

POWER OF THE MANY

Catalizing Systemic Change

Human-First Decentralised
Autonomous Organisations (DAO)
prioritize people over automation,
fostering regenerative business models
that drive systemic transformation,
sustainability, equity, and solutions to
global challenges for a thriving future.



Advancing Energy Democracy Through Innovation and Collaboration

“Catalyzing systemic change” means initiating or accelerating a deep and widespread transformation in a system—whether that’s an organization, society, economy, or environment. It goes beyond small, surface-level improvements and instead aims to shift the fundamental structures, behaviors, and mindsets that shape how the system functions.

We empower local initiatives to create their own Energy Hubs & Communities, enabling shared ownership, utilization, and financial benefits from local renewable energy assets. By doing so, we foster resilient and inclusive Energy Economies, ensuring communities have greater control over their energy future.

Our approach is built on the principles of programmable energy, leveraging tokenization to enhance transparency, accessibility, and efficiency—turning the vision of decentralized energy into reality.

We are proud to be driven by a team of experts who share a deep commitment to energy abundance for all. Our collective knowledge, expertise, and determination are instrumental in building the next generation of resilient energy hubs and communities.

To further advance energy democracy, we have established a strategic partner network that brings together diverse expertise to drive innovation, maximize the potential of energy tokenization, and develop equitable, scalable energy solutions for a more sustainable future.



Colofon

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Introduction

The third generation of Decentralized Autonomous Organizations (DAOs) marks a significant evolution in how we organize and manage collective efforts towards systemic change across various sectors.

Third-Generation DAOs, also known as Human-First DAOs, have been developed by Hypha¹ with a groundbreaking vision: to place humans back at the center of organizational and systemic change. Unlike traditional DAOs, which often emphasize technology and automation, Human-First DAOs prioritize human-centric values, aiming to accelerate holistic development and systemic regeneration.

Human-First DAOs are designed to facilitate a comprehensive transformation across all segments of the economy, driving a shift towards regenerative business models that prioritize sustainability, equity, and community. This transformative approach is critical as we face pressing global challenges such as climate change, social fragmentation, and economic inequality. By focusing on the integration of regenerative principles, Human-First DAOs offer a viable pathway for creating systems that not only address these challenges but also enhance the quality of life for people and the health of our planet.

The potential applications of Human-First DAOs span a wide range of sectors, demonstrating their versatility and impact. In socio-ecological terms, they encourage practices that restore and protect natural ecosystems, contributing to environmental resilience. Further, in socio-cultural spheres, they can help preserve and celebrate cultural diversity while cultivating a sense of global community. In the socio-political arena, they can enable more inclusive and participatory governance models, empowering communities to take a more active role in decision-making processes. In socio-educational contexts, such DAOs support collaborative and adaptive learning environments that nurture innovation and personal growth. Finally, the socio-economic benefits include creating local economies, promoting fair trade, and enabling sustainable business practices.

Embarking on a journey with a DAO is akin to venturing into uncharted waters for many new joiners. The absence of a conventional hierarchy and the distributed nature of decision-making can require significant adjustment, especially for those accustomed to traditional organizational structures. DAOs represent a paradigm shift in how we think about and engage in collective endeavors. In fact, they are developed on the foundation of community involvement, transparency, and shared governance, by leveraging cutting-edge technology to upshift organizational norms. As this exciting yet unfamiliar terrain continues to evolve, it is essential to equip oneself with the knowledge and tools needed to navigate it effectively. This guide is designed to provide you with key guideposts to help you not only acclimate to the unique ecosystem of a DAO but also thrive and contribute meaningfully to its mission and goals.

¹ <https://hypha.earth>



Evolution of the Internet

Paradigm Shift

The Internet has undergone a remarkable evolution since its inception, progressing through distinct phases that have transformed how we interact, communicate, and conduct business online.

In its nascent stage, known as Web1.0, the Internet primarily served as a repository of static information, with users passively consuming content on rudimentary websites. With the emergence of Web2.0, a first paradigm shift occurred, leading to an era of more interactive, user-centric platforms characterized by social networking, user-generated content, and online collaboration. These platforms own users' data which has also led to many extractive patterns orchestrated by centralized and profit-oriented organizations. As it is generally stated: if you do not pay for the product, you are the product. As we move further into the 21st century, the emergence of Web3.0 promises to revolutionize the Internet once again. This time, principles of decentralization, user empowerment and ownership along with the enablement of the blockchain technology² will create a more transparent, secure, and inclusive digital environment.

This evolution from the static web of yesteryears to the decentralized web of tomorrow reflects the ongoing quest to unlock the full potential of the Internet for the benefit of individuals, businesses, communities, and society as a whole.

Web1.0 (The Static Web)

Web1.0 refers to the early days of the World Wide Web, primarily in the 1990s. During this phase, websites were primarily static and read-only. Information was presented in a one-way manner, with users mainly consuming content. Websites were basic in design and functionality, typically consisting of text and images. Interaction was also limited, and there were few opportunities for user-generated content or collaboration. Examples of Web1.0 services include early search engines like Yahoo! and AltaVista, as well as static personal websites.

The end of the Web1.0 period witnessed the emergence of the very first commercial webshops, replacing traditional shopping methods reliant on paper forms, physical presence, and telephone interactions, opening up the way for Web2.0, the Commercial Web.

Web2.0 (The Commercial Web)

Web2.0 emerged in the early 2000s and represents a shift towards more dynamic, interactive, and user-centered websites and applications. This phase is characterized by the rise of social media platforms, user-generated content, and online collaboration. Websites became more dynamic, with features such as social networking, blogging, video sharing, and instances of Wikipedia.

Indeed, users were not just consumers of content but also contributors, by generating and sharing their own content, and engaging in online communities. This evolution coincided with the significant rise of

²Blockchain technology and distributed ledger technology (DLT) are used interchangeably

a new form of currency, “your personal data”, used to access free content and services. Examples of Web2.0 services include Facebook, YouTube, Wikipedia, and Twitter.

Web3.0 (The Decentralized Web)

Web3.0 is a term used to describe the next generation of the Internet, which aims to address issues such as centralization of power, privacy, and data ownership. This phase emphasizes the paradigm shift emerging from the use of blockchain technology. Unlike traditional, intermediary-based platforms where the power is mostly centralized, this new form of decentralized web disentangles the power and ownership of a community to its members. Web3.0 envisions a more peer-to-peer (P2P) Internet, where users have more control over their data and interactions through decentralized applications (dApps). Web3.0 is also facilitating a transition for organizations, moving away from shareholder-owned models to stakeholder and stewardship governance structures.

Blockchain technology is expected to play a significant role in enabling secure, transparent, immutable, and decentralized systems for various applications. Examples of Web3.0 initiatives include decentralized finance (DeFi) platforms, decentralized autonomous organizations (DAOs), asset tokenization with fungible tokens (utility tokens) and non-fungible tokens (NFTs), and blockchain-based self-sovereign identity (SSI) solutions.

Each phase represents a significant evolution in the way we use and interact with the Internet, with Web3.0 set to drive further changes in the coming years.

Accelerating Ideas Whose Time Has Come



“Nothing is more powerful than an idea whose time has come.”

We live in an age where millions of ideas can now be realised, revolutionizing how we think about innovation in the digital age.



“There are decades when nothing happens and there are weeks when decades happen.”

We are accelerating into a change point, the developments in AI and an expansion of human consciousness are catalysing system change.

²Source: Hypha DAO

Web3.0 Values

Web3.0 values encompass the principles of decentralization, self-sovereignty, self-organization, security, transparency, traceability, inclusivity, user empowerment, collective intelligence, integrated local and global focus. Web3.0 values particularly resonate with Internet-native generations.

Decentralization: Web3.0 aims to decentralize and democratize control and ownership of digital assets, applications, and data. By distributing power across a network of nodes rather than relying on centralized authorities, it seeks to create a more resilient, censorship-resistant, and open and participatory Internet.

Self-Sovereignty: It is a fundamental value in Web3.0, emphasizing the importance of individuals' rights to control their identity and personal data. Decentralized technologies, such as blockchain, offer enhanced self-sovereignty features, enabling users to transact and communicate securely without sacrificing their personal information to third parties.

Self-Organization: This value enables a transformative approach to governance and operations in the Web3.0 landscape, embodying the shift towards a more democratized and participatory model. This framework creates a high degree of trust among participants, with smart contracts⁴ automating organizational processes and aligning individual incentives with collective goals. Such a structure not only democratizes decision-making but also streamlines operations, by reducing potential biases and errors while promoting a culture of collaboration.

Security: This pillar is paramount in Web3.0 systems, given the distributed nature of the infrastructure and the potential risks associated with digital transactions. Robust encryption, cryptographic techniques, and consensus mechanisms are employed to ensure the integrity and safety of data and assets on decentralized platforms. In many ways, Web3.0 ends the era of traditional, custodial-issued credentials in favor of private keys that provide users with full control.

Transparency: Web3.0 promotes transparency in governance, operations, and transactions. Blockchain technology, with its immutable and auditable nature, brings trust by providing transparent records of all activities on the network. Smart contracts further enhance transparency by automating processes and decision-making in a transparent manner.

Traceability: Among the core values driving this evolution is the principle of traceability – the ability to track and verify the origin, journey, and ownership of digital assets and information with accuracy and integrity. By leveraging distributed ledger technology (DLT)'s components such as cryptographic techniques and decentralized consensus mechanisms, Web3.0 platforms facilitate real-time, immutable tracking of data and transactions.

Inclusivity: Web3.0 aims to create a more inclusive digital economy by lowering barriers to entry and providing equal opportunities for participation. DeFi platforms, for example, enable anyone with just

⁴Source: Smart contracts are digital contracts stored on a blockchain that are automatically executed when predetermined terms and conditions are met

an Internet connection to access financial services and participate in global markets, regardless of their geographical location or socioeconomic status.

User Empowerment: Web3.0 also prioritizes user empowerment, by enabling individuals to have greater control over their digital identities, assets, and interactions online. Through self-sovereign identity (SSI) solutions and decentralized applications (dApps), users can manage their data, monetize their contributions, and participate in decision-making processes within decentralized ecosystems.

Collective Intelligence: Refers to the capacity of groups of individuals to collectively gather, share, and process information, insights, and knowledge in order to make decisions, solve problems, or generate innovative solutions that surpass the abilities of any single member. It encompasses the idea that the collective wisdom and expertise of a diverse group can lead to more effective decision-making, problem-solving, and innovation than the contributions of individuals acting alone.

Integrated Local and Global Focus: It concerns the balance and tension between prioritizing the interests, autonomy, and identity of local communities while enabling global connectivity, cooperation, and standardization within decentralized digital ecosystems. It encompasses the debate over how digital technologies should navigate the needs and dynamics of local communities while also promoting broader interconnectedness and collaboration on a global scale. This value reflects the challenges and opportunities inherent in balancing local autonomy, cultural diversity, and community empowerment with the benefits of global cooperation, innovation, and interoperability in the decentralized landscape of Web3.0.

Internet-native Culture: Entities, individuals, or concepts that originate or exist primarily on the Internet, embodying the digital age's characteristics and culture. This term is often used to describe the younger generation that has grown up with the Internet as an integral part of their daily lives, seamlessly navigating digital platforms and online communities. Internet-native entities, including firms and non-profit organizations, are distinguished by their innate understanding and utilization of digital tools, platforms, and communication strategies to engage, operate, and innovate.

These values underscore the transformative potential of Web3.0 in reshaping the Internet and empowering individuals and communities to reclaim ownership, privacy, and autonomy in the digital realm.

Redefining Decentralized Autonomous Organizations (DAOs)

DAO Generations

Decentralized Autonomous Organizations (DAOs) have evolved significantly since their inception, progressing through distinct generations that reflect advancements in technology, operations, governance models, and community values. In particular, DAOs generations are the following:

First-Generation DAOs were introduced in 2016 with the emergence of blockchain technology and characterized by relatively simple governance structures, laying the groundwork for decentralized decision-making. These DAOs primarily relied on token-based voting mechanisms, where token holders could vote on proposals to allocate resources or make decisions within the organization. The most notable example of this generation is “The DAO,” launched on the Ethereum blockchain in 2016. However, these DAOs faced challenges such as limited functionality and security vulnerabilities in their smart contract code, leading to a significant hack and eventual dissolution.

Second-Generation DAOs were developed upon these foundations to implement more sophisticated governance mechanisms and prioritize security and scalability. These DAOs represent an evolution beyond the initial shortcomings of first-generation DAOs. In particular, they incorporate improvements in smart contract security, governance mechanisms, and user experience. Second-generation DAOs often feature more sophisticated voting mechanisms, such as quadratic voting or liquid democracy, to enhance decision-making processes and mitigate the dominance of large token holders. These DAOs also focus on security audits and rigorous testing to minimize the risk of vulnerabilities and hacks. While second-generation DAOs are more robust and capable than their predecessors, they still face challenges related to technical and governance scalability, and user adoption. Projects such as Aragon or Colony are examples of second-generation DAOs that have made strides in improving security, scalability, and governance effectiveness.

Third-Generation DAOs, also known as Human-First DAOs, introduced a paradigm shift in decentralized governance, by placing a greater emphasis on human-centric values, community collaboration, and stakeholder participation. This new type of digital venture leverages advancements in blockchain technology, artificial intelligence (AI) for sense-making and collective intelligence, and decentralized finance to create highly dynamic and adaptive governance structures that empower communities and ecosystems to collectively shape their future. This new generation was introduced by Hypha⁵ in 2020, deployed to markets in 2023, and represents a significant evolution in decentralized governance models.

To sum up, the transition from first to Second-Generation DAOs reflects a maturation of decentralized governance models, with an emphasis on improving security, usability, and governance effectiveness. On the other hand, Third-Generation DAOs represent a more mature and sophisticated approach to decentralized governance, combining advanced technology with human-centric values to create more resilient, inclusive, and sustainable organizational structures.

⁵ Hypha provides Third Generation Human-First DAO Technology: <https://hypha.earth>

Human-First DAOs

Human-First DAOs represent a significant evolution in the realm of decentralized governance and organizational dynamics. Unlike their predecessors, they are a new generation of human-centered DAOs where people are the driving force. This shift not only redefines collaboration and decision-making within organizations but also creates living structures and contexts for trusted cooperation towards greater sustainability and effectiveness.

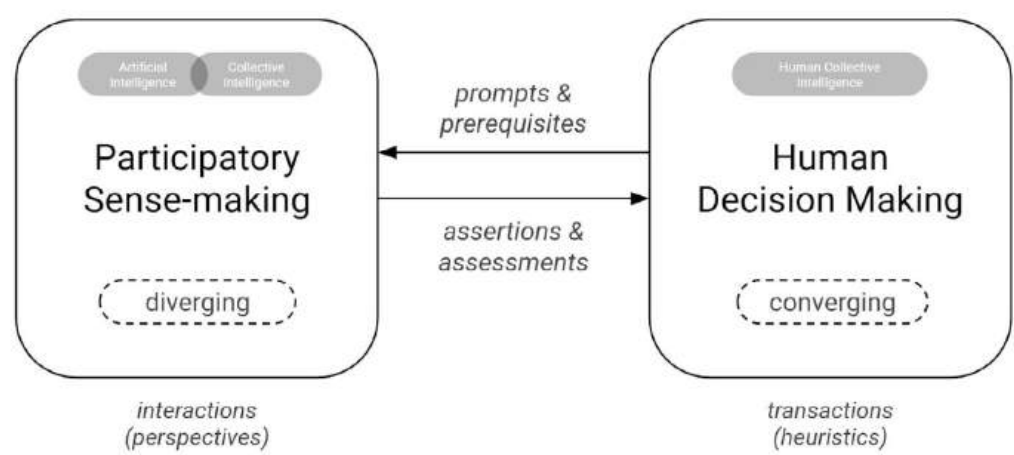
Our journey from a traditional DAO to a Human-First DAO underscores our commitment to human-centric values, emphasizing collective intelligence, collaboration, and the holistic integration of technology with human needs and aspirations. By embracing this transformation, we aim to create more resilient, adaptive, and inclusive organizational structures that truly embody the principles of decentralization and regeneration.

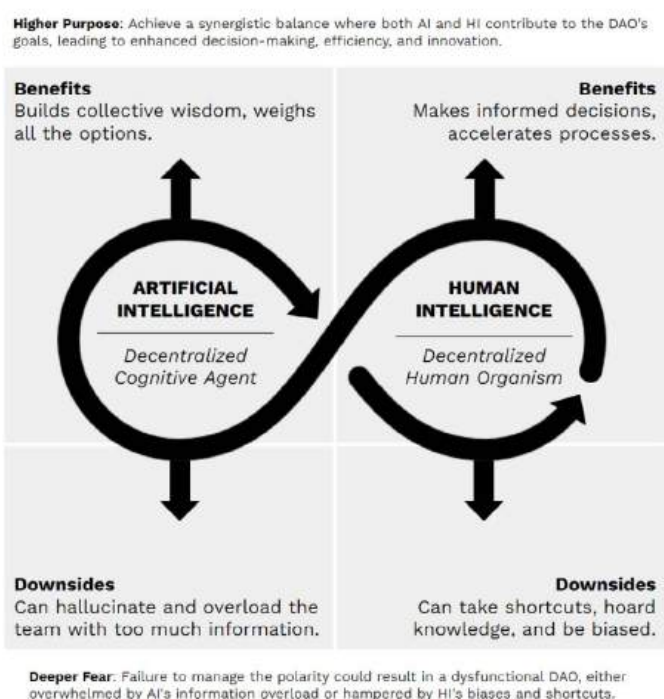
Overview

Hypha serves as a leading example of Human-First DAOs, designed to facilitate decentralized collaboration and decision-making within communities. It introduces innovative governance mechanisms that prioritize transparency, inclusivity, and sustainability. In particular, Human-First DAOs' key features include:

Enhanced Interactivity and Governance: Unlike earlier generations of DAOs, which primarily focused on simple decision-making through token-based voting mechanisms, Human-First DAOs introduce more sophisticated governance structures based on more granular voice and contribution accounting methods.

Integration with Artificial Intelligence and Machine Learning: Human-First DAOs integrate with artificial intelligence (AI) and machine learning (ML) algorithms to optimize sense-making processes and enhance organizational efficiency. These technologies can analyze vast amounts of data, predict outcomes, and automate certain tasks, empowering DAOs for participatory sense-making and collective intelligence in real-time.





Amplification of Human-Machine Interactions:

The interaction of AI-empowered decentralized cognitive agents with humans in decentralized human organizations creates an infinite loop as explored by the work of Barry Johnson in Polarity Management (1992). By applying the benefits of generative AI to build collective wisdom and to weigh in all the options, humans can make more informed decisions and accelerate processes across the board. Taken too far, the loop will surface downsides of both AI (such as hallucination and information overload) and human shortcomings (such as taking shortcuts, hoarding knowledge or being overly biased).

Focus on Social Impact and Sustainability: Human-First DAOs place a strong emphasis on social impact, sustainability, and community engagement. They prioritize projects and initiatives that align with their members’ values and contribute to the greater common good, by cultivating a sense of purpose and collective responsibility among participants.

