ASPEN TECH POLICY HUB

POLICY

TREVOR PELS

Worker-Led DAOs

POLICY BRIEF FOR ACCELERATORS AND INCUBATORS

EXECUTIVE SUMMARY

Start-up accelerators should set aside a portion of each of their batches for worker-led DAOs (decentralized autonomous organizations): start-ups governed democratically by their employees, with a structure formalized through blockchain technology.

This is an experimental alternative to shareholder-led firms, which have widely acknowledged problems due to their prioritization of short-term profits over long-term vision and values like sustainability and social responsibility. Not only can worker-led firms prioritize those values, but they have key advantages in terms of efficiency and talent retention. The DAO structure provides the core benefits of worker-led firms along with simple governance and easier access to capital.

This policy brief recommends that accelerators introduce the option of forming a DAO to pre-seed founders, make DAOs eligible for follow-on investment, and target a single DAO investment in the current batch, ramping up to 5 percent of the following batch. This will allow accelerators to support the worker-led DAO movement while securing an early financial stake, with potentially lucrative returns.

PROBLEM

This proposal aims to address 2 acknowledged issues in the start-up community. First, founders struggle to find a governance structure that allows for long-term decisionmaking, focused on sustainability, social responsibility, or other values they find important. Second, there is increasing pressure on the pay and working conditions of low-wage workers, and particularly so-called gig workers. Both of these are societal-scale problems that must be addressed through a movement across many new companies; this makes accelerators the perfect shepherds for coordinating potential responses.

Values-Led Founders

Many founders are devoted to creating businesses that reflect their values and will last over the long term, securing their legacy rather than simply a paycheck. Unfortunately, this is often difficult to maintain as a start-up grows and takes on significant outside investment. One reason for this is that mainstream finance insists that quick returns for shareholders be prioritized over all other considerations, including a company's stated values or its long-term reputation and sustainability. An especially famous and blatant example is Google dropping "don't be evil" from its code of conduct, but it often happens more subtly and gradually.[1]

An increasingly popular alternative is the founder-led business, in which a company takes on investment while retaining full board-level control for its founders. While this does allow companies to "stand up to the immense pressure from the dogmas of modern finance" (as Ryan Petersen, CEO of Flexport, put it),[2] it creates a new problem: concentration of all decisionmaking power in one set of hands. There are many examples of companies that are controlled by founders who make serious judgment errors, with little recourse for other stakeholders to intervene: a few prominent ones have included Theranos, WeWork, Uber, and Facebook. Even from a principled perspective, it's reasonable to object to this solution's further concentration of power. Founders would thus benefit from a start-up model that enables a values-driven approach without such a clear concentration of power.

Low-Wage Workers

Real median wages in the United States have remained stagnant for 50 years, while the economy as a whole has grown by 20 times.[3] And for workers in the bottom quintile, pay has actually declined.[4] Meanwhile, benefits and working conditions have degraded even further. In part, this is because of the growth in the gig economy, which classifies its workers as independent contractors without legal labor protections.[5] But another significant factor is the increased concentration of corporate power among a few large companies, leading to a monopsony labor market in which large employers have enough sway to dictate terms to their workers.[6]

Historically, this pressure is counteracted through action from the labor movement. And recent years have, in fact, seen sizable increases in attempts at organization, with strikes in 2021 reaching a high not seen in 40 years.[7] But because of the expansion in corporate power along with the decentralization of work, these efforts have been largely ineffective.[8] These trends are only accelerating; a new check on worker exploitation not only is necessary, but would provide a meaningful competitive advantage over traditional firms in attracting labor supply.

RECOMMENDATIONS

This policy brief recommends that accelerators experiment with funding worker-led DAOs (decentralized autonomous organizations). The details of this structure and its advantages follow.

Structure of Worker-Led DAOs

A DAO is a business whose central operations are governed democratically on the blockchain. In a typical DAO, the organization's treasury is stored as cryptocurrency on the blockchain, and dispersal of those funds is subject to approval from a majority of the community. This ensures that democracy is technically ingrained, rather than nominally or legally enforced.

