

Abstract

Title : Fostering a Knowledge Commons through DICT Education DAO: A Triangulated Mixed-Methods Study of Boundary Spanning, Unlearning, and Learner Transformation

Research Overview : This study explores how DICT Education DAO builds a knowledge commons by enabling adults to cross boundaries, unlearn prior organizational identities, and co-create educational value. A triangulated mixed-methods design analyzes project emergence, learner transformation, and event-triggered cognitive shifts, proposing a globally relevant post-AI paradigm for lifelong learning.

Purpose of Study : Contemporary education systems increasingly face the innovator's dilemma: they optimize for standardized human capital while constraining disruptive innovation and individual creativity. At the same time, generative AI has rapidly commoditized explicit knowledge, making unlearning, tacit knowledge, and collaborative value creation more critical than ever. This study investigates DICT Education DAO, defined not narrowly as a blockchain protocol but as a community model organized around autonomy, decentralization, and a tokenized economy based on empathy and contribution.

The study is theoretically grounded in Ostrom's Knowledge Commons, Nonaka and Takeuchi's SECI model, and the concept of the ambidextrous organization. It also draws inspiration from Japan's historical independent academy tradition, in which intrinsic motivation and rigorous member selection transformed peer friction into

energy for social change. Building on these perspectives, the study examines how adult learners acting as boundary spanners transcend institutional and professional boundaries to build a knowledge commons and co-create new educational value. By analyzing a Japan-based case as a model with broader international relevance, the study aims to contribute to global debates on post-AI lifelong learning, decentralized educational governance, and the future of co-creative learning communities.

Research Methods : This study employs a triangulated mixed-methods design integrating macro-, micro-, and event-level data in order to explain structural emergence through individual and situational transformation. This design is intended to ensure methodological rigor while capturing the fluidity of a decentralized community.

First, at the macro level, project tracking and timeline mapping will document the frequency, diversity, and participant volume of spin-off initiatives emerging from the community, thereby visualizing how the knowledge commons expands over time.

Second, at the micro level, retrospective semi-structured interviews with core members will examine how participants unlearn prior organizational logics and adopt new collaborative roles. Narrative analysis will be used to code critical incidents in which members shed prior organizational identities and move toward more generative, co-creative forms of participation. Third, at the event level, reflection data collected immediately after intensive in-person retreats and other shared experiences will be analyzed through text mining to identify cognitive and emotional shifts that trigger the socialization and externalization of tacit knowledge.

Together, these three strands address the following questions: how a venture-studio-type DAO expands the knowledge commons, how learners transform into active co-creators

through unlearning, and how shared extraordinary spaces catalyze knowledge socialization. Data collection is currently underway through project records, member interviews, and post-event reflection data.

Results and Discussion : The study is expected to demonstrate that a non-hierarchical, empathy-driven ecosystem can continuously generate market-viable educational initiatives by linking individual unlearning with collective knowledge socialization. At the macro level, the findings are expected to show how decentralized participation expands the diversity, frequency, and collaborative capacity of educational ventures. At the micro level, they will clarify how learners move from role-bound participation to proactive co-creation by shedding prior organizational identities and assuming new forms of agency. At the event level, the study will identify how intensive shared physical spaces catalyze emotional and cognitive shifts that initiate the socialization phase of the SECI model.

These findings will offer original empirical evidence on how a DAO-inspired educational community functions as a knowledge commons in the post-AI era. More broadly, the study will propose a globally significant paradigm for lifelong learning and educational organization, one that depends less on the transmission of standardized explicit knowledge and more on commons-based collaboration, boundary spanning, tacit knowledge sharing, and continuous unlearning. The study therefore has implications for educational practice, organizational design, and policy discussions across national contexts.

Keywords

***DICT Education DAO, knowledge Commons, boundary Spanners, unlearning, mixed
Methods***