesis.

Interviewee 3: It's my pleasure.

Interviewer: So, when you think about a company trying to transform itself to a DAO, what specific advantages to you see? Are there also downsides?

Interviewee 3: From my experience, there are of course up- and downsides. The biggest upside is probably the possibility to operate globally. Also, basically, everyone can participate in comparison to some individuals in an HR department. The transparency inside the DAO is typically higher than it would be in a regular company. A downside to mention is a more loose communication manner, which can lead to a lack of efficiency.

Interviewer: For me, it seems like the people rather find themselves in a DAO, and not a company finding the right people.

Interviewee 3: Yes. It can be said that the concept and process of companies hiring after corporate culture and corporate fit are automated. DAOs are based on the community, right? So, the community for them is a central point where everybody connects with each other. And while normal businesses try to implement that in processes, now DAOs connect people through an identity you like. Shared value it is. It is way more genuine than in a normal business. The participants need to feel a part of that. To really need to belong and like otherwise I think it naturally expels you out. You know, if you're not in a space where you don't feel like you belong, it's something that maybe it's not for you.

Interviewer: As you just mentioned the possibility to cooperate fully globally, do you think that a very high degree of decentralization may also have negative effects on the organization's output?

Interviewee 3: I was studying exactly this topic a lot over the last few years and it's a difficult question. I believe the only thing that matters in this context is the governance. I think governance

is something that's really important when we're talking about a more effective structure. Effectiveness does not come by itself. So I think for you to have an efficient business, you need to have a really well-set governance and good governance so people can grow it. A good example is, for example, the AEISEC. It's a very old organization in like 135 countries and in every country, they are working the same. So, wherever you are on the earth, the norms and processes are kind of the same. And I really like their governance because it's like fully global. But when it comes to the positions, they are very volatile when it comes to people working for them, because once a year they have to change the management. So, they only find and support people who want to be part and really belong to their organization. So, I think this is a really good study case of like what really a DAO could work, you know in the sense of the public. So, for DAOs generally, structure and culture are very important. So when you get into a higher role, you have to be compliant with higher rules, otherwise, you will get voted out. It's way more about community, so if the community votes for you to go higher, you need a really good governance and voting system in order to sustain in the long term.

Interviewer: As we were just talking about participation, what do you think about the actual level of commitment that people have to bring into a DAO? And also, in the whole process of transforming a legal company to a DAO?

Interviewee 3: As people don't really have a working contract and a legally binding salary, it's very different to regular employment. Maker DAO for example was talking publicly about exactly this. There is a specific level of trustiness the people have to go through. And that level of trust mostly comes from their history and participation in the past. So, when people are working in the community they have to prove themselves first. The people are simply not getting a better position in the DAO when they don't participate or work in a not value-adding manner. The level of work people are doing depends on the level of trust that they have. So, the more you work, the more you

delegate and the more you dedicate, your commitment and also your relevance goes higher. It's a process in the end.

Interviewer: And how does this look-alike at the very beginning of a DAO, when people don't really have a perception of the different people involved?

Interviewee 3: In the beginning, proactiveness is very important. As it also is in a regular company. So, if there is anything to be done, then the people have to be there at that moment. Also, the willingness is very important. That's what really draws attention to your work. So, I think that it's not something that's passive. You need something that's active. You should have an active attitude towards the things that are happening. So that's why participation is very important. If you don't participate, you don't get anything and you are not going to be able to be part of the community itself.

Interviewer: That makes sense. When we now look to the technical part of a DAO transformation, how doable is such a transformation at the moment?

Interviewee 3: There are already a lot of web3 services online which support the building of a DAO. You can use applications, which would allow you to issue tokens that can be the base of a DAO. Also, you can use applications where you have a forum and some voting mechanics in place. You can also adapt these systems to implement your own rules. When I used them for our community, it worked. But the most successful DAOs, they start with a common objective and not with a premade setup. Once the community is set and is committed, the setup will evolve over time. So again, you have to study the people and their objectives.