Collective Decision-Making: It enables community members to collaborate on decision-making processes through transparent and inclusive mechanisms. It allows participants to propose, discuss, and vote on initiatives, ensuring that decisions are made collectively and democratically. Individuals can, reflect, learn, and even change their decisions throughout the process (voting periods are adaptable and multiple casts are possible).

Multi-Token System: It distributes rewards based on value creation and contributions to the community, by utilizing DAO protocols to assess the impact of individuals’ contributions to ensure fair and equitable distribution of incentives.

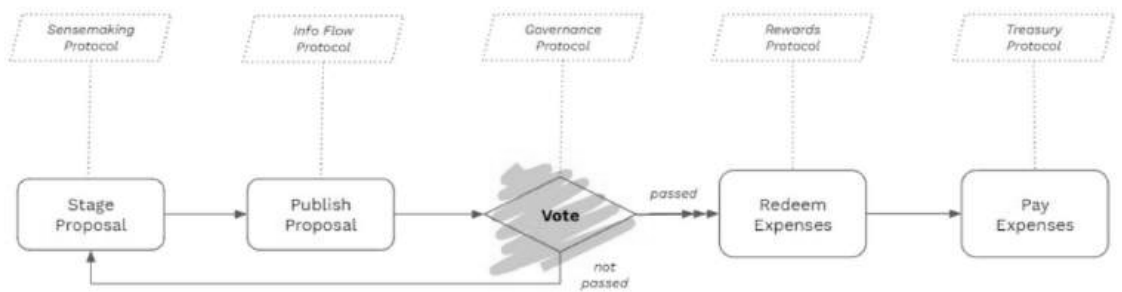
Multi-Role and Badge System: It is a framework within an organization or community platform that allows individuals to take on various roles and earn badges based on their contributions and achievements.

Contribution Accounting: It is designed to acknowledge members’ contributions allowing a constantly evolving dynamic based on the value created towards the purpose. It encourages experimentation and innovation, and empowers members and communities.

Multi-Sig Treasury: A Human-First DAO treasury adds additional layers of security through multiple signatures that enforce review and approval by multiple members before a decision is made. With a clear separation between the core team’s operational domain (action-driven) and the community space (focused on sense-making and collective intelligence), resources are distributed by taking the DAO’s objectives into consideration and promoting purpose-driven allocation.

Multi-Stage Governance: By enabling the staging of proposals for sense-making, members cultivate

a deeper level of collaboration before publishing proposals on the blockchain for voting. This preliminary stage allows DAO members to achieve greater alignment, turning the voting process into a confirmation and celebration of consensus.



Example of an expense proposal

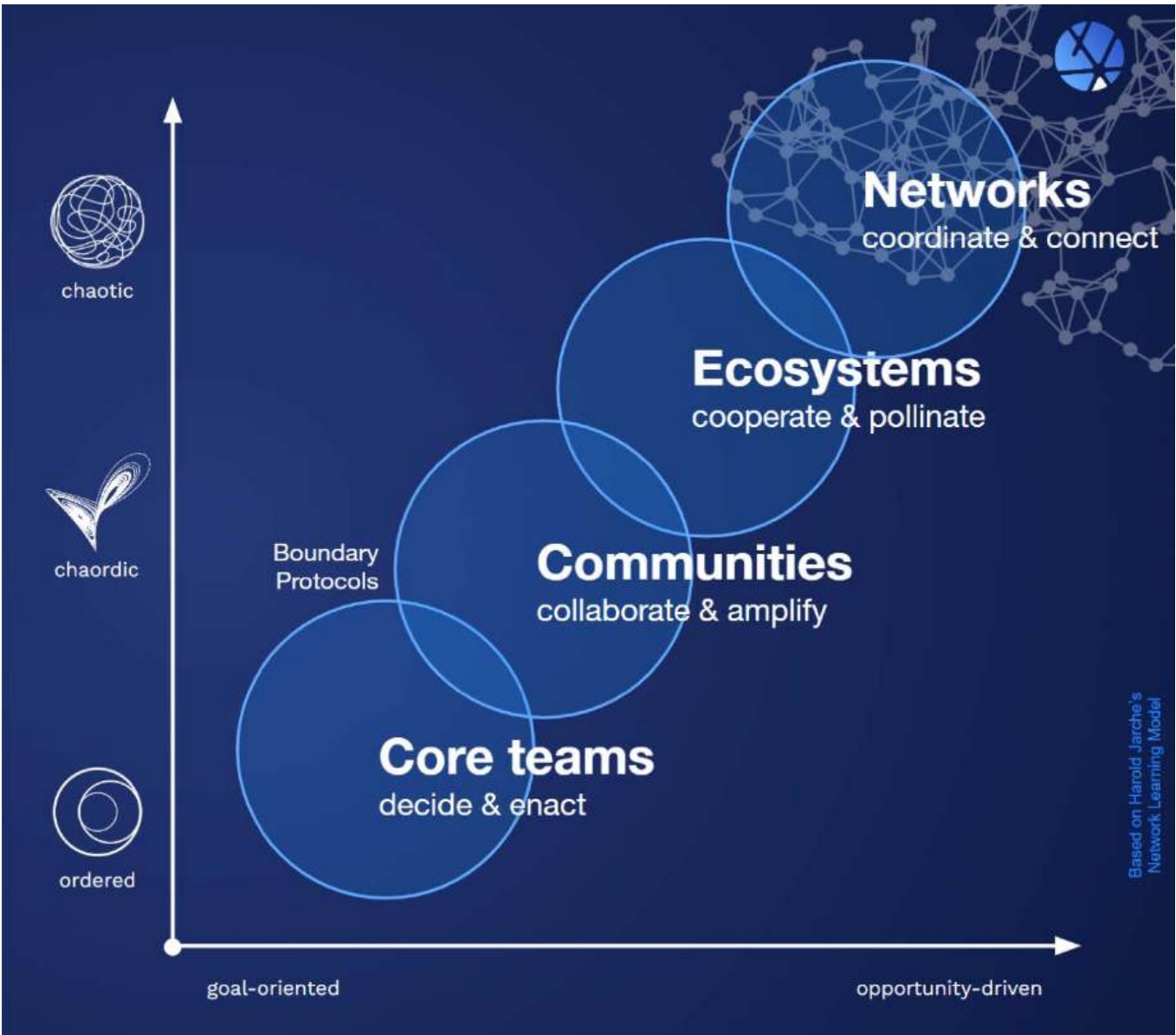
Empowering Collaboration

Embedded within a broader collaborative context, the principle of collaboration over competition prevails in Human-First DAOs. They prioritize collective efforts and mutual support, by creating an environment where success is measured not by individual gain, but by the collective progress of all stakeholders involved. This paradigm shift promotes synergy and innovation, as diverse perspectives and talents are leveraged towards achieving common goals. By embracing collaboration over competition, Human-First DAOs can unlock new opportunities, build stronger relationships, and create lasting positive impact within their communities.

Human-First DAOs are designed to be interoperable with other decentralized platforms and protocols, enabling seamless collaboration and integration across the broader decentralized ecosystem. This interoperability allows DAOs to access a wider range of resources, services, and expertise, enhancing their capabilities and effectiveness.

Organizational Structures

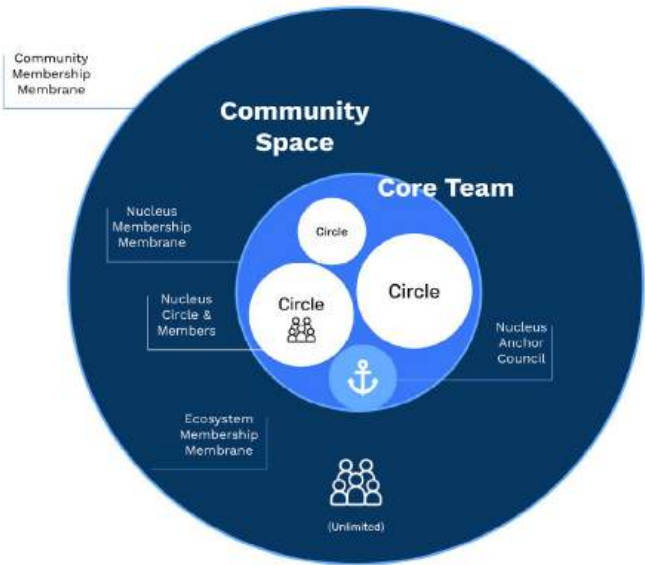
Human-First DAOs represent a significant advancement in decentralized organizational structures, as they incorporate a nuanced understanding of different scopes and scales within their framework. Each regenerative organizational structure within the Hypha network is designed to include multiple layers, each with distinct boundaries and protocols. These layers represent different levels of engagement, trust, and transparency, offering a flexible and dynamic approach to governance and collaboration. The boundaries within these organizational structures are not merely barriers but gateways that facilitate the seamless flow of participation, decision-making, and value exchange. The fundamental structure is comprised of three overlapping spaces:



Efficient Core Teams

At the core, Human-First DAOs feature a structured team, driven by specific goals and oriented towards action, ensuring efficiency and effectiveness in achieving objectives. A typical structure for a core team layer may include core and circle members as well as councils.

- **Core members** are part of the DAO’s core team, also called Nucleus, playing crucial roles in its day-to-day operations and strategic planning. The admission of a new member in the core team takes place through a selective enrollment process to ensure that core members possess the necessary skills, aligned values and commitment. Exit protocols are established by the core team through a DAO policy, as removing a member from the core team can be a sensitive issue. This policy, which



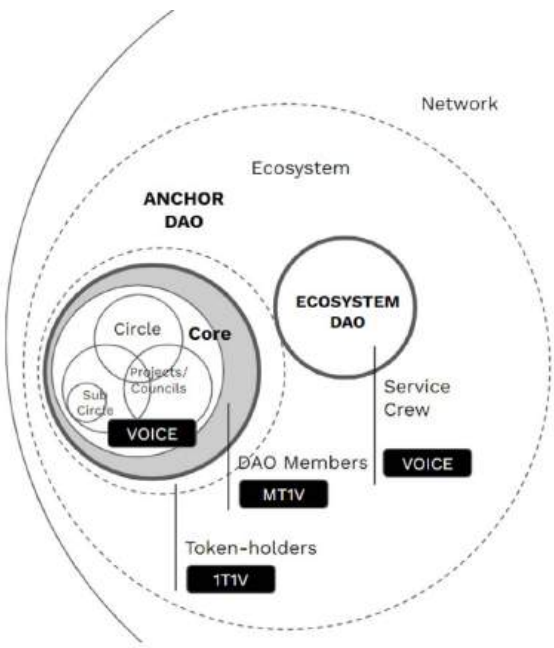
clarifies a prior collective agreement, helps prevent unnecessary tensions during a member's exit. According to the DAO's exit policy, removing a member from the core team typically involves a proposal vote within the DAO. Further, voting methods are designed to facilitate quick and effective decision-making, while maintaining transparency. Finally, proposals from core members typically address strategic and high-impact initiatives.

- **CircXles:** Zooming in, decentralization thrives with various circles forming the core team, and nesting deeper to serve more specific functions. These circles enable distributed decision-making and collaboration.
- **Circle members** belong to one or several circles within the DAO, focusing on particular areas such as development, marketing, or governance. Circle members can join through enrollment based on expertise and interest, while exit protocols are flexible, allowing for fluid movement between circles. The voting methods within circles are designed to be efficient and relevant to the specific focus area. Proposals from circle members are often tactical, aimed at advancing the objectives of their respective circle. Lastly, members can participate in one or more circles.
- **Councils** comprise members of various boards, roundtables, or strategic alignment groups. These councils provide high-level oversight and strategic direction. New members are typically appointed or elected, ensuring that they have the requisite experience and vision. Exit protocols are formal, reflecting the importance of continuity in strategic leadership. Moreover, voting methods in the council are geared towards achieving strategic consensus and alignment as the proposals are strategic, aiming to guide the long-term direction of the DAO.

Engaged Communities

The community membrane acts as a boundary, which facilitates the interaction with external stakeholders. Through this setup, Human-First DAOs leverage collective intelligence and collaboration to achieve common goals. Concurrently, the community aspect embodies a more dynamic and collaborative approach, characterized by a chaordic nature where individuals engage in sense-making activities and contribute to collective intelligence. This collaborative environment promotes innovation and adaptability, allowing for the exploration of diverse perspectives and ideas.

- **Token holders** consist of all holders of native or linked DAO tokens⁶, who may not necessarily be formal members of a DAO. Token-holders have a stake in the ecosystem's success and can participate in certain governance processes. In



⁶ Tokens can be either created (minted) by the DAO itself or added (external tokens) to the treasury.

other words, token acquisition results in becoming part of the community, while token sale or transfer leads to peeling off the community. Additionally, voting methods often involve weighted voting, reflecting the economic stake of participants. In this category, the proposals from token-holders typically address economic and financial aspects of the DAO. Voting methods and rights are bound by the defined rules of the membrane and the native token of the DAO and future ecosystem tokens.

- **DAO members** are individuals who have been invited to join a specific DAO. This layer involves a higher degree of trust and commitment, as members actively contribute to the DAO’s operations and governance. New members can join by invitation only, ensuring alignment with the DAO’s mission and values. Exit protocols are defined but flexible, allowing members to leave while maintaining respect for their contributions. Voting methods at this level emphasize active participation and consensus-building, while proposals from DAO members often focus on operational improvements and community-building initiatives.

Living Ecosystems

Hypha’s approach to ecosystems marks a significant departure from traditional, industrial-era models that often emphasize competition and hierarchical supply chains.

Instead, Hypha enables a collaborative environment where participants work together to address complex, systemic problems. This paradigm shift transforms the concept of ecosystems into dynamic collaboration spaces of mutual support and shared innovation, where value and knowledge flow freely among participants. By prioritizing human-centric interactions, Hypha not only nurtures trust and transparency but also opens up new avenues for value creation and knowledge exchange across the ecosystem.

The ecosystem layer includes all DAOs that are bound by a shared constitution or manifesto. This layer represents a more cohesive subset of the broader network, united by common principles and goals. Entry and exit protocols at this level are more defined, often requiring alignment with the ecosystem’s values and objectives. Voting methods may vary, but they generally aim to balance inclusivity with the need for cohesive action. Proposals at the ecosystem layer are focused on initiatives that advance the collective goals of the participating DAOs.



Thriving Networks

Hypha's ecosystems are characterized by their ability to build networks on trust and transparency, facilitating environments where collaboration is not only possible but also the preferred mode of operation. This emphasis on transparent interactions ensures that all participants have a clear understanding of the network's objectives and operations, and can engage confidently and constructively. Trust, in this context, becomes a foundational element that supports the creation of new business models and playgrounds for innovation. As a result, Hypha's approach enables the exploration of previously unimagined opportunities, driven by the collective intelligence and creativity of the network.

Ultimately, Hypha's layered model embodies the potential of networked organizations to transcend traditional competitive paradigms. By leveraging the principles of Human-First DAOs, Hypha creates ecosystems that are not just economically efficient but also socially and environmentally regenerative. These ecosystems thrive on the active participation of their members, who are empowered to co-create solutions that benefit the ecosystem as a whole. This collaborative ethos ensures that Hypha's ecosystems remain vibrant, adaptive, and aligned with the broader goal of creating a thriving planetary civilization, in harmony with nature and human aspirations.

By implementing these boundaries, Hypha creates a flexible yet structured network where trust and transparency extend into each new space. This multi-layered approach allows for tailored decision-making methods at each layer, ensuring that governance is both effective and inclusive. The clear delineation of boundaries facilitates smooth transitions for individuals and groups, forming a dynamic and resilient network that can adapt to evolving needs and opportunities.

Purposefully Human-Centered

At the heart of Hypha ecosystem's philosophy, it is the belief that markets are fundamentally about conversations, as emphasized in the Cluetrain Manifesto⁷. This perspective positions humans at the center of economic activities, ensuring that technological advancements serve to enhance human connections and collaborative potential. In such an environment, the barriers to innovation and problem-solving are significantly reduced, enabling a more fluid and adaptive response to emerging challenges. This human-centric approach also facilitates the creation of decentralized networks that are resilient and capable of evolving in tandem with their participants' needs and aspirations.

Driven by Purpose

Human-First DAOs are distinguished by their purpose-driven nature, where the overarching mission and objectives of the organization serve specific societal or community needs, whether it be promoting sustainability, social impact, or economic equity. Unlike earlier generations, these DAOs are structured

⁷ <https://www.cluetrain.com/>

to ensure that every action taken within the organization is aligned with its core purpose, with governance mechanisms and resource allocation strategies geared towards achieving its goals.

One of the key benefits of purpose-based DAOs is their ability to attract and engage members who share a common vision and commitment to the organization’s mission. This alignment of values promotes a strong sense of community and collaboration, driving collective efforts towards meaningful outcomes. Moreover, purpose-driven DAOs often prioritize transparency and accountability, ensuring that members have visibility into how resources are allocated and decisions are made. This transparency builds trust within the community and reinforces the organization’s commitment to its purpose. Above all, the pursuit of a shared mission and vision serves as the guiding force behind all activities for collaboration, innovation, and positive societal impact.

Driven by Human Values and Interactions

Human-First DAOs are positioned as a significant shift towards prioritizing human involvement within decentralized governance models. Unlike their predecessors, they place a strong emphasis on human-driven principles such as inclusivity, transparency, and collective decision-making.

At the core of Human-First DAOs is the recognition that technology alone cannot fully address the complexities of human interaction and societal needs. Instead, these organizations seek to catalyze the collective intelligence, creativity, and values of their participants to drive meaningful change and innovation. In fact, these DAOs are known for the following values⁸:



1. Integrity: It empowers DAO members to participate in building and deploying technologies and services for the benefit of humanity and our planet, in full alignment with their values and principles.

2. Responsibility: It drives how we take accountability, individually and collectively, for becoming a mature and thriving organism and acting in accordance with our values.

3. Trust: It enables the creation of reliable and empowering solutions and connects us to the heart of our humanity.

⁸Source: [Hypha Constitution](#)

4. Transparency: It enables us to live by what we promise and forms the DNA of our technology solutions for collective thriving.

5. Commitment: It fuels our promise of excellence through radical transparency, diversity inclusion, responsibility, and continual learning and improvement.

6. Reciprocity: It commits DAO members to honor all who contribute to the value we co-create, receive, enjoy, and distribute—including Nature herself.

7. Creativity: It inspires contributors to expand and grow in consciousness by purposefully inviting diverse perspectives and new horizons for learning and innovation.

8. Excellence: It matures everyone to learn, act, and evolve by taking self-responsibility and accountability for their actions and the standards, promises, and commitments they make.

Thriving as a Collective

Thriving as a collective involves establishing an environment where all members can flourish. This requires a commitment to inclusivity, equitable resource distribution, and the continuous cultivation of trust and collaboration. By prioritizing the well-being of the collective, we ensure that our organization remains resilient, innovative, and capable of achieving its long-term goals.