The particular worker-led DAO structure proposed here has 2 tiers, splitting the 2 traditional ownership rights of voting on board-level decisions and receiving a share of future profits. First, votes on corporate governance are handled through worker democracy on the blockchain, using the DAO itself. Second, shares of future profits are issued through a traditional legal corporate entity, separate from the blockchain, associated with the DAO (see Appendix A for illustration). This is analogous to the split between "common" and "preferred" shares in founder-led companies, but the rights to vote and the rights to future profits are issued by different, linked entities. The arrangement preserves the democratic commitment and agility of the DAO, while providing access to the established law around limited liability, taxation, and securities for corporations.

The DAO should be structured such that each worker receives a single governance token, entitling them to an equal vote along with all other employees (see Appendix B for illustration). This voting right can be exercised only for high-level governance, such as electing board members. Voting does not come with any rights to future dividends; if founders wish to give equity grants to employees or themselves, they may still issue restricted units of preferred stock. Founders also may set a cliff for issuance of the governance token, holding off until an employee has been with the company for some set period.

The legal entity housing the DAO can be a normal corporation, with voting rights for board seats reserved in the by-laws to the DAO. This forgoes the tax benefits offered in some states to organizations registered as official worker cooperatives, but it drastically lowers the legal burden of both establishing the entity and later accepting investment. Investors will receive preferred stock, which entitles them to a share of future dividends but no meaningful voting rights, as is the case in many founder-led companies. (Any organization that is interested in implementing such a model should consult with their attorneys on further implementation details.)

Advantages of Worker-Led DAOs

This model of embedding a DAO into traditional corporations has several advantages over both traditional start-ups and other worker-led alternative structures.

The advantages of being worker-led, over traditional start-ups:

- **Worker-led businesses are long-term oriented and can prioritize values.** Unlike public market investors (who can liquidate their stakes anytime) or executives (who often receive very large equity grants), workers are numerous enough that they must rely on an ongoing paycheck rather than a single, large lump sum. Because the distance between the floor and the ceiling of a worker's pay (i.e., between their standard wage and a full cash-out, split among all peers) is so narrow, it is financially optimal for them to stay at the company as long as possible, rather than attempting to frontload gains.

  Workers' profit-maximizing strategy thus relies on their employer's stability over a longer timescale. In addition, they aren't bound by the shareholder value doctrine, which requires corporate profit maximization above all else. So not only are they legally able to overlook short-term profit opportunities if they conflict with their own values, but they are actually financially pressured to do so; they will be forced to feel the eventual business impact of the reputational damage and possible regulatory response those moves reap, in time.[9]

- **Worker-led businesses are more efficient.** As has been well established in the scientific literature, workers have more information about day-to-day operations than investors.[10] In worker-led businesses, these data are more often surfaced and applied by leadership to make core processes more efficient, increasing productivity relative to their investor-led peers.[11]

- **Worker-led businesses can attract better talent.** Not only do they generally offer better financial terms to workers, but the very fact of democratic input on the direction of the company is an important benefit to many potential employees.[12] And since technology companies increasingly rely on exceptional talent as the biggest differentiator over their competitors, this can become a significant handicap for non-worker-led businesses.[13]

- **Worker-led businesses are better for workers.** Perhaps this goes without saying, but worker-led businesses that follow the structure laid out above pay better, have better working conditions, and allow employee input on the direction of the company.[14] This is a competitive advantage, but it is also straightforwardly better for workers. And as today's start-ups become tomorrow's Uber, Lyft, and Amazon, it can be a large step toward remedying the mounting pressure on low-wage workers generally.

The advantages of a DAO, over other worker-led structures:

- **A DAO has better access to capital.** Many of the traditional forms of worker-led businesses involve artificially limiting investor returns (literally capping them at a certain multiple) or preventing any possibility of future sale of shares on the secondary market (only allowing them to be sold back to the company).[15] This often comes with an ideological commitment to remain small and avoid rapid growth — hence this dismissal of investors' interests, since their capital is unnecessary.

