4 Exit to Community: Strategies for Multi-Stakeholder Ownership in the Platform Economy[304]

Abstract

Online platform regulation has been the subject of heated debate for a number of years, as shown in chapters 1 and 2. In addition to considering different forms of legislative action, the discourse on platform regulation has, in recent times, expanded to include private efforts to build alternative platforms and popular initiatives to convert existing platform companies into cooperative alternatives as ways in which platform businesses can be held accountable. Yet, guidance and mechanisms for how such a transition can be achieved are in short supply. The purpose of this chapter is to make a contribution to filling this gap. Using the example of an archetypical fictitious technology start-up that uses the multi-sided, matchmaking business model to operate a social media and gig platform ('CoSocial'), three strategies for 'exiting' to community are proposed: transferring stock to a non-charitable perpetual purpose trust, federating the platform and tokenizing corporate stock. The implications of each strategy in terms of control rights, financial rights, and public policy are considered in turn, before a general discussion and conclusion looking towards the future.

4.1 Introduction

The platform economy is facing a crisis of accountability.[305] Large Internet platforms, once regarded as sources of hope for democratic social movements or engines of a promising new economy – or, at worst, just superficial distractions – are now facing serious public scrutiny across the globe. The executives of Facebook, Google, and Twitter have been called before the U.S. Congress to account for their roles in enabling foreign election interference. Scholars have raised concerns about algorithmic, data-driven

304 This chapter has been published, in slightly shortened form, in M. Mannan and N. Schneider, 'Exit to Community: Strategies for Multi-Stakeholder Ownership in the Platform Economy' (2021) 5 Georgetown Law Technology Review 1-71.

305 Kenney and Zysman (n 30); Parker, Van Alstyne and Choudary (n 28).

business models,[306] the exploitation of digital labour,[307] the abuse of market power,[308] corporate governance failures,[309] manipulation by oppressive governments,[310] opacity and arbitrariness in content moderation,[311] and corporate surveillance,[312] to name just a few in an ever-growing body of literature on the depredations of the platform economy.

Part of the urgency surrounding such concerns lies in the fact that some platforms are near-impossible to escape. Internet users, and societies as a whole, have difficulty opting out of their services.[313] Companies like Facebook, for instance, track users across the Web and create shadow user profiles even when the user does not have an account on their platforms.[314] Not using such platforms means foregoing essential opportunities for work and social life – even access to basic services.[315] By not using social media platforms such as Facebook, people deprive themselves of one of the "most

306 Balkin alludes to this in the social media context as social media's "grand bargain" – free communication technology in exchange for user data and loyalty – but such trade-offs can be seen in the gig economy as well (e.g., with respect to workers' rights). *See* Balkin, 'Fixing Social Media's Grand Bargain' (n 90); Frank Pasquale, *The Black Box Society: The Secret Algorithms behind Money and Information* (2016) 8, 30ff; Nick Couldry and Ulises A Mejias, *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism* (Stanford University Press 2019) 56–58; Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York University Press 2018) 29.

307 Juliet B Schor, 'Does the Sharing Economy Increase Inequality within the Eighty Percent?: Findings from a Qualitative Study of Platform Providers' (2017) 10 Cambridge Journal of Regions, Economy and Society 263; Scholz, *Uberworked and Underpaid* (n 53).

308 Lina M Khan, 'Amazon's Antitrust Paradox' (2017) 126 Yale Law Journal 710; Carl Shapiro, 'Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets' (2019) 33 Journal of Economic Perspectives 69, 70, 75–76, 80–86; Tim Wu, *The Curse of Bigness: Antitrust in the New Gilded Age* (2018) 133. Shapiro argues for the need for skepticism about horizontal mergers involving "superstar" firms given the growing body of evidence that the largest U.S. firms have increasing market power, while conceding that the narrow interpretation of U.S. antitrust laws in recent years diminishes the likelihood of successful antitrust enforcement against "tech titans" unless a particularly strong case emerges against them.

309 David Larcker and Brian Tayan, 'Governance Gone Wild: Epic Misbehavior at Uber Technologies' (2017) Closer Look Series: Topics, Issues and Controversies in Corporate Governance 70 <https://perma.cc/F7LB-NG2G>; Robinson Meyer, 'Twitter's Famous Racist Problem' (*The Atlantic*, 21 July 2016) <https://perma.cc/6GHS-UMNY>.

310 Zeynep Tufekci, *Twitter and Tear Gas: The Power and Fragility of Networked Protest* (Yale University Press 2017) 225–226.

311 Thomas E Kadri and Kate Klonick, 'Facebook v. Sullivan: Public Figures and Newsworthiness in Online Speech' (2019) 93 Southern California Law Review 37, 90–91.

312 Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (1 edition, PublicAffairs 2019) 8, 512–516.

313 Erin Bernstein and Theresa J Lee, 'Where the Consumer Is the Commodity: The Difficulty with the Current Definition of Commercial Speech' (2013) 2013 Michigan State Law Review 39, 40. ("Companies like Facebook ... and Twitter offer services used by billions of users that have become central to our day-to-day lives.")

314 Skeggs and Yuill (n 92) 382.

315 *See generally,* Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* (St Martin's Press 2018).

powerful mechanisms" to make their voices heard.[316] Conversely, for those who use such services, exit is not a costless exercise, as it involves the irrecoverable loss of social capital, reputational cachet, and assets.[317]

Additionally, users suffer from an extreme degree of information asymmetry with respect to platforms, in terms of the technology used, the manner and ends to which information about users is collected and, especially in the case of pre-initial public offering (IPO) start-ups, about the business itself.[318] In Hirschman's terms,[319] the platform economy presents diminishing possibilities of "exit" as a realistic option for participants, while also offering little in the way of "voice" for shaping platforms' behaviour from within. For instance, aside from independent advocacy groups, there are no meaningful blocs to represent user concerns that correspond to the role of labour unions in twentieth-century industrial firms.

This chapter suggests that platform stakeholders, including its users, might find such a bloc through the tools offered by corporate ownership, and that founders and early investors in platform companies might see reasons to seek such an arrangement. The remainder of this section is devoted to briefly reviewing existing proposals for improving platform regulation and governance, including the budding platform cooperative movement. This lays the foundation for the proposal that an alternate exit strategy – an exit to community – will be best positioned to render platform corporations accountable to their community of stakeholders, while permitting their founders and early investors a modest financial benefit. Among various possible structures, three options are presented for materializing an exit to community that appear to be particularly promising: (1) transferring stock to a non-charitable perpetual purpose trust (section 4.2.1.), (2) federating the platform (section 4.2.2.), and (3) tokenizing corporate stock (section 4.2.3.).

To flesh out what is meant by an exit to community, as well as the options listed above, this section defines certain terms that are used throughout the chapter and outlines the growth of a hypothetical plat-

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316 Packingham v. North Carolina, 137 S. Ct. 1730, 1737 (2017).

317 "[I]t may be harder to change communities in cyberspace than it is in real space. It is harder because you must give up everything in a move from one cyber-community to another, whereas in real space you can bring much of it with you."Lawrence Lessig, *Code: Version 2.0* (Basic Books 2006) 290.

318 Balkin, 'Fixing Social Media's Grand Bargain' (n 90) 5. Balkin discusses this with respect to social media platforms in particular. Also see, Gabriel JX Dance, Michael LaForgia and Nicholas Confessore, 'As Facebook Raised a Privacy Wall, It Carved an Opening for Tech Giants' *The New York Times* (19 December 2018) <https://perma.cc/2LQR-M9F8>.This article discusses an investigation into Facebook's data sharing practices with over 150 companies that, among other things, enable Netflix and Spotify to read Facebook users' private messages.

319 Albert O Hirschman, *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States* (Harvard University Press 1970) 30ff.

form company, CoSocial. This hypothetical case allows, in section 4.2., a description of the means of implementing each option at greater length, an explanation of the inspiration for each option, and a consideration of their respective governance and financial implications within a specific organizational context. While the chapter hews closely to what is already possible under existing California state and federal law, each of these strategies would benefit from the support of legislative interventions. The nature of these measures is discussed alongside each option. Section 4.3. engages in a discussion concerning the general merits of these options (and similar strategies), while directly addressing some of the potential challenges an exit to community would encounter. This section pre-empts some of the possible criticisms of these proposals and outlines means to overcome them, which is suggested as the subject of future research. Section 4.4. concludes.

4.1.1 Existing Proposals for Platform Regulation & Governance

Proposals for remedying concerns about platforms have typically involved some form of privacy regulation, with the European Union's (EU) General Data Protection Regulation (GDPR) and California's Consumer Privacy Act[320] being notable examples in the domain of end-user personal-data protection. It is unlikely that privacy regulation alone – even if it is realized at the federal level[321] – will be sufficient to address the concerns at hand, as they extend beyond privacy.[322] Aside from the scope of possible regulatory interventions, there are questions about the feasibility of such regulation in the near future and the legitimacy of any such intervention. Reliance on the state for appropriate regulation leaves platform stakeholders vulnerable

320 California Consumer Privacy Act of 2018, Cal. Civ. Code § 1798.100 (2020).

321 Pardau notes that "[P]rivacy law in the wider U.S. remains a complex patchwork of narrowly tailored federal and state laws." In addition, Brinckerhoff contends that "comprehensive federal consumer privacy legislation is unlikely to be enacted anytime soon." Rosie Brinckerhoff, 'Social Network or Social Nightmare: How California Courts Can Prevent Facebook's Frightening Foray into Facial Recognition Technology from Haunting Consumer Privacy Rights Forever' (2018) 70 Federal Communications Law Journal 105, 109; Stuart L Pardau, 'The California Consumer Privacy Act: Towards a European-Style Privacy Regime in the United States' (2018) 23 Journal of Technology Law & Policy 68, 73.

322 In addition, as legal scholars have noted, one of the impediments to regulation is the narrowness of the commercial speech doctrine, which may make platform company representations to users, as well as the analysis, disclosure and sale of lawfully collected data, constitutionally protected by the First Amendment. Bernstein and Lee (n 313) 70–71; Jack M Balkin, 'Information Fiduciaries and the First Amendment' (2016) 49 UC Davis Law Review 1183, 1194.

to corporate lobbying[323] and regulatory capture,[324] through which the rule-making process falls under the control of special interests, such as the most powerful and well-endowed corporations. This is an especially material risk in the online economy, as several of these platform companies view regulatory entrepreneurship as a core part of their business plan.[325] Coupled with the desire of governments to attract large internet and tech companies to their shores,[326] such capture can lead to a de-prioritization of the public interest, including that of platform users.[327] The transnational nature of online platforms means that national or regional level interventions will never legitimately represent the entire globally-dispersed user-base,[328] even

323 Kiran Stacey, 'Tech Companies Spent Record Sum on US Lobbying in 2018' *Financial Times* (London, 23 January 2019) <https://perma.cc/AHH2-Q6PL>.

324 Dal Bó, 'Regulatory Capture: A Review' (2006) 22 Oxford Review of Economic Policy 203; Rui JP De Figueiredo and Geoff Edwards, 'Does Private Money Buy Public Policy? Campaign Contributions and Regulatory Outcomes in Telecommunications' (2007) 16 Journal of Economics & Management Strategy 547; Luigi Zingales, 'Towards a Political Theory of the Firm' (2017) 31 Journal of Economic Perspectives 113, 114. All three articles draw out the lineaments of regulatory capture and its implications on the economy, with Zingales in particular focusing on the reinforcement of economic and political power, a dynamic which he calls the "Medici vicious circle." Zingales argues that in "a winner-take-all economy, entrepreneurs lobby and corrupt, not only to seize a crucial first-mover advantage, but also to preserve their power over time." *See also*, a critique of corporate and high net-worth individual philanthropy, Anand Giridharadas, *Winners Take All the Elite Charade of Changing the World* (Alfred A Knopf 2018).

325 Elizabeth Pollman and Jordan M Barry, 'Regulatory Entrepreneurship' (2017) 90 Southern California Law Review 392. This is compounded by the fact that governments may be of the view that tech companies are best positioned to determine how they may be regulated – usually through voluntary self-regulation – given the complexity of the issues raised by the industry. French Secretary of State for Digital Affairs, 'Regulation of Social Networks - Facebook Experiment' (French Secretary of State for Digital Affairs 2019) 11. This mission report discusses the merits and limits of a self-regulatory approach for online social networks.

326 Damien Geradin, 'Principles for Regulating Uber and Other Intermediation Platforms in the EU' (2017) 37 <https://perma.cc/W2XL-QXHQ>.

327 Gary A Giroux, *Business Scandals, Corruption, and Reform: An Encyclopedia*, vol 1 (2013) 97. It is also difficult to agree on the normative end(s) which government regulation should serve, thereby raising the possibility that a poorly reasoned and ill-drafted piece of legislation could lead to undesirable outcomes.

328 Leiser and Murray problematize the traditional legitimacy of the Westphalian state to regulate Internet technologies or, indeed, their ability to do so. *See* Mark Leiser and Andrew Murray, 'The Role of Non-State Actors and Institutions in the Governance of New and Emerging Digital Technologies' in Roger Brownsword, Eloise Scotford and Karen Yeung (eds), *The Oxford Handbook of Law, Regulation and Technology* (Oxford University Press 2017) 670, 675; Ingo Take, 'Regulating the Internet Infrastructure: A Comparative Appraisal of the Legitimacy of ICANN, ITU, and the WSIS' (2012) 6 Regulation & Governance 499, 499.

while the GDPR makes clear that regulation in one jurisdiction will have cascading effects on a platform's behaviour in others.[329]

While public figures as varied as right-wing activist Steve Bannon and left-wing technology critic Evgeny Morozov have called for state appropriation of platform assets[330] – as have media scholars such as Nick Srnicek[331] – this approach will only deepen the accountability crisis, given the past behaviour of state intelligence and social welfare services with online user data,[332] together with the aforementioned challenge that internet networks are transnational in nature. Other proposed interventions fall short of the scale of the problem. Facebook's proposed "Oversight Board" is focused on ceding control over the moderation of content, but in its current form it would arguably be ineffective in that narrow function as well, given the shortcomings of its envisioned private "common law system" as a method for online dispute resolution.[333] Most importantly, for our purposes, this

329 This is due to the fact that the GDPR encompasses all corporations that collect, process, or store data of natural persons located in an EU Member State, as well as those that run offices in the EU. *See* GDPR, art. 44 et seq.; Alexander Tsesis, 'Data Subjects' Privacy Rights: Regulation of Personal Data Retention and Erasure Articles & Essays' (2019) 90 University of Colorado Law Review 593, 595.

330 Evgeny Morozov, 'Data Populists Must Seize Our Information – for the Benefit of Us All' *The Guardian* (4 December 2016) <https://perma.cc/8MUQ-7T92>; Ryan Grim, 'Steve Bannon Wants Facebook and Google Regulated Like Utilities' *The Intercept* (27 July 2017) <https://perma.cc/HB6G-DDB2>. For more on bipartisan efforts to regulate big tech based on different objectives, *see* Gilad Edelman, 'A Conservative Senator's Crusade Against Big Tech' [2019] *The Washington Post Magazine* <https://perma.cc/K33B-372G>. At the federal level, see the bipartisan sponsorship of the Do Not Track Act, S. ___, 116th Cong. (2019) (bill to protect the privacy of internet users through the creation of a "Do Not Track" system); Social Media Addiction Reduction Technology Act, S. __, 116th Cong. (2019) (bill targeted at inhibiting practices by social media companies to capture users' attention so as to serve their business model). At the state level, see the It's Your Data Act, A07736, Assemb. Reg. Sess. 2019-2020 (N.Y. 2019) (proposing a bill providing greater transparency and consumer privacy regarding the collection, use, retention and sharing of personal data).