Trustless Environments for DAOs

In the realm of DAOs, “trustless” environments leverage advanced technology to ensure security, transparency, and fairness without requiring participants to trust one another. The blockchain technology with its underlying smart contracts and cryptographic protocols plays a pivotal role in creating these trustless systems. By automating and enforcing agreements through code, DAOs can operate efficiently and securely, minimizing the risk of fraud and ensuring that all transactions are verifiable and immutable. This technological foundation allows DAOs to scale and function effectively, even in the absence of established personal relationships between participants. Trustful environments in human-First DAOs level up this foundational layer.

Trustful Environments for DAOs

Contrasting the trustless approach, trustful environments emphasize the importance of relationships, community, and human-centric values. While technology provides the backbone for operations, the true strength of a DAO lies in the trust and collaboration among its members. Building a trustful environment involves fostering open communication, mutual respect, and shared values. This relational trust is crucial for complex decision-making, conflict resolution, and the overall health of the organization. In trustful environments, members are more likely to engage fully, share ideas, and work together towards common goals, creating a cohesive and resilient community.

Design from Trust

“Design from trust” is a principle articulated by Jerry Michalski, and emphasizes the importance of designing systems and processes that inherently trust their participants. This approach fosters greater creativity, collaboration, and engagement by reducing the need for coercive controls and surveillance. In a decentralized organization, trust becomes a foundational element that enhances transparency, accountability, and the overall effectiveness of the ecosystem.

Psychological Safety

Psychological safety, as defined by Amy Edmondson, is the shared belief that the environment is conducive to interpersonal risk-taking. It is a crucial factor for high-performing teams, as it encourages open communication, experimentation, and learning from failures without fear of retribution. By fostering psychological safety within our organization, we create a supportive and innovative culture that empowers members to contribute their best ideas and efforts.

Adapting as an Individual

Coping with the changes on an individual basis is as important as on a collective basis. Hypha has created a series of guideposts that can help navigate this new landscape.

Embrace the Spirit of Decentralization

In a DAO, the power is distributed among all members, not concentrated at the top. This requires a shift from a hierarchical mindset to that of a self-starter who proactively contributes to the governance, development, and operation of the organization. Contributors are not “employees,” but members and stakeholders who bear responsibility for the collective well-being and future of the DAO.

Do Not Bring Your Baggage from Traditional Organizational Experiences

DAOs function on the principles of consensus, collaboration, self-responsibility, and mutual respect. To be effective in such a setting, participants need to shed the mindsets cultivated by traditional hierarchical organizations. As there are no hierarchical power dynamics or politics in this new form of organization, everyone earns a voice according to their best abilities and contributions, and decisions are made collectively.

Be Open, Transparent, Honest, and Show Vulnerability

Transparency and openness are the lifeblood of a DAO. Participants should not hesitate to admit what they do not know or seek help when needed. Further, authenticity and vulnerability foster trust, which supports the collaborative spirit. DAO members are also encouraged to share their thought process and learnings with others.

Give Your Highest Level of Integrity and Follow Through

In a DAO, contributing actions are paramount on how individuals are perceived for their commitment and reliability. For example, following through on tasks and responsibilities, maintaining transparency in actions, and accountability for deliverables will boost one's credibility within the organization and contribute to their success.

Familiarize Yourself with the Technology

Understanding the fundamentals of blockchain technology, including smart contracts, wallets, and voting protocols is essential to navigate the DAO environment. In other words, familiarity with these tools can greatly enhance a newjoiner's effectiveness.

Collaborate with Others, Do Not Be a Lone Wolf

Collaboration is the backbone of any DAO. By complementing your skills, knowledge, and experience with those of other contributors on projects, the workload is spreaded, innovation is fostered, and a stronger sense of community is developed.

Build on What is Already Present, Do Not Reinvent the Wheel

Most DAOs already have a wealth of existing protocols, processes, assets, knowledge bases, as well as projects under development. Rather than starting from scratch, new members should understand and build upon these foundations to improve existing structures. In doing so, they can ensure that their efforts add value and align with the DAO's existing trajectory.

Focus on Getting to Know the People and Establish a Base Level of Trust

In a DAO, relationships matter. Therefore, it is worth investing time to understand the personalities, dynamics, and skills within the community. Building relationships with other members can help you establish a base level of trust, which is essential for thriving collaboration in a decentralized context.

Show Up to Your Meetings as Your True Self (Camera On If You Can)

With remote, distributed teams, face-to-face interaction in DAOs often takes place via video calls. During these calls, be present, engaged, and authentic. Having your camera on, if possible, can help foster better communication and a more personal connection with others.

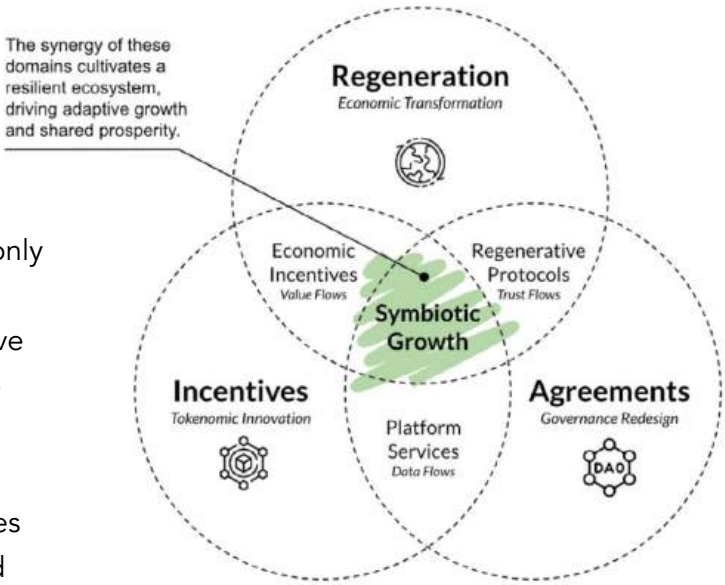
Value Diversity and Inclusion

DAOs bring together individuals from diverse backgrounds, cultures, and skills. Treasuring this diversity and fostering an inclusive environment can lead to innovative ideas and solutions.

Regenerative by Design

Regenerative design and biomimicry are a forward-thinking approach that goes beyond sustainability by actively restoring and replenishing natural systems. It enables environments and systems creation that not only minimize harm but actively contribute to the health and vitality of ecosystems. Regenerative design in Human-First DAOs comprises three primary domains:

- **Regeneration (Economics):** It integrates sustainable practices into decentralized validation protocols, stressing holistic resource allocation and positive socio-ecological impact.
- **Incentives (Tokenomics):** It emphasizes the reward systems and economic incentives that encourage participation, regenerative practices, and growth within the platform.
- **Agreements (Daonomics):** It encompasses all the technical and operational rules and mechanisms that facilitate secure, efficient, and fair interactions within the ecosystem.



The regenerative design of DAOs takes inspiration from nature, facilitating organic organizational structures that encourage the emergence of innovative regenerative business models:

Evolutionary Living System: Human-First DAOs recognize the capacity of living systems to envision and manifest new possibilities, exploring and realizing higher orders of potential futures. These DAOs serve as future collaboratories and evolutionary attractors of a new and thriving planetary civilization, brought about through human maturation and prioritization for collective wellbeing.

Focus on Sustainability and Regeneration: Such DAOs emphasize sustainability, regeneration, and long-term viability, encouraging communities to prioritize projects and initiatives that have a positive impact on both the community and the broader ecosystem. They also promote transparency and accountability in resource allocation, ensuring that resources are used efficiently and effectively.

Inspired by nature: Human-First DAOs draw inspiration from nature's principles of biomimicry, reflecting the intricate and adaptive structures found in ecosystems. Just as hyphae networks in fungi create interconnectedness and resilience, Hypha for example aims to create more sustainable and inclusive organizational structures creating harmony in decentralized governance.

Understanding Human-First DAO Protocol Blueprints

Introduction

The world runs on protocols — structured sets of rules and guidelines that enforce the flow of processes and interactions. From the technological enablement of our global communications to the societal norms of governing behavior, protocols are the invisible frameworks that maintain order and functionality in today's complex systems.

In the context of sustainable development, economic transactions, and governance modes, protocols serve as the backbone for initiatives aimed at facilitating regenerative practices, equitable exchange of value, and decentralized decision-making. By establishing clear objectives and methods of implementation, protocols not only streamline cooperation across various domains but also allow collective efforts towards common goals of resilience, inclusivity, and environmental stewardship. As such, the crafting and adherence to well-designed protocols are pivotal in shaping a future that aligns with the principles of regeneration, fair economics, and collaborative governance.

Human-First DAO protocols provide a structured and transparent framework for operations, governance, collaboration, and evolution. They encompass a series of coded agreements that define the mechanisms through which members propose, vote, and implement decisions, manage rewards, delineate membership criteria, resolve conflicts, facilitate onboarding, and measure performance.

These protocols also govern the economic principles, or tokenomics, that incentivize participation, as well as specify the blockchain infrastructure on which the DAO operates. By codifying these aspects, Human-First DAO protocols create an environment of trust, cooperation, and shared purpose, all while operating in a decentralized and often borderless digital realm.

Systemic Approach

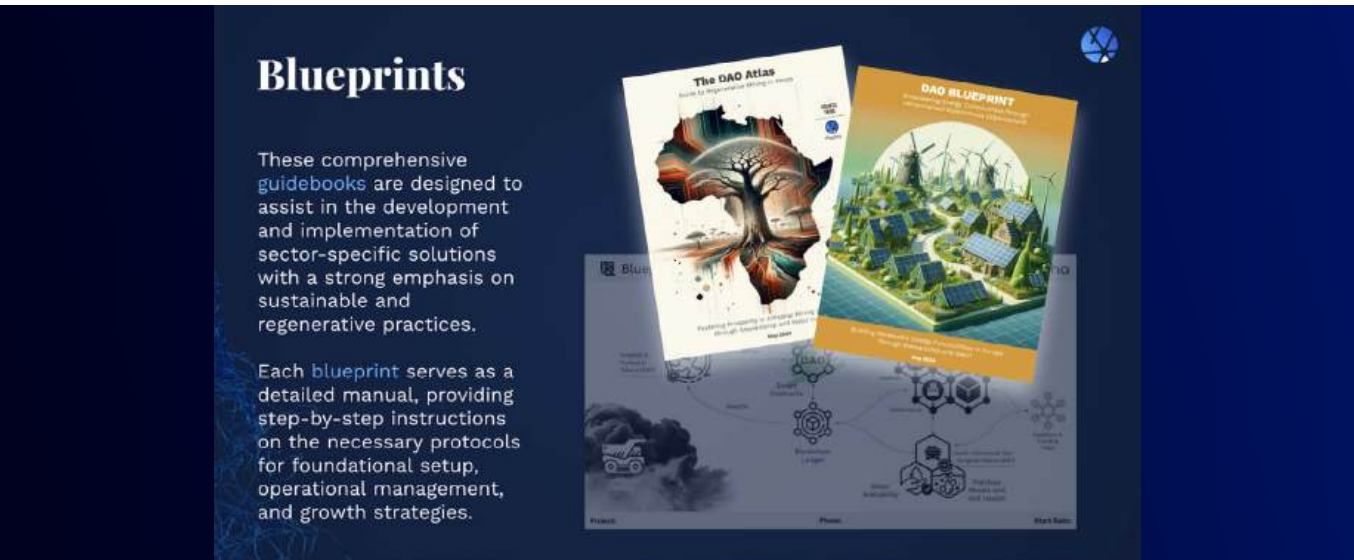
Defining protocols for Human-First DAOs and identifying patterns across different types of DAOs require a systematic approach that balances the unique goals and needs of each DAO with the benefit of learning from established best practices. By adopting a systematic approach, designing protocols for DAOs becomes a collaborative and iterative process that balances the unique characteristics of each DAO with the collective wisdom and experience of the broader ecosystem.

Human-First DAOs protocols are crafted with a foundational principle of regeneration at their core. Unlike their predecessors, which primarily focused on decentralized decision-making and governance, these next-generation protocols prioritize sustainability and resilience as integral components of their design. At their essence, regenerative DAO protocols are structured to not only facilitate collective decision-making and resource allocation but also to actively contribute to the long-term health and vitality of the ecosystems they operate within. They are designed to mimic the self-sustaining and self-renewing properties found in natural systems, aiming to create positive feedback loops that enhance the well-being of both the DAO and its surrounding environment.

One key aspect of this regenerative design is the integration of mechanisms that promote environmental stewardship and social responsibility. Regenerative DAO protocols prioritize community resilience through inclusivity, diversity, and equitable participation. They are designed to empower all stakeholders, including marginalized groups, to actively engage in decision-making processes and benefit from the collective resources and opportunities generated by the DAO.

Protocol Blueprints

Blueprints are comprehensive guide books designed to assist in the development and implementation of sector-specific solutions with a strong emphasis on sustainable and regenerative practices. Each blueprint serves as a detailed manual, providing step-by-step instructions on the necessary protocols for foundational setup, operational management, and growth strategies. Beyond mere operational



⁹Source: Hypha DAO

guidance, blueprints can facilitate the integration of Human-First DAOs within broader socio-ecological, socio-cultural, and socio-economic contexts. This integration ensures that DAOs do not operate in isolation but are instead interwoven with various stakeholders and other DAOs within the same ecosystem or across networks. This promotes a collaborative and synergistic environment that leverages collective expertise and resources.

Blueprints also address growth strategies and legacy planning, by highlighting sustainability and market integration as well as long-term strategic development and innovation. This comprehensive approach ensures that DAOs are not only successful in achieving their initial objectives but are also capable of adapting and thriving over time within a larger, dynamic ecosystem.

Scalable and Configurable

The scalability of DAO protocol blueprints lies in their versatility and adaptability. One of the key features that contributes to the scalability of these blueprints is their modularity. In particular, they consist of a collection of protocols that can be mixed and matched to suit the specific requirements and objectives of each community. Moreover, this modular approach allows for flexibility in design and implementation, enabling communities to customize their DAOs according to their unique circumstances and priorities.

Through configuration, they can be adjusted and adapted across diverse community types and initiatives, accommodating a wide range of preferences, purposes, and endeavors. These highly configurable blueprints are designed to allow communities to tailor the governance structures, decision-making processes, and incentive mechanisms to align with their values and preferences. This configurability ensures that DAOs reflect the diversity and nuances of the communities they serve, with a sense of ownership and participation among members.

Through their scalability, adaptability, and configurability, these blueprints facilitate the rapid deployment and customization of DAOs, unlocking the transformative potential of decentralized decision-making on a local scale.

Protocol Selection Process

The “Blueprint Protocol Selection Process” is designed to systematically guide the development and implementation of protocols across three vital value domains; regeneration, incentives, and agreements. Collectively, they enhance the functionality and sustainability of DAOs.

Regenerative Protocols for Economic Transformation

Regenerative protocols focus on integrating sustainable practices across various sectors to ensure a positive socio-economic and environmental impact. In fact, such protocols are related to:

- **Regenerative Finance:** Protocols establish decentralized financial systems that facilitate ecological credits, circular economy financing, and climate resilience data.
- **Regenerative Economics:** This domain concerns protocols for sustainability reporting, holistic

resource allocation, and renewable energy usage.

- **Regenerative Ecologies:** This category of protocols focuses on enhancing biodiversity, reducing waste, and engaging communities through education and active participation.

Incentivization Protocols for Tokenomic Innovation

Incentives are structured around Hypha’s tokenomics, designed to reward participation and growth within the organizational structures:

- **Token Protocols:** This category includes different types of tokens such as reward, asset-referenced non-fungible, and fungible and tradeable tokens.
- **Staking (Locking) Protocols:** These protocols support staking mechanisms that encourage capital to support DAOs, ecosystems and the network as a whole.
- **Infrastructure Protocols:** They ensure blockchain’s efficiency and scalability, including consensus optimization, interoperability, data storage, and access provisioning.

Agreement Protocols for Governance Redesign

Human-First DAOs are the containers (agreement spaces) to establish a structured framework of governance and operational protocols that ensure all interactions within the ecosystem are secure and efficient. This categorization is designed to provide a structured overview, but it is important to note that many protocols may intersect multiple categories. The flexibility to adapt and redefine the categorization of such protocols as a DAO evolves is crucial.

- **Constitutional or Policy Protocols:** These establish the foundational principles, values, and guidelines for governance, ensuring alignment with the DAO’s purpose and vision.
- **Consensus Protocols:** They include mechanisms to facilitate and streamline decision-making processes so that all members have a voice and decisions are made democratically and transparently.
- **Conflict Resolution Protocols:** They are structured processes for addressing and resolving disputes within the DAO, by promoting harmony and maintaining trust among members.

Blueprint Implementation

Human-First DAO-empowered communities can decide on partial or full activation of protocol blueprints through a collaborative, iterative process. In doing so, they can safeguard that the selected protocols for implementation align with their objectives, values, and capabilities. A structured approach to unfold the activation process is the following:

Discovery and Alignment

- **Identify Objectives:** Begin with a clear understanding of the DAO’s goals, challenges, and desired

impact; objectives could relate to sustainability, community engagement, or ecological restoration, among others.

- **Assess Current State:** Evaluate the DAO's current practices, resources, and readiness for implementing regenerative practices
- **Align Vision:** Ensure that there is a shared understanding and commitment to regenerative principles and outcomes among its members

Protocol Selection

- **Educate on Options:** Present a comprehensive overview of available protocols, including their purposes, benefits, and requirements
- **Match Protocols to Objectives:** Align protocols with the DAO's specific objectives, highlighting how each protocol could contribute to the community's goals
- **Consider Resources and Constraints:** Take into account the DAO's resources, technological capabilities, and any constraints stakeholders may face
- **Prioritize:** Help the DAO prioritize protocols based on their impact potential, feasibility, and alignment with their long-term visions

Customization and Planning

- **Customize Protocols:** Adapt the protocols to fit the specific context and needs of the DAO, including customizing guidelines, actions, and metrics
- **Develop an Implementation Plan:** Create a detailed plan outlining steps, timelines, responsibilities, constraints, and required resources for activating the selected protocols
- **Set Metrics and Key Performance Indicators (KPIs):** Define clear metrics and KPIs for measuring the effectiveness and impact of the protocols on meeting DAO's long-term and short-term goals

Pilot and Iterate

- **Pilot Protocols:** Implement the protocols on a small scale initially to test their effectiveness and gather insights
- **Collect Feedback:** Regularly collect feedback from all stakeholders involved in the pilot
- **Iterate and Improve:** Use the feedback to refine the protocols and implementation strategies, by making necessary adjustments

Full-scale Activation

- **Roll Out:** Once the protocols have been refined and validated through the pilot, proceed with a broader rollout
- **Training and Support:** Provide comprehensive training and ongoing support to all stakeholders involved in implementing the protocols

- **Monitor and Report:** Continuously monitor the implementation, and regularly report on progress against the set KPIs and other metrics

Community and Ecosystem Integration

- **Build Community:** Create a community of practice around the protocols and encourage knowledge sharing, support, and collaboration among similar organizations
- **Leverage Synergies:** Explore synergies with other organizations and initiatives to amplify impact and share best practices

Continuous Improvement

- **Review and Reflect:** Regularly review the effectiveness of the protocols and their alignment with evolving objectives and external conditions
- **Adapt and Evolve:** Get prepared to adapt and introduce new protocols as the organization grows and as new challenges and opportunities emerge

It is important to note that selecting and activating the right protocols is a dynamic process that requires close collaboration between the provider (e.g., Hypha) and organizations. It is also crucial to maintain flexibility, openness to learning, and a commitment to the principles of regeneration throughout the process. This approach ensures that the protocols not only achieve the desired outcomes but also contribute to the broader vision of creating sustainable, regenerative systems.

