Prof. Dr. Thomas Widjaja

Chair for Business Information Systems

Topic: A Taxonomy of DAO on-chain contributors

Supervisor: Jonas Riefle (jonas.riefle@uni-passau.de)
Starting date: as soon as possible
Type: Bachelor/Master Thesis
Language: German/English

Motivation:

Decentralized Autonomous Organizations (DAOs) have emerged as a new form of community organizing, founded on the principle of extensive stakeholder participation. By embedding governance directly into the system's protocol and code, DAOs shift power and influence from a central company to a network of community members. The mechanisms for this—executing decisions through automated smart contracts and allocating voting rights via governance tokens—promise to provide the efficiency and transparent enforcement necessary for effective and scalable long-term operation.

However, the promise of this novel organizational form hinges on more than just its technical architecture. For a DAO to be sustainable and achieve its goals, it must be able to elicit and sustain contributions of a diverse set of contributors. The long-term viability of decentralized governance depends on understanding the complex social dynamics at play within the community. In order to do so, a critical step towards designing resilient and equitable DAOs is to develop a nuanced understanding of how different stakeholder groups behave and diverge in their voting patterns, and to uncover the underlying drivers of their engagement.

In this thesis you will:

- Create a summary of the current research on contributors to decentralized organizations
- Create a model of governance contributors based on voting data

Sources:

- Nickerson, R., Varshney, U. & Muntermann, J. (2013). A method for taxonomy development and its application in information systems. European Journal of Information Systems 22(3), 336–359. https://doi.org/10.1057/ejis.2012.26
- Franck, E., & Jungwirth, C. (2003). Reconciling rent-seekers and donators–The governance structure of open source. Journal of Management and Governance, 7(4), 401-421.
- De Laat, P. B. (2007). Governance of open source software: state of the art. Journal of Management & Governance, 11(2), 165–177. https://doi.org/10.1007/s10997-007-9022-9
- Hassan, S., & De Filippi, P. (2021). Decentralized autonomous organization. Internet Policy Review, 10(2).