331 Srnicek (n 41).

332 Eubanks (n 315); Pasquale (n 306).

333 Douek presents an an overview of how the Oversight Board would function before critiquing its legitimacy as well as its technical capacity to address the immense volume of content-related appeals that will be generated. The author concedes that the Oversight Board may serve a useful function in providing a forum for public reasoning over content moderation. Klonick and Kadri are generally optimistic about the Oversight Board, stating that the "platform is on the cusp of creating a meaningful check on its own power". Pozen presents a more critical view, that, by installing an Oversight Board, Facebook is emulating the absolutist constitutionalism of certain states that present the veneer of respecting civil liberties while concentrating "sovereign" decision-making power in a single person's hands. Evelyn Douek, 'Facebook's "Oversight Board": Move Fast with Stable Infrastructure and Humility' (2019) 21 North Carolina Journal of Law & Technology 1, 28–39, 46–47; Kadri and Klonick (n 311) 95–97; David Pozen, 'Authoritarian Constitutionalism in Facebookland' (Knight First Amendment Institute at Columbia University, 30 October 2018) <https://perma.cc/Y5FK-Y9P4>.

concession to users' views does not diminish the shareholder profit motive, which ultimately determines the subject matter over which the Oversight Board has jurisdiction and guides the determination of "hard cases" in content moderation.[334] Technological resistance in the form of obfuscation of user data to interfere with surveillance and data hacking, algorithmic hacking, and the dissemination of viruses, while subversive, is, by its very nature, an activity on the margins.[335]

As with many tech start-ups, such platforms are venture capital (VC) funded and the path-dependent nature of such investment makes investor ownership very difficult to change later on in a corporation's life. Reputation management through B Corp certification[336] may encourage greater corporate responsibility, but cases like that of Etsy – whose investors opted to rescind B Corp status for the sake of future growth[337] – suggest that such provisions alone carry insufficient leverage to challenge impulses toward founders and investors seeking an IPO or sale to another business, such as a

334 Douek (n 333) 41.

335 Williams (n 35) 227; Brunton and Nissenbaum (n 162) 1. Brunton and Nissenbaum explain that "obfuscation is the deliberate addition of ambiguous, confusing, or misleading information to interfere with surveillance and data collection," which can be operationalized through several means".

336 Janine S Hiller, 'The Benefit Corporation and Corporate Social Responsibility' (2013) 118 Journal of Business Ethics 287.

337 David Gelles, 'Inside the Revolution at Etsy' *The New York Times* (25 November 2017) <https://perma.cc/VG3L-G3N6>.

market incumbent.[338] Yet, the moment of a start-up's "exit"[339] to acquisition or public offering can involve particular dangers for mission drift, potentially compromising its relationship with its end users.[340] Claims that platform companies have a mission other than short-term profit maximization

338 The empirical evidence suggests that an acquisition is more likely than an IPO. Gao and colleagues document the decline in IPOs between 2001-12, which the authors argue occurred due to greater returns for investors being generated through a sale to a strategic buyer, such as a larger organization, rather than remaining as smaller, independent companies. Ragozzino & Blevins find that, in a dataset of 3,600 VC-backed entrepreneurial companies between 1985-2010, 40% of businesses experienced exit by acquisition and 17% experienced an IPO within 10 years of being founded. The number of VCs invested in a company is significantly and positively correlated with the likelihood of exit by acquisition, but not the prominence or reputation of the VC. Norbäck and Persson present evidence that exits via acquisition by incumbents was more valuable than exits via IPOs, particularly in the U.S. during the early years of the millennium. Cumming indicates that VC funds in Europe are also likely to favour acquisitions over IPOs, particularly if the VC fund has strong control rights, by studying 223 investments between 1996-2005 across eleven continental European countries. Xiaohui Gao, Jay R Ritter and Zhongyan Zhu, 'Where Have All the IPOs Gone?' (2013) 48 Journal of Financial and Quantitative Analysis 1663, 1690; Roberto Ragozzino and Dane P Blevins, 'Venture–Backed Firms: How Does Venture Capital Involvement Affect Their Likelihood of Going Public or Being Acquired?' (2016) 40 Entrepreneurship Theory and Practice 991, 992, 1002, 1006; Pehr-Johan Norbäck and Lars Persson, 'The Organization of the Innovation Industry: Entrepreneurs, Venture Capitalists, and Oligopolists' (2009) 7 Journal of the European Economic Association 1261, 1262–1263; Douglas Cumming, 'Contracts and Exits in Venture Capital Finance' (2008) 21 The Review of Financial Studies 1947, 1948.

339 DeTienne defines an exit as "the process by which the founders of privately held firms leave the firm they helped to create; thereby removing themselves, in varying degree, from the primary ownership and decision-making structure of the firm". In contrast, DeTienne explains that an "an exit strategy is the mode through which the entrepreneur intends to exit the firm". An exit strategy may evolve during the lifetime of a start-up and is thereby harder to measure, while an exit is a measurable event. Dawn R DeTienne, Alexander McKelvie and Gaylen N Chandler, 'Making Sense of Entrepreneurial Exit Strategies: A Typology and Test' (2015) 30 Journal of Business Venturing 255, 256; Dawn R DeTienne, 'Entrepreneurial Exit' in Cary L Cooper (ed), *Wiley Encyclopedia of Management* (3rd edn, John Wiley & Sons, Ltd 2015) 1. For the sake of completeness, it should be noted that 'exit to bankruptcy' is a strategic option that is available to entrepreneurs wishing to renegotiate their relationships with creditors and other stakeholders during financial distress, but as mentioned earlier our focus is on an earlier stage in a business's life cycle when multiple exit options may be possible – not just a strategic "last resort". *See, e.g.*, Henrick Aalbers and others, 'Does Pre-Packed Bankruptcy Create Value? An Empirical Study of Postbankruptcy Employment Retention in The Netherlands' (2019) 28 International Insolvency Review 320, 322.

340 Elmer describes this as part of the "precorporation" period of start-ups, as it is the time when "a set of legal, political and economic conventions establish the prospects (the 'future-look') of a company," reconstructing the capital structure of the company as well as its relationship to users and non-users. It is at this juncture that start-ups are typically required to rewrite their core values in a bid to attract external investment. Greg Elmer, 'Precorporation: Or What Financialisation Can Tell Us about the Histories of the Internet' (2017) 1 Internet Histories 90. However, DeTienne et al. in their typology highlight that founder-entrepreneurs may have exit strategies in mind that are geared towards stewardship and independence of the company over financial, profit-maximizing motives. DeTienne, McKelvie and Chandler (n 339) 260.

and founder aggrandizement are often dismissed as rhetorical flourishes, yet as online service providers and (in some cases) as creators of digital infrastructure, users genuinely come to depend on their affordances.[341] Researchers and many users themselves have long understood that social media platforms can serve as safe havens for marginalized persons[342] and those seeking support for mental well-being.[343] Scholars have also found that gig work platforms provide essential sources of income for immigrant communities,[344] but with respect to both types of platforms, this has been underappreciated in the business world. As one commentator lamented, at the terminal decline of the delicious link-sharing platform following its sale to Yahoo!, "If you make a start-up we like, such as Delicious: please don't sell it."[345]

Governing platform companies more democratically from within, along with reasonable regulatory guardrails, could offer a promising alternative.[346] If one agrees that social media companies offer a "public service,"[347] then cooperative or mutual business ownership offers a time-tested alternative to both private and state ownership for governing such a service. Cooperative structures have been instrumental the world over in

341 Yuval Dror, '"We Are Not Here for the Money": Founders' Manifestos' (2015) 17 New Media & Society 540, 547.

342 Cho discusses the preference of LGBTQI+ youth for Tumblr over Facebook and other social media platforms due to Tumblr's default non-public setting. This preference changed after Verizon acquired Tumblr from Yahoo and began to filter out LGBTQI+ user-generated content. Lee argues that "black Twitter" creates a digital homespace to address "social issues of racial bias and discrimination" Alexander Cho, 'Default Publicness: Queer Youth of Color, Social Media, and Being Outed by the Machine' (2018) 20 New Media & Society 3183, 3184, 3196; Latoya A Lee, 'Black Twitter: A Response to Bias in Mainstream Media' (2017) 6 Social Sciences 26, 6.

343 Berryman and Kavka explore the motivations for vloggers to create videos to lay bare their emotional vulnerability and seek community support. (This is not to say this substitutes the need for medical and professional support.) Rachel Berryman and Misha Kavka, 'Crying on YouTube: Vlogs, Self-Exposure and the Productivity of Negative Affect' (2018) 24 Convergence 85, 87.

344 Berger and colleagues present evidence that Uber drivers in London are primarily from Black, Bangladeshi and Pakistani ethnic groups, with driving for Uber being their main source of work. Berger and others (n 135) 433.

345 Violet Blue, 'AVOS' Delicious Disaster: Lessons from a Complete Failure' (*ZDNet*, 28 September 2011) <https://perma.cc/62YX-FKSA>.

346 Douek observes that "Facebook is not a democracy – it is a business". The argument of this chapter is that the history of cooperative and purpose-oriented businesses, as well as more recent experiences in using blockchain for solidaristic ends, can show that democracy and business are not mutually incompatible. Douek (n 333) 75.

347 There may be three interconnected public services offered by social media: "First, they *facilitate* public participation in art, politics, and culture. Second, they *organize* public conversation so that people can easily find and communicate with each other. Third, they *curate* public opinion through individualized results and feeds and through enforcing terms-of-service obligations and community guidelines." Balkin, 'Fixing Social Media's Grand Bargain' (n 90) 9.

such roles as servicing small farmers, facilitating shared newsgathering among many media outlets, providing community-centred financial products, and pioneering new forms of ethical consumption.[348] In each case, the participants in a business, more than outside shareholders, own and govern it. Cooperatives tend to furnish "missing markets"[349] with social benefits but little investor appeal, prioritize user well-being over financial gain, and resist exploitation of vulnerable constituents. Despite the historical success of cooperatives and other forms of shared ownership, these structures have been mainly absent from the online economy, which has relied on risk-friendly venture capital whose expectations for high returns from an exit usually preclude participant-ownership. This has begun to change in recent years, largely under the banner of "platform cooperativism," a burgeoning movement that calls for the reconfiguration of corporate ownership and governance in the online economy along the lines of the long-standing tradition of cooperative business.[350] This approach points toward an especially desirable form of internal regulation in the long run, since it would confer greater legitimacy[351] on the decisions arrived at by the platform and will be intrinsically transnational, as Internet networks already are.[352]

348 Nathan Schneider, *Everything for Everyone: The Radical Tradition That Is Shaping the Next Economy* (PublicAffairs 2018).

349 Brent Hueth, 'Missing Markets and the Cooperative Firm' (2014) <https://perma.cc/L9QH-Y36M>.

350 Schneider, 'An Internet of Ownership' (n 148); Scholz and Schneider (n 138); Scholz, *Uberworked and Underpaid* (n 53).

351 This understanding of legitimacy draws upon Rawls' argument that the legitimacy of exercises of political power is predicated on a 'duty of civility', whereby citizens should be able to explain to one another how their choices and votes are supported by public reason and should be open, fair-minded and accommodating to the views of others. John Rawls, *Political Liberalism* (Expanded, Columbia University Press 2005) 217. This understanding is premised on the normative view that platforms should be amenable to public reasoning and not considered a nonpublic 'association', given the importance of stakeholder retention (e.g., in the form of user attention) to their business model and the wide socio-economic impact that platforms can have as they become more prominent (e.g., in terms of market dominance), repercussions that extend beyond their employees, users and suppliers to the wider community. ibid 220. Arguably, from a civic republican point of view, granting stakeholders some of the deliberative tools of economic democracy will contribute to a more robust political democracy. *See, e.g.,* Brett McDonnell, 'Employee Primacy, or Economics Meets Civic Republicanism at Work' (2008) 13 Stan. J.L. Bus. & Fin. 334, 369–372. McDonnell reviews empirical, social psychology, and Habermasian arguments for this with respect to employee primacy and the extension of worker control in corporations.

352 Dwayne Winseck, 'The Geopolitical Economy of the Global Internet Infrastructure' (2017) 7 Journal of Information Policy 228.

While this chapter does not discount the value or necessity of government regulation, it focuses on the potential of multi-stakeholder ownership[353] in the online economy, with particular attention to the inclusion of end-users.

Although platform cooperativism has garnered considerable interest, including a series of conferences, research projects, countless discussions in the popular press[354] and even a mention in a national political party's manifesto,[355] only a few Internet start-ups have achieved any success with a cooperative model and grown in international scale and membership. One such exceptional example is Stocksy, a stock photographers' cooperative registered in British Columbia but with global membership.[356] Many such start-ups have run into existential barriers, particularly due to a lack of access to capital, mentorship, and other forms of infrastructural support.[357] Meanwhile, some enthusiasts have sought to take the challenge to existing large Internet companies. A "#BuyTwitter" campaign in 2016 and 2017 proposed, through a petition and a shareholder proposal, that the popular microblogging platform Twitter, then being discussed as a potential acquisition target, be converted to some form of user ownership.[358] Yet by demanding that the company merely "study" potential user-ownership models, the organizers and shareholders acknowledged that there is no go-to strategy for such a conversion to take place. Individual share ownership, while available for platform companies that have undergone an IPO, often confers weaker (or no) voting rights to individual shareholders,[359] and

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353 Multi-stakeholder ownership is considered to be beneficial for business models that combine production and consumption under a single organizational umbrella, such as online platforms, as they treat stakeholders as "allies rather than rivals, prioritize community solidarity over return on investment, and emphasize collective enhancement instead of value appropriation." Cohen explicitly advocates the exploration of multi-stakeholder ownership structures in platform co-operatives. Cohen (n 180) 378–379.

354 The primary portal for this network is platform.coop, managed by the Platform Cooperativism Consortium at The New School in New York City. Both authors have been affiliated with these efforts.

355 Jeremy Corbyn, 'The Digital Democracy Manifesto' (2016) <https://perma.cc/H2KF-QDTM>.

356 Scholz provides an overview of Stocksy's origins and business model in this contribution. Trebor Scholz, 'How to Coop the Digital Economy' in Inte Gloerich, Geert Lovink and Patrice van der Burgt (eds), *Moneylab reader 2: Overcoming the hype* (Institute of Network Cultures 2018) 205–208.

357 Schneider, *Everything for Everyone* (n 348).

358 'Exit to Democratic User Ownership - Proposal 4' (*#BuyTwitter*, 2017) <https://perma.cc/K7Z3-QZ8X>. Nathan Schenider was closely involved in this campaign.

359 Wells notes the growth and diversity of individual shareholding in the U.S. through the decade following World War II, after which it experienced a decline precipitated by the growth of private and public pension funds. As of 2010, modal individual shareholders were in the top 1% wealth bracket, Caucasian, and above 65. Harwell Wells, 'Shareholder Power in America, 1800–2000: A Short History' in Jennifer G Hill and Randall S Thomas (eds), *Research Handbook on Shareholder Power* (Edward Elgar Publishing 2015) 18–19; William Bratton and Michael Wachter, 'Shareholders and Social Welfare' (2013) 36 Seattle University Law Review 489, 516–521.

in any event is experiencing a secular decline with the rise of institutional investors.[360] In its current form, this does not present an attractive option for users. By 2018, the platform companies Airbnb, Postmates, and Uber had each sought the means to issue compensatory equity with their most loyal users, which remains largely untenable under current U.S. securities law given the nature of the relationship of Airbnb hosts, Postmates couriers, and Uber drivers with these platforms.[361] From #BuyTwitter to Uber's recent efforts to offer equity to loyal users, activists and corporate executives alike have indicated the need for concrete transfer options for stewardship-oriented founders who are interested in sharing ownership.

360 Bebchuk and Hirst discuss the proportional dominance of institutional investor ownership evidenced by a ten-fold increase over the past 70 years, with the largest institutional investors – "the Big Three" comprising Blackrock, Vanguard, and State – being passive investors, thereby being excessively deferential to the management of investee companies. Lucian Bebchuk and Scott Hirst, 'The Specter of the Giant Three' (2019) 99 Boston University Law Review 721, 725–726. Coates emphasizes the power that may be exercised and potentially abused by twelve investment management teams over their investee companies. Coates explains that individual investors have some information rights with respect to investment funds, but do not have any shareholder rights with respect to the investee companies of the fund. John C Coates IV, 'The Future of Corporate Governance Part I: The Problem of Twelve' (Harvard Public Law Working Paper 2019) 7 <https://perma.cc/4ZSX-DMVM>.