  But a DAO, linked to a standard corporation, allows investment on terms that venture capitalists (VCs) are accustomed to; the only difference is that they cede control to a democratic body of workers rather than to the founders, which many VCs may well prefer. And the novel technology inherent in a DAO makes it a more promising potential growth opportunity.

- **A DAO has simple, settled governance.** Typically, worker-led businesses spend a significant amount of time fleshing out the logistical details of how the company will be structured and run. This is not only distracting but also expensive, due to the extensive legal work involved.[16] By relying on established DAO technology for the logistics and simple by-laws adjustments for the legal framework, this model reduces those burdens to a minimum.

Role of Accelerators

There are 3 primary reasons for accelerators, specifically, to become involved in worker-led DAOs:

- **Massive potential upside.** If worker-led DAOs come to represent even a small portion of the US technology sector, any accelerator that has invested this early will receive both huge direct returns and a significant edge in terms of reputation and experience. Even if the chance of this is low, the potential benefits outweigh the minor cost of the initial steps below.

- **Better attracting and serving social impact founders.** With regulatory and journalistic pressure on Silicon Valley mounting, many would-be founders are turning to social impact ventures as a remedy. The worker-led DAO model gives accelerators a stronger pitch for these founders. Crucially, it provides a structure that allows these companies to pursue their chosen values while still providing venture-scale returns to the accelerator. This also makes the marginal cost of these investments unusually low; today, accelerators fund some of these businesses as nonprofits, requiring the same capital input without any potential returns at all.

- **Promoting a resilient and moral economy.** Many of the most successful accelerators are conscious of the role they play in shaping the composition of the economy's next wave, across both digital technology and, increasingly, all other fields. The problems laid out above, with short-term profit maximization and pressure on low-wage workers, are hotly contested within the start-up community. Accelerators are uniquely positioned to shepherd potential solutions across large cohorts of companies, and thus to play a key part in shifting the US economy toward a longer-term and more values-centric orientation.

As such, start-up accelerators should take some simple steps to encourage adoption of worker-led DAOs. They should:

- **Provide the introductory materials to founders.** Founders should be presented with DAOs as an option at onboarding, and it should be personally suggested to those who might be most interested. A sample website explaining DAOs to founders can be found here. Anyone trying to create a long-term, values-focused company could benefit, but key candidates would be:
  - *Those currently planning to start nonprofits*. A worker-led DAO could accomplish the same goals with better access to capital and a much higher return for the organization.
  - *Those attempting to create for-profit ventures focused on social impact*. Not only would a worker-led DAO serve their social impact goals, but in better aligning those incentives, it would make their eventual financial success more likely.
- **Make worker-led DAOs eligible for follow-on investments from accelerators.** This signals confidence in the DAO structure, provides founders with a guaranteed capital floor, and assures VCs that their investment won't go completely unsupported by their peers.
- **Set a target for the number of worker-led DAOs in future accelerator batches.** Accelerators should aim for at least one DAO in their current batch (which likely means helping a nonprofit or traditional start-up pivot to become a worker-led DAO) and 5 percent in future batches (which likely means specifically recruiting companies that are already worker-led DAOs or would be good candidates to become one).
- **Announce all of the above publicly.** This will serve as a signal to VCs that this is a promising new area for investment, and further build the momentum this structure has.

ABOUT THE HUB

The Aspen Tech Policy Hub is a Bay Area policy incubator, training a new generation of tech policy entrepreneurs. We take tech experts, teach them the policy process, and support them in creating outside-the-box solutions to society's problems.

The Aspen Institute
2300 N St. NW, Suite 700
Washington, DC 20037
202 736 5800

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TRADITIONAL CORPORATION

Profit Rights:	Voting Rights:
Common Stock (owned by investors, founders, etc.)	