Interviewer: The technical realization is one thing, another thing is also the legal basis of a DAO. It doesn't seem as a good, legally complying solution has been found. Can you comment on that?

Interviewee 3: Yeah, there are the British Virgin Islands, Cayman Island, and Delaware where they have the LLC which can be used to create such a business. I think Delaware is the most advanced

one. I was talking to a guy the other day on an event and he has a solution of creating the necessary documentation to create a DAO in like 5 minutes. But to be honest, from the legal perspective, I haven't seen a satisfying solution yet, because the organization is somehow centralized again if registered somewhere. For now, it makes sense to go for a traditional legal structure and more and more decentralize over time. There are not enough countries that accepted token-based structures which could be seen as shares of a regular business. So yeah, a lot is currently still legally centralized in a way.

Interviewer: Why do you think most of countries don't accept such decentralized structures?

Interviewee 3: Yes, I think the more decentralized you are, the harder it is for countries to know who is liable and responsible in the end. From the outside, it's a very loose concept and governments tend to be skeptical about that. And that's why more regulation is coming. Security wise there are also some things that are not in place right now, for example, some decentralized finance DAOs may have KYC, but sometimes it's not enough for proof of your existence. And how to track an individual's activities. I also think we need more time to figure out a way to ensure privacy inside DAOs. So, privacy is important but also responsibilities. There needs to be more work to be done in that direction.

Interviewer: And finally, what do you think about the whole concept of DAOs? How do you think will the future of DAOs look like?

Interviewee 3: I think that for everything there is, there is a purpose. And for a lot of different things, people have defined a more fitted structure in comparison to DAOs. So, I think there are things that can be more hybrid and more things that are completely stiff. So, some applications will have more stiff and others more loose structures. But that depends on the objective. I think one of the things people are going to experiment with in the future is hybrid structures, where centralized companies use DAOs for some departments to achieve a better market fit for their products. Also,

in today's world, a lot is about marketing. So, when companies use DAOs in their process of developing products and services, they can add a lot value. Especially in the area of building loyal communities and understanding the customers better. People can still have a job somewhere and also participate in DAOs and benefit from their activity there. An example could be special loyalty programs where people could just engage more with a brand and get something back, not necessarily money, but also other incentives. It just gives more opportunities for more stakeholders. And from there on, businesses can start to bring more value to the market because they understand better how the dynamics are going. In the end, it's an evolution and there already have been some experiments, but there will be more. For the beginning, the brain connection of the users, that they can be involved in an organization's activities, is a good starter.

Interviewer: That sounds like a good ending statement. Thank you very much for your time.

#### 8.4 Transcript I-4

Interviewer: Hello, thank you for taking the time to talk with me about DAOs and the transformation of a regular company to such an organization.

Interviewee 4: I'm happy to help.

Interviewer: According to our previous messages, you are involved in some DAOs right? If you compare the underlying concepts of a DAO to traditional companies, what benefits and downsides do you see in the transformation of a company to a DAO?

Interviewee 4: Yes. So, in a DAO transparency and the connected unfalsifiability is the biggest advantage. Not only that people can see and track every action and decision, but also that people trust more in the organization, because, in comparison to a regular company, you can see who signed a decision. Code is law. That's important, especially in regard to veto rights in a DAO which can block decisions. But still, it's sometimes hard to see what teams inside a DAO are doing.

Coming to the decision-making, everything in a DAO is based on the vote majority agreement, which is a good thing. But sometimes this brings also the disadvantage that massive token holders accumulate big amounts of tokens so they easily overvote the majority of people with the majority of tokens. In the end, those disadvantages are dependent on the governance, because you can define the parameters as you want.

Interviewer: So, do I understand you right, that decentralization and the distribution of voting power also negative aspects to a DAO operations?