361 Robert B Robbins, Cindy V Schlaefer and Jessica Lutrin, 'From Home Sharing and Ride Sharing to Shareholding' (*Pillsbury Law*, 25 October 2018) <https://perma.cc/RWR7-M9KC>. Rule 701 of the Securities Act of 1933 allows companies to issue compensatory securities (of up to $10 million) to employees, independent contractors, advisors and de facto employees without filing a registration statement with the SEC. 17 C.F.R. § 230.701(c) (2018). This exemption allows the company to avoid the lengthy and complex disclosures required of public companies. Till now, this hasn't included Airbnb hosts, Postmates couriers, and Uber drivers. For Uber's, Postmates' and Airbnb's responses to a public consultation on *inter alia* the potential reform of Rule 701, see Comment Letter from Robert Rieders, Gen. Counsel & Vikrum D. Aiyer, Vice President of Pub. Policy & Strategic Commc'ns, Postmates, Inc., to Brent Fields, Sec'y, U.S. Secs. & Exch. Comm'n (Oct. 17, 2018), https://perma.cc/HQ37-849N. Comment Letter from Danielle Burr, Head of Fed. Affairs, Uber Techs., Inc., to Brent J. Fields, Sec'y, U.S. Secs. & Exch. Comm'n (Oct. 11, 2018), https://perma.cc/HC3Q-2R8Y. Comment Letter from Rob Chesnut, Gen. Counsel, Airbnb, Inc., to Brent J. Fields, Sec'y, U.S. Secs. & Exch. Comm'n (Sept. 21, 2018), https://perma.cc/9HLM-KQHE. Recently, the SEC voted to propose rules that would allow platform companies, over a five-year period, to use the Rule 701 exemption and offer and sell their securities to their platform workers as compensation. This would be capped at 15% of the workers' annual compensation and $75,000 over a 36-month period. *See* Press Release, SEC Proposes Temporary Rules to Facilitate Measured Participation by Certain "Platform Workers" in Compensatory Offerings Under Rule 701 and Form S-8, Release No. 2020-293, U.S. Sec. & Exch. Comm'n. (Nov. 24, 2020), https://perma.cc/VD52-V3QA.

In addition to regulatory barriers, stakeholder-owned businesses can face higher costs of governance,[362] which pose particular challenges for tech start-ups that often need to "pivot" their business models several times to locate a market niche.[363] Therefore, if start-ups begin as closely-held, investor-backed businesses but, upon discovering and filling a niche, transform into institutions highly responsive to the users who rely on them, they can benefit from both early nimbleness and later accountability when each is needed most. Based on the experience of earlier democratic businesses, such as multi-stakeholder cooperatives, worker cooperatives, and employee-owned firms, shared ownership and participatory decision-making gives vulnerable parties a voice, increases the legitimacy of business decision-making,[364] cultivates broader democratic values,[365] enhances organizational commitment,[366] and improves corporate performance (in terms of the value of firms).[367] Currently, however, there are no well-established pathways or best practices for doing so.

The purpose of this chapter is to make a contribution toward filling that gap. Using the example of an archetypical technology company that uses the multi-sided, matchmaking business model to operate a social media and gig platform, three strategies for rendering such firms more broadly accountable to participant stakeholders are proposed and analysed. It is submitted that this is not only beneficial for the welfare of stakeholders, but also to the business as a distinct entity. Many of the perverse incentives in the platform economy emerge from the obligatory, single-minded pursuit of a speculative liquidity event or exit – typically, an IPO or an acquisition by a more established company. While stock market offerings encourage the pursuit of short-term financial gains, acquirers often shut down the

362 Henry Hansmann, *The Ownership of Enterprise* (Belknap Press of Harvard Univ Press 1996) 44.

363 Bajwa (n 87) 28.

364 Hans-H Münkner, 'Multi-Stakeholder Co-Operatives and Their Legal Framework' in Carlo Borzaga and Roger Spear (eds), *Trends and Challenges for Co-operatives and Social Enterprises in Developed and Transition Countries* (Edizioni31 2004).

365 Bruno Jossa, 'The True Strong Point of Democratic Firm Management' (2018) 9 Modern Economy 1625; Rory Ridley-Duff, 'New Frontiers in Democratic Self-Management' in Diarmuid Padraig McDonnell and Elizabeth Chalmers Macknight (eds), *The Co-operative Model in Practice: International Perspectives* (University of Aberdeen & CETS 2012) 105–106.

366 Izaskun Agirre, Pedro Reinares and Fred Freundlich, 'Does a Democratic Management Model Enhance Performance through Market Orientation? Empirical Evidence from the Mondragon Industrial Group' (2015) 47 Review of Radical Political Economics 345, 361.

367 Ernest H O'Boyle, Pankaj C Patel and Erik Gonzalez-Mulé, 'Employee Ownership and Firm Performance: A Meta-Analysis' (2016) 26 Human Resource Management Journal 425, 439.

start-ups they buy altogether.[368] Each outcome risks marginalizing the platforms' key stakeholders, such as users and employees. An alternative exit strategy, an exit to community, may be the best way to ensure that platform businesses remain within, and become accountable to, their community of stakeholders.[369] By beginning as a more closely held company and transitioning to community ownership later, a start-up could experience the benefits of both early flexibility and mature accountability.

This chapter invites the reader to consider: could a major gig platform become owned by its workers? Could a successful start-up be acquired by its employees and users, rather than through public markets or by a larger company? What role can new technologies, such as blockchain, have in easing the conversion process to more accountable ownership? The strategies presented build on long-standing corporate structuring options and corporate governance principles that are present in several industries and jurisdictions but have been largely overlooked when analysing the accountability crises of platform companies. Through these proposals, the chapter aims to make more plausible the prospect of democratic multi-stakeholder ownership and governance of such companies – which collectively affect critical economic, social, cultural, and environmental infrastructure on a global scale. These strategies, or variations thereof, may appeal to established, market-leading platforms, budding platforms with a small user base or platforms that exist in between. If successful, it is hoped that these strategies spur a new "race to the top" of companies competing to offer more attractive forms of economic democracy.

368 Lemley and McCreary present evidence of, and arguments why, there has been a decline in IPOs, with the primary reasons being the speed and scale of incumbent acquisitions and the economic incentives of VCs to promote such acquisitions. This chapter complements Lemley and McCreary's position that entrepreneurs starting a company with a focus on how it will eventually be shut down is "deeply misguided." Mark A Lemley and Andrew McCreary, 'Exit Strategy' (2021) 101 Boston University Law Review 1, 10.

369 While strategies like employee and community buy-outs have long been considered in the context of founder(s) succession and financial distress, our proposed exit to community strategy draws attention to an earlier inflection point in the business's lifecycle. On employee buy-outs as a strategy of founder succession, see Stephen Clifford and The Staff of the Ohio Employee Ownership Center, *An Owner's Guide to Business Succession Planning* (2nd edn, Ohio Employee Ownership Center, Kent State University 2008); David Wagner, 'California Business Owners Spread The Wealth By Selling Their Companies To Their Workers' (*LAist*, 1 November 2019) <https://perma.cc/7A6X-NTX8>. On employee buy-outs as a strategy for rescuing a business from financial distress, *see, e.g.*, Susan Chaplinsky, Greg Niehaus and Linda Van de Gucht, 'Employee Buyouts: Causes, Structure, and Consequences' (1998) 48 Journal of Financial Economics 283, 285–286. On community buy-outs of local "community assets," *see, e.g.*, Tessa Lynn, 'The Social Relations of Property: Motives, Means and Outcomes of the Community Right to Bid in England' (phd, University of Reading 2018).

4.1.2 Defining Terms

Community is understood to be those persons who both use and contribute labour (broadly defined) to a platform business, as well as a term to encapsulate the bonds and sense of belonging that grows among these persons through the process of using and contributing to the platform over a sustained period of time.[370] This accords with legal philosopher John Finnis' view that the formation of a community involves social interactions "over an appreciable span of time…with a view to a shared objective."[371] In discussing *multi-stakeholder ownership*, the chapter includes models in which one or more classes of stakeholders experience meaningful financial or governance rights from co-owning part or all of the company that operates the platform in which they participate. This is distinct from efforts to protect local businesses by helping them purchase expensive new equipment, as such crowdfunding does not involve a transfer of ownership.[372] *User* is taken from the colloquial – and likely intentionally vague[373] – terminology that platform companies adopt to refer to people who interact with their services. The ambiguity of this identity category finds expression in futurist Alvin Toffler's 1980 neologism "prosumer," a blending of the activities of production and consumption without clear lines between the two. Scholars have rediscovered this term to help describe the platform era.[374] Users, according to this capacious understanding of the term, engage in contributing labour value (e.g., "volunteer" moderators, ride-sharing drivers, content posters), consuming content (e.g., social media account holders, viewers of targeted advertising), and providing business services (e.g., restaurants that provide food for a delivery service). This definition of user does not include platform companies' employees, although such employees are typically also users. Instead, employees are a distinct class of stakeholder. Non-employee users are highlighted as a distinct class because many employees already have access to stock ownership programs in U.S. platform companies and because they are relatively few in number compared to contributing users as a whole.[375]

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370 On the importance of bonds and a sense of belonging in community formation, *see, e.g.,* Roger Cotterrell, *Law, Culture and Society: Legal Ideas in the Mirror of Social Theory* (Ashgate Pub Co 2006) 70.

371 John Finnis, *Natural Law and Natural Rights.* (Oxford University Press 2011) 153.

372 Matthew Josefy and others, 'The Role of Community in Crowdfunding Success: Evidence on Cultural Attributes in Funding Campaigns to "Save the Local Theater"' (2017) 41 Entrepreneurship Theory and Practice 161, 168.

373 Gillespie (n 31).

374 Alvin Toffler, *The Third Wave* (Morrow 1980) 283; George Ritzer and Nathan Jurgenson, 'Production, Consumption, Prosumption: The Nature of Capitalism in the Age of the Digital "Prosumer"' (2010) 10 Journal of Consumer Culture 13, 13.

375 For instance, according to its 2019 S-1 filing, Uber Technologies' employees numbered 22,263, alongside 3.9 million active drivers, typically classified as independent contractors. On the frequency (and perils) of employee stock options as a form of compensation in technology startups, *see* Abraham JB Cable, 'Fool's Gold? Equity Compensation & The Mature Startup' (2017) 11 Virginia Law & Business Review 613, 616.

By bringing attention to the emergent stakeholder group of platform users, this chapter joins the corporate law scholarship that has sought to recognize the essential contributions of participant stakeholders.[376] This line of argument stands in contrast to the dominant strand of corporate governance discourse in the United States, particularly in the state of Delaware, where in spite of the rhetoric of the Business Roundtable's Statement on the Purpose of a Corporation, the interests of shareholders are regarded as primary over other potential stakeholders.[377] In the context of the platform economy, the operation of the shareholder wealth maximization principle can be most readily seen in the case involving the online classifieds platform Craigslist.[378]

By advocating for the extension of ownership rights to users, this chapter goes beyond earlier recommendations for merely expanding the sphere of corporate purpose to act in a manner attentive to multiple stakeholder groups.[379] With outright ownership, such stakeholders gain not just

376 *See generally,* David Yosifon, *Corporate Friction* (Cambridge University Press 2018); Lawrence E Mitchell, 'A Theoretical and Practical Framework for Enforcing Corporate Constituency Statutes' (1992) 70 Texas Law Review 579; McDonnell (n 351); Lynn A Stout, 'On the Rise of Shareholder Primacy, Signs of Its Fall, and the Return of Managerialism (in the Closet) Berle IV: The Future of Financial and Securities Markets: The Fourth Annual Symposium of the Adolf F. Berle, Jr. Center on Corporations, Law & Society' (2013) 36 Seattle University Law Review 1169.

377 Julian Velasco, 'Fiduciary Principles in Corporate Law' in Evan J Criddle, Paul B Miller and Robert H Sitkoff (eds), *The Oxford Handbook of Fiduciary Law* (Oxford University Press 2019) 64; Stephen Bainbridge, *Corporate Law* (2nd ed., Foundation Press ; Thomson/West 2009) 141. In the context of the platform economy, the operation of the shareholder wealth maximization principle can be most readily seen in the case involving the online classifieds platform Craigslist. For a contrary view on shareholder primacy, see, e.g., Jonathan R Macey, 'Fiduciary Duties as Residual Claims: Obligations to Nonshareholder Constituencies from a Theory of the Firm Perspective' (1999) 84 Cornell Law Review 1266, 1268. Macey argues that shareholder wealth maximization can be considered as a default rule, rather than a mandatory rule if it is accepted that a corporation is a nexus of contracts in which shareholders can opt of shareholder primacy. The release of the Business Roundtable's Statement on the Purpose of a Corporation (last amended in February 2021) has been met with some scepticism, as preliminary research indicates that the CEOs who have committed to stakeholder value creation have been guilty of egregious environmental and labour violations in comparison to their competitors. *See* Thomas Clarke, 'The Contest on Corporate Purpose: Why Lynn Stout Was Right and Milton Friedman Was Wrong' (2020) 10 Accounting, Economics, and Law: A Convivium 32.

378 *See eBay Domestic Holdings, Inc. v. Newmark*, 16 A.3d 1 (Del. Ch. 2010) in which the Court of Chancery of Delaware held that a shareholder rights plan which sought to preserve a corporate culture that did not prioritize shareholder wealth maximization was inconsistent with the directors' fiduciary duties as "[p]romoting, protecting, or pursuing non-stockholder considerations must lead at some point to value for stockholders". Chancellor Chandler then went on to emphasize that the choice of a for-profit Delaware corporation and the 'Inc.' suffix are bound by the fiduciary standards that accompany that form, including the promotion of shareholder value.

379 For a recent overview and critique of 'stakeholderism', *see* Lucian A Bebchuk and Roberto Tallarita, 'The Illusory Promise of Stakeholder Governance' (2020) 106 Cornell Law Review 91, 115.

paternalistic attention but, instead, are owed a direct fiduciary duty.[380] This extension of fiduciary duty has been advocated in recent years by a group of scholars and policymakers who see online platforms as part of a new class of "information fiduciaries".[381] According to this view, the duties of care, confidentiality, and loyalty expected of professionals – lawyers, doctors and accountants – should be partially extended to "online service providers", including the platforms discussed thus far. A fiduciary relationship should be legally recognized because of the significant vulnerability of users, users' relative dependence on these providers, the providers' expertise in the service they provide and the providers holding themselves out to be trustworthy, which would in turn allow the imposition of ethical obligations and regulations without violating the providers' first amendment rights to collect, analyse, sell or disclose some end-user data. There has been some legislative interest in the idea of online service providers acting as fiduciaries, with Democratic Senators introducing the Data Care Act of 2018[382] that directly draws on Balkin's proposals, but this Bill did not receive a vote in the US Congress.[383] The transfer of ownership also help users gain legal standing for litigation as well as governance rights.[384]

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380 The powerlessness of users and the indirectness of platform accountability to them is argued in Kate Klonick, 'The New Governors: The People, Rules, and Processes Governing Online Speech' (2018) 131 Harvard Law Review 1598, 1666. In some jurisdictions, like the Netherlands, as directors do not owe a fiduciary duty to shareholders, but instead have a fiduciary duty to the corporation, this fiduciary argument will not apply.

381 Jack M Balkin and Jonathan Zittrain, 'A Grand Bargain to Make Tech Companies Trustworthy' [2016] *The Atlantic* <https://perma.cc/5J7H-JBMR>; Balkin, 'Information Fiduciaries and the First Amendment' (n 322) 1222.

382 S. 3744, 115th Cong. (2018).

383 There has been scholarly pushback on Balkin's core arguments as well, *see* Lina M Khan and David E Pozen, 'A Skeptical View of Information Fiduciaries' (2019) 133 Harvard Law Review 498. Khan and Pozen point out the gaps in Balkin's information fiduciary proposal, that online service providers cannot have a fiduciary duty in a meaningful sense to users if shareholder primacy is maintained, that the business model of platforms make 'user primacy' implausible and/or unworkable, that the creation of user vulnerability is deliberate and that there are extensive information asymmetries between the user and the platform. They add that the fiduciary concept is also vague in how it will be enforced and questioned whether the idea materially adds to the arsenal of contractual and privacy rights that already exists. They appear to be particularly concerned that the recognition of fiduciary duties will head off more ambitious regulatory interventions, such as vigorous antitrust enforcement. ibid 537. In view of these criticisms, while Balkin and Zittrain's approach would require either Congressional approval or judicial creativity, this chapter proposes privately ordering changes in transparency and accountability in governance through strategies that transfer ownership and thereby shift who the platform who the board of the platform owes fiduciary duties to.

384 The contribution of this chapter – at least with respect to governance – is most closely aligned with those of Cohen regarding multi-stakeholder platform cooperative ownership. Cohen (n 180) 124–125. It is also aligned with the more ambitious of Yosifon's proposals in *Corporate Friction*, that the very largest corporations should be "structured to allow each major stakeholder group to elect at least one director to the board". Yosifon (n 376) 200. He also notes that the affordances of modern technology would particularly facilitate the voting of large stakeholder groups, such as consumers. ibid 201.