Conclusion

The transition from Web1.0 to Web3.0 represents not just a technological advancement but a paradigm shift in how we interact with digital spaces and each other. Specifically, Web1.0's static information pages evolved into Web2.0's interactive, user-generated content and social media platforms. Now, Web3.0 aims to decentralize the Internet, by returning control and ownership of data to individuals through blockchain and other decentralized technologies.

This shift has significant implications. By decentralizing the Internet, Web3.0 reduces the power of central authorities and intermediaries, enabling peer-to-peer interactions and transactions. Interestingly, DAOs represent a natural extension of this decentralization ethos, enabling organizational structures to operate without centralized control.

Human-First DAOs represent the next step in this evolution. By building upon principles such as collaboration, inclusivity, and sustainability, these DAOs aim to create environments that prioritize the well-being and participation of all members. They also challenge traditional hierarchical structures and promote a human-driven approach to decision-making and resource allocation.

The systemic approach to designing Human-First DAO protocols is crucial for their success. In particular, scalability ensures that these organizations can grow and accommodate more participants without sacrificing efficiency. In the same vein, configurability allows DAOs to be tailored to specific needs and contexts, making them versatile tools for a wide range of applications. Finally, adaptability supports DAOs to evolve and respond to changing circumstances, which is essential for long-term sustainability.

The practical applications of DAOs are vast and varied. For example, in the energy sector, DAOs can facilitate self-governing, decentralized energy grids, allowing communities to produce, share and trade renewable energy locally. In education, DAOs can democratize access to resources, enabling students and educators to collaborate and share knowledge without the need for intermediaries. These examples illustrate just a fraction of the potential impact DAOs can have on different industries. Looking ahead, the continued integration of DAOs into various sectors promises to create infrastructure that is not only more resilient and fair but also more dynamic and responsive to the needs of their participants. As DAOs evolve, they will likely influence the development of new governance models, economic systems, and social structures.

In conclusion, the evolution of the Internet towards Web3.0 and the rise of DAOs represent a significant shift towards decentralization and user empowerment. Human-First DAOs, with particular focus on collaboration, inclusivity, and sustainability, offer a promising model for future organizations. Their ability to enhance transparency, efficiency, and collective decision-making renders them powerful tools for addressing contemporary challenges and fostering a more equitable future. The journey of DAOs is just the beginning, and their continued evolution will undoubtedly play a crucial role in shaping the decentralized and equitable systems of tomorrow.

Appendix: Use Cases

Decentralized Autonomous Organizations (DAOs) are revolutionizing various sectors by leveraging blockchain technology to enhance transparency, efficiency, and community engagement. The following list includes use cases that Hypha is actively pursuing as of June 2024, or have the potential to become future use cases and case studies. These use cases span diverse domains, from renewable energy trading and youth-led initiatives to corporate governance and regenerative funerals, showcasing the transformative potential of DAOs in addressing contemporary challenges and fostering sustainable, inclusive, and democratic ecosystems.

Active Use Cases

Use Case	Objective	Key Problems	Key Benefits
Energy Communities	Democratize production, sharing, and management of renewable energy	Centralized Decision-Making, Transparency Issues, Operational Inefficiencies, High Costs	Increased Participation, Transparency, Operational Efficiency, Cost Savings, Enhanced Compliance
Youth-led Initiatives	Empower young individuals to create meaningful change in their communities	Increased Isolation, Manipulation by Social Media, Rising Mental Health Issues, Aversion to Hierarchical Organizations, Fear of the Future	Increased Engagement, Transparency, Efficiency, Empowerment, Scalability
Corporate DAOs	Leverage decentralized governance to enhance autonomy, innovation, and collaboration	Bureaucratic Inefficiencies, Limited Autonomy, Siloed Operations, Resistance to Change, Top-Down Management	Increased Innovation, Enhanced Collaboration, Employee Empowerment, Efficient Resource Allocation, Adaptability and Resilience, Cultural Alignment
Regenerative Funerals	Revolutionize funeral ceremonies through sustainability, digital innovation, and community involvement	Environmental Impact, High Costs, Lack of Transparency, Limited Community Engagement, Cultural Sensitivity, Regulatory Compliance, Technological Barriers, Accessibility	Increased Transparency, Efficient Resource Management, Enhanced Community Engagement, Improved Monitoring, Effective Collaboration, Timely Responses, Scalable Solutions, Community Empowerment

Artisanal Mining	Liberalize the management, production, and sharing of mineral resources	Centralized Operations, Limited Transparency Issues, Operational Inefficiencies, Environmental Impact	Increased Participation, Elevated Transparency, Operational Efficiency, Sustainability, Enhanced Compliance
Land-based Communities and Farms	Enhance sustainability, community engagement, and resource management	Bureaucratic Inefficiencies, Lack of Flexibility, Political Constraints, Resource Constraints, Scalability Issues, Limited Community Engagement, Ineffective Monitoring, Lack of Transparency	Increased Transparency, Efficient Resource Management, Enhanced Community Engagement, Improved Monitoring, Effective Collaboration, Timely Responses, Scalable Solutions, Community Empowerment

Use Case for Energy Communities

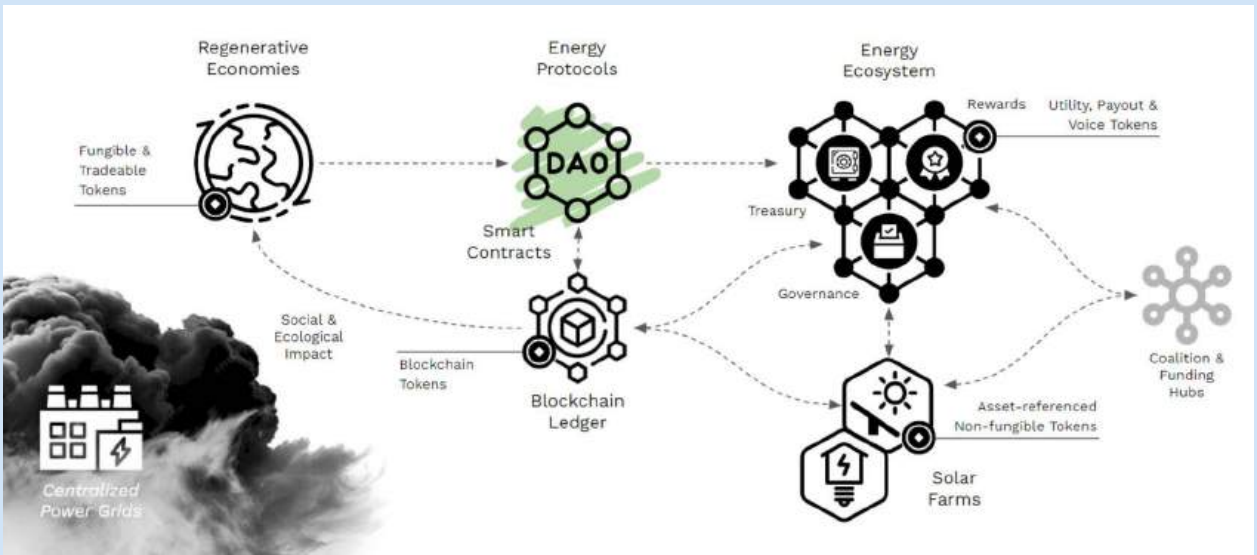
www.powerofthemanymany.org > "Democratizing Renewable Energy through Decentralized Autonomous Organisations (DAOs)" for a full exporation of the full case.x

Background and Purpose of Use Case

Objective: To democratize the production, sharing, and management of renewable energy by transforming energy communities into Decentralized Autonomous Organizations (DAOs). This approach empowers individuals and businesses with direct control over their energy resources, fostering increased participation and inclusivity among all stakeholders. By leveraging blockchain technology, energy DAOs aim to create a more transparent, efficient, and compliant energy ecosystem. This includes enhancing operational efficiency through smart contracts, reducing costs for participants, and improving auditing and certification processes—ultimately building trust and stability within the community.

Stakeholders:

- Community Members: Households and individuals participating in energy sharing
- Businesses: Local SMEs involved in energy production and consumption
- Municipalities: Local governments supporting and regulating energy-related initiatives
- Energy Producers: Entities generating renewable energy
- Technology Service Providers: Organizations offering technical, financial, and regulatory support
- Investors: Individuals and entities investing in renewable energy projects



Problem Description (Without DAOs)

Issues:

- Centralized Decision-making: Energy production and distribution are often centralized, limiting community participation and control.
- Transparency Issues: Lack of transparency in energy pricing and capacity, resource allocation, and decision-making processes.
- Operational Inefficiencies: Bureaucratic processes and outdated infrastructure hinder the efficient management and distribution of energy.
- High Costs: Significant costs associated with the transition to renewable energy sources and infrastructure upgrades.
- Limited Access: Individuals and businesses have limited access to renewable energy resources and decision-making processes.
- Mistrust: Lack of transparency and accountability leads to mistrust among stakeholders.
- Resource Misallocation: Inefficient resource management results in higher costs and suboptimal energy use.
- Slow Transition: The transition to renewable energy is slowed by regulatory and infrastructural challenges.

Solution Space (Using DAOs)

DAO Implementation: An energy DAO can address these challenges by decentralizing governance and making all processes transparent and efficient. By using blockchain technology, the Energy DAO can facilitate democratic decision-making, transparent resource management, and efficient implementation of energy projects and operations management.

Components:

- **Governance:** All stakeholders have voting rights on critical issues such as project funding, energy pricing, and policy updates. Governance tokens can be distributed to stakeholders to enable further participation.
- **Tokenomics:** The DAO utilizes tokens to incentivize participation and manage resources. Tokens can also represent energy units and be used for trading and investment purposes.
- **Stakeholder Roles:** Community members, businesses, municipalities, energy producers, and investors have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Blockchain technology ensures transparency, accountability, and compliance as smart contracts automate processes.

Benefits:

- **Increased Participation:** A more inclusive decision-making process encourages greater involvement from all stakeholders.
- **Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- **Operational Efficiency:** Smart contracts automate processes, reducing bureaucratic delays and improving resource allocation with higher granularity.
- **Cost Savings:** Community-driven energy projects and efficient resource management lower energy costs for participants.
- **Enhanced Compliance:** Auditing and certification processes will be improved through blockchain's immutability and transparency.

Use Case for Youth-led Initiatives

Background and Purpose of Use Case

Objective: To empower young individuals to drive meaningful change in their communities and beyond by implementing a Decentralized Autonomous Organization (DAO) for youth-led initiatives. This approach leverages decentralized governance to tackle challenges such as social isolation, mental health issues, economic insecurity, and distrust in institutions. By providing a platform for innovation, collaboration, and purposeful engagement, the DAO enables young people to actively participate in creating a more inclusive and supportive society.

Stakeholders:

- **Young Individuals:** Youths participating in the DAO to drive social and environmental

initiatives

- **Educational Institutions:** Schools, colleges, and universities supporting youth engagement
- **Mentors:** Experienced members of the Hypha community guiding the youth
- **Investors:** Individuals and entities funding youth projects
- **Non-Profit Organizations:** NGOs collaborating on social and environmental projects
- **Technology Service Providers:** Companies offering technical support for DAO implementation
- **Regulators:** Government bodies overseeing compliance and institutional governance

Problem Description (Without DAOs)

Issues:

- **Increased Isolation:** Digital technology has led to intense feelings of isolation among young people.
- **Manipulation by Social Media:** Social media platforms can manipulate perceptions, leading to unrealistic expectations and mental health issues.
- **Rising Mental Health Issues:** A surge in depression and anxiety among the youth due to societal pressures and economic uncertainties.
- **Aversion to Hierarchical Organizations:** Younger generations seek meaningful work and autonomy, finding traditional hierarchical organizations restrictive.
- **Fear of the Future:** The young are concerned about climate change, political instability, and economic uncertainties.
- **Uncertainty About Their Role in Society:** They struggle to find meaningful roles in a rapidly changing world.
- **Economic Insecurity:** The young generation often faces challenges such as high levels of student debt, difficulty in securing well-paying jobs, and unaffordable housing.
- **Overwhelmed by Choices and Information:** Young people navigate an abundance of choices and information which leads to decision paralysis.
- **Distrust in Institutions:** Growing distrust towards traditional institutions takes place due to perceived corruption and lack of transparency.
- **Social and Environmental Responsibility:** Youths are deeply concerned about social justice and the environmental crisis.
- **Fragmented Community Engagement:** Lack of a unified strategy reduces the impact of youth initiatives
- **Mental Health Deterioration:** Increased isolation and manipulation by social media worsen mental health issues
- **Economic Strain:** Economic insecurity leads to a sense of financial instability.
- **Distrust and Disillusionment:** Distrust in institutions and uncertainty about the future contribute to disillusionment among the youth.

Solution Space (Using DAOs)

DAO Implementation: A youth-led Initiatives DAO can address these challenges by decentralizing governance and ensuring transparent, efficient management of resources and decision-making processes. The DAO can facilitate collaboration, empower young individuals, and promote sustainable social and environmental initiatives.

Components:

- **Governance:** All stakeholders have voting rights on critical issues such as project funding, policy updates, and resource allocation. Governance tokens can be distributed to enable participation.
- **Tokenomics:** The DAO utilizes tokens to incentivize participation and manage resources. Tokens can be used for funding projects, rewarding contributions, and facilitating trade within the community.
- **Stakeholder Roles:** Young individuals, mentors, educational institutions, community members, investors, and NGOs have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Blockchain technology ensures transparency and accountability, as smart contracts automate processes.

Benefits:

- **Increased Engagement:** Decentralized governance encourages greater involvement from all stakeholders, particularly young individuals.
- **Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- **Efficiency:** Smart contracts automate processes, by reducing bureaucratic delays and improving resource allocation.
- **Empowerment:** Young individuals gain autonomy and confidence through meaningful participation in decision-making, project execution, and operations.
- **Scalability:** The DAO framework allows successful initiatives to be replicated and scaled, promoting broader impact and sustainable development.

Use Case for Corporate DAOs

Background and Purpose of Use Case

Background: Both RenDanHeYi and Wirearchy reject the rigid, top-down hierarchical models

in favor of more fluid, network-based governance. In RenDanHeYi, employees are empowered to act as micro-entrepreneurs, aligning closely with customer needs while maintaining accountability and autonomy. Wirearchy, as coined by Jon Husband, introduces a similar concept, emphasizing the dynamic flow of power through networks of trust, knowledge, and results-driven actions.

The purpose of this use case is to explore how a hybrid model combining RenDanHeYi's customer-centric, entrepreneurial ethos and Wirearchy's decentralized networks can be deployed within a DAO framework. This combination facilitates corporate transformation by empowering employees to "break out" of traditional hierarchical structures and form decentralized, customer-focused micro-ecosystems that can evolve dynamically based on market needs.

Objective: The primary goal is to create an organizational structure where employees can break out of traditional corporate boundaries to form decentralized, customer-driven networks. These networks are supported by decentralized governance (in the form of DAOs), with the flexibility to adapt and thrive in ever-changing market conditions. Through this process, employees, now functioning as micro-entrepreneurs, gain financial and strategic support through decentralized funding mechanisms (such as DAO tokens) akin to an "umbilical cord," providing resources while maintaining autonomy.

Stakeholders:

- **Business Leaders:** Act as facilitators of decentralized networks rather than top-down controllers. They enable the creation of DAOs that allow employees to form micro-enterprises.
- **Employees (Micro-entrepreneurs):** Employees are empowered to "break out" of the corporate pyramid and create customer-driven, agile units that function autonomously within or outside the organization.
- **Sponsors & Investors:** Provide funding through decentralized mechanisms (DAO tokens) to back these micro-enterprises, similar to venture capital.
- **Partnering Businesses:** Work closely with decentralized teams, forming networked collaborations based on customer needs and market conditions.
- **Customers:** Engage directly with decentralized units, benefiting from personalized and entrepreneurial customer service.
- **Technology Providers:** Ensure blockchain and decentralized technologies enable transparency, governance, and trust within these decentralized networks.
- **Regulators:** Oversee the compliance and governance of decentralized structures to ensure they align with external regulations and legal frameworks.

Problem Description (Without DAOs)

Issues:

- **Bureaucratic Inefficiency and Slowed Innovation:** Traditional hierarchies limit flexibility, slowing down the ability to innovate in response to customer needs.
- **Employee Disengagement:** Employees feel trapped within hierarchical structures, limiting their potential to act entrepreneurially.
- **Siloed Departments and Fragmented Collaboration:** Hierarchical structures foster silos, hindering cross-functional collaboration and agile responsiveness.
- **Organizational Inertia:** Stagnant, slow-moving structures make it difficult for companies to adapt to rapidly evolving market dynamics.
- **Lack of Autonomy:** Employees have little power to make decisions or form teams that can address emergent customer needs quickly and effectively.
- **Misalignment with Evolving Market Conditions:** Traditional structures fail to provide the flexibility required to adapt to customer expectations or market trends

Solution Space (Using DAOs)

This hybrid model allows employees to “break out” of rigid hierarchies, as seen in the Hugh McLeod drawing, and form decentralized, autonomous networks that are customer-centric. These decentralized networks are governed through a DAO, ensuring transparency, accountability, and flexibility in decision-making. The DAO also provides financial and operational support through tokens, acting as the “umbilical cord” for these autonomous micro-enterprises, allowing them to thrive outside the corporate pyramid.

Components

1. **Governance through DAOs:** Employees-turned-entrepreneurs are granted governance rights via tokens to participate in decision-making and resource allocation.
2. **Dynamic Networks:** These employees form new, decentralized teams (akin to Wirearchy) based on customer needs and shared goals, breaking away from traditional organizational hierarchies.
3. **Tokenomics and Financial Support:** Micro-enterprises are funded through DAOs, with tokens acting as a form of financial backing. These tokens allow employees to “purchase” the resources they need for their decentralized units.
4. **Technology Integration:** Blockchain ensures that all decentralized networks are transparent and accountable. Smart contracts facilitate seamless transactions and agreements between micro-enterprises, employees, and investors.
5. **Breaking Organizational Silos:** The focus is on trust, knowledge, and results, allowing employees to work across boundaries, outside the constraints of hierarchical structures.
6. **Customer-Centric Innovation:** Employees, now free from the corporate pyramid, can respond

dynamically to customer needs, ensuring agility and innovation.