FOUNDER-LED START-UP

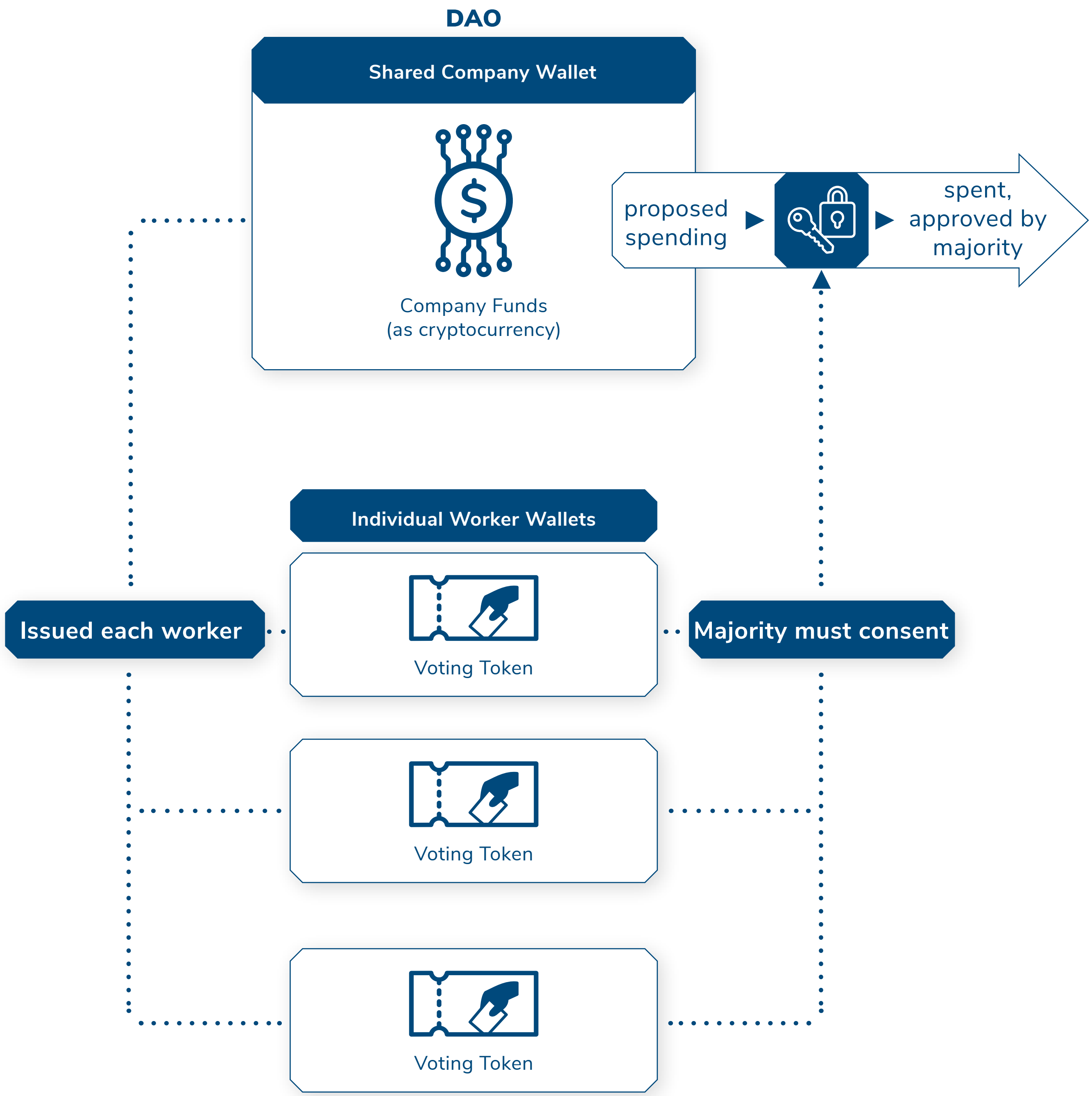
Profit Rights:	Voting Rights:
Preferred Stock (owned by investors)	Common Stock (owned by founders)

WORKER COOPERATIVE

Profit Rights:	Voting Rights:
Common Stock (owned by workers)	

WORKER-LED DAO

Profit Rights:	Voting Rights:
Preferred Stock (owned by investors)	Common Tokens (owned by workers)


DAO
Shared Company Wallet
Company Funds
(as cryptocurrency)
proposed spending
spent, approved by majority
Individual Worker Wallets
Issued each worker
Majority must consent
Voting Token
Voting Token
Voting Token

1 Kate Conger, "Google Removes 'Don't Be Evil' Clause from Its Code of Conduct," *Gizmodo*, May 18, 2018, https://gizmodo.com/google-removes-nearly-all-mentions-of-dont-be-evil-from-1826153393.