To be effective, this multi-stakeholder ownership must be *broad-based*. This means that ownership accrues to all or most of that class, rather than to an elite few.[385] For example, in the context of employee-ownership schemes, a company that offers voluntary stock options that only executives can exercise is not broad-based. Instead, an automatic employee stock-ownership plan (ESOP) from which all employees benefit, even if the benefits vary according to their pay scale, is broad-based. Broad-based user ownership, by definition, includes all or a large majority of value-contributing users. Consequently, investor ownership or founder ownership alone would not be considered broad based. For platforms that rely on a large pool of non-employee users regularly contributing value, even widespread employee ownership would not alone qualify as broad-based ownership of a company.

This chapter avoids specifying in advance the legal form such multi-stakeholder ownership should take, while presenting tangible examples of what it could look like. It might take shape within a cooperative, a limited liability company, or some other legal entity. The corporation's shares might be wholly or partially owned by users, where the legal ownership of shares might be handled by an intermediary entity such as a trust or the shares might be owned by the users directly. The primary benefits of broad-based multi-stakeholder ownership might be financial returns (such as ensuring rank-and-file users receive dividends alongside investors) or oversight in governance (such as through board representation and voting rights in general meetings). Such ownership might include only one group of users being especially involved in the value creation process or it might balance the interests of multiple stakeholder groups. While many of these strategies fall short of classical aspirations for workers' control,[386] this chapter seeks to achieve productive compromises that balance the interests of platforms' diverse stakeholders.

The bulk of what follows will review three strategies for converting founder- and investor-owned, closely-held Internet-native firms to multi-stakeholder ownership – strategies that could be relevant for both growth-stage and mature contexts: (1) multi-stakeholder buyout via a trust, (2) federation, and (3) tokenization. In order to concretize the strategies, the

385 Blasi, Kruse and Freeman discuss the corporate governance benefits of broad-based employee ownership in Joseph Blasi, Douglas Kruse and Richard B Freeman, 'Broad-Based Employee Stock Ownership and Profit Sharing: History, Evidence, and Policy Implications' (2018) 1 Journal of Participation and Employee Ownership 38.

386 David P Ellerman, 'ESOPs & CO-OPs: Worker Capitalism & Worker Democracy' (1985) 1 Labor Research Review 55, 57; Immanuel Ness and Dario Azzellini, 'Introduction', *Ours to master and to own: workers' control from the commune to the present* (Haymarket 2011) 1.

case of a hypothetical platform company will be described and analysed.[387] This allows for a discussion of the means of implementing each strategy and their possible outcomes within a specific organizational context.

4.1.3 The Case of CoSocial

CoSocial Corporation ("CoSocial"; the Corporation) is a C corporation[388] incorporated and headquartered in San Francisco, California, that operates a social network made up of affinity-based groups, which are managed and moderated by users. In a short space of time, a bare bones website with a small, dedicated following grew to boast 50 million monthly active users spread across the globe on the Web and a free smartphone application. Like its larger competitors, the platform derives revenue from advertising and promoted links.

In addition to its social media features, CoSocial developed into a peer-to-peer gig platform, wherein users can pay each other for services. A small commission is paid to the platform for each successful transaction. Partly because its early user-base included a critical mass of counter-cultural artists, CoSocial is widely viewed as a more community-oriented alternative to the more prominent social media and gig platforms. The gig functionality, for instance, is often used by creatives, such as gallerists and filmmakers, to hire local or distributed teams for large-scale projects.

CoSocial initially launched with seed funding from the founders themselves, the founders' families and friends, and convertible notes issued to a small group of angel investors.[389] Subsequently, at a pre-money valuation of 6 million dollars, the company received 3 million dollars in Series A funding from a VC fund. This gave CoSocial a post-money valuation of 9 million

387 The use of hypothetical scenarios is common for comparative corporate law scholarship. *See generally* Lynn LoPucki, 'A Rule-Based Method for Comparing Corporate Laws' (2018) 94 Notre Dame Law Review 263; Matthias M Siems, 'The Methods of Comparative Corporate Law' in Roman Tomasic (ed), *Routledge Handbook of Corporate Law* (Routledge Handbooks 2016).

388 The C Corp continues to be the most common legal form for start-ups. Gregg Polsky, 'Explaining Choice-of-Entity Decisions by Silicon Valley Start-Ups' (2019) 70 Hastings Law Journal 409, 411.

389 The fact that founders typically look to these groups for seed funding is mentioned in Elizabeth Pollman, 'Startup Governance' (2019) 168 University of Pennsylvania Law Review 155, 167, 170. Convertible notes are a form of debt that may be converted into preferred shares upon maturing and pays interest. John F Coyle and Joseph M Green, 'Contractual Innovation in Venture Capital' (2014) 66 Hastings Law Journal 133, 151.

dollars and the VC fund 33 percent of preferred shares in the business.[390] As a result, following the conversion of the convertible notes, CoSocial had two classes of stock (common and preferred) distributed across four pools: (1) founders and family; (2) employee stock option pool; (3) angel investors; and (4) the VC fund. The former two pools were allocated common stock and the latter two pools were allocated preferred stock. The term sheet of the VC investment, among other provisions, included a non-participating liquidation preference for the investment amount, a broad-based weighted average anti-dilution provision, two investor-elected board seats and co-sale (tag along) rights.

Over the course of three years, the platform grew to its current user base of 50 million monthly active users. Following Series B and Series C financing rounds, CoSocial had a post-money valuation of 500 million dollars.[391] At this stage, 47 percent of common shares were held by the founders and family, 10 percent in the option pool and 43 percent of preferred shares by eight investors,[392] including the initial VC fund that now acts as a lead investor.

Growth slowed somewhat in the following months. Management began to face pressure from the lead investor[393] to begin monetizing the network through the introduction of more aggressive targeted advertising and increasing its share of transaction fees from gig services. Among other things, this would require CoSocial to step up its collection and processing of personal data for uses that would not be readily apparent for users, even if they consent to such collection.[394] For the moment, CoSocial enjoyed

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390 Preferred shares (also known as preferred stock) are senior to common shares in a corporation's capital structure, which means that preference shareholders are paid in full before common shareholders are paid in the event of the corporation's liquidation. The preferred shareholders also receive dividends from the corporation's current income prior to common shareholders. Ben Walther, 'The Peril and Promise of Preferred Stock' (2014) 39 Delaware Journal of Corporate Law 161, 167. While preferred shares typically do not have voting rights, it is standard for them to have voting rights over major corporate decisions such as changes in corporate control or dissolution of the corporation. Harold Marsh, R Roy Finkle and Larry W Sonsini, *Marsh's California Corporation Law* (4th edn, Wolters Kluwer 2020) s 7.03.

391 These figures conservatively approximate the user-base and valuation of the collaborative publishing network Medium. *See* Jim Edwards, '$132 million later, Ev Williams says he is raising even more money for Medium' (*Business Insider Nederland*, 8 November 2018) <https://perma.cc/BBH4-T7WP>.

392 It is assumed that Series B and Series C preferred shareholders have different cash flow, liquidation, control, and voting rights than the initial VC fund.

393 There is a material risk that startup founder-CEOs are replaced by large, activist investors, particularly as the startup matures into a large corporation. *See* Pollman (n 389) 169, 180, 184.

394 Brinckerhoff argues that users do not meaningfully consent to Facebook's implementation of facial recognition technology. Brinckerhoff (n 321) 140. *See also,* Elmer (n 340) 94. Elmer documents the escalating rate at which the Facebook interface and core user services changed between 2004 and the year of its IPO in an effort to stimulate user engagement and time spent on the platform.

strong loyalty from its users and moderate recurring revenue from the gig transactions, and its reputation had not been tarnished by the scandals that plagued similar platforms. Yet analysts feared that without dramatically increasing growth and revenue, the company would not be an attractive candidate for an IPO or a profitable buyout.

The founders, who had the power to appoint four members of the seven-member board, resisted the investors' demands for fear that such changes would alienate the core user-base and undermine CoSocial's future.[395] They were searching for an alternative solution that would both satisfy the investors and further strengthen the community-oriented culture of the platform, which served as one of its principal competitive advantages. In other words, their consideration of exit options included factors other than maximizing short-term financial return. This challenge, and possible solutions to it, are presented in this chapter.

4.2 Exit-to-Community Strategies

In this section, three distinct possibilities for the future of our fictional company, CoSocial, are considered together with their backgrounds and implications. It is appreciated that these strategies include some features that may be beyond the realm of what is presently feasible. Thus, each section includes a policy discussion about modest, near-term interventions that could ease the way toward these strategies becoming more available.

4.2.1 Option 1: Stockholding Trust

In this scenario, with the support of the founders and their family members, CoSocial's board of directors established a non-charitable perpetual purpose trust,[396] CoTrust, in the state of Delaware. Its purpose was to enable CoSocial users to participate in profit-sharing and governance within the CoSocial Corporation. This involved settling a trust agreement, a set of principles[397] that CoTrust commits itself to and drafting a profit-sharing agreement that is to be approved by founders, investors, employees, and users. The board of CoSocial appointed an experienced trustee to handle administrative matters (e.g., trust distributions), appointed a trust

395 This is a pivotal moment for CoSocial as investors typically gain more seats with further financing rounds, leading the startup from being primarily controlled by its founders to being controlled by its investors. *See* D Gordon Smith, 'The Exit Structure of Venture Capital' (2005) 53 UCLA Law Review 315, 326–327.

396 This trust structure has long been used by offshore trusts and, more recently, by companies seeking to establish multi-stakeholder governance such as The Organically Grown Company. The Purpose Foundation, *Steward-Ownership: Ownership and Finance Solutions for Mission-Driven Businesses* (The Purpose Foundation 2019) 28.

397 For example: promoting forums for stakeholders to express their voice regarding important choices and decisions to be made by platform companies (including CoSocial).

"enforcer" to hold the role usually filled by beneficiaries (e.g., legal action to ensure the purpose of the trust is fulfilled), and outlined a system of elections among founders, investors, employees, and active CoSocial users to elect representatives to a Trust Protector Committee. This Committee would have the power to remove the trustee and the trust enforcer, appoint future members to CoSocial Corporation's board, and approve profit distributions. The members of the Committee could vote on a one-member, one-vote basis or in proportion to the shares beneficially held by each class of stakeholder. Given the ease with which users may enter and exit the platform and potentially create fake accounts, the platform's existing system of cross-checking user identities with government-issued IDs and residency documents for its gig-work functionality was extended to verify the identity of active users and, in particular, committee candidates.[398] Users could then become confirmed participants in CoTrust.

Once established, one of CoTrust's purposes was to gradually acquire 100 percent share ownership of CoSocial Corporation.[399] This meant that, initially, external investors were one of the stakeholder groups represented on the Trust Protector Committee and received cumulative preferred dividends. Eventually, the CoSocial board and the CoTrust trustees intend to initiate a process of gradually buying out the outside investors. This would involve approaching social finance and other values-aligned equity investors willing to provide loans for the buyback of shares, as well as the issuance of non-voting preferred shares to values-aligned accredited investors.[400] These shares were then transferred to CoTrust, which meant that they could not be sold by any of the stakeholders or the corporation. After consultation with affected employees, the employee stock option plan was cancelled in favour of integrating the employees into the financial and governance structure of the trust agreement, including the right to elect their own representatives to the Trust Protector Committee.[401] As a consequence, the shares set aside for the option pool were transferred to the purpose trust.

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398 With the growing maturity of self-sovereign identity systems, this could eventually be replaced by a mechanism that is more sensitive to the privacy of users. *See, e.g.,* Fennie Wang and Primavera De Filippi, 'Self-Sovereign Identity in a Globalized World: Credentials-Based Identity Systems as a Driver for Economic Inclusion' (2020) 2 Frontiers in Blockchain; Margie Cheesman, 'Self-Sovereignty for Refugees? The Contested Horizons of Digital Identity' (2020) 0 Geopolitics 1.

399 The repurchase of stock is a common recent trend. *See* Pollman (n 389) 175.

400 This is the proposed approach of the Organically Grown Company. Natalie Reitman-White, 'Organically Grown Company Transitions from ESOP to Perpetual Trust' (*Medium*, 30 August 2018) <https://perma.cc/VU2X-HFUG>.

401 Pollman notes that employee participation in start-up governance is typically indirect, and even non-vested employee stock optons are vulnerable to being arbitrarily clawed back by the company. Pollman (n 389) 194. Smith provides an example of employee stock-options being clawed back by corporate management in Thomas A Smith, 'The Zynga Clawback: Shoring up the Central Pillar of Innovation' (2013) 53 Santa Clara Law Review 577, 578.

The early investors were reluctant to agree to the deal at first, but soon they embraced it. They came to recognize that CoSocial was not on track to accelerate its growth exponentially without compromising the reasons that its users had come to trust it. The company had become, as some business analysts explain, a "zombie."[402] Faced with a never-ending wait for an acquisition or IPO, they supported the unusual arrangement. They knew that if they cashed out after holding their shares in CoSocial for five years, they would have to pay little to no capital gains tax.[403] While the VC fund managers have a fiduciary duty to their limited partners, whose capital they invest, they also owe a duty of care to the portfolio company, CoSocial.[404] An exit to community via the CoTrust appeared to be the best option in the circumstances. They were able to walk away with their initial investment and a bit more, even if it was short of their highest ambitions.

From its inception, CoTrust gained a significant role in CoSocial's governance. In accordance with the deal struck with the early investors, the amended articles of incorporation provided that the Trust Protector Committee could appoint two members onto CoSocial's seven-member board. Over time, as the VC fund and other external investors exited CoSocial and the CoTrust grew from being a minority shareholder to a controlling shareholder, all of the seats came to be elected by the Trust Protector Committee.

As a consequence of these changes, users found a new set of reasons to appreciate the platform. They began to receive, in monthly transfers to their app wallets, a portion of the dividends on CoTrust's stock. As per the profit-sharing agreement, the users' dividends were in proportion to their transactions through the platform, for as long as they remained active users.

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402 "The term 'zombie company' refers to a company that is officially 'alive' despite being financially dead ... a company that can manage to pay the interest on its debts but not reduce the actual debt … [They] keep lurching along – not quite alive but not quite dead, either. *See* Adam Golub and Carrie Lane, 'Zombie Companies and Corporate Survivors' (2015) 7 Anthropology Now 47. While this adjective has been used to describe bailed-out banks, it is often used to refer to startups that earn enough revenue to keep running but are unlikely to achieve a large return for investors. See, e.g., Sean Wise, '8 Signs Your Startup Is a Zombie, and 3 Things to Do About It' (*Inc.com*, 11 December 2018) <https://perma.cc/44PB-DELP>.

403 This is due to the fact that CoSocial qualified as a "small business" as a result of having less than $50 million in assets at the time they received these investments. 26 U.S.C. § 1202(d) (defining qualified small business). The amount that the investors could exclude from their income depends on their initial investment but it could be up to "10 times the aggregate adjusted basis of the [shares] issued by the corporation disposed of by the taxpayer during the taxable year, as measured on the original issue date." ibid § 1202(b)(1)(B). Given the cap on assets to be qualified as a small business, the upper limit is $500 million in exemptions. In the case of CoSocial, the VC fund, for instance, would be able to exclude up to $30 million as its Series A investment was $3 million. However, as this only applies to shares that were originally issued by the corporation, it would not apply to shares acquired through secondary markets. ibid § 1202(c)(1).

404 *See, e.g.*, the case of *In re* Trados Inc. S'holder Litig., 73 A.3d 17, 46 (Del. Ch. 2013), which discusses this dual responsibility. *See also*, Lemley and McCreary (n 368) 57.

The higher the platform's total transaction volume, and the higher their own activity, the higher their "divi."[405] Confirmed users, who proved their identities and used the platform above a certain threshold during the course of a year, became eligible to participate in CoTrust's governance system for as long as they maintained their engagement.

While this all seemed complex at first, a gamified interface made involvement in the governance process intuitive. Through a system of delegative (or "liquid") voting, users selected board members and allocated those funds not distributed in the divi to projects ranging from silly, viral stunts to sophisticated research on their own behaviour and oversight of company practices. Compared to users of other platforms, CoSocial's users thus developed unusually high degrees of confidence that their personal data and financial dealings were being handled responsibly. This confidence, in turn, fuelled the platform's growth. The divi even became an important source of income for many users, who in turn became committed to the platform's success and sustainability. While CoSocial never reached the size of some of its "unicorn" competitors, it became widely regarded as an important high-road platform that raised expectations for others, analogous to Wikipedia, Mozilla, WorldCat, and the Internet Archive.