Benefits:

- 1. Increased Autonomy & Innovation: Employees can become entrepreneurs, breaking out of hierarchical constraints, thus unleashing their full creative and entrepreneurial potential.
- 2. Enhanced Customer Focus: Decentralized networks enable employees to remain closer to customer needs and adapt quickly, providing more personalized and effective services.
- 3. Efficient Use of Resources: Decentralized financial support through DAO tokens ensures that resources are allocated to those initiatives that are most likely to succeed based on market conditions.
- 4. Improved Employee Engagement: The ability to form new networks and drive their own projects increases motivation, creativity, and satisfaction.
- 5. Dynamic and Resilient Organizations: Decentralized, networked structures are better equipped to respond to rapid changes in the market and can pivot quickly when necessary.
- 6. Silo-free Collaboration: Employees are no longer confined to specific departments but are empowered to collaborate across functions, leveraging their collective knowledge and expertise.

Challenges:

- 1. Ensuring Accountability and Coordination: As employees break away from hierarchical structures, maintaining clear accountability mechanisms within decentralized networks is critical.
- 2. Regulatory Compliance: Navigating legal and governance frameworks is more complex in decentralized organizations, particularly regarding labor laws and financial regulations.
- 3. Cultural Shift: Shifting from a pyramid to a network-based culture requires significant re-education and mindset shifts, especially for management accustomed to traditional control models.
- 4. Sustaining the Financial Support “Umbilical Cord”: Ensuring that DAOs remain financially viable and that tokens continue to be a reliable source of funding for micro-enterprises.

Use Case for Regenerative Funerals

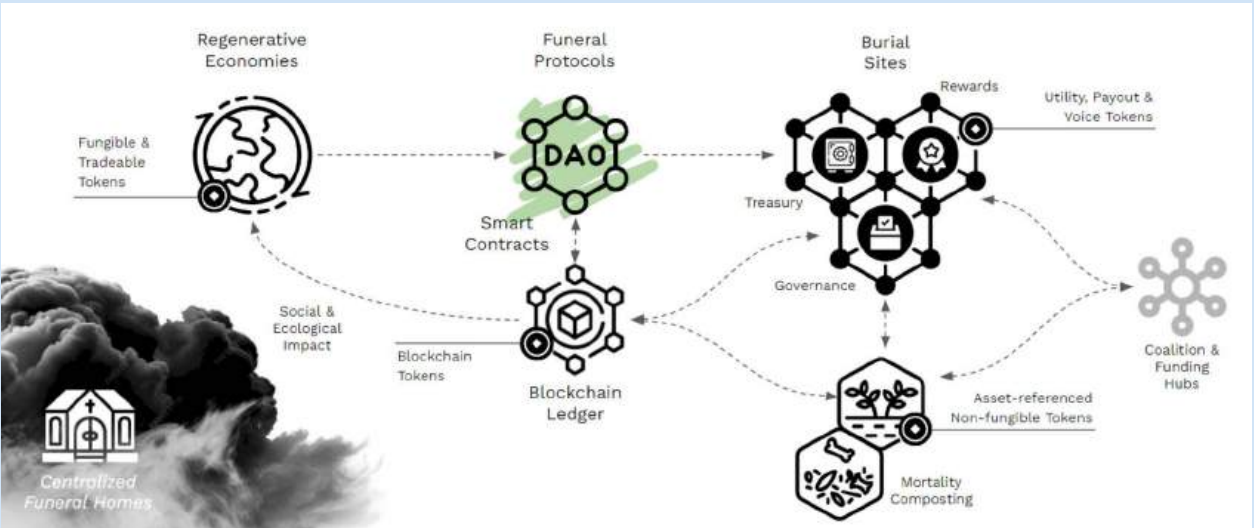
Background and Purpose of Use Case

Objective: To revolutionize end-of-life services by establishing Daisybox DAO—a Decentralized Autonomous Organization that reimagines funeral ceremonies through sustainability, digital innovation, and community involvement. This approach addresses the limitations

of traditional centralized systems by promoting eco-friendly practices, inclusivity, and collaborative commemoration. By leveraging blockchain technology, Daisybox DAO aims to create meaningful, personalized farewells that honor lives while upholding environmental responsibility and enhancing community engagement.

Stakeholders:

- Families and Friends: Individuals planning and attending funerals
- Environmentalists: Advocates for eco-friendly burial practices
- Local Community Members: Residents involved in or impacted by local burial sites
- Funeral Service Providers: Businesses offering funeral and burial services
- Technology Service Providers: Companies offering technical support for DAO implementation
- Legal Advisors: Experts ensuring compliance with legal and regulatory frameworks
- Cultural Advisors: Experts ensuring cultural sensitivity in burial practices
- Investors: Individuals and entities funding the development and expansion of the DAO
- Government Entities: Local and national governments regulating burial practices
- Environmentalists and NGOs: Advocates and organizations promoting eco-friendly and ethical burial practices.
- Educational Institutions: Schools and universities educating about sustainable end-of-life practices
- Media: Outlets reporting on innovative funeral practices and DAO activities
- Volunteers: Individuals interested in contributing to community support initiatives



Problem Description (Without DAOs)

Issues:

- **Environmental Impact and Degradation:** Traditional burial practices often involve non-biodegradable materials and harmful chemicals, contributing to pollution and resource depletion.
- **High Costs and Financial Strain:** Funerals can be prohibitively expensive, placing significant financial burdens on grieving families.
- **Lack of Transparency Leading to Mistrust and Exploitation:** Opaque processes in the funeral industry foster mistrust and potential exploitation.
- **Limited Community Engagement and Disempowerment:** Minimal involvement of community members in decision-making restricts local input and empowerment.
- **Cultural Insensitivity and Incompatibility:** Standardized practices may not align with diverse cultural and personal preferences, leading to cultural disconnects.
- **Regulatory Compliance Challenges:** Navigating complex legal frameworks governing burials can be difficult, causing delays and complications in the burial process.
- **Technological Barriers and Exclusion:** Limited access to and understanding of digital tools for planning and memorializing excludes some individuals from modern options.
- **Accessibility and Inequitable Access:** Sustainable and affordable burial options are not widely available, restricting access for many families and communities.

Solution Space (Using DAOs)

DAO Implementation: A DAO like Daisybox DAO can address these challenges by decentralizing governance, ensuring transparent and efficient resource management, and empowering communities to participate in decision-making processes and operations.

Components:

- **Transparent Ledger:** Utilizing blockchain technology to maintain a public, immutable record of transactions and decisions, ensuring transparency and trust among all stakeholders.
- **Smart Contracts with Automated Audits:** Implementing smart contracts that release funds and services only when verifiable conditions are met, combined with algorithms that regularly audit transactions and automatically flag any irregularities for review.
- **Community Governance:** Allowing community members and other stakeholders to vote on important issues, budget allocations, and service approvals, promoting inclusive and democratic decision-making.
- **Whistleblower Protection:** Providing a secure, anonymous platform for reporting corruption and mismanagement, safeguarding those who expose unethical practices.
- **Decentralized Proposals and Funding:** Enabling community members to propose initiatives

and directly fund them, fostering grassroots involvement and empowerment.

- Legal Document Repository: Hosting a decentralized repository of legal documents and resources, ensuring easy access and transparency in legal matters.
- Crowdsourced Monitoring: Allowing citizens and volunteers to monitor and report on service quality and practices, enhancing accountability and service delivery.

Benefits:

- Increased Transparency: Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- Efficient Resource Management: Smart contracts and decentralized governance enhance efficiency and reduce mismanagement.
- Community Empowerment and Engagement: By giving families, environmentalists, and local communities a voice in planning and decision-making, stakeholders are empowered to actively participate in governance. This fosters greater trust, inclusivity, and engagement among all parties involved.
- Improved Monitoring: Crowdsourced monitoring and automated audits provide a higher level of oversight and accountability, ensuring that resources are used appropriately.
- Effective Collaboration: Strengthened partnerships with NGOs and international bodies enhance support efforts, resource sharing, and the overall effectiveness of initiatives.
- Timely Responses: Real-time reporting and alerts enable quick and effective responses to issues as they arise, improving service delivery and problem resolution.
- Scalable Solutions: Decentralized systems can rapidly scale to meet increasing demands and community needs, ensuring sustainability and adaptability over time.

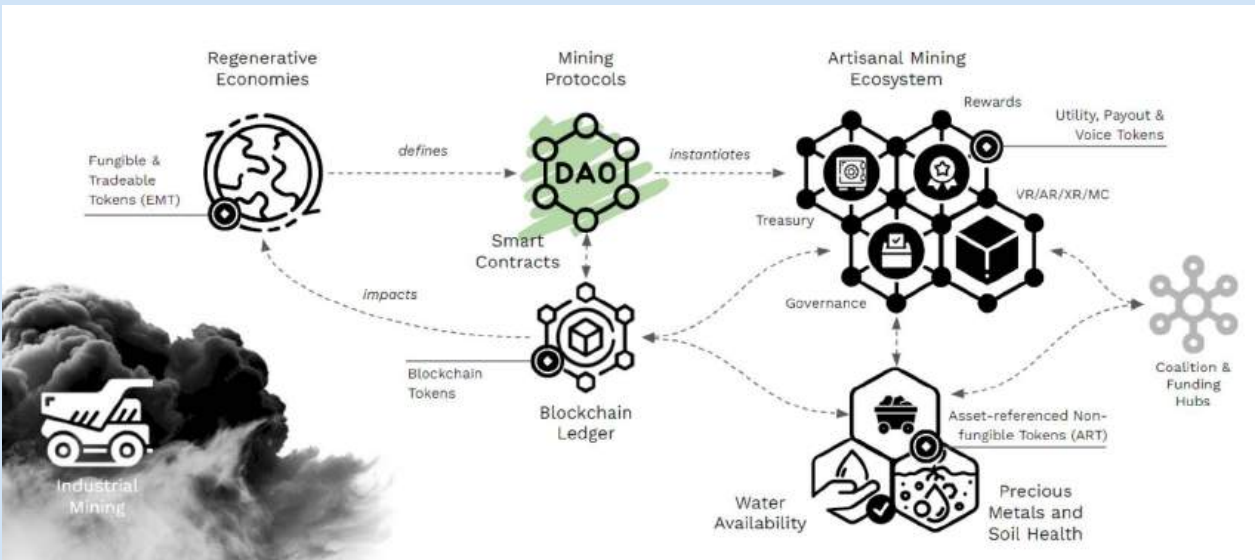
Use Case for Artificial Mining DAO

Background and Purpose of Use Case

Objective: To transform the mining sector—particularly artisanal and small-scale mining (ASM)—by implementing a Decentralized Autonomous Organization (DAO) that democratizes the management, production, and distribution of mineral resources. This approach aims to empower local communities, ensure fair and equitable wealth distribution, and promote sustainable mining practices. By leveraging blockchain technology, mining DAOs seek to create a more transparent, efficient, compliant, and inclusive mining ecosystem, fostering trust and collaboration among all stakeholders.

Stakeholders:

- Community Members: Individuals and families involved in mining activities
- Local Businesses: Small businesses and cooperatives associated with mining
- Municipalities: Local governments regulating and supporting mining initiatives
- Mining Companies: For-profit entities engaged in mining operations
- Technology Service Providers: Organizations offering technical, financial, and regulatory support
- Investors: Individuals and entities investing in mining projects



Problem Description (Without DAOs)

Issues:

- Centralized Operations: Mining operations are often controlled by a few entities, limiting community participation and benefits.
- Transparency Issues: Transparency in mining operations, profit sharing, and environmental impact is currently limited.
- Operational Inefficiencies: Bureaucratic processes and outdated methods hinder efficient and sustainable mining.
- Environmental Impact: Unsustainable practices lead to child labor, environmental degradation, and health risks.

- **Limited Benefits:** Local communities receive minimal benefits from mining activities.
- **Mistrust:** Lack of transparency and accountability leads to mistrust among stakeholders.
- **Resource Misallocation:** Inefficient management results in wastage and environmental harm.
- **Health and Safety Risks:** Poor practices lead to significant health and safety hazards for miners.

Solution Space (Using DAOs)

DAO Implementation: A mining DAO can address these challenges by decentralizing governance and ensuring transparency and efficiency in mining operations. By using blockchain technology, the mining DAO can facilitate democratic decision-making, transparent resource management, and sustainable practices.

Components:

- **Governance:** Stakeholders have voting rights on critical issues such as project funding, mining practices, and policy updates. Governance tokens are distributed to enable participation.
- **Tokenomics:** The DAO utilizes tokens to incentivize sustainable practices and manage resources. Tokens represent shares in mining profits and can be used for trading and investment.
- **Stakeholder Roles:** Community members, local businesses, municipalities, mining companies, and investors have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Blockchain ensures transparency, accountability, and compliance, as smart contracts automate processes.

Benefits

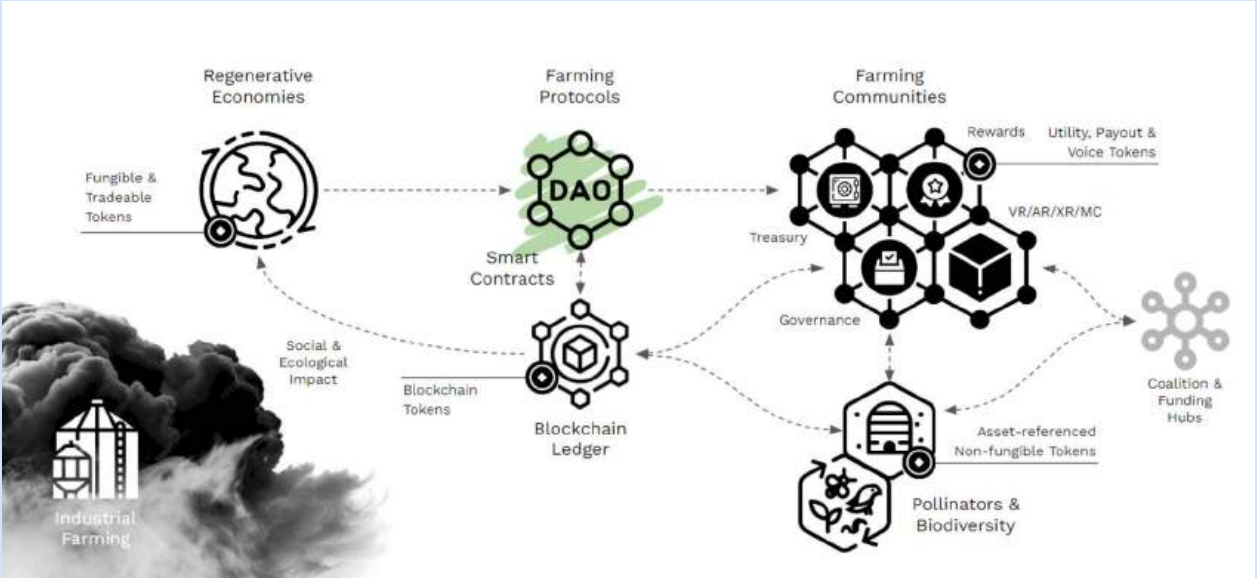
- **Increased Participation:** An inclusive decision-making process encourages greater involvement from all stakeholders.
- **Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- **Efficiency:** Smart contracts automate processes, reducing bureaucratic delays and improving resource allocation and compliance.
- **Sustainability:** Promotes sustainable mining practices, reducing environmental impact and health risks.

Background and Purpose of Use Case

Objective: To empower land-based communities by implementing a Decentralized Autonomous Organization (DAO) that decentralizes governance and enhances sustainability, community engagement, and resource management. This approach leverages blockchain technology to overcome the limitations of traditional centralized systems, ensuring transparency and fostering global collaboration. By enabling local communities to take direct control over their resources and decision-making processes, the DAO aims to build a more sustainable, inclusive, and interconnected world.

Stakeholders

- Local Residents: Individuals residing in the community and actively participating in governance and projects
- NGOs: Non-governmental organizations providing support for community projects
- Government Entities: Local and national governments involved in policy-making and resource allocation
- International Organizations: Entities supporting sustainability and community initiatives
- Technology Service Providers: Companies offering technical support for DAO implementation
- Educational Institutions: Schools, colleges, and universities offering educational programs
- Investors: Individuals and entities funding community support initiatives
- Media: Outlets reporting on community activities and DAO initiatives
- Legal Advisors: Experts ensuring compliance with laws and advocating for community rights
- Sponsors and Donors: Individuals and organizations providing financial and material support
- Local Businesses: Enterprises supporting or being impacted by the community
- Environmental Groups: Organizations focusing on the environmental impact of the community
- Volunteers: Individuals interested in contributing to community support initiatives



Background Description (Without DAOs)

Issues:

- Bureaucratic Inefficiencies: Delays and inefficiencies hinder timely service provision.
- Lack of Flexibility: Rigid frameworks fail to adapt to changing conditions.
- Political Constraints: Efforts are influenced by political considerations, compromising neutrality.
- Resource Constraints: Insufficient funding and political support limit capacity.
- Scalability Issues: Traditional systems struggle to scale in response to demands.
- Limited Community Engagement: Involvement of residents in decision-making is limited.
- Ineffective Monitoring: Systems for monitoring and reporting are inadequate.
- Lack of Transparency: Opaque processes lead to mistrust and potential mismanagement.:
- Delayed Aid: Inefficiencies slow delivery of services and resources.
- Poor Adaptability: Inflexible systems cannot respond to evolving needs.
- Compromised Neutrality: Political influence undermines effectiveness.
- Underfunded Programs: Resource constraints limit support initiatives.
- Overwhelmed Systems: Large demands strain infrastructure and services.
- Disempowered Communities: Residents lack agency in decisions impacting their lives.
- Unmonitored Conditions: Poor oversight leads to unaddressed issues.
- Mistrust and Mismanagement: Lack of transparency fosters mistrust and potential corruption.

Solution Space (Using DAOs)

DAO Implementation: A land-based DAO can address these challenges by decentralizing governance, ensuring transparent and efficient resource management, and empowering community members to participate in decision-making processes and operations.

Components:

- **Transparent Ledger:** Utilizing blockchain to maintain a public, immutable record of resource distribution, contracts, and transactions
- **Smart Contracts with Automated Audits:** Implementing smart contracts that release funds and services only when verifiable conditions are met, combined with algorithms that regularly audit transactions and automatically flag any irregularities for review.
- **Community Governance:** Allowing community members and other stakeholders to vote on important issues, budget allocations, and project approvals
- **Whistleblower Protection:** Providing a secure, anonymous platform for reporting corruption and mismanagement
- **Decentralized Proposals and Funding:** Enabling community members to propose and fund initiatives directly
- **Legal Document Repository:** Hosting a decentralized repository of legal documents and resources
- **Crowdsourced Monitoring:** Allowing citizens and volunteers to monitor and report on conditions
- **Open Forums for Discussion:** Providing platforms for open discussion on policy matters
- **Collaboration with NGOs:** Partnering with NGOs to verify data and support initiatives
- **Real-time Reporting and Alerts:** Enabling immediate reporting of issues and dissemination of alerts
- **Cross-Border Collaboration Tools:** Facilitating international cooperation on community support and policy

Benefits:

- **Increased Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- **Efficient Resource Management:** Smart contracts and decentralized governance enhance efficiency and reduce mismanagement.
- **Community Empowerment and Engagement:** Residents and other stakeholders are empowered to actively participate in governance, giving them a voice and agency. This combined approach fosters greater trust, inclusivity, and engagement among all parties involved.
- **Improved Monitoring:** Crowdsourced monitoring and automated audits ensure a higher level of oversight and accountability.

