

Pre-Class Discovery: DAOs — SOLUTIONS

Digital Finance – BSc Course

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Complete before class. No prior knowledge required. Work alone or in pairs.

Activity 1: Board vs. DAO

A company needs to decide whether to spend \$50,000 on a marketing campaign.

Option A: A traditional board of 7 directors votes in a meeting.

Option B: A DAO with 10,000 token holders votes on-chain over 5 days.

- (a) List 3 advantages and 3 disadvantages of the board approach.

- (b) List 3 advantages and 3 disadvantages of the DAO approach.

- (c) Which approach would you choose for (i) an emergency security fix and (ii) a long-term brand strategy? Justify each.

Activity 2: Design Your DAO

Your university student association wants to become a DAO. It has 2,000 members, a €50,000 annual budget, and organises events, clubs, and student services.

- (a) Define voting rights: 1 token per member, or proportional to fees paid? What are the tradeoffs?

- (b) Design the proposal process: who can submit proposals, what information must a proposal contain, and how long is the voting period?

- (c) Set a quorum requirement. What percentage of members must vote for a decision to be valid? Justify your choice.

- (d) Which decisions need a full token vote vs. delegation to a committee? Give 2 examples of each.

Activity 3: The Turnout Problem

Typical voter turnout: DAOs 3–5%, national elections ~60%, corporate shareholder votes 70–80%.

- (a) Why is DAO turnout so much lower? List at least 3 reasons.
- (b) Propose 3 mechanisms to increase DAO voter participation.
- (c) Does 4% turnout make a DAO undemocratic? Or is “voice when you care” a valid model? Take a position and give 3 arguments.

Answer Key

A1: (a) Board advantages: fast decisions, domain expertise, accountability. Disadvantages: groupthink, conflicts of interest, excludes stakeholders. (b) DAO advantages: inclusive, transparent, no single point of capture. Disadvantages: slow, voter apathy, vulnerable to whale domination. (c) Emergency: board (speed). Brand strategy: DAO (legitimacy, buy-in from community).

A2: (a) 1-per-member is egalitarian but ignores stake; proportional reflects investment but enables plutocracy. Hybrid: 1 base vote + bonus for participation. (b) Any member can submit; proposal needs title, budget, timeline, expected outcome; 7-day discussion + 5-day vote. (c) 10–20% quorum balances legitimacy with practical turnout; too high (>50%) blocks all decisions given typical DAO turnout. (d) Full vote: annual budget, constitutional changes. Committee: event logistics, vendor contracts.

A3: (a) Voter fatigue (too many proposals), gas costs, low perceived impact, no legal obligation, time zones, complexity of proposals. (b) Delegation (liquid democracy), vote incentives (reputation tokens), batching votes monthly, gasless voting (off-chain snapshots). (c) Pro “valid”: self-selection means informed voters decide; similar to open-source contribution. Con: small group can capture governance; lacks legitimacy for binding decisions.