4.2.1.1 Background

This scenario takes inspiration from the U.S. ESOP, which corporations may use to sell or contribute their shares to a trust so as to eventually vest in individual employees' accounts, often as part of their direct-contribution retirement package.[406] To qualify for their tax advantages, ESOPs must be broad-based among a company's employees rather than benefiting just top executives.[407] They have frequently been used as a means for founders to transfer their stake in a business to employees.[408] This process is often a leveraged transaction, financed by bank loans, which are secured by a pledge of the shares and a guarantee from the corporation, so that neither

405 Katarina Friberg and others, 'The Politics of Commercial Dynamics: Cooperative Adaptations to Postwar Consumerism in the United Kingdom and Sweden, 1950–2010' in Harm G Schröter and Patrizia Battilani (eds), *The Cooperative Business Movement, 1950 to the Present* (Cambridge University Press 2012) 249.

406 "The term 'employee stock ownership plan' means an individual account plan ... which is a stock bonus plan which is qualified ... and which is designed to invest primarily in qualifying employer securities." 29 U.S.C. § 1107(d)(6)(A).

407 *See* 26 U.S.C. § 1042(b)(2). The participants in a plan may be current and former employees as well as their beneficiaries. 29 U.S.C. § 1002(7).

408 "Congress explicitly intended that the ESOP would be both an employee retirement benefit plan and a 'technique of corporate finance' that would encourage employee ownership." Martin v. Feilen, 965 F.2d 660, 664 (8th Cir. 1992). While it is possible for an ESOP to hold all of a corporation's shares, typically most ESOPs only hold thirty percent of a corporation's shares. *See* Sarah J Westendorf, 'Compensation through Ownership: The Use of the ESOP in Entrepreneurial Ventures' (2006) 1 Entrepreneurial Business Law Journal 195, 204.

the employer nor the employees pay upfront.[409] These loans can subsequently be repaid by the company through tax-deductible employer contributions to the ESOP.[410] Regarding control rights, the terms of the ESOP determine whether voting rights are passed through to ESOP participants, with the only statutory requirement being that participants who have had shares allocated to their account be permitted to direct how the trustee votes such shares in major corporate transactions, namely mergers or consolidations, recapitalization, reclassification, liquidation, dissolution, and the sale of substantially all assets of the business.[411]

There are, however, limitations in applying the ESOP model to the platform economy, assuming one was to include the variety of stakeholders mentioned above. While the Internal Revenue Code's definition of "employee" for the purpose of benefit plans is broad,[412] it does not generally extend to creators of voluntary, user-generated content or independent contractors who have not been reclassified. Moreover, since the class of users is constantly changing, it becomes difficult to specify identifiable beneficiaries – a common requirement for settling most types of trusts.[413]

The basic economic principles undergirding ESOPs, however, are not predicated on the existence of an employment relationship or indeed the maximal extraction of labour value.[414] Instead, they rest on the idea of maximizing the productivity of capital and distributing the income generated through this production. As part of a wider vision of "binary economics,"

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409 John H Langbein, David A Pratt and Susan J Stabile, *Pension and Employee Benefit Law* (5th ed., Foundation Press 2010) 344; Corey Rosen and Scott Rodrick, *Understanding ESOPs* (National Center for Employee Ownership 2018).

410 Norman P Stein, 'An Alphabet Soup Agenda for Reform of the Internal Revenue Code and ERISA Provisions Applicable to Qualified Deferred Compensation Plans' (2003) 56 SMU Law Review 49, 646–647.

411 26 U.S.C. §§ 409(e)(3), 409(e)(5).

412 *See* Vizcaino v. Microsoft Corp., 120 F.3d. 1006, 1009, 1015 (9th Cir. 1997) (holding invalid the exclusion of independent contractors reclassified as common law employees from benefit plans, including savings plus plans and employee stock purchase plans). Subsequently, in a Technical Advice Memorandum dated July 28, 1999, the IRS clarified that even reclassified common law employees can be deliberately excluded from a plan.

413 In the European Union, for instance, the 'Fifth Anti-Money Laundering Directive' requires member states to ensure that companies obtain and hold adequate, accurate and current information on their beneficial ownership. The definition of beneficial ownership includes individual beneficiaries of a trust, although it is acknowledged that in certain instances it may be difficult to identify individuals. This information should be held in a central register of the Member State. *See* Directive (EU) 2015/849 of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC [2015] OJ L141/73, arts. 3(6)(b)(iv), 30(1)-(3), as amended by Directive (EU) 2018/843 of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing and amending Directives 2009/138/EC and 2013/36/EU [2018] OJ L156/43.

414 Robert HA Ashford, 'The Binary Economics of Louis Kelso: The Promise of Universal Capitalism' (1990) 22 Rutgers Law Journal 3.

ESOP inventor Louis Kelso regarded the mechanism as only one of many possible leveraged buyout trusts; for instance, he outlined and experimented with a variant that would be owned by a company's consumers, among other stakeholder groups.[415] The inclusion of such stakeholders, would allow them to "share the responsibilities of ownership as well as its rewards – profit, knowledge and power."[416]

The use of a non-charitable perpetual purpose trust would address some limitations of beneficiary trusts. Purpose trusts are trusts that are created for specific, non-charitable purposes rather than for identifiable beneficiaries.[417] In contrast to LLCs, these trusts place the trust property outside of the ownership of the settlor and mandatorily limit the discretion of both trustees and beneficiaries in how they handle the trust property. While purpose trusts were primarily developed in offshore jurisdictions, an increasing number of onshore jurisdictions have legislation that permits the creation of non-charitable perpetual purpose trusts, including the states of Delaware, New Hampshire, Wyoming, and Maine. Major online platforms have already proposed the use of non-beneficiary trusts to resolve accountability challenges, such as the (now-abandoned) "civic data trust" of Google-affiliate Sidewalk Labs[418] and the trust intended to intermediate between Facebook and its Independent Oversight Board.[419]

An early example of a company adopting a stockholding trust explicitly for its users is NIO, a Chinese electric vehicle manufacturer that also offers a car-sharing app. In 2018, founder Bin Li announced plans to deposit approximately one third of NIO's shares, with financial rights but no voting rights, into a trust on behalf of users. Li wrote, in a letter included with NIO securities filings, "I believe this trust arrangement further advances NIO's pursuit of our original aspiration of becoming a user enterprise and will also deepen our relationship with users."[420]

415 *See generally,* Louis O Kelso and Patricia Hetter Kelso, *Democracy and Economic Power: Extending the ESOP Revolution* (Ballinger Pub Co 1986) ch 7. The sole, but successful, example of a Consumer Stock Ownership Plan (CSOP) was Valley Nitrogen Producers, Inc., headquartered in Fresno, California, which enabled its farmer-shareholders to acquire ownership of two fertilizer factories and buy their fertilizers from the factories at near-production cost between 1957 and 1963 when Congress changed the tax laws to inhibit such structures.

416 John Lewis Partnership, 'The Constitution of the John Lewis Partnership' (2017) 7 <https://www.johnlewispartnership.co.uk/content/dam/cws/pdfs/about-us/our-constitution/john-lewis-partnership-constitution.pdf>.

417 Richard C Ausness, 'Non-Charitable Purpose Trusts: Past, Present, and Future' (2016) 51 Real Property, Trust and Estate Law Journal 321, 327; Christopher Michael, 'The Employee Ownership Trust, an ESOP Alternative' (2017) 31 Probate and Property 42.

418 Alyssa Harvey Dawson, 'An Update on Data Governance for Sidewalk Toronto' (*Side Walk Labs*, 15 October 2018) <https://perma.cc/44J8-PRMP>.

419 Brent Harris, 'Establishing Structure and Governance for an Independent Oversight Board' (*facebook Newsroom*, 17 September 2019) <https://perma.cc/3XVW-3KZK>.

420 Nio, Inc., *Letter from Bin Li*, *in* Form F-1 Registration Statement under the Securities Act of 1933, at iii (filed with the SEC on Aug. 13, 2018), https://perma.cc/X7CH-3EVY; Nio, Inc., *NIO Inc. CEO Transferred 50 Million Shares to the Newly Established NIO User Trust*, NIO (Jan. 24, 2019, 3:00 AM EST), <https://perma.cc/WL9A-X7ME>.

In general, legislation concerning such trusts requires that the purposes are specifically defined, certain, reasonable, not immoral or against public policy, and capable of being fulfilled.[421] The governance of such trusts is flexible, usually requiring, at a minimum, the appointment of one trustee to administer the trust property and a trust protector to enforce the purposes of the trust. The trustee's fiduciary obligations are to fulfil the purposes of the trust through the administration of the trust property (e.g., shares in a company) rather than to a specified class of beneficiaries.[422] While individual persons may benefit from purpose trusts, this benefit is indirect. This is particularly advantageous when involving users, as an entity like CoTrust is not required to constantly update the personal details of who its user beneficiaries are, given that the trust is for a purpose, that can include benefiting active, confirmed users as a class. Furthermore, users are not required to take on the ordinary duties of a shareholder, nor are they required to dispose of any shares when leaving the platform. The perpetuity of a perpetual purpose trust exempts CoSocial Corporation from having to buy back the shares held in CoTrust at the end of a statutorily defined period, as may otherwise be the case with trusts.[423] Alternatively, if many of the users of CoSocial are residents in the U.K. or another jurisdiction where there is concern that the perpetual trust will not be recognized due to a violation of their rule against perpetuities, a suitably long duration of the trust (e.g., up to a maximum of 125 years for the U.K.)[424] can be included in the trust's governing instrument.

Depending on the jurisdiction, other structural options might be available. For instance, Dash – the organization behind the Dash cryptocurrency – settled an irrevocable trust in New Zealand in 2017 to enable the master nodes[425] of its network to participate in governance and gain ownership of the Dash Core Group (a Delaware C-Corporation). By allowing master nodes of the Dash network to elect the protectors of The Dash DAO Irrevocable Trust, the corporation is held accountable to the network it serves.

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421 Rose-Marie Belle Antoine, *Offshore Financial Law: Trusts and Related Tax Issues* (2nd edn, Oxford University Press 2013) 48–50.

422 ibid 51. Antoine refers to the possibility of shares in a corporation being owned by a purpose trust.

423 In California, an interest in a trust must vest or terminate no later than 21 years following the death of a potential beneficiary or actually vest or terminate within 90 years of being created. Cal. Prob. Code §§ 21200-21231. On the gradual decline of the Rules against Perpetuities in the United States and the concomitant rise of perpetual trusts, *see generally*, Jesse Dukeminier and James Krier, 'The Rise of the Perpetual Trust' (2003) 50 UCLA Law Review 1303.

424 Section 5, Perpetuities and Accumulations Act, 2009.

425 A master node is "a server with a full copy of the Dash blockchain, which guarantees a certain minimum level of performance and functionality to perform certain tasks related to block validation," for which the nodes are paid on the basis of "proof of service." As of October 31, 2020, there are roughly 5,000 master nodes across 50 countries. Dash Core Group Inc., 'Understanding Masternodes' (*DASH*, 31 October 2020) <https://perma.cc/FPR8-2UDN>.

As a beneficiary trust, an individual had to be identified in the settlement deed to represent the class of beneficiaries – Dash master nodes – and a trust period of 100 years (or less at the discretion of trustees) had to be specified.[426] Moreover, candidates who stand for election as Trust Protectors have to submit valid IDs and residency documents to avoid infringing mandatory laws, such as legal age requirements and U.S. sanctions.[427] Thus, this structure could be particularly suitable for a user-base that has strong ties to a network and has a robust internal mechanism for dealing with the issue of fake users.

Other examples include, cooperatives organized by user-members to hold shares in a platform company, akin to Québec's "worker-shareholder" cooperatives, could be developed as a means to advance user-ownership.[428] Non-equity profit-sharing bonuses to platform users could similarly align their economic gains with those of shareholders, executives and other non-executive employees who receive equity remuneration. Forms of employee co-determination in governance, without stock ownership,[429] might be expanded to include platform users. Such structures might be voluntary or required by law, but in either case, they must be designed to ensure users have meaningful, enforceable collective power.

4.2.1.2 Implications for Governance

ESOPs have become a common feature in the U.S. corporate landscape, but ordinarily they do not require significant employee participation in governance. As mentioned above, in private corporations, the voting rights of the shares held in the employee ownership trust are ordinarily exercised by trustees, with the exception of fundamental decisions such as liquidation or sale of the company when they are obligated to pass through their voting rights to employee-beneficiaries.[430] This is contrary to a growing body of

426 Ryan Taylor, 'Dash Core Group Legal Structure Details' (*Dash Forum*, 1 August 2018) <https://perma.cc/R87Z-ZCXG>. Deed of Settlement constituting The DASH DAO Irrevocable Trust, dated Dec 22, 2017, <https://perma.cc/G7G5-YC2F>.

427 Michael Seitz, 'Trust Protectors Election 2020' (*Medium*, 3 April 2020) <https://perma.cc/9EP9-JQMX>. The voters were not required to reveal their identities but had to use their master node private key to verify their status as owners. This was then audited by a third-party to make an eligible list of voters. Ryan Taylor, 'Dash Network Elected Trust Protectors: Closing the Governance Loop' (*Medium*, 31 December 2018) <https://perma.cc/66R7-2GPJ>.

428 Yvan Comeau and Benoit Levesque, 'Workers' Financial Participation in the Property of Enterprises in Quebec' (1993) 14 Economic and Industrial Democracy 233, 239–243; Sharit K Bhowmik, 'Workers as Shareholders: Case for Closer Examination' (1994) 29 Economic and Political Weekly 2580.

429 Thomas Piketty recently made the case for extending co-management in Anglo-American companies, including through board-level representation of workers, by drawing on the experience of Nordic countries and Germany. *See* Thomas Piketty, *Capital and Ideology* (Belknap Press : Harvard University Press 2020) 513.

430 Rosen and Rodrick (n 409) 16–17.

evidence that finds that employee financial participation is most effective when coupled with employee participation in governance,[431] which has spurred a growing interest in more participatory governance in ESOP workplaces.

A non-charitable perpetual purpose trust, as described above, can facilitate not only greater employee participation in the corporate governance of a corporation, but also that of other stakeholders who are vested in its continued existence and prosperity. In the context of the platform economy, this notably includes committed, active users of platforms. The Organically Grown Company, a wholesale distributor of organic produce in the Pacific Northwest of the United States, has introduced a purpose trust after being an agricultural market cooperative and operating an ESOP. Such a structure can give stakeholders, such as users, a direct voice in the election of a Trust Protector Committee, influence in the election of the board of directors of a corporation, and a right to present grievances to the committee if they feel that their interests are not being adequately addressed.[432]

A host of involvement mechanisms could be deployed to facilitate user governance. For instance, liquid democracy[433] and quadratic voting[434] appear to have some promise for governance in digitally enabled corporate contexts, balancing scale with expertise and commitment. An updated version of ancient Greek sortition could employ relatively small virtual

431 Blasi, Kruse and Freeman (n 385).

432 The Purpose Foundation (n 396) 28.

433 Liquid democracy refers to a system where voters delegate voting power to delegates over certain issues but can withdraw the delegation of that power at any time and vote directly. *See* Steve Hardt and Lia Lopes, 'Google Votes: A Liquid Democracy Experiment on a Corporate Social Network' [2015] Technical Disclosure Commons <https://www.tdcommons.org/dpubs_series/79>. Hardt and Lopes conduct a case study of liquid democracy in action on Google's internal corporate Google+ social network.

434 Posner and Weyl define quadratic voting as a voting tool "where individuals buy as many votes as they wish by paying the square of the votes they buy using some currency". Eric A Posner and E Glen Weyl, 'Quadratic Voting and the Public Good: Introduction' (2017) 172 Public Choice 1, 1. They posit that quadratic voting would reduce vertical and horizontal agency costs by giving minority shareholders – as well as stakeholders – the ability to increase the weight of their votes. Eric A Posner and E Glen Weyl, 'Quadratic Voting as Efficient Corporate Governance' (2014) 81 University of Chicago Law Review 251, 253,260. The response to criticisms that this would encourage plutocratic behaviour within corporate governance has been that the sums contributed to acquire votes would go to the corporation initially, with large shareholders (>1% of shares) only receiving 1% of the funds they spent on acquiring votes and the remainder going to other shareholders. ibid 261. It could also be that the currency used to pay for votes is not in fiat currency but a "voice credit" that could be internal to the platform and obtained through means other than wealth. Posner and Weyl have suggested that quadratic voting could also be used for a form of mutual management in online platforms, where "users could have voice credits that they receive for participation (say, a certain number for every stay, ride, or post) that they then could use to evaluate the performance of others on the system." Eric A Posner and E Glen Weyl, *Radical Markets: Uprooting Capitalism and Democracy for a Just Society* (2018) 117.

juries of users to study controversial issues and make decisions on behalf of users as a whole – a model used by the dispute resolution platform cooperative Kleros.[435] If an election system proves to be unwieldy or leads to democratic entropy, a sortition method[436] could be used to select representatives for the Trust Protector Committee.