- **Effective Collaboration:** Partnerships with NGOs and international bodies are strengthened, enhancing support and resource sharing.
- **Timely Responses:** Real-time reporting and alerts enable quick responses to issues, improving service delivery.
- **Scalable Solutions:** Decentralized systems can rapidly scale to meet increasing demands, ensuring sustainability and adaptability.

Future Use Cases

The following list provides an overview of use cases with the potential to become future Hypha use cases and case studies.

Use Case	Objective	Key Problems	Key Benefits
Schools (Future of Education)	Create a decentralized, transparent, and efficient system of governance and resource management	Inefficiencies, Stakeholder Disenfranchisement, Resource Mismanagement, Slow Progress	Inclusive decision-making, transparent school operations, and efficient school governance lead to improved educational experiences and outcomes.
Peace Movements	Utilize decentralized governance to support grassroots peace initiatives	Operational Inefficiencies, Transparency Issues, Limited Reach, Reduced Community Engagement, Mistrust:	Enhanced participation, transparent network operations, efficient resource allocation, and scalable impact for global peace initiatives.
Student Movements	Facilitate coordinated, efficient, and transparent organization of student protests and activities	Lack of Coordination, Inefficiencies, Transparency Issues, Limited Reach, Repression	Enhanced coordination, transparent decision-making, efficient resource management, and scalable actions for impactful student movements.

Resilient Food Systems	Establish sustainable, resilient, and equitable food systems	Climate Change, Food Insecurity, Economic Instability, Bureaucratic Inefficiencies, Lack of Collaboration, Limited Innovation, Inequitable Resource Distribution	Enhanced Collaboration, Transparency, Efficiency, Innovation, Resilience, Equity
Anti-Corruption DAOs	Increase transparency, enhance civic engagement, and reduce corruption in socio-political contexts	Lack of Transparency, Misappropriation of Funds, Corruption in Decision-Making, Whistleblower Vulnerability, Inefficient Audits, Centralized Proposal and Funding Control, Limited Access to Legal Resources, Ineffective Monitoring, Election Tampering, Restricted Discussion Platforms, Weak NGO Collaboration, Delayed Reporting and Alerts, Cross-Border Corruption	Increased Transparency, Reduced Corruption, Enhanced Citizen Engagement, Secure Whistleblowing, Efficient Audits, Direct Funding Control, Access to Legal Resources, Effective Monitoring, Fair Elections, Inclusive Policy Discussion, Strengthened NGO Collaboration, Real-time Alerts, Cross-Border Anti-Corruption
Refugee Camp DAOs	Improve efficiency, transparency, and effectiveness of refugee aid and management	Bureaucratic Inefficiencies, Lack of Flexibility, Political Constraints, Resource Constraints, Scalability Issues, Limited Community Engagement, Ineffective Monitoring, Lack of Transparency	Increased Transparency, Efficient Resource Management, Enhanced Community Engagement, Improved Monitoring, Effective Collaboration, Timely Responses, Scalable Solutions, Community Empowerment
Festival DAOs	Enhance the organization, participation, and overall experience of in-person gatherings	Bureaucratic Inefficiencies, Lack of Participant Engagement, Resource Mismanagement, Transparency Issues, Sustainability Concerns, Limited Flexibility, Coordination Challenges	Increased Transparency, Efficient Resource Management, Enhanced Participant Engagement, Improved Monitoring, Effective Collaboration, Timely Responses, Sustainable Practices, Community Empowerment

Family Care DAOs	Create a decentralized, community-driven network to manage caregiving services	Inefficiencies in Service Delivery, Lack of Transparency, Inflexibility, High Costs, Limited Caregiver Autonomy, Resource Constraints	Increased Transparency, Efficient Resource Management, Enhanced Caregiver Autonomy, Improved Service Quality, Cost Reduction, Community Empowerment
Condominium DAOs	Democratize management, decision-making, and operational processes within condominium communities	Centralization, Transparency Issues, Inefficiencies, Communication Gaps	Increased Participation, Transparency, Efficiency, Better Communication
Rainforest Conservation	Empower local and indigenous communities, enhance biodiversity protection, and foster sustainable development for future generations.	Centralized Decision-making, Transparency Issues, Operational Inefficiencies, Resource Constraints, Community Exclusion, Unrealistic Project Expectations, Insufficient Grasp of Human Psychology	Increased Participation, Transparency, Efficiency, Cost Savings

Use Case for Land-based Communities and Farms

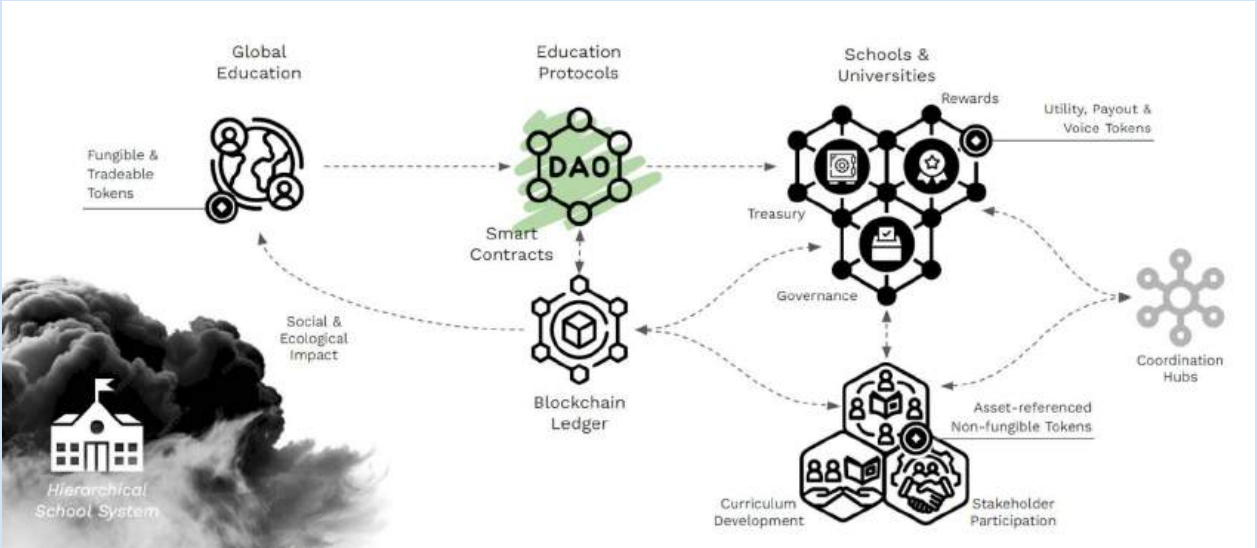
Background and Purpose of Use Case

Objective: The main goal of implementing a DAO for schools is to create a decentralized, transparent, and efficient system of governance and resource management. This approach aims to empower all stakeholders—students, teachers, parents, and administrators—by offering them a direct voice in decision-making processes. By leveraging blockchain technology, the school DAO seeks to create a more democratic and inclusive educational environment.

Stakeholders:

- Students: The primary beneficiaries who can directly impact their educational experience through active participation.

- Teachers: Educators involved in governance, curriculum development, and mentoring students.
- Parents: Engaged in decision-making processes and supporting school initiatives to enhance educational outcomes.
- School Administrators and Board Members: Overseeing and participating in the decentralized governance process to ensure alignment with educational goals.
- Alumni: Contributing through mentoring, fundraising, and providing input on school policies based on their experiences.
- Mentors: Experienced individuals from various fields offering guidance, support, and expertise to students and teachers.
- Non-Governmental Organizations (NGOs): Organizations supporting educational initiatives, advocating for policy changes, and providing resources or programs.
- Partners / Local Firms: Businesses and companies that offer guest lectures, curriculum advice, educational visits, internships, and resources to enrich the learning environment.
- Community Members: Local residents engaging in capacities that support school activities and initiatives, fostering a strong community-school relationship.
- Governments: Local and national government bodies involved in educational policy-making, funding, and regulatory compliance.
- Technology Service Providers: Companies offering technical support and tools for implementing decentralized governance, educational technologies, and enhancing digital literacy.
- Cultural Advisors: Experts ensuring that educational content and practices are culturally sensitive and inclusive.
- Legal Advisors: Professionals ensuring compliance with legal and regulatory frameworks within the educational system.



Problem Description (Without DAOs)

Issues:

- **Centralized Decision-making:** Decisions are often made in a centralized way, with limited input from impacted stakeholders such as students, parents, and teachers. Therefore, representation and responsiveness to the needs of the school community is limited.
- **Transparency Issues:** Financial management and governance processes are not always transparent, causing mistrust among stakeholders.
- **Inefficiencies:** Bureaucratic processes slow down decision-making and implementation of school policies and projects.
- **Stakeholder Disenfranchisement:** Students, teachers, and parents feel excluded from important decisions, reducing their engagement and sense of ownership.
- **Resource Mismanagement:** Lack of transparency can lead to misallocation of funds and resources, impacting the quality of education and school facilities.
- **Slow Progress:** Inefficient processes hinder the timely implementation of beneficial projects and policies, affecting overall school performance and student outcomes.

Solution Space (Using DAOs)

DAO Implementation: A DAO can address these challenges by decentralizing governance and making all processes transparent and efficient. By using blockchain technology, the school DAO can facilitate democratic decision-making, transparent resource management, and efficient implementation of policies and projects.

Components:

- **Governance:** All stakeholders may have voting rights on important issues such as budget allocation, curriculum changes, and policy updates. Governance tokens can be distributed to stakeholders to enable participation.
- **Tokenomics:** The DAO can utilize tokens to incentivize participation and manage resources. Tokens can also represent voting power and be used for fundraising.
- **Stakeholder Roles:** Students, teachers, parents, administrators, and alumni have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Blockchain ensures transparency, accountability, and compliance as smart contracts automate processes.

Benefits

- Increased Participation: A more inclusive decision-making process encourages greater involvement from all stakeholders.
- Fairness and Transparency: Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- Improved Outcomes: Efficient governance and resource management lead to better educational experiences and outcomes for students.

Use Case for Peace Movements DAOs

Background and Purpose of Use Case

Objective: The primary goal of implementing a DAO for peace movements is to utilize decentralized governance to replicate successful community empowerment models like the Sarvodaya movement. This approach aims to support grassroots initiatives across the globe, by leveraging blockchain technology to promote transparency, inclusivity, and sustainable development.

Stakeholders:

- Community Members: Individuals participating in local and global peace initiatives
- Peace Organizations: Entities working on conflict resolution and community building
- Governments: Local and national bodies supporting peace and reconciliation efforts
- Technology Service Providers: Organizations offering technical support for DAO implementation
- Investors: Individuals and entities funding peace-building projects
- Thought Leaders: Experts in community development, spirituality, and governance

Problem Description (Without DAOs)

Issues:

- Centralized Decision-making: Traditional peace movements often rely on centralized

decision-making, limiting grassroots participation.

- **Operational Inefficiencies:** Bureaucratic processes hinder the timely and effective implementation of peace initiatives.
- **Transparency Issues:** Fund allocation and project management have limited transparency.
- **Limited Reach:** Successful local initiatives are difficult to scale to a global level.
- **Reduced Community Engagement:** Limited opportunities for local communities to actively participate in peace-building efforts.
- **Mistrust:** Lack of transparency leads to mistrust among stakeholders.
- **Slow Progress:** Bureaucratic inefficiencies slow down the implementation of peace initiatives.
- **Inequitable Resource Distribution:** Centralized control can lead to unequal distribution of resources.

Solution Space (Using DAOs)

DAO Implementation: A peace movement DAO can address these challenges by decentralizing governance and ensuring transparency and efficiency in all processes. By leveraging blockchain technology, the DAO can facilitate democratic decision-making, transparent fund management, and scalable community initiatives.

Components:

- **Governance:** All stakeholders have voting rights on critical issues such as project funding, policy updates, and resource allocation. Governance tokens can be distributed to enable participation.
- **Tokenomics:** The DAO utilizes tokens to incentivize participation and manage resources. Tokens can be used for funding projects, rewarding contributions, and facilitating trade within the community.
- **Stakeholder Roles:** Community members, peace organizations, governments, technology providers, investors, and thought leaders have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Blockchain technology ensures transparency and accountability as smart contracts automate processes.

Benefits:

- **Increased Participation:** Decentralized governance encourages greater involvement from all stakeholders, especially at the grassroots level.

- **Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- **Efficiency:** Smart contracts automate processes, reducing bureaucratic delays and improving resource allocation.
- **Scalability:** The DAO framework allows successful local initiatives to be replicated globally, promoting a broader impact.

Use Case for Student Movements

Background and Purpose of Use Case

Objective: The primary goal of implementing a DAO for student movements is to facilitate coordinated, efficient, and transparent organization of student protests and activities at a regional or national scale. By leveraging blockchain technology, the DAO will enable decentralized decision-making, resource allocation, and communication among diverse student groups, fostering a unified and impactful movement.

Stakeholders:

- **Core Organizers:** Students and faculty leading and directing the movement
- **General Members:** Active participants in the DAO's activities and decisions
- **Supporting Members:** Occasional contributors and external supporters
- **University Administration:** University officials engaging with the movement
- **Student Body:** The wider student population affected by or interested in the movement
- **Local and National Organizations:** NGOs and other groups that support the movement
- **Government Entities:** Government bodies that the movement seeks to influence
- **Media:** Media outlets covering the movement and shaping public perception
- **Academic Associations:** Groups representing the academic community and providing support
- **Sponsors and Donors:** Individuals and organizations funding the movement
- **Law Enforcement:** Agencies that may interact with protesters
- **Legal Advisors:** Lawyers and legal experts advising the movement
- **Community Members:** Local community members and businesses affected by protests
- **Technology Service Providers:** Companies providing the technical infrastructure for the DAO
- **Non-Profit Organizations:** NGOs providing support and partnership opportunities
- **Alumni Associations:** Alumni offering resources, networking, and support

- Peer Movements: Other movements that share goals and can collaborate
- Opposing Groups: Groups with opposing viewpoints impacting the movement’s strategy
- International Observers: Global entities and foreign organizations monitoring the movement
- Potential Recruits: Individuals who are potential new members of the movement

Problem Description (Without DAOs)

Issues:

- Lack of Coordination: Student protests across different campuses are often uncoordinated and fragmented.
- Inefficiencies: Efforts across different student groups are inefficient and duplicate.
- Transparency Issues: Resource allocation and decision-making processes have limited transparency.
- Limited Reach: Successful local protests are difficult to scale to a regional or national level.
- Repressive Responses: Student protests frequently face severe reactions from university administrations and law enforcement, including disciplinary actions, censorship, and sometimes even physical intervention. These measures intimidate students, discourage participation, and hinder the effectiveness of their movements.
- Fragmented Efforts: Lack of a unified strategy and coordination reduces the impact of student protests.
- Mistrust: Lack of transparency leads to mistrust among student groups and stakeholders.
- Slow Response: Inefficiencies and lack of coordination slow down the response to pressing issues.
- Inequitable Resource Distribution: Inefficiencies in resource management lead to unequal distribution.

Solution Space (Using DAOs)

DAO Implementation: A student movement DAO can address these challenges by decentralizing governance and ensuring transparent, efficient management of resources and decision-making processes. The DAO can facilitate unified strategies, collaborative efforts, and scalable actions across campuses.

Components:

- Governance: All stakeholders have voting rights on critical issues such as protest strategies, resource allocation, and policy updates. Governance tokens can be distributed to enable participation.
- Tokenomics: The DAO utilizes tokens to incentivize participation and manage resources. Tokens can be used for funding projects, rewarding contributions, and facilitating trade within the community.
- Stakeholder Roles: Core organizers, general members, supporting members, university administration, and other stakeholders have defined roles, each with specific responsibilities and voting rights.
- Technology Integration: Blockchain technology ensures transparency and accountability as smart contracts automate processes.

Benefits:

- Increased Coordination: Decentralized governance encourages greater collaboration and coordination across different student groups.
- Transparency: Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the movement.
- Efficiency: Smart contracts automate processes, reducing bureaucratic delays and improving resource allocation.
- Scalability: The DAO framework allows successful local protests to be replicated and scaled to a regional or national level, promoting a broader impact.

Use Case for Resilient Food System DAOs

Background and Purpose of Use Case

Objective: The primary goal of implementing a DAO for resilient food systems is to leverage decentralized governance to create sustainable, resilient, and equitable food systems. This approach aims to address challenges such as climate change, food insecurity, and economic instability by fostering collaboration, innovation, and transparency among stakeholders.

Stakeholders:

- Farmers: Small-scale and large-scale farmers adopting sustainable practices
- Agronomists and Environmental Scientists: Experts providing guidance on sustainable agriculture
- Government Agencies: Entities supporting and regulating food systems and climate action
- Non-Profit Organizations: NGOs working on food security and environmental sustainability
- Private Sector: Businesses involved in food production, distribution, and technology development
- Investors: Individuals and entities funding sustainable agriculture projects
- Consumers: End-users benefiting from sustainable and resilient food systems
- Community Members: Local communities impacted by food system initiatives
- Technology Service Providers: Companies offering technical support for DAO implementation
- Research Institutions: Universities and think tanks contributing to sustainable agriculture research

Problem Description (Without DAOs)

Current Challenges:

- Climate Change: Agriculture’s significant contribution to greenhouse gas emissions and vulnerability to climate impacts
- Food Insecurity: Limited access to nutritious food for large populations
- Economic Instability: Financial challenges faced by small-scale farmers and high levels of food waste
- Bureaucratic Inefficiencies: Slow and ineffective policy implementation and resource allocation
- Lack of Collaboration: Fragmented efforts and lack of coordination among stakeholders
- Limited Innovation: Insufficient investment and adoption of sustainable and innovative agricultural practices
- Inequitable Resource Distribution: Unequal access to resources and support for small-scale farmers

Impact:

- Increased Emissions: Continued high levels of greenhouse gas emissions from unsustainable agricultural practices.
- Persistent Food Insecurity: Ongoing challenges in providing access to nutritious food for

all populations.

- **Economic Hardship:** Financial instability for farmers and inefficiencies in food production and distribution.
- **Policy Gaps:** Delayed and ineffective policies failing to address the urgent needs of food systems and climate action.
- **Fragmented Efforts:** Lack of collaboration leading to duplication of efforts and missed opportunities for synergy.
- **Stagnation in Innovation:** Slow progress in developing and implementing sustainable agricultural technologies and practices.
- **Resource Inequity:** Disparities in resource allocation hindering small-scale farmers from thriving.

Solution Space (Using DAOs)

- **DAO Implementation:** A resilient food systems DAO can address these challenges by decentralizing governance and ensuring transparent, efficient management of resources and decision-making processes. The DAO can facilitate collaboration, drive innovation, and promote sustainable practices among stakeholders.