2 Ryan Petersen (@typesfast), "Only Founder Led Companies and Family-Owned Businesses can Stand Up to the Immense Pressure from the Dogmas of Modern Finance," Twitter post, October 28, 2021, https://twitter.com/typesfast/status/1453753942228160515.

3 Drew Desilver, "For Most U.S. Workers, Real Wages Have Barely Budged in Decades," Pew Research Center, August 7, 2018, https://www.pewresearch.org/fact-tank/2018/08/07/for-most-us-workers-real-wages-have-barely-budged-for-decades/.

4 David Cooper, Elise Gould, and Ben Zipperer, "Low-Wage Workers Are Suffering from a Decline in the Real Value of the Federal Minimum Wage," Economic Policy Institute, August 27, 2019, https://www.epi.org/publication/labor-day-2019-minimum-wage/.

5 Rani Molla, "More Americans Are Taking Jobs without Employer Benefits like Health Care or Paid Vacation," *Vox*, September 3, 2021, https://www.vox.com/recode/22651953/americans-gig-independent-workers-benefits-vacation-health-care-inequality.

6 Brad Hershbein, Claudia Macaluso, and Chen Yeh, "Monopsony in the U.S. Labor Market," *American Economic Review*, December 31, 2019.

7 Laura Bliss, "MapLab: Documenting the Real Scope of U.S. Labor Strikes," *Bloomberg*, October 20, 2021, https://www.bloomberg.com/news/newsletters/2021-10-20/the-real-scope-of-u-s-worker-strikes-mapped; Jasmine Kerrissey and Judy Stepan-Norris, "U.S. Workers Have Been Striking in Startling Numbers. Will That Continue?," *Washington Post*, November 11, 2021, https://www.washingtonpost.com/politics/2021/11/11/us-workers-have-been-striking-startling-numbers-will-that-continue/.

8 Li Jin, Scott Duke Kominers, and Lila Shroff, "A Labor Movement for the Platform Economy," *Harvard Business Review*, September 24, 2021, https://hbr.org/2021/09/a-labor-movement-for-the-platform-economy.

9 Constantine Iliopoulos and Vladislav Valentinov, "Cooperative Longevity: Why Are So Many Cooperatives So Successful?," *Sustainability* 10, no. 10 (2018): 3449, https://doi.org/10.3390/su10103449.

10 Ben Craig and John Pencavel, "Participation and Productivity: A Comparison of Worker Cooperatives and Conventional Firms in the Plywood Industry," *Brookings Papers on Economic Activity* 26 (1995): 121–74; and Fathi Fakhfakh, Virginie Pérotin, and Mónica Gago, "Productivity, Capital, and Labor in Labor-Managed and Conventional Firms: An Investigation on French Data," *ILR Review* 65, no. 4 (October 2012): 847–79.

11 *Id.*

12 Laura Hanson Schlachter and Olga Prushinskaya, "How Economic Democracy Impacts Workers, Firms, and Communities," Democracy at Work Institute, March 25, 2021, https://institute.coop/resources/how-economic-democracy-impacts-workers-firms-and-communities.

13 Sam Altman, "How to Hire," blog post, September 23, 2013, https://blog.samaltman.com/how-to-hire.

14 See Schlachter, *supra* note 12.

15 Greg Brodsky, "How to Invest in Cooperatives (Part 1)," Medium, Start.coop, June 3, 2021, https://medium.com/start-coop/how-to-invest-in-cooperatives-part-one-52f69350d16.

16 Greg Brodsky, "The 3 Reasons We Don't See More Cooperatively Owned Businesses," Medium, Start.coop, July 28, 2020, https://medium.com/start-coop/the-3-reasons-we-dont-see-more-cooperatively-owned-businesses-e0172217e7ed.

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