

Blockchain Network and DAO Governance

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Agenda

- Context: Blockchain networks and the ICT Revolution
- Definition: Governance
- Overview: Blockchain network and DAO governance

Blockchain Networks and the ICT Revolution

- Blockchain-related innovation is part of the ongoing *deployment phase* of the ICT Revolution, which includes the emergence of Internet-native forms of organization and coordination that are increasingly:
 - Digital
 - Global
 - Decentralized
 - Automated

The Rise of Bureaucratic Middlemachines

- Blockchain networks (and ICT more broadly) are inherently *bureaucratic* technologies, and the mass deployment and adoption of these technologies represents the continued *hyper-rationalization* of modern society.
- What used to be manual bureaucratic work, i.e. the rules-based administering of information and facilitating transactions connected to that information, is now increasingly done by distributed networks of *middlemachines*.

Blockchain Networks and the ICT Revolution

- Blockchains and decentralized autonomous organizations (DAOs) are primarily a *process* and *institutional innovation*: a reimagining of how digital infrastructure and services are built, deployed, governed, and consumed. This innovation is centred around:
 - Programmability (related to OSS development, automation)
 - Composability (currently network-specific; related to interoperability)
 - Improved access and tamper/censorship-resistance (related to crypto, decentralization)
 - Governance

Defining Governance

- My definition: *Governance is the process of applying any design feature or control mechanism that maintains and steers a system.*
- Importantly, this includes features that 'permanently' establish some control mechanism within the system (*institutionalization*), and mechanisms that don't require active human involvement to accomplish a task (*automation*).

Blockchain Network and DAO Governance

- Blockchain network and DAO governance is a combination of:
 - Free and open source software (FOSS) governance
 - Corporate governance
 - Novel forms of digital/online governance (incl. the use of crypto-economic incentives, tokenized voting, automation, the ability to fork software/data)

Key Stakeholders in Blockchain Network and DAO Governance

- Founders, developers, operators (technical experts)
- Token holders, incl. institutional and retail investors (capital providers)
- Users
- Suppliers, technology providers, business partners (incl. other DAOs)
- Regulators
- Distribution of power and resources: Technocracy vs. Plutocracy vs. Democracy

On-chain vs. Off-chain Blockchain Network and DAO Governance

- Rules inscribed in the relevant software protocols (related to '*on-chain governance*')
- Rules and mechanisms external to the relevant software protocols ('*off-chain governance*')

Examples of Blockchain Network and DAO Governance Mechanisms

- Pre-launch decision-making/coordination, esp. around initial resource allocation
- Core software development process and official documentation/communications
- Formalized and curated process for submitting/handling governance proposals
- Token-weighted voting on software upgrades, treasury management, etc.
- Multi-signature arrangements to validate/execute actions
- Technical councils and other ad hoc committees (elected/unelected)
- Extensive use of Web 2.0 tools (esp. Github, Discourse, Discord, Twitter, Telegram)

Key Challenges in Blockchain Network and DAO Governance

- Balancing stakeholder interests, avoiding misuse of power and extractive behavior
- Organizational structure (incl. delegation), principal-agent issues
- Managing change, conflict resolution (incl. handling forks)
- Community engagement, governance participation
- Achieving long-term economic sustainability (use case + revenue model)
- Legal structure, regulatory compliance
- Systemic stability, cybersecurity (incl. private key / identity management)

Recent Trends in Blockchain Network and DAO Governance

- Division of labor, specialization ('domain teams', 'core units', 'DAO of DAOs')
- Professionalization (treasury management, financial analysis, community coordination)
- Delegation mechanisms to counter voter fatigue and improve decision-making quality
- Growing recognition of the need for checks and balances, accountability
- Reliance on governance tools/interfaces/aggregators (standardization)
- Institutional isomorphism

Thank You

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