-

Components:

- **Governance:** All stakeholders have voting rights on critical issues such as project funding, policy updates, and resource allocation. Governance tokens can be distributed to enable participation.
- **Tokenomics:** The DAO utilizes tokens to incentivize participation and manage resources. Tokens can be used for funding projects, rewarding contributions, and facilitating trade within the community.
- **Stakeholder Roles:** Farmers, agronomists, government agencies, NGOs, private sector, investors, and other stakeholders have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Blockchain technology ensures transparency, accountability, and compliance as smart contracts automate processes.

Benefits:

- **Enhanced Collaboration:** Decentralized governance fosters greater collaboration and

coordination among stakeholders.

- **Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- **Efficiency:** Smart contracts automate processes, reducing bureaucratic delays and improving resource allocation.
- **Innovation:** Incentivized participation and funding drive innovation in sustainable agricultural practices and technologies.
- **Resilience:** Diversified and sustainable agricultural practices enhance the resilience of food systems to climate impacts.
- **Equity:** Equitable resource distribution and support empower small-scale farmers and marginalized communities.

Use Case for Anti-Corruption DAOs

Background and Purpose of Use Case

Objective: The primary goal of implementing an anti-corruption DAO is to utilize decentralized governance and blockchain technology to increase transparency, enhance civic engagement, and reduce corruption in socio-political contexts. This approach aims to provide a transparent, secure, and participatory platform for collective action and oversight against corruption.

Stakeholders:

- **Citizens:** Individuals participating in governance, oversight, and reporting
- **Government Officials:** Public servants subject to transparency and accountability measures
- **Whistleblowers:** Individuals reporting corrupt practices anonymously
- **Non-Profit-Organizations:** NGOs supporting anti-corruption efforts
- **Technology Service Providers:** Companies offering technical support for DAO implementation
- **Legal Authorities:** Entities enforcing legal standards and investigating corruption
- **Investors:** Individuals and entities funding anti-corruption initiatives
- **Community Monitors:** Citizens actively monitoring government activities and reporting irregularities
- **Media:** Outlets reporting on corruption and promoting transparency
- **International Bodies:** Organizations facilitating cross-border collaboration on anti-corruption measures

Problem Description (Without DAOs)

Current Challenges:

- Lack of Transparency: Government spending, contracts, and transactions are often opaque and prone to tampering.
- Misappropriation of Funds: Public funds are frequently diverted or misused due to weak oversight and control mechanisms.
- Corruption in Decision-Making: Citizens have limited influence over budget allocations and project approvals, leading to corrupted intermediaries exploiting the system.
- Whistleblower Vulnerability: Whistleblowers face significant risks without secure and anonymous reporting channels.
- Inefficient Audits: Traditional audit processes are slow, infrequent, and often inadequate in identifying and addressing corruption.
- Centralized Proposal and Funding Control: Government officials can manipulate or control resources for personal gain.
- Limited Access to Legal Resources: Citizens lack access to legal documents and resources to educate themselves on their rights and anti-corruption measures.
- Ineffective Monitoring: Government activities are not adequately monitored by citizens due to lack of accessible reporting systems.
- Election Tampering: Election processes are vulnerable to manipulation, undermining democracy.
- Restricted Discussion Platforms: Avenues for open discussion and debate on policy matters are limited.
- Weak NGO Collaboration: Coordination and verification between NGOs and anti-corruption efforts are insufficient.
- Delayed Reporting and Alerts: Dissemination of corruption reports and alerts to citizens and authorities is slow.
- Cross-Border Corruption: Tracking and addressing corruption that crosses national borders is difficult.

Impact:

- Unchecked Corruption: A lack of transparency and oversight allows corruption to thrive, leading to the misallocation of public resources and weakening trust in government institutions. Citizens and potential whistleblowers are deterred by risks and limited avenues for secure reporting.
- Resource Misallocation: Public funds are frequently diverted due to ineffective monitoring and centralized control, reducing the effectiveness of government spending and services meant for public welfare.

- **Erosion of Democracy:** Election tampering and restricted platforms for policy discussion undermine democratic processes and citizen influence. Limited citizen engagement and centralized decision-making lead to a weakened democratic fabric.
- **Inefficient Anti-Corruption Efforts:** Traditional methods fail to adequately prevent and address corruption due to slow, inadequate audits, poor NGO collaboration, and difficulty in managing cross-border corruption.
- **Weak Civic Engagement and Legal Ignorance:** Citizens have limited access to legal resources and lack participation in governance. Poor monitoring and restricted avenues for open debate hinder community involvement in anti-corruption efforts.

Solution Space (Using DAOs)

DAO Implementation: An anti-corruption DAO can address these challenges by decentralizing governance and ensuring transparent, efficient management of resources and decision-making processes. The DAO can facilitate citizen engagement, secure whistleblowing, and effective monitoring and reporting mechanisms.

Components:

- **Transparent Ledger:** Utilizing blockchain technology to keep a public, immutable ledger of government spending, contracts, and transactions
- **Smart Contracts with Automated Audits:** Implementing smart contracts that release funds and services only when verifiable conditions are met, combined with algorithms that regularly audit transactions and automatically flag any irregularities for review.
- **Community Governance:** Allowing citizens to vote on important issues, budget allocations, and project approvals directly
- **Whistleblower Protection and Incentives:** Providing a secure, anonymous platform for whistleblowers with cryptocurrency rewards
- **Decentralized Proposals and Funding:** Enabling citizens to propose and fund community projects or anti-corruption initiatives directly
- **Legal Document Repository:** Hosting a decentralized repository of legal documents and resources
- **Crowdsourced Monitoring:** Allowing citizens to monitor government activities and report through a decentralized system
- **Election Monitoring:** Using blockchain to securely record votes and ensure fair elections
- **Open Forums for Discussion:** Providing a platform for open discussion and debate on policy matters
- **Collaboration with NGOs:** Partnering with NGOs to verify data, support investigations, and promote anti-corruption measures

- Real-time Reporting and Alerts: Enabling real-time reporting of corruption cases and automatic dissemination of alerts
- Cross-Border Collaboration Tools: Providing tools for cross-border collaboration to track and tackle transnational corruption

Benefits:

- Increased Transparency: Blockchain ensures all transactions and decisions are recorded and accessible.
- Reduced Corruption: Smart contracts and decentralized governance reduce opportunities for misappropriation and manipulation.
- Enhanced Citizen Engagement: Community governance and crowdsourced monitoring empower citizens to actively participate.
- Secure Whistleblowing: Secure, anonymous platforms protect whistleblowers and incentivize reporting.
- Efficient Audits: Automated audits increase the frequency and effectiveness of corruption detection.
- Direct Funding Control: Decentralized proposals and funding give citizens control over community projects and initiatives.
- Access to Legal Resources: A decentralized repository provides citizens with necessary legal documents and information.
- Effective Monitoring: Crowdsourced monitoring enhances oversight of government activities.
- Fair Elections: Blockchain-based election monitoring ensures transparency and integrity in voting processes.
- Inclusive Policy Discussion: Open forums allow a wide range of voices to be heard in policy-making.
- Strengthened NGO Collaboration: Partnerships with NGOs enhance data verification and support anti-corruption efforts.
- Real-time Alerts: Immediate reporting and alerts enable quick responses to corruption.
- Cross-Border Anti-Corruption: Tools for international collaboration address transnational corruption effectively.

Solution Space (Using DAOs)

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Use Case for Refugee Camps DAOs

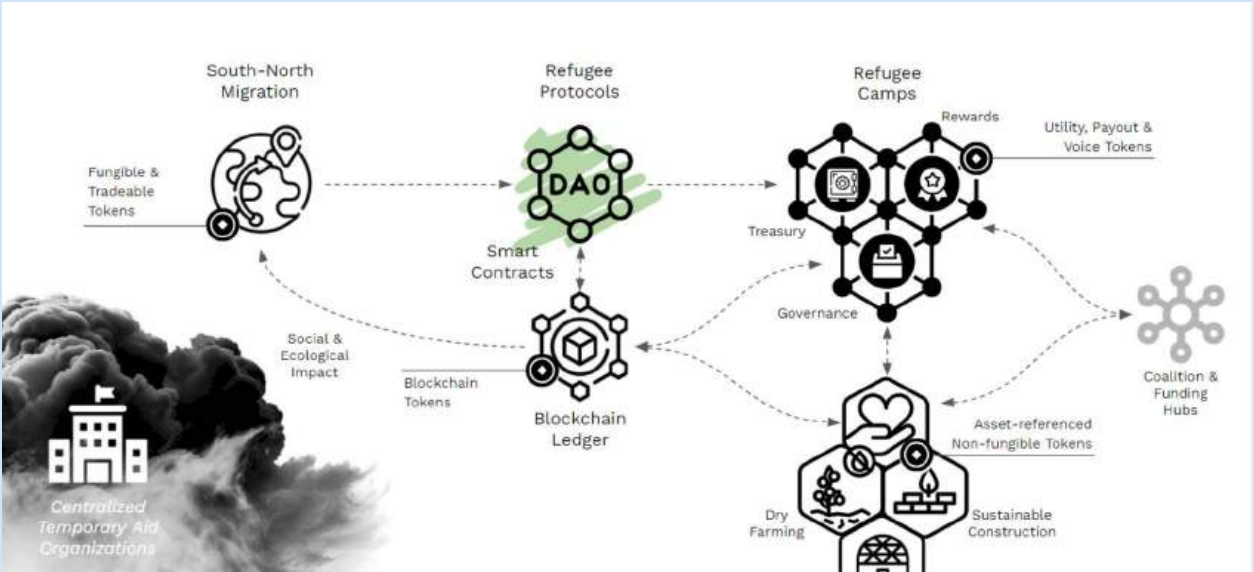
Background and Purpose of Use Case

Objective: The primary goal of implementing a DAO for refugee camps is to leverage blockchain technology to decentralize governance and improve the efficiency, transparency,

and effectiveness of refugee aid and management. This approach aims to address the limitations of traditional centralized systems by empowering local communities, enhancing resource allocation, and fostering global collaboration.

Stakeholders:

- **Refugees:** Individuals residing in camps, participating in community governance and projects.
- **NGOs:** Organizations providing essential services and support.
- **Government Entities:** Local and national governments hosting refugee camps.
- **International Organizations:** Entities like the UN supporting refugee initiatives.
- **Technology Service Providers:** Companies offering technical support for DAO implementation.
- **Healthcare Providers:** Medical professionals and organizations offering health services.
- **Educational Institutions:** Schools and universities providing educational programs.
- **Private Sector & Local Businesses:** Businesses contributing resources, technology, and support to refugee communities.
- **Investors:** Entities funding refugee support initiatives.
- **Community Monitors:** Citizens and volunteers monitoring camp conditions and resource distribution.
- **Media:** Outlets reporting on the refugee crisis and DAO activities.
- **Legal Advisors:** Experts ensuring compliance with international laws and advocating for refugee rights.
- **Sponsors and Donors:** Individuals and organizations providing financial and material support.
- **Environmental Groups:** Organizations focusing on the environmental impact of refugee settlements.
- **Volunteers:** Individuals contributing to refugee support initiatives.



Problem Description (Without DAOs)

Objective: The primary goal of implementing a DAO for refugee camps is to leverage blockchain technology to decentralize governance and improve the efficiency, transparency

Issues:

- **Bureaucratic Inefficiencies:** Delays hinder timely aid distribution and service provision.
- **Rigid Systems:** Inflexible frameworks fail to adapt to changing conditions.
- **Political Interference:** Aid efforts are influenced by political considerations, compromising neutrality and effectiveness.
- **Resource and Funding Constraints:** Insufficient funding and fluctuating support limit the response to refugee needs.
- **Scalability Issues:** Traditional systems struggle to scale with large influxes of refugees.
- **Limited Community Engagement:** Refugees have minimal involvement in decision-making processes.
- **Lack of Transparency and Trust:** Opaque processes lead to mistrust and potential mismanagement of resources.
- **Ineffective Monitoring:** Poor oversight fails to address issues and leads to suboptimal camp management.
- **Delayed Aid and Responses:** Slow systems lead to delayed delivery of essential services,

Solution Space (Using DAOs)

DAO Implementation: A DAO for refugee camps can address these challenges by decentralizing governance, ensuring transparent and efficient resource management, and empowering refugee communities to participate in decision-making processes.

Components:

- **Transparent Ledger:** Utilizing blockchain to maintain a public, immutable record of aid distribution, contracts, and transactions
- **Smart Contracts for Resource Allocation with Automated Audits:** Implementing smart contracts that release funds and services only when verifiable conditions are met, combined with algorithms that regularly audit transactions and automatically flag any irregularities for review.
- **Community Governance:** Allowing refugees and other stakeholders to vote on important

issues, budget allocations, and project approvals

- Whistleblower Protection: Providing a secure, anonymous platform for reporting corruption and mismanagement
- Decentralized Proposals and Funding: Enabling community members to propose and fund initiatives directly
- Legal Document Repository: Hosting a decentralized repository of legal documents and resources
- Crowdsourced Monitoring: Allowing citizens and volunteers to monitor and report on camp conditions
- Open Forums for Discussion: Providing platforms for open discussion and debate on policy matters
- Collaboration with NGOs: Partnering with NGOs to verify data, support initiatives, and promote best practices
- Real-time Reporting and Alerts: Enabling immediate reporting of issues and dissemination of alerts
- Cross-Border Collaboration Tools: Facilitating international cooperation on refugee support and policy

Benefits:

- Increased Transparency: Blockchain ensures all transactions and decisions are recorded and accessible.
- Efficient Resource Management: Smart contracts and decentralized governance enhance efficiency and reduce mismanagement.
- Enhanced Community Engagement: Refugees and other stakeholders are empowered to actively participate in governance and decision-making.
- Improved Monitoring: Crowdsourced monitoring and automated audits ensure a higher level of oversight and accountability.
- Effective Collaboration: Partnerships with NGOs and international bodies are strengthened to enhance support efforts.
- Timely Responses: Real-time reporting and alerts enable quick and effective responses to issues.
- Scalable Solutions: Decentralized systems can scale up rapidly to meet increasing demands and crises.
- Community Empowerment: Giving refugees a voice and agency in their own support systems fosters greater trust and engagement.

Background and Purpose of Use Case

Objective: The primary goal of implementing a DAO for festivals is to leverage blockchain technology to decentralize governance and enhance the organization, participation, and overall experience of in-person gatherings such as retreats, festivals, and un-conferences. This approach aims to increase transparency, efficiency, and engagement, positioning Hypha DAO as a central platform for managing event logistics, decision-making, and community-building.

Stakeholders:

- Event Organizers: Individuals and teams responsible for planning and executing the event.
- Participants: Attendees engaging in festival activities and community interactions.
- Venue Providers: Entities offering locations and infrastructure for events.
- Sponsors and Investors: Organizations and individuals funding or supporting the event and its initiatives.
- Vendors: Providers of goods and services such as food, merchandise, and workshops.
- Technology Service Providers: Companies offering technical support for DAO implementation.
- Community Monitors: Volunteers ensuring smooth operations and adherence to community guidelines.
- Media: Outlets covering the event and promoting its activities.
- Environmental Groups: Organizations focusing on the sustainability of events.
- Local Businesses: Enterprises benefiting from the influx of event participants.
- Artists and Performers: Individuals providing entertainment and cultural value.
- Security and Health Services: Providers ensuring safety and well-being during events.

Problem Description (Without DAOs)

Current Challenges:

- Bureaucratic Inefficiencies & Delayed Planning: Slow decision-making processes delay event execution and planning.
- Low Engagement & Participant Disempowerment: Limited opportunities for attendee involvement reduce enthusiasm and event satisfaction.
- Resource Mismanagement & Budget Overruns: Inefficient allocation and opaque tracking lead to wasted resources, financial issues, and mistrust from sponsors.

- **Transparency Issues & Mistrust:** Opaque organizing and funding processes foster skepticism among stakeholders.
- **Sustainability Concerns & Environmental Impact:** Lack of sustainable practices results in ecological harm.
- **Limited Flexibility & Inflexible Operations:** Centralized control restricts adaptability to changing needs.
- **Coordination Challenges & Poor Communication:** Managing multiple stakeholders without a unified platform results in disjointed efforts and reduced event success.

Solution Space (Using DAOs)

DAO Implementation: A Festival DAO can address these challenges by decentralizing governance, ensuring transparent and efficient resource management, and enhancing participant engagement through collaborative decision-making and community-building activities.

Components:

- **Transparent Ledger:** Utilizing blockchain to maintain a public, immutable record of event planning, funding, and transactions
- **Smart Contracts for Resource Allocation with Automated Audits:** Implementing smart contracts that release funds and services only when verifiable conditions are met, combined with algorithms that regularly audit transactions and automatically flag any irregularities
- **Community Governance:** Allowing participants and stakeholders to vote on key aspects such as event agenda, speakers, and logistics
- **Participant Incentives:** Offering tokens or rewards for contributions such as feedback, volunteering, and content creation
- **Decentralized Proposals and Funding:** Enabling community members to propose and fund initiatives directly related to the event
- **Environmental Monitoring:** Implementing systems to track and minimize the environmental impact of events
- **Crowdsourced Monitoring:** Allowing participants to report issues and provide real-time feedback through a decentralized system
- **Open Forums for Discussion:** Providing platforms for open discussion and collaboration on event planning and execution
- **Collaboration with Sponsors and Vendors:** Partnering with sponsors and vendors to enhance the event experience and ensure resource availability
- **Real-time Reporting and Alerts:** Enabling immediate reporting of issues and dissemination

- of alerts to organizers and participants
- Cross-Border Collaboration Tools: Facilitating international participation and coordination for global events

Benefits:

- Increased Transparency: Blockchain ensures all transactions and decisions are recorded and accessible.
- Efficient Resource Management: Smart contracts and decentralized governance enhance efficiency and reduce mismanagement.
- Enhanced Participant Engagement: Participants and other stakeholders are empowered to actively participate in decision-making and event activities.
- Improved Monitoring: Crowdsourced monitoring and automated audits ensure a higher level of oversight and accountability.
- Effective Collaboration: Partnerships with sponsors, vendors, and other stakeholders are strengthened to enhance the event experience.
- Timely Responses: Real-time reporting and alerts enable quick and effective responses to issues.
- Sustainable Practices: Implementing environmental monitoring and sustainable practices minimizes ecological impact.
- Community Empowerment: Giving participants a voice and agency in event planning and execution fosters greater trust and engagement.