Such a system for user governance must contend with concerns about principal-agent costs that might accrue, leaving directors unaccountable to both shareholders and non-shareholder groups.[437] The potential for tensions to emerge between shareholder-appointed directors (or employed executives) and stakeholder-appointed directors has also been acknowledged in the context of multi-stakeholder cooperatives, such as Japan's medical cooperatives.[438] The use of a purpose trust addresses this critique as it positions a large, fluid group of stakeholders as a class with a unified purpose. While critics of stakeholder theory have argued that it is vague in terms of its proposed objectives and that this can render management unaccountable,[439] the defined purposes and the broad powers of the Trust Protector Committee mitigates this risk. Even in purely economic terms, the inability of stakeholder groups to directly enforce the trust as beneficiaries, coupled with their financial interest in the company, would incentivize

435 Ast explains how Kleros uses a sortition system to select "jurors" to decide on disputes concerning online transactions. Federico Ast, 'Genesis: When Greek Lotteries Meet Medieval Private Law' in Kleros.io (ed), *Dispute Resolution: The Kleros Handbook of Decentralized Justice* (Kleros 2019). A similar system has been proposed for the blockchain-based social network Minds to handle content moderation, in the wake of Neo-Nazis exploiting its light touch approach to content moderation.Ben Makuch and Jordan Pearson, 'Minds, the "Anti-Facebook," Has No Idea What to Do About All the Neo-Nazis' (*Motherboard: Tech by Vice*, 28 May 2019) <https://perma.cc/A9CS-KHJR>.

436 Pek describes sortition, the lottery system where representatives are selected at random from a larger pool of potential candidates, and its historical use in representative government Simon Pek, 'Drawing Out Democracy: The Role of Sortition in Preventing and Overcoming Organizational Degeneration in Worker-Owned Firms' (2021) 30 Journal of Management Inquiry 193, 198.

437 Frank H Easterbrook and Daniel R Fischel, *The Economic Structure of Corporate Law* (Harvard University Press 1991) 38; Michael C Jensen, 'Value Maximization, Stakeholder Theory, and the Corporate Objective Function' (2002) 12 Business Ethics Quarterly 23, 237; Richard A Posner, *Economic Analysis of Law* (Third, Wolters Kluwer Law & Business 1986) 396.

438 Victor A Pestoff, 'The Social and Political Dimensions of Co-Operative Enterprises' in Jonathan Michie, Joseph R Blasi and Carlo Borzaga (eds), *The Oxford Handbook of Mutual, Co-Operative, and Co-Owned Business* (Oxford University Press 2017) 88; Aalt Colenbrander and Tineke Lambooy, 'Engaging External Stakeholders in Dutch Corporate Governance' (2020) 12 International and Comparative Corporate Law Journal 1, 3. In jurisdictions such as the Netherlands, this tension does not emerge in the same way as directors have to perform their duty in the interest of the legal entity and not the stakeholder group that nominated or appointed them. Instead, there may be dilemmas about weighing the (sometimes competing) interests of various stakeholder groups when acting in the interest of the legal entity, as well as actively engaging with stakeholders.

439 Jensen (n 437) 242.

them to monitor the activities of the committee and exercise their appointment rights carefully. The committee's own financial stake and fear of replacement would motivate its members to supervise the trust officers and the board. Thus, the alignment of interests in such a structure, combined with its democratic qualities, would go some way toward addressing the problem of apathy that typically bedevils companies with dispersed retail share ownership[440] as well as those with passive institutional investors.[441]

From a legal standpoint, the use of a purpose trust would permit fiduciaries to reorient their decision-making away from pursuing shareholder wealth maximization and toward fulfilling the specified purposes of the trust agreement. While it would be unreasonable to expect founders, employees, users, and investors to agree on every issue, the emergent mechanisms to signal stakeholder voice and the Trust Protector Committee would provide fora to work out topics of disagreement on equal footing before arriving at a decision. This would not only confer decisions made by the trust and the corporation with greater legitimacy, it would diminish the fiduciary problems associated with ESOPs, where the fiduciary of a trust may have divergent interests from the corporation in which the trust holds shares.[442] As such, elements of the governance structure of CoTrust, such as a Trust Protector Committee, may be of interest to emerging user trusts such as the Nio Inc. User Trust, which seek to involve users in decision-making about how financial returns are employed, but do not confer control rights over the company to the trust.[443]

4.2.1.3 Implications for Financial Rights

In the perpetual purpose trust outlined above, users would accrue divi (e.g., as bank deposits or payments to an account on the platform) from the CoTrust at the moment CoTrust itself receives dividends from its CoSocial Corporation shareholdings. Unlike a conventional security holding, users

440 Lisa M Fairfax, 'From Apathy to Activism: The Emergence, Impact, and Future of Shareholder Activism as the New Corporate Governance Norm' (2019) 99 Boston University Law Review 1301, 1314.

441 Lucian A Bebchuk, Alma Cohen and Scott Hirst, 'The Agency Problems of Institutional Investors' (2017) 31 The Journal of Economic Perspectives 89, 90, 100–101.

442 In ESOPs this is the case because the people acting as plan administrators are often the same people serving as the directors and officers of the corporation, leading to a conflict between their ERISA duty to act in the best interests of plan participants and their general fiduciary duty of loyalty to the corporation. This conflict can arise when an offer is made to purchase a company or when a plan is to be amended. Dana Muir and Norman Stein, 'Two Hats, One Head, No Heart: The Anatomy of the ERISA Settlor/Fiduciary Distinction' (2015) 93 North Carolina Law Review 459, 464–465.

443 Nio, Inc., *Letter from Bin Li*, *in* Form F-1 Registration Statement under the Securities Act of 1933, at iii (filed with the SEC on Aug. 13, 2018), https://perma.cc/X7CH-3EVY; Nio, Inc., *NIO Inc. CEO Transferred 50 Million Shares to the Newly Established NIO User Trust*, NIO (Jan. 24, 2019, 3:00 AM EST), <https://perma.cc/WL9A-X7ME>

would not have to accrue, hold, or dispose of equity themselves; however, the trust may structure their payments so that employees as a class are preferentially paid before users. Through payments in fiat currencies, bank deposits, or other widely accepted negotiable instruments, the platform can avoid the regulatory difficulties of privately issuing equity to a globally dispersed and constantly changing user base. This liquidated form of financial benefit is also easier to transfer to other companies. In this regard, lessons can be drawn from the experience of collaborative platforms such as HITRECORD, which has been making payments of varying amounts to community contributors around the world since 2005,[444] initially by issuing checks, and more recently, by using payment platforms like Hyperwallet.[445]

It is important to clarify that, given the length of time it generally takes before a platform company is profitable and able to distribute dividends,[446] it would be inadvisable for the divis of a non-charitable perpetual purpose trust to be considered as a retirement benefit plan for employees or users or as a substitute for a salary. The wildly varying nature of platforms, and their users' relationships to them, entails that the potential for financial returns would vary wildly. For gig work platforms, such a trust could be accompanied with portable benefit plans so as not to expose economically precarious individuals to undue risk.[447] This strategy may not initially seem attractive to highly skilled employees who may have found the promise of lucrative stock options more alluring than the mission of CoSocial. But given the expense involved in exercising stock options and the fact that the common stock will be relatively illiquid once the options are exercised (due to no IPO or acquisition being on the horizon), gradually accruing divis from the stockholding trust may also be viewed as more beneficial to them in the long run.[448]

444 Melanie Fawcett, 'Hollywood Calling: Hitrecord and the Power of Online Collaboration' [2016] Screen Education 86, 87.

445 HITRECORD, 'Are Artists Outside the United States Eligible to Receive Community Payments?' (*help.hitrecord.org*, 18 September 2019) <https://perma.cc/22HG-TU4L>.

446 Dan Caplinger, 'Will Facebook Start Paying a Dividend in 2019?' (*The Motley Fool*, 21 January 2019) <https://perma.cc/DZZ5-ZD7L>.

447 Silveman reports on a letter sent by some forty executives and public policy experts on the need for portable benefits for gig workers, including worker compensation and sick leave. Rachel Emma Silverman, 'On-Demand Workers Need "Portable Benefits," Tech and Labor Leaders Say' *Wall Street Journal* (10 November 2015) <https://perma.cc/H2ML-T7HS>. The need for social protection systems to be portable, in acknowledgment of labour market mobility is mentioned in Christina Behrendt, Quynh Anh Nguyen and Uma Rani, 'Social Protection Systems and the Future of Work: Ensuring Social Security for Digital Platform Workers' (2019) 72 International Social Security Review 17, 26, 32.

448 Pollman provides examples of employees being harmed by the expense of exercising their options, the illiquidity of exercised common stock and/or falling share prices. Pollman (n 389) 215.

Some trusts may be instead oriented more toward shared governance than distributing financial gains. For instance, social media platforms do not generate direct income from most users but do process their personal data. In such cases it may be preferable to design a purpose trust that retains the income from the stock it holds and allocates the income toward user organizing and advocacy efforts for the mission of user empowerment. To meet the purpose of this option, the use of these funds must be determined through a process that involves users directly.

4.2.1.4 Implications for Public Policy

As with any business organization that seeks to chart a path that is distinct from shareholder wealth maximization, the major issue with mainstreaming the adoption of purpose trusts for platform users will be financing the acquisition of shares by the trust. One option would be to introduce tax measures that make the creation of such trusts financially attractive, as was done previously in the United States at the federal level for ESOP trusts regulated by ERISA. Individuals and LLCs that sell their shares to a qualified ESOP – including the founders of a business or a VC fund organized as an LLC – can indefinitely defer payment of capital gains tax under section 1042 of the Internal Revenue Code if they reinvest ("rollover") the proceeds into a qualified replacement property.[449] One advocate for the use of perpetual purpose trusts for employee ownership in the United States has already proposed that the tax treatment of ESOPs should be extended to other kinds of employee ownership trusts, including perpetual purpose trusts.[450] This chapter advocates for such a regime being extended beyond the employment relation to include multi-stakeholder trusts such as CoTrust.

4.2.2 Option 2: Federation

The second option considers another way to reorient the company toward its community. In this scenario, CoSocial defined the outlines of a plan that, over a five-year period, would transition CoSocial from a single platform to a federated system called CoNet. Rather than continuing to manage the entire system through its vertically integrated organization, CoSocial's board decided to advance its market position by radically distributing decision-making power to the moderators and users of its platform. The first step in doing this involved converting CoSocial into

449 26 U.S.C. § 1042.
450 Michael (n 417) 47.

a Benefit Corporation,[451] so as to avoid derivative actions by disgruntled shareholders who disapprove of this distribution of power.[452] Converting into a Benefit Corporation would also permit the board of CoSocial to ward off takeover bids from larger competitors, which are a persistent threat in the platform economy.[453] The founders of CoSocial all agreed with this course of action and were instrumental in persuading some of the external investors that this conversion would allow them to gain long-term value.[454] The non-vested employee options were unaffected by the conversion as it did not involve a change in control and would be transferred to the new Benefit Corporation. As a consequence, the requisite two-thirds of all classes of shareholders voted for the conversion at a shareholders' meeting and the

451 A Benefit Corporation is a variant of the for-profit C-Corporation in that, in addition to pursuing profit, the business can pursue a general public benefit, with the option of also pursuing specific public benefits. The California Corporations Code defines a general public benefit as having "a material positive impact on society and the environment, taken as a whole, as assessed against a third-party standard, from the business and operations of a benefit corporation." Cal. Corp. Code § 14601(c). The Code mentions a non-exhaustive list of seven specific public benefits, but other specific public benefits can be included as long as they are more specific than the general public benefit, but broad enough to accommodate future changes. Model legislation for Benefit Corporations was first introduced by B Lab and since 2010, 37 states and the District of Columbia have adopted legislation that permits social entrepreneurs to form Benefit Corporations. *See* B Lab, 'State by State Status of Legislation' (*Benefit Corporation*, 2021) <https://perma.cc/R3KJ-VMPS>; Mark J Loewenstein, 'Benefit Corporation Law Twenty-Ninth Annual Corporate Law Center Symposium: Corporate Social Responsibility and the Modern Enterprise' (2017) 85 University of Cincinnati Law Review 381.

452 Judgments in cases such as *eBay Domestic Holdings, Inc. v. Newmark*, 16 A.3d 1 (Del. Ch. 2010) underscore the importance of entity form in pursuing non-shareholder interests. According to this decision, a for-profit corporation form is obliged to pursue shareholder profit and its board can face derivative actions for failing to do so. Converting into a Benefit Corporation can protect directors from this risk as the law permits the business to pursue both commercial and social objectives set out in the Benefit Corporation's articles. Instead of a derivative action, Benefit Corporation legislation provides for benefit enforcement proceedings through which failures to pursue general and/or specific public benefits are litigated. However, scholars have pointed out that this is a weak remedy, as the threshold for shareholders to bring such an action is high, directors are not held personally liable for monetary damages for failing to pursue a general or specific public benefit, and non-shareholders cannot bring such a proceeding without explicit provision being made for it in the company's articles. *See* Cal. Corp. Code § 14620(f); Loewenstein (n 451) 387–388.

453 McDonnell discusses expanding the justifications available to pursue non-shareholder interests during changes and sales of corporate control. Brett H Mcdonnell, 'Committing to Doing Good and Doing Well: Fiduciary Duty in Benefit Corporations' (2014) 20 Fordham Journal of Corporate and Financial Law 19, 53–56. Doyle, in turn, discusses the risk of takeover bids from large competitors. Kim Doyle, 'Facebook, Whatsapp and the Commodification of Affective Labour' (2015) 48 Communication, Politics & Culture 51, 56.

454 Cal. Corp. Code § 14603(a). The possibility of social media platforms like Facebook registering as public benefit corporations was also alluded to, but not further explored, by Klonick (n 380) 1668.

few that dissented were paid the fair market value of their shares. In its amended articles of incorporation, the new CoSocial Benefit Corporation stated that along with achieving a general public benefit, the company committed to the specific public benefit of (i) distributing power over the CoSocial network and infrastructure among its users and (ii) stimulating broad-based ownership of CoSocial corporation.

The new Benefit Corporation's strategy of distributing network power had both technical and organizational dimensions. On the technical side, CoSocial released a new version of its software with a free, copyleft license (e.g., GNU Affero General Public License v3.0)[455] that allowed user-groups to download and run the software on their own servers, while ensuring that a certain percentage of revenues earned through network transactions were shared with the company. The terms of the license also meant that other user-groups could iterate on the software improvements made by any other user-group. User-moderators of the groups on the platform already had significant autonomy on CoSocial; now, they could run a customized version of the CoSocial platform on their own servers for local user communities. As CoSocial implemented a decentralized social networking protocol (e.g., ActivityPub),[456] users were able to interact with other user-groups that had installed their own servers, as well as servers running third-party software that adopted CoSocial's open protocol.

On the organizational side, local legal entity forms that enabled member-ownership were registered to operate user-group Nodes. These often were, but not limited to, cooperatives. Nodes were conferred the ability to make a wide range of decisions over matters such as user-onboarding,[457] user-interface design, content moderation, data management policies, advertising policies, group governance, and which other Nodes to

455 We use the Free Software Foundation's definition of "free software," e.g., software that give users the freedom to run, copy, distribute, study, change and improve the software. This does not refer to price, as users can charge for modified software if they wish. A subcategory of free software can be licensed on copyleft terms, which means that users cannot restrict the freedoms associated with the software through their use and adaptations of it. Free Software Foundation, 'What Is Free Software?' (*GNU Operating System*, 30 July 2019) <https://perma.cc/KM6D-W2HW>.

456 "The ActivityPub Protocol is a decentralized social networking protocol based upon the ActivityStreams 2.0 data format. It provides a client to server API for creating, updating and deleting content, as well as a federated server to server API for delivering notifications and content." ActivityPub, 'W3C Recommendation' (23 January 2018) <https://perma.cc/XG2A-QFPZ>.

457 This includes setting the process of distinguishing genuine users from bots as well as those among the former who have a fleeting interest in CoSocial's activities and those who wish to contribute to an alternative way of governing a platform business.

collectively remove from the network.[458] By distributing decision-rights to these Nodes, each node was able to align its gig-work functionality with local regulations and the demands of gig workers in their jurisdiction. Distributing control of the network also entailed significant cost-savings because Nodes invested in expansion strategies, content moderation, and several other previously centralized functions.