Interviewee 4: Yes. Sometimes decentralization in combination with wrong governance is the biggest problem. Some days ago, Aragon was attacked by a 51% attack, where a group got the majority of the voting power. Now they have a big problem because the wallets actually acted according to the majority agreement, but the funds would have been used for the enrichment of the wallets and not of the DAO. The majority agreement is often not good enough. Let's say you have a proposition in a DAO where 70% of the token holders vote in favor of the proposition and 30% against. If the DAO is open source, it can easily be forked. As Sushiswap just forked Uniswap and introduced lower fees, users would be more attracted to use their platform. For the founders, it was easy money, because they don't even have to worry about liquidity because when they introduce their own tokens, the liquidity automatically comes to their liquidity pools. Forkability is a big challenge. Another example is 1inch as a Dex aggregator. They charged 0.11% fees and just got forked by Matcha which charged 0.08%. So 1inch did all the work and Matcha just copied the code and charged less. Coming back to companies and their transformation to a DAO. You can easily fork an open-source organization, but you can't just fork a registered company. Another challenge coming with decentralization is the minimum amount of votes needed to get the proposition through. So, people spend time researching what they think is the best option, placing their vote and then nothing changes because not enough wallets participated. Same goes for the quorum

threshold. Governance is the challenge and wrong governance harms the organization. And only one person one vote would be real decentralization.

Interviewer: As you mention those challenges, what do you think motivates people to contribute to a DAO the most?

Interviewee 4: The more skin in the game the people have, the more they want the DAO to exist in the future. And yeah, with different roles in a DAO also different voting rights might come along. But transparency is just the most important underlying aspect of that.

Interviewer: And if you think about the process of transforming a company to a DAO? Isn't it a threat, that people lose their contract-based job after the transformation?

Interviewee 4: In the transformation process the employees get tokens to participate. And in the end, if people don't participate, then they just are not part of the DAO and get kicked out. So, if there is no engagement, then you don't need the people in the organization anymore. This just opens the opportunity for new and more motivated people to join the DAO and contribute. That should be a pretty good thing for the organization because you sort people out, who are not motivated to work. Additionally, you can incentivize the good people to stay on board by giving them tokens.

Interviewer: Interesting approach.

Interviewee 4: I believe that a lot of companies would benefit from that process because the background of the people doesn't matter anymore, it's only the output of their work.

Interviewer: From your perspective, can you say something about technical difficulties in the process of transforming a company to a DAO?

Interviewee 4: No, personally we never had challenges because we never implemented a DAO neither accompanied a traditional in the direct transformation process.

Interviewer: Have you heard about any legal challenges that might arise during a transformation?

Interviewee 4: I mean, that is a challenge that every DAO has. Where is the DAO registered? Does it have to be registered? There are some solutions for example in Delaware, but it's a mega niche. And in the end, the registered DAOs are not even fully decentralized because also Delaware LLCs have company-equity and token equity. I'd rather strive for full decentralization.

Interviewer: Do you know how a DAOs contributor has to deal with the earnings from solving tasks?

Interviewee 4: You mean tax-wise?

Interviewer: Yes, tax-wise and working-wright-wise.

Interviewee 4: At the moment, for the governments, it's not a real case yet. There are too few people who are contributing to DAOs and too less money to earn from taxing that. Also, it's not clear if contributors count as independent, self-employed workers or if they are kind-of employed by the task contract they are signing with the DAO.

Interviewer: So, taking all the challenges we talked about into consideration, what do you think might the possibility of transforming a traditional company to a DAO look like?

Interviewee 4: There is a lot to discuss for the future. But as mentioned in the very beginning, transparency is the biggest advantage in comparison to a traditional company. And everything is stored somewhere on the blockchain, visible for everybody. I think over the time best out of both worlds will merge together. DAO transparency, DAO rigidity, and the advantage of a traditional company to not being at the mercy of getting forked would be a great achievement for humanity. People have to realize that working for a DAO brings advantages to their everyday work. I believe that triple-entry bookkeeping is a thing which has a lot of advantages. For example, things like Enron and FTX could just not happen. Triple-entry bookkeeping would be the endgame.

Interviewer: Thank you very much for your time and perception on DAOs.

Interviewee 4: Happy to help. Good luck with the thesis.