Use Case for Family Care DAOs

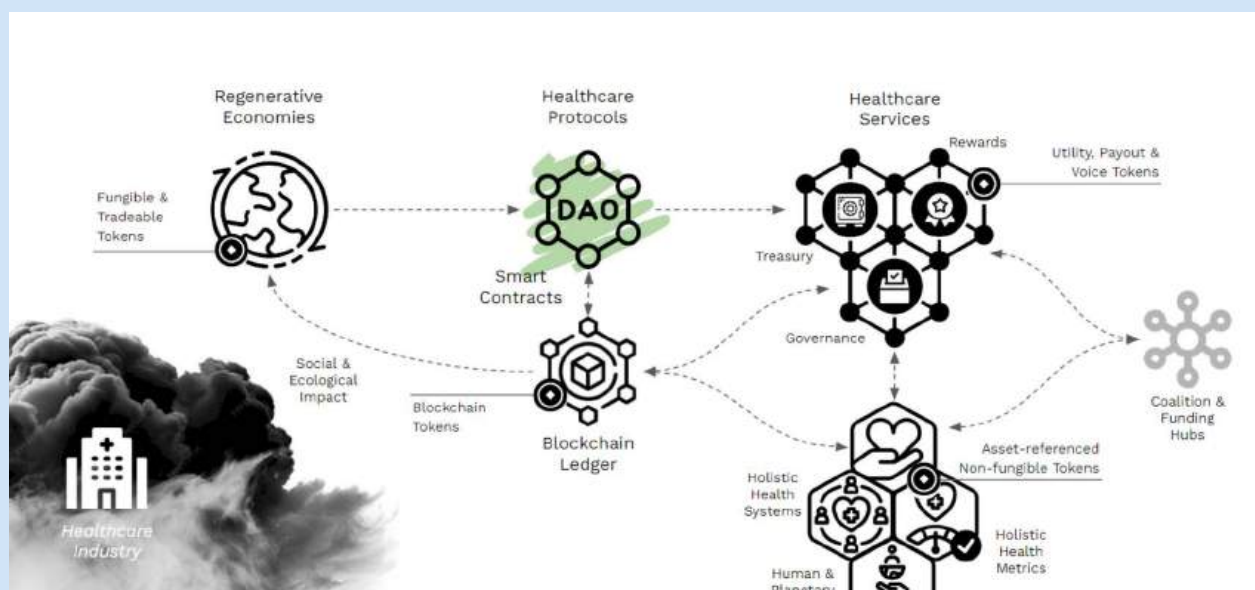
Background and Purpose of Use Case

Objective: The goal of implementing a DAO in the family care sector is to create a decentralized, community-driven network that efficiently manages caregiving services, ensuring transparency, flexibility, and accessibility for all stakeholders. This approach aims to empower caregivers, enhance service delivery, and provide families with high-quality, personalized care.

Stakeholders:

- Care Givers: Providers of care services

- Care Receivers: Families and individuals receiving care
- Care Coaches: Facilitators and educators within the care network
- Care Staff: Core team managing finance, marketing, development, and operations.
- Investors: Entities and individuals funding the network
- Community Members: Local groups supporting and benefiting from the network
- Regulatory Bodies: Government agencies ensuring compliance with health and legal standards
- Technology Service Providers: Companies offering technical support and infrastructure
- Healthcare Professionals: Doctors, nurses, and specialists providing medical care
- Educational Institutions: Schools and organizations offering training and certification.



Problem Description (Without DAOs)

Issues:

- **Inefficiencies in Service Delivery:** Centralized care systems often face delays and inefficiencies in matching caregivers with those in need.
- **Lack of Transparency:** Opaque processes in care management can lead to mistrust and misallocation of resources.
- **Inflexibility:** Traditional care models are rigid and may not adapt quickly to changing needs and circumstances.

- **High Costs:** Centralized management and administrative overhead can increase the cost of care services.
- **Limited Caregiver Autonomy:** Caregivers often have little control over their work conditions and compensation.
- **Resource Constraints:** Limited funding and resource allocation can affect the quality and availability of care services.:
- **Delayed Service:** Inefficiencies lead to slower response times and delayed care delivery.
- **Mistrust:** Lack of transparency fosters skepticism among caregivers and receivers.
- **High Costs:** Increased operational costs are passed on to care receivers, making services less affordable.
- **Caregiver Burnout:** Limited autonomy and high demands contribute to caregiver burnout and turnover.
- **Inconsistent Quality:** Resource constraints and inflexibility result in variable quality of care.

Solution Space (Using DAOs)

DAO Implementation: A family care DAO can address these challenges by decentralizing governance, ensuring transparent resource management, and enhancing participant engagement through collaborative decision-making and community-driven initiatives.

Components:

- **Transparent Ledger:** Implement a blockchain-based public, immutable ledger to record all caregiving transactions, service agreements, and key decisions, ensuring transparency and building trust among stakeholders.
- **Smart Contracts for Service Delivery:** Utilize smart contracts to automate service payments and ensure care providers are compensated only when services are successfully delivered, enhancing accountability and reducing delays.
- **Caregiver Organization and Autonomy:** Organize caregivers into self-managing teams, allowing them to set their own service prices and work conditions. Token exchange mechanisms can be used to reward high-quality service and active participation within the network.
- **Community Governance:** Empower caregivers, care receivers, and care coaches to participate in decision-making processes. Using a token-based voting system, stakeholders can influence important issues such as budget allocations, service offerings, and community guidelines.
- **Token-Based Incentives:** Implement a token system to incentivize contributions from all participants. Tokens can reward caregivers for high-quality service, community members

for feedback, and families for participating in decision-making.

- **Care Receiver Integration:** Simplify the account creation process for care receivers and use the Hypha wallet for secure payments, making it easier for families to access and pay for services directly through the DAO.
- **Automated Audits:** Introduce automated auditing mechanisms to regularly review transactions and service delivery. Smart contracts can flag inconsistencies for review, ensuring accountability and efficient resource management.
- **Decentralized Proposals and Funding:** Allow community members to propose and fund initiatives that enhance care services. Proposals can include new care programs, educational workshops, or improvements to the network infrastructure.
- **Education and Training Programs:** Provide a decentralized repository of educational resources, workshops, and training programs for both caregivers and care receivers. This improves service quality and ensures that care providers are continuously upskilled.
- **Collaboration with Stakeholders:** Foster partnerships with local businesses, educational institutions, and regulatory bodies. This collaboration supports service delivery, compliance with health standards, and community engagement.

Benefits:

- **Increased Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible.
- **Efficient Resource Management:** Smart contracts and decentralized governance enhance efficiency and reduce mismanagement.
- **Enhanced Caregiver Autonomy:** Empowering caregivers with decision-making authority and fair compensation.
- **Improved Service Quality:** Decentralized governance and community involvement lead to a higher level of care services.
- **Cost Reduction:** Reduced administrative overhead lowers the overall cost of care services.
- **Community Empowerment:** Engaging all stakeholders in decision-making fosters trust and collaboration.

Use Case for Condominiums

Background and Purpose of Use Case

Objective: The primary goal of implementing a DAO for condominiums is to democratize

the management, decision-making, and operational processes within the community. This approach aims to enhance transparency, efficiency, and community engagement, empowering unit owners to have a direct influence in the management of their properties. By leveraging blockchain technology, a condominium DAO can bring a more transparent, efficient, and inclusive community governance model.

Stakeholders:

- Unit Owners: Residents and property owners
- Board of Directors: Elected members responsible for governance
- Operational Management Team: The operational team handling daily management
- Committees: Various committees formed for specific projects and tasks
- Technology Service Providers: Companies offering tooling for environmental monitoring and protection
- Investors: Individuals and entities investing in condominium projects

Problem Description (Without DAOs)

Issues:

- Centralized Decision-making: Decisions are often made by a few board members, limiting wider community participation.
- Transparency Issues: Decision-making, project management, and financial reporting have limited transparency.
- Inefficiencies: Bureaucratic processes and delays hinder timely project completion.
- Communication Gaps: Board, management, unit owners, and other stakeholders use inefficient communication channels.
- Limited Participation: Unit owners have limited involvement in decision-making processes.
- Mistrust: Lack of transparency and accountability leads to mistrust among stakeholders.
- Project Delays: Inefficient management results in delays and increased costs.
- Information Asymmetry: Unit owners are often not fully informed about ongoing projects and decisions

Solution Space (Using DAOs)

DAO Implementation: A DAO for condominiums can address these challenges by decentralizing governance and making all processes transparent and efficient. The DAO will use blockchain technology to facilitate democratic decision-making, transparent resource management, and efficient implementation of projects.

Components:

- **Governance:** Stakeholders have voting rights on critical issues such as project funding, maintenance schedules, and policy updates. Governance tokens can be distributed to unit owners to enable participation.
- **Tokenomics:** The DAO utilizes tokens to incentivize participation and manage resources. Tokens can also represent shares in the condominium’s assets and be used for voting and rewarding active participants.
- **Stakeholder Roles:** Unit owners, board members, management, committees, and investors have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Implementation of blockchain for transparency, accountability, and compliance as smart contracts automate processes.

Benefits:

- **Increased Participation:** A more inclusive decision-making process encourages greater involvement from all stakeholders.
- **Transparency:** Blockchain ensures all transactions and decisions are recorded and accessible, building trust within the community.
- **Efficiency:** Smart contracts automate processes, reducing bureaucratic delays and improving resource allocation.
- **Better Communication:** Enhanced communication channels ensure all stakeholders are well-informed about ongoing projects and decisions.

Use Case for Rainforest Conservation

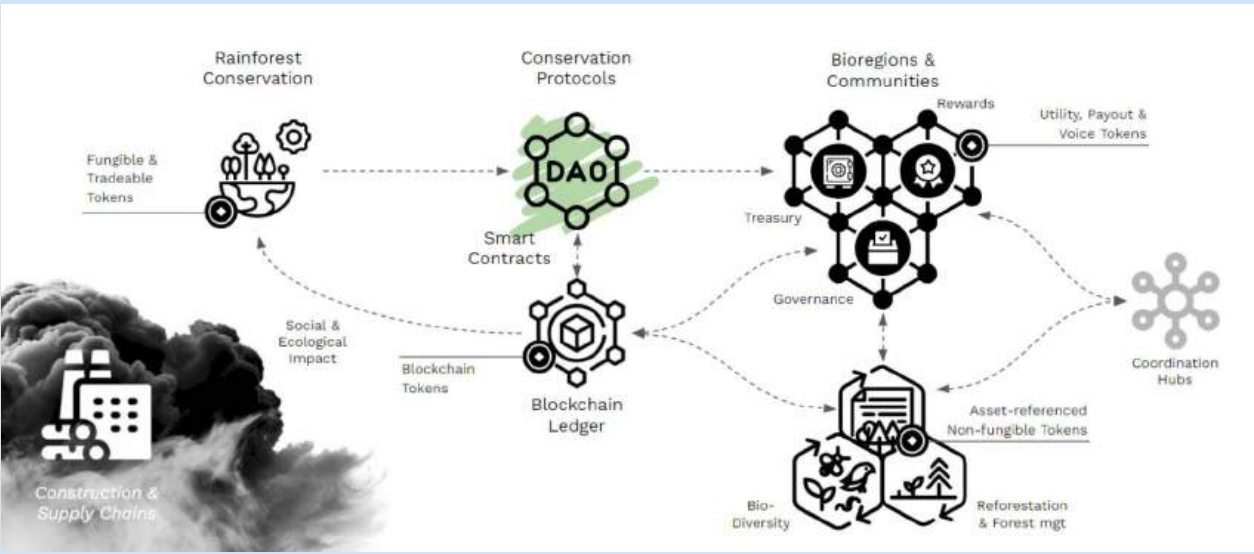
Background and Purpose of Use Case

Objective: The primary goal of implementing a DAO for rainforest conservation is to empower

local and indigenous communities, enhance biodiversity protection, and foster sustainable development for future generations. By utilizing decentralized governance and tokenomic innovation, this approach aims to address challenges such as lack of community engagement and inefficiencies in conservation efforts, building a transparent, efficient, and inclusive conservation ecosystem (and ultimately a global movement).

Stakeholders:

- Local Communities: Indigenous and local populations participating in conservation efforts
- Environmental Organizations: NGOs and other institutions supporting rainforest conservation
- Researchers: Scientists conducting biodiversity research and monitoring
- Government Bodies: Local and national authorities regulating and supporting conservation initiatives
- Sponsors: Individuals and entities funding conservation projects with potential returns on investments
- Global Activists: Individuals and groups advocating for rainforest protection
- Technology Service Providers: Companies offering tooling for environmental monitoring and protection



Problem Description (Without DAOs)

Issues:

- Centralized Decision-making: Conservation efforts are often controlled by centralized bodies, limiting community participation and decision-making.
- Transparency Issues: Lack of transparency in resource allocation, project funding, and decision-making processes.
- Operational Inefficiencies: Bureaucratic processes and fragmented efforts hinder effective conservation and resource management.
- Resource Constraints: Comprehensive conservation initiatives are often characterized by significant costs and limited available resources.
- Community Exclusion: Indigenous and local communities are often excluded from decisions impacting their lands and livelihoods.
- Unrealistic Project Expectations: Conservation projects without adequate input or understanding from local communities, leading to impractical or unsustainable outcomes ("buy the rainforest").
- Insufficient Grasp of Human Psychology: Conservation initiatives often fail to consider the behavioral and psychological factors influencing community participation and support.
- Limited Access: Communities have restricted access to resources and involvement in conservation efforts.
- Mistrust: Lack of transparency and accountability leads to mistrust among stakeholders.
- Resource Misallocation: Inefficient use of resources results in suboptimal conservation outcomes.
- Slow Progress: The pace of conservation efforts is hindered by regulatory and infrastructural challenges.
- Mental Health Deterioration: Increased isolation and manipulation by social media worsen mental health issues.
- Economic Strain: Economic insecurity leads to a sense of financial instability.
- Distrust and Disillusionment: Distrust in institutions and uncertainty about the future contribute to disillusionment among the youth.
- Lack of Enaction: Plans and initiatives fail to translate into actionable and impactful conservation efforts.

Solution Space (Using DAOs)

DAO Implementation: A Rainforest DAO can address these challenges by decentralizing

governance and ensuring transparent, efficient management of conservation projects. The DAO will use blockchain technology to facilitate democratic decision-making, transparent resource management, and efficient implementation of conservation initiatives.

Components:

- **Governance:** All stakeholders have voting rights on critical issues such as project funding, policy updates, and resource allocation. Governance tokens can be distributed to stakeholders to enable participation.
- **Tokenomics:** The DAO utilizes tokens to incentivize participation and manage resources. Tokens can also represent contributions and be used for trading and investment purposes.
- **Stakeholder Roles:** Local communities, environmental organizations, researchers, government bodies, investors, and global activists have defined roles, each with specific responsibilities and voting rights.
- **Technology Integration:** Implementation of blockchain for transparency, accountability, and compliance as smart contracts automate processes.
- **Benefits:**
- **Inclusive Participation:** A more democratic and inclusive decision-making process encourages active involvement from all stakeholders, including local communities, environmental organizations, and global activists.
- **Transparent Operations:** Blockchain ensures that all transactions, resource allocations, and decisions are openly recorded and accessible, building trust within the diverse conservation community.
- **Automated Efficiency:** Smart contracts streamline operations, reducing bureaucratic delays and ensuring more efficient use of resources for conservation efforts.
- **Reduced Costs:** Community-driven initiatives and decentralized resource management lower operational costs, enhancing the sustainability and long-term impact of conservation projects.

References

1. Augustin, N., Eckhardt, A., & de Jong, A. W. (2023). Understanding decentralized autonomous organizations from the inside. *Electronic Markets*, 33(1), 38.
2. Beck, R., Müller-Bloch, C., & King, J. L. (2018). Governance in the blockchain economy: A framework and research agenda. *Journal of the Association for Information Systems*, 19(10), 1020-1034. Available Online: https://pure.itu.dk/ws/files/82931178/Governance_in_the_blockchain_economy_a_framework_and_research_agenda.pdf
3. Bellavitis, C., Fisch, C., & Momtaz, P. P. (2023). The rise of decentralized autonomous organizations (DAOs): a first empirical glimpse. *Venture Capital*, 25(2), 187-203. Available Online: <https://w3rl.com/documents/202203DAOs.pdf>
4. De Filippi, P., & Hassan, S. (2018). Blockchain technology as a regulatory technology: From code is law to law is code. arXiv preprint arXiv:1801.02507. Available Online: <https://escola.mpu.mp.br/servicos-academicos/atividades-academicas/inovaescola/atividades-de-extensao/4-ciclo-de-debates/blockchain-perspectivas-no-brasil-e-no-mundo/blockchain-technology-as-a-regulatory-technology.pdf/@download/file/Blockchain%20Technology%20as%20a%20Regulatory%20Technology.pdf>
5. Hsieh, Y. Y., Vergne, J. P., Anderson, P., Lakhani, K., & Reitzig, M. (2018). Bitcoin and the rise of decentralized autonomous organizations. *Journal of Organization Design*, 7(1), 1-16. Available Online: <https://uscholar.univie.ac.at/detail/o:1061870.pdf>
6. Hsieh, Y., Vergne, J. P., & Wang, S. (2018). The internal and external governance of blockchain-based organizations: Evidence from cryptocurrencies. *Journal of Management Studies*, 55(5), 853-888.
7. Hubbard, S., Trivedi, A., Sharma, M. (2023). Case Profiles of Decentralized Autonomous Organizations. Harvard Kennedy School Belfer Center for Science and International Affairs Report. Available Online: https://www.belfercenter.org/sites/default/files/files/publication/TAPP_CaseProfilesDAO.pdf
8. Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255-2276.
9. Kretschmer, T., Leiponen, A., Schilling, M., & Vasudeva, G. (2022). Platform ecosystems as meta-organizations: Implications for platform strategies. *Strategic Management Journal*, 43(3), 405-424

10. Laskowski, M., Zargham, M., Turesson, H., Barlin, M., Kabanov, D., & Dhaliwal, E. (2020). Evidence based decision making in blockchain economic systems: From theory to practice. arXiv preprint arXiv:2001.03020. Available Online: <https://arxiv.org/pdf/2001.03020>
11. Lumineau, F., Wang, W., & Schilke, O. (2021). Blockchain Governance—A New Way of Organizing Collaborations? *Organizational Science*, 32(2), 500–521. Available Online: <https://www.hkubs.hku.hk/wp-content/uploads/2022/05/Lumineau-Wang-Schilke-OS-2021.pdf>
12. Rikken, O., Janssen, M., & Kwee, Z. (2023). The ins and outs of decentralized autonomous organizations (DAOs) unraveling the definitions, characteristics, and emerging developments of DAOs. *Blockchain: Research and Applications*, 4(3), 100143.
13. Ruane, J, McAfee, A. (2022). What a DAO Can — and Can't — Do. Available Online: <https://hbr.org/2022/05/what-a-dao-can-and-cant-do>
14. Slavin, A., & Werbach, K. (2022). Decentralized autonomous organizations: Beyond the hype. In *World Economic Forum* (Vol. 6). Available Online: https://www3.weforum.org/docs/WEF_Decentralized_Autonomous_Organizations_Beyond_the_Hype_2022.pdf
15. Wright, A., & De Filippi, P. (2015). Decentralized blockchain technology and the rise of lex cryptographia. Available at SSRN 2580664. Available Online: <https://www.weusecoins.com/assets/pdf/library/Decentralized%20Blockchain%20Technology%20And%20The%20Rise%20Of%20Lex%20Cryptographia.pdf>
16. Wright, A. (2020). The rise of decentralized autonomous organizations: Opportunities and challenges. *Stan. J. Blockchain L. & Pol'y*, 4, 1. Available Online: <https://stanford-jblp.pubpub.org/pub/rise-of-daos>