Some decisions, however, were not delegated to the Nodes. To maintain certain core services that benefit from operating at scale – the payments system, the advertising marketplace, and the popular AI-powered recommendation algorithms – Nodes were expected to financially contribute to CoNet. Some Nodes could seek to opt out of these services or develop them independently, but most Nodes saw the benefit of having an organization facilitate the coordination of certain issues and sharing resources among the Nodes.

With this in mind, some of the moderators and active users decided to form CoNet Cooperative, an entity organized under the Cooperative Corporation Law of California[459] that was dedicated to furthering the interests of its Node-members. These members enjoyed one-member, one-vote decision-making rights in the governance of the CoNet Cooperative. In return, the membership conditions of CoNet Cooperative required that the owners of the Nodes pay monthly dues and maintain a minimum level of patronage,[460] which was expansively defined to encompass a broad range of activities from moderators/users of individual Nodes giving time to govern the cooperative to the contribution of meta-data and technical expertise to improve the offerings of the federated CoNet. For gig-work transactions that involved payments to individual users, the Nodes and CoNet Cooperative charged a small transaction fee that was set at a lower rate than competitor platforms.

Initially, a significant portion of these dues and fees went from CoNet Cooperative to CoSocial Benefit Corporation to cover overheads and the salaries of employees who remained with the company. However, as the model's popularity grew, CoNet Cooperative began to acquire shares in the CoSocial Benefit Corporation with the view of ultimately merging it with CoNet Cooperative once it had the means to tender an offer. This acquisition of shares was partially financed by the aforementioned member Nodes' dues and transaction fees from users. This was complemented by

458 It is not exceptional that platforms can decide what their "tone and tenor" is or involve users in content moderation processes, as even major platforms do so. Klonick (n 380) 1626, 1641. While this has to be calibrated to the business model of the Nodes and has to be mindful of commercial confidentiality, as a practical matter there is "no excuse for members not to be consulted or engaged on any issue." Peter Couchman, 'Governance and Organizational Challenges' in Jonathan Michie, Joseph R Blasi and Carlo Borzaga (eds), *The Oxford Handbook of Mutual, Co-Operative, and Co-Owned Business* (Oxford University Press 2017) 256.

459 Cal. Corp. Code § 12200.

460 Cal. Corp. Code §§ 12441, 12243.

donations of shares from CoSocial Benefit Corporation, from shares that had been redeemed earlier, so as to comply with its specific public benefit of expanding broad-based ownership of the company. Over time, CoSocial became wholly owned by a cooperative of its member-owned Nodes.

Through this arrangement, users enjoyed the ubiquity of a common network along with a considerable diversity of Nodes to choose from. The emphasis on relentlessly growing CoSocial's user base and maximizing shareholder value had gradually been replaced with a commitment to enhancing the welfare of users. Users simultaneously become part of two public spheres, at the level of their individual Nodes and at the level of the Cooperative. For the users who increasingly come to identify more with their favourite Nodes than with CoNet, the cooperative organizational network faded into the background as it gave rise to an ever more diverse, community-governed experience of Internet social media and gig labour.[461]

4.2.2.1 Background

In comparison to the perpetual purpose trust scenario in section 4.2.1., a federation is well-regarded by those acquainted with the governance of social and syndicalist movements,[462] global common-pool resources,[463] and, in particular, those familiar with the cooperative sector.[464] Its use in

461 The relationship and behaviour of the Nodes with respect to each other and to the CoNet Cooperative can be described as a form of polycentric governance. In contrast to a monocentric system of governance, which has a single decision-making authority, this is a system where there are various, overlapping centres of decision-making authority, all with some degree of autonomy from each other, but each with a central understanding that they have to take into account what others are doing. This interdependence typically leads to the formation of common rules and coordinating institutions. Keith Carlisle and Rebecca L Gruby, 'Polycentric Systems of Governance: A Theoretical Model for the Commons' (2019) 47 Policy Studies Journal 927, 932; Mark Stephan, Graham Marshall and Michael McGinnis, 'An Introduction to Polycentricity and Governance' in Andreas Thiel, Dustin E Garrick and William A Blomquist (eds), *Governing Complexity: Analyzing and Applying Polycentricity* (Cambridge University Press 2019) 29. The idea of friendly competition among Nodes has been referred to as genuine, competitive federalism. Shruti Rajagopalan and Richard E Wagner, 'Constitutional Craftsmanship and the Rule of Law' (2013) 24 Constitutional Political Economy 295, 306.

462 William H George, 'Proudhon and Economic Federalism' (1922) 30 Journal of Political Economy 531, 540; Michael Hardt and Antonio Negri, *Assembly* (Oxford University Press 2017) 68.

463 This chapter adopts Quilligan's distinction between public goods, common-pool resources and common goods. Going beyond notions of exclusivity and rivalrousness, the latter two are goods which are best governed by social mutuality and collaboration. James B Quilligan, 'Why Distinguish Common Goods from Public Goods?' in David Bollier and Silke Helfrich (eds), *The Wealth of the Commons: A World Beyond Market & State* (Levellers Press 2012).

464 Ellerman, *Democratic Worker-Owned Firm* (n 20) 104; Sonja Novkovic, 'Co-Operative Networks, Adaptability and Organizational Innovations' in Caroline Gijselinckx, Li Zhao and Sonja Novkovic (eds), *Co-operative innovations in China and the West* (Palgrave Macmillan 2014) 49.

the cooperative sector, including in the agriculture and financial industry,[465] has meant the use of federations is widespread in businesses and political movements. The CoNet structure described above incorporates the features of both a consumers' cooperative and a shared-services' cooperative,[466] blending the way in which CoNet users participate in both consumption and production.[467] The transactions between the user and their Node are akin to that of a consumers' cooperative, in that a member-owned and member-governed Node operates in the interest of its user-members, with its services allowing them to, for example, consume other's social media content. The transactions between the Nodes and the CoNet Cooperative are similar to that of a shared-services' cooperative among smaller businesses in a common industry. The various Nodes maintain a high degree of operational autonomy, but they also benefit from a shared content network and various resources that would be too capital-intensive for them to invest in by themselves. Nodes can also exercise decision-making authority over the organization that manages these shared resources.

This kind of cooperative model allows economies of scale while maintaining greater local diversity than comparable investor-owned firms.[468] Indeed, as Elinor Ostrom identifies, the existence of "multiple layers of nested enterprises" is characteristic of successful institutions that manage large common-pool resources over a substantial period of time.[469] The CoNet Cooperative is a nested institution, as it manages common goods such as the protocol and payment services, while member Nodes retain significant autonomy.[470] In terms of power, such cooperative federations invert the top-down logic of archetypical corporate groups, as it is the local entities that act as the "parents" of a centralized, "daughter" organization

465 Claudia Sanchez Bajo and Bruno Roelants, *Capital and the Debt Trap: Learning from Cooperatives in the Global Crisis* (Palgrave Macmillan 2011) 106–107.

466 "A shared-services cooperative is a business organization owned and controlled by private businesses or public entities that become members of the cooperative to more economically purchase services and/or products." Anthony C Crooks, Karen J Spatz and Marc Warman, 'Basics of Organizing a Shared-Services Cooperative' (United States Department of Agriculture, Rural Business and Cooperative Development Services 1995) Service Report 46 <https://perma.cc/3D4J-GXV6>. For more on the role of shared-services cooperatives in the context of the platform economy, see chapter 6.

467 ibid; Raym Crow, 'Publishing Cooperatives: An Alternative for Non-Profit Publishers' (2006) 11 First Monday <https://journals.uic.edu/ojs/index.php/fm/article/view/1396/1314>.

468 Svend Albaek and Christian Schultz, 'On the Relative Advantage of Cooperatives' (1998) 59 Economics Letters 397, 397–398.

469 Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press 2015) 90, 101–102.

470 Mayo Fuster Morell, 'Governance of Online Creation Communities for the Building of Digital Commons: Viewed through the Framework of Institutional Analysis and Development' in Brett M Frischmann, Michael J Madison and Katherine Jo Strandburg (eds), *Governing knowledge commons* (Oxford University Press 2014) 281.

that serve a defined common function[471] and enable local entities to provide a quality and diversity of services that would be impossible in isolation. Seeking a similar balance, both the Mastercard and VISA payment systems were once organized as cooperative federations to allow local entities to provider higher qualities services.[472]

Consumer cooperatives have a storied history, being one of the earliest uses of the cooperative form.[473] They have had a constant presence in the retail sector in Western Europe and, to a lesser extent, the U. S. for more than a century.[474] Such cooperatives permit retailers to cater to the interests of local consumers while benefiting from shared wholesaling, procurement, branding and marketing. The degree to which such structures decentralize decision-making, and production differ across countries and over time. Ekberg, in surveying the history of retail consumer cooperatives across Western Europe since the Second World War, found that retaining a federated structure – even during times of financial distress – has been successful in overcoming financial distress in many instances while reverting to centralization has not.[475] In countries like Italy, in addition to a vibrant retail consumers' cooperative sector,[476] public utility services such as water and electricity supply are also furnished through consumer cooperatives.[477]

Beyond retail and public utilities, consumer and shared-service cooperatives have also prominently been featured in the media industry, particularly in news-wire services and radio. The Associated Press (AP) was organized as a cooperative to have exclusivity over news and to allow member-newspapers to share the costs of gathering news (e.g., telegram dispatches) by charging members based on their respective use of the news

471 Espen Ekberg, 'Organization: Top Down or Bottom Up? The Organizational Development of Consumer Cooperatives, 1950-2000' in Patrizia Battilani and Harm G Schröter (eds), *The Cooperative Business Movement, 1950 to the Present* (Cambridge University Press 2012) 222.

472 David L Stearns, *Electronic Value Exchange: Origins of the VISA Electronic Payment System* (Springer-Verlag 2011) viii, 27–28, 38.

473 Percy Redfern, *The Story of the C. W. S. The Jubilee History of the Cooperative Wholesale Society, Limited. 1863-1913* (The Co-operative wholesale society limited 1913); Sidney Webb and Beatrice Webb, *The Consumers Co-Operative Movement* (Longmans, Green and Co 1930) 5.

474 Clarke A Chambers, 'The Cooperative League of the United States of America, 1916-1961: A Study of Social Theory and Social Action' (1962) 36 Agricultural History 59, 59; Ekberg (n 471); Florence E Parker, *The First 125 Years: A History of Distributive and Service Cooperation in the United States, 1829-1954* (Cooperative League of the United States 1956) 66.

475 Ekberg (n 471) 237–238.

476 Vera Zamagni, 'A World of Variations: Sectors and Forms' in Patrizia Battilani and Harm G Schröter (eds), *The Cooperative Business Movement, 1950 to the Present* (Cambridge University Press 2012) 72.

477 Pier Angelo Mori, 'Customer Ownership of Public Utilities: New Wine in Old Bottles' (2013) 2 Journal of Entrepreneurial and Organizational Diversity 54, 55.

reports in their publications.[478] Despite a sequence of structural transitions, culminating in a direction from the U.S. Supreme Court to amend how it transacts with non-members, it continues to be a not-for-profit cooperative.[479] The Associated Press claims that its reports reach around half the world's population each day,[480] making its reach substantially greater than that of even Facebook.[481] On the other end of the spectrum, in terms of scale, community radio stations (often organized as cooperative-like entities) were able to independently cater to widely different listener/supporter communities and involve them in organizational decision-making, while simultaneously building networks with other values-aligned community radio stations to create content and share technological resources (e.g., KRAB Nebula; the Pacifica Affiliate Network coordinated by the non-profit Pacific Foundation). It was this decentralization in decision-making that allowed these stations to bring bold content to the airwaves that went against the grain, starting with the views of Martin Luther King, Jr., Malcolm X, and others in the civil rights movement.[482]

The history of the Internet, particularly after it entered mainstream use, also offers precedents for federated models as described in this section. The French Data Network (FDN) is an Internet access provider that was formed in 1992 and is managed by organizations on behalf of their member-subscribers. The member-subscribers pay an annual membership fee and a monthly subscription to access the Internet.[483] In the past decade, the FDN has sought to federalize its structure by encouraging the establishment of local cooperative and member-owned ISPs and VPN service providers under the umbrella of a federation (a non-profit association). While these groups individually seek to provide Wi-Fi, fibre-optic cable, and VPN access to their member-subscribers, collectively they embark on community projects such as local file-sharing,[484] lending of resources such as servers and cheap bandwidth and organizing in-person general assemblies.[485] As with

478 Jonathan Silberstein-Loeb, *The International Distribution of News: The Associated Press, Press Association, and Reuters, 1848–1947* (Cambridge University Press 2014) 2, 48–49; Victor Rosewater, *History of Coöperative News-Gathering in the United States* (Johnson 1970).

479 Associated Press v. United States, 326 U.S. 1 (1945).

480 Associated Press, 'About Us' (*Associated Press*, 2018) <https://perma.cc/C67D-TFUD>.

481 In the second quarter of 2020, Facebook had 1.79 billion daily active users out of a world population of roughly 7.8 billion. This is about 20% of the global population. Worldometer, 'Current World Population' (*Worldometer*, 31 October 2020) <https://perma.cc/CH56-PUML>; Facebook, 'Facebook Reports Second Quarter 2020 Results' (*Facebook Investor Relations*, 30 July 2020) <https://perma.cc/7G5E-YJ6V>.

482 William Barlow, 'Community Radio in the US: The Struggle for a Democratic Medium' (1988) 10 Media, Culture & Society 81, 86, 88, 93.

483 Félix Tréguer, 'Federating Community Networks: A Case Study from France' in Luca Belli (ed), *The community network manual : how to build the Internet yourself*, vol III (FGV Direito Rio 2018) <https://perma.cc/Q9Y7-PLE8>.

484 ibid 164–166.

485 ibid 169.

progressive community radio, the FDN has also used its technology for socio-political ends. For instance, FDN put up a mirror site for WikiLeaks and set up modems and call-in numbers for Egyptians to connect to the Internet when access was blocked.[486] The FDN also represents the voice of the community on hot-button issues such as net neutrality.[487] Similar to FDN, guifi.net, which originated in Catalonia, was formed as a bottom-up technological project to extend broadband Internet access to underserved communities and is run by, and for, its more than 13,000 registered members through digital participation tools and face-to-face meetings.[488]

The capacities attributed to CoNet's Nodes are to be found in existing federated social networks such as Mastodon and GNU Social,[489] although both have fallen far short of the major centralized social networks in terms of reach. Nevertheless, there are examples of member-owned technology networks which do have the size and global scale of the envisioned CoNet. WorldCat, for instance, is the premier international library catalogue stewarded by the OCLC Cooperative, an organization comprised of its 17,983 library-members in 123 countries, member-elected Regional and Global Councils of library-members, a member-elected Board of Trustees, and a non-profit corporation governed by said Board.[490] The Cooperative enables library-members to share resources, cut costs (e.g., on original cataloguing), and increase its visibility, in exchange for inter alia contributing meta-data and holdings information. This immense store of data has, in turn, enabled OCLC to develop a host of web-applications, library management, and cataloguing software.[491]

These examples of federated social networks and other member-owned technology networks point toward a return to federated protocols instead of platforms as the basic container for online networks.[492] Early in the development of Twitter, such protocol federation was considered but ultimately rejected.[493] In other words, the technology for social media federations

486 ibid 163.

487 ibid 171.

488 Roger Baig and others, 'Guifi.Net, a Crowdsourced Network Infrastructure Held in Common' (2015) 90 Computer Networks 150, 160, 162.

489 M Zignani, S Gaito and GP Rossi, 'Follow the "Mastodon": Structure and Evolution of a Decentralized Online Social Network', *ICWSM* (Association for the Advancement of Artificial Intelligence 2018) <https://air.unimi.it/retrieve/handle/2434/629384/1180809/2018_ICWSM.pdf>.

490 OCLC, 'WorldCat Rights and Responsibilities for the OCLC Cooperative' (*OCLC*, 2010) <https://perma.cc/ASJ9-UV47>.

491 OCLC, 'All OCLC Products and Services' (*OCLC*, 1 November 2018) <https://perma.cc/J4H5-LPW7>.

492 Mike Masnick, 'Protocols, Not Platforms: A Technological Approach to Free Speech' (*Knight First Amendment Institute at Columbia University*, 21 August 2019) <https://perma.cc/8RW8-4FGD>.

493 Schneider, *Everything for Everyone* (n 348) 167.

has existed for years, as has the interest;[494] what has been missing is the business model to make it more widespread. In 2017, Facebook CEO Mark Zuckerberg lamented the difficulty of governing a massive, centralized platform and called for strategies that would enable more local governance.[495] Perhaps the CoNet scenario outlined in this section represents a means for doing so.

4.2.2.2 Implications for Governance

Alexander Galloway has pointed out the rigid forms of control that can arise in networks that share underlying protocols, where the designers of a difficult-to-change protocol wield outsized and often invisible authority.[496] CoNet would require such a shared protocol for interoperability of its Nodes,[497] but the rigidity of protocol-based systems would be mitigated by its cooperative structure. Node operators would have a say in decisions about changes to their shared protocol, ensuring a measure of direct accountability that many protocols lack. Cooperative governance would also provide a forum in which issues and conflicts among Nodes could be coordinated and resolved (e.g., Nodes competing for users), as compared to more confederal structures in which secondary entities have a far weaker position.[498] This, in turn, would allow for solidarity among Nodes as well as the sharing of best-practices across CoNet, both of which have been seen in non-digital cooperative federations with interlocking directorships.[499] While bearing these advantages in mind, the governance of federations raises its own challenges.

494 Geert Lovink and Ned Rossiter, *Organization After Social Media* (Autonomedia 2018) 3; Robert W Gehl, 'Real (Software) Abstractions: On the Rise of Facebook and the Fall of MySpace' (2012) 30 Social Text 99, 114.

495 Mark Zuckerberg, 'Building Global Community' (*Facebook*, 16 February 2017) <https://perma.cc/G8WV-H9WL>.

496 *See generally,* Alexander R Galloway, *Protocol: How Control Exists after Decentralization* (MIT Press 2004).

497 Interoperability refers to the "extent to which one platform's infrastructure can work with others." Bennett Cyphers and Danny O'Brien, 'Facing Facebook: Data Portability and Interoperability Are Anti-Monopoly Medicine' (*Electronic Frontier Foundation*, 24 July 2018) <https://perma.cc/K8TS-QZ2Z>.Along with lawyers such as Khan & Pozen, prominent finance and economics professors have also called for (major) online platforms to be made interoperable so as to reduce incumbency advantages and switching costs. Khan and Pozen (n 383) 538–539; Sai Krishna Kamepalli, Raghuram Rajan and Luigi Zingales, 'Kill Zone' (National Bureau of Economic Research 2021) 32.

498 Nicolás Brando and Helder De Schutter, 'Federal Commons' in Samuel Cogolati and Jan Wouters (eds), *The commons and a new global governance* (Edward Elgar Publishing 2018) 48.

499 Interlocking directorships refers to the situation in which the director of a primary entity serves on the board of another entity, including secondary entities in a federation. Kostas Karantininis, 'The Network Form of The Cooperative Organization: An Illustration with the Danish Pork Industry' in Kostas Karantininis and Jerker Nilsson (eds), *Vertical markets and cooperative hierarchies the role of cooperatives in the agri-food industry* (Springer 2010) 23, 28.

Among knowledge-economy sectors in which global, inverted federations are common, such as in certain large U.S., U.K. and German law firms,[500] common problems include discrepancies in quality among members of the federation[501] and the gradual de-equitization of partners by depriving them of a meaningful voice in the management of the global firm.[502] Examples ranging from transnational law firms to the Co-operative Wholesale Society in England (another complex cooperative federation) highlight how tensions may emerge between the primary entities, such as Nodes, and secondary entities such as the CoNet Cooperative, concerning the purpose of the latter. Over time, the secondary entity could come to expect that the local primary entities serve the secondary entity's interest rather than vice versa.[503] To avoid falling into patterns similar to existing platforms that are charged with alleged abuses of monopsony power, this will have to be actively mitigated.[504] The federation model would, in effect, create a market for governance[505] among the Nodes for users to choose from. If some of the Nodes were to actively challenge the monopsony power of the CoNet Cooperative, concerns about an abuse of monopsony power could be somewhat allayed.

Governance concerns may also arise at the primary level of such federations. Self-hosted platforms such as Minecraft[506] and Wikia (now Fandom)[507] suggest that heterogeneous governance practices ranging from micro-democracies to oligarchies and "benevolent dictators for life" can emerge in federated networks. By registering as a member-owned legal

500 Glenn Morgan and Sigrid Quack, 'Institutional Legacies and Firm Dynamics: The Growth and Internationalization of UK and German Law Firms' (2005) 26 Organization Studies 1765, 1775.

501 Debora L Spar, 'Lawyers Abroad: The Internationalization of Legal Practice' (1997) 39 California Management Review 8, 22–23.

502 James R Faulconbridge and Daniel Muzio, 'The Financialization of Large Law Firms: Situated Discourses and Practices of Reorganization' (2009) 9 Journal of Economic Geography 641, 651–652, 655–656.

503 James R Faulconbridge, 'Managing the Transnational Law Firm: A Relational Analysis of Professional Systems, Embedded Actors, and Time – Space-Sensitive Governance' (2008) 84 Economic Geography 185, 194; Anthony Webster, John Wilson and Rachael Vorberg-Rugh, 'The Rise, Retreat and Renaissance of British Cooperation: The Development of the English Cooperative Wholesale Society and the Cooperative Group, 1863-2013' in Johanna Heiskanen and others (eds), *New Opportunities for Co-operatives: New Opportunities for People* (Ruralia Institute, University of Helsinki 2012) 93.

504 Khan, 'Amazon's Antitrust Paradox' (n 308) 766.

505 Charles M Tiebout, 'A Pure Theory of Local Expenditures' (1956) 64 Journal of Political Economy 416, 422.

506 Seth Frey and Robert W Sumner, 'Emergence of Integrated Institutions in a Large Population of Self-Governing Communities' (2019) 14 PloS One e0216335.

507 Aaron Shaw and Benjamin M Hill, 'Laboratories of Oligarchy? How the Iron Law Extends to Peer Production' (2014) 64 Journal of Communication 215, 225.

entity, such as a cooperative, the Node could embed certain governance rules such as one-member-one-vote, the minimum number of members needed for a quorum, and the appointment and composition of a representative board. This would make explicit the terms of Node governance, which might otherwise be left to soft norms, allowing implicit power structures to arise.[508] A robust governance structure would provide guardrails against oligarchic behaviour by certain members or the prioritization of short-term agendas that may harm the long-term interests of the Node. Additionally, the inclusion of users in decision-making would give them a voice on issues that directly affect their experience on the platform such as the form of encryption to be used over communications, the type of advertisers that will be allowed on the platform, and how personal data will be managed. The reconfiguration of decision-making rights proposed by this scenario would give users and other stakeholders the opportunity to reflect on the goals and business model of CoNet – deciding, for instance, whether it should focus on exponential expansion by emulating its competitors or shifting to growth that is "slow but sure."[509] This, in turn, would shape the choices CoNet makes to earn revenue. Ultimately, the creativity of founding members in designing the internal governance of a given Node would only be limited by any mandatory rules imposed on its legal form (e.g., minimum number of members) in the jurisdiction concerned.

Another issue for such a cooperative structure to address is its exclusion of persons who do not consent to the new terms of use. The exclusive right of shared-services cooperatives to provide a service and their members to benefit from this service has, naturally, deprived non-members. This has been a cause for concern as cooperatives have grown in scale within a given market. Whether this is AP excluding non-members from news reports[510] or community radios preventing others from using a standard FM spectrum allocated by the U.S. federal government to non-commercial broadcasters,[511] cooperative history is replete with such examples. This touches upon an important normative question raised by John L. Hochheimer in the context of community radios: should community radios serve their communities, or is the community a resource that is intended for society as a whole?[512]

508 Jo Freeman, 'The Tyranny of Structurelessness' (2013) 41 WSQ: Women's Studies Quarterly 231.

509 To appropriate a motto of the Lincoln Equitable Co-operative Industrial Society (LECIS) from 1863. Andrew JH Jackson, 'The Cooperative Movement and the Education of Working Men and Women: Provision by a Local Society in Lincoln, England, 1861–1914' (2016) 90 International Labor and Working-Class History 28, 33.

510 Associated Press v. United States, 326 U.S. 1 (1945).

511 Barlow (n 482) 99.

512 John L Hochheimer, 'Organizing Democratic Radio: Issues in Praxis' (1993) 15 Media, Culture & Society 473.

Transposing this onto CoNet, tensions might emerge between expectations of an individual Node to serve its users (i.e., seeing the network as a private good or club good) and serving users of all other Nodes in CoNet as well as users of other decentralized social networking platforms that use the same protocol (i.e., seeing the network as a common good). While social media content is excludable, unlike breaking news reports and narrowly allocated radio spectrums, it is non-rivalrous and anti-rivalrous.[513] In other words, not only does social media content not diminish in value when simultaneously shared or consumed, it generally increases in value the more it is simultaneously shared or consumed.[514] An understanding of this property of the system may allow users to appreciate that the benefit of their individual Nodes is contingent, to at least some extent, on what is beneficial for other Nodes and other decentralized social networking platforms.[515] One way of balancing the interests of user members and non-member users could be through the extension of certain control rights to the latter in the cooperative's bylaws (e.g., consultation on major strategic decisions), an option that is already available under California's Cooperative Corporation Law.[516] Educating users about the properties, architecture, and political economy of platforms may also help ameliorate some of these governance challenges, as has long been the case with cooperatives.[517] Such education could prove to be an important service provided by the CoNet Cooperative.

4.2.2.3 Implications for Financial Rights

By registering as member-owned legal entities, the Nodes could limit the liability of users from the financial risks of the collective enterprise. Conversely, the separate legal personality of the entity, in conjunction with end-user licenses which inform users of their obligations to avoid posting

513 The gig work dimension of CoSocial is rivalrous.

514 F Xavier Olleros, 'Antirival Goods, Network Effects and the Sharing Economy' (2018) 23 First Monday.

515 Aymeric Mansoux and Roel Roscam Abbing, 'Seven Theses on the Fediverse and the Becoming of FLOSS' in Kristoffer Gansing and Inga Luchs (eds), *The Eternal Network: The Ends and Becomings of Network Culture* (Institute of Network Cultures & transmediale eV 2020) 126.

516 Cal. Corp. Code § 12238(b)

517 On the importance of education for cooperatives, *see, e.g.,* Jackson (n 509) 37–41, 47; Jessica Gordon Nembhard, *Collective Courage: A History of African American Cooperative Economic Thought and Practice* (Penn State Press 2014) 101–103.

copyright protected content, could help shield the Node from intermediary liability. [518]

In contrast to a more centralized model, a federated network of Nodes would mean that most of the operating expenses, including shared services developed by CoNet Cooperative, will be met by individual Nodes. Local surpluses, therefore, will largely be reinvested in the CoNet ecosystem. If the Nodes are not charitable entities and are permitted to make distributions,[519] a divi can be paid to individual users after these operating expenses are met. Moreover, if a Node chooses to have distinct classes of membership, it could include a minority of investor-members with the understanding that they would receive a capped return on investment (e.g., up to 6%).

As is typical with a shared-service cooperative, the cooperative's own surpluses (if any) could in part be returned to member Nodes as patronage dividends, in proportion to their patronage. At the same time, the bylaws of CoNet Cooperative and individual Nodes would need to prevent excessive dividend-seeking by individual members. This would ensure that sufficient resources can be retained and reinvested in the Nodes to develop the shared infrastructure, support existing or new Nodes and, based on the prior experience of cooperative federations such as Desjardins and Mondragon, establish an indivisible reserve for times of financial distress.[520] The acquisition of

518 Intermediary liability refers to the civil liability that intermediaries, such as internet-service providers or online platforms, may face for the actions of their users. Legislative interventions, such as the Communications Decency Act, 47 U.S.C. § 230 (2012), were introduced to shield intermediaries from such liability and to incentivize them to play a quasi-regulatory role in blocking and screening certain objectionable content, including the moderation and removal of content. Klonick provides an overview of how the interpretation of this section by state and circuit courts have served to preclude strict liability for intermediaries such as website operators, particularly in the case of corporations such as Facebook. Klonick (n 380) 1606–1609. Aubrée and de Rosnay discuss how community networks are protected from intermediary liability. Virginie Aubrée and Mélanie Dulong de Rosnay, 'Fostering Sustainability of Community Networks: Guidelines to Respect the European Legal Framework' in Luca Belli (ed), *The community network manual : how to build the Internet yourself*, vol III (FGV Direito Rio 2018) 177, 181, 185 <https://perma.cc/N895-PFL9>.

519 *Compare* Nonprofit Public Benefit Corporations, Cal. Corp. Code §§ 5237, 5410 (prohibiting distributions and making directors jointly and severally liable for making distributions). Nonprofit Mutual Benefit Corporations can only make distributions upon dissolution and when memberships are redeemed or purchased subject to certain conditions. Cal. Corp. Code §§ 7411-7414. Cooperative Corporations, in contrast, may make distributions, but those distributions cannot exceed 15% multiplied by contributions (whether membership fees, capital credits, or otherwise) to capital. Cal. Corp. Code § 12451. This is an important point as members may be liable for any amount that they knowingly receive which has been distributed wrongfully. Cal. Corp. Code § 12455.

520 In California, a worker cooperative can create an indivisible reserve, so long as the funds do not derive from the patronage of the members. Bajo and Roelants describe the advantages of having an indivisible reserve based on the experience of Desjardins and Mondragon. Sanchez Bajo and Roelants (n 465) 161, 179.

CoSocial Corporation by CoNet Cooperative, for instance, is an expensive endeavour, one in which the interests of various CoSocial shareholders have to be reconciled.

Previous experience of federated social networks[521] suggest that most usage is likely to be clustered in a small number of successful Nodes, which will also capture a significant share of financial gains. The establishment of a CoNet Cooperative to unite the various Nodes would help prevent the system from being fully captured by the interests of the most successful Nodes, as it would allow the more successful Nodes to receive higher patronage dividends while limiting their control rights due to there being one-member, one-vote cooperative governance.

4.2.2.4 Implications for Public Policy

As in the case of existing federated social networks using open-source software[522] and other network organizations such as franchises,[523] Nodes would be subject to local regulation. The individual Nodes and their servers would take responsibility for adapting their rules and norms to local legal regimes, such as those governing labour and employment relationships or the formation requirements for member-owned enterprises. Less of the regulatory burden would fall on the central federation, which could result in a parsimony appealing both to regulators and to operators at various levels of the network. As with rural electric co-ops and franchisees,[524] the costs of organization and operation would fall on local Nodes. This would mean Nodes would have to cautiously consider establishment and slow the growth of the network, but this caution will improve the chances of each Node surviving.

Conversely, since the businesses of individual Nodes would benefit from a shared brand identity, their owners and the CoNet Cooperative as a whole would have an incentive to ensure that all Nodes meet certain minimum technical and operational standards in order to prevent free-

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521 Frey and Sumner (n 506); Zignani, Gaito and Rossi (n 489).

522 "[I]t is possible to create an online community that can interface with the rest of the Fediverse but that operates according to its own local rules, guidelines, modes of organization, and ideology." Mansoux and Abbing (n 515) 130.

523 Several U.S. states, along with countries around the world, have laws governing franchising. This may be through specific franchise legislation or through competition law or foreign trade and investment law. While a master franchise agreement may operate transnationally, these laws shape pre-contractual disclosures, dictate the terms of an in-term franchise relationship, and constrain forms of coordination that could restrict trade and protect local economies. *See*, Mark Abell, 'The Regulation of Franchising Around the World' in Mark Abell (ed), *The Franchise Law Review* (7th ed., Law Business Research Ltd 2020).

524 Sandeep Vaheesan and Nathan Schneider, 'Cooperative Enterprise as an Antimonopoly Strategy' (2019) 124 Penn State Law Review 1, 21; Karin Fladmoe-Lindquist and Laurent L Jacque, 'Control Modes in International Service Operations: The Propensity to Franchise' (1995) 41 Management Science 1238, 1238.

riding behaviour. In addition to promoting healthy self-regulation, such incentives could also encourage proactive policy advocacy to protect the integrity of the network as a whole. For instance, the CoNet Cooperative board may see fit to lobby against "data localization" laws that could, among other things, expose users to heightened privacy and cybersecurity risks.[525] The existence of a wider member-owned network organization may act as a countervailing force to the imposition of oppressive regulation and aid in promoting more user-centric regulations.[526]

Regulatory intervention could be a means of creating such a federated network. In the CoSocial scenario above, federation was a voluntary choice – one that allows for the creation of standardized common protocols for Nodes. However, such an outcome might also be dictated by a regulatory authority through an antitrust case, on the basis that a federated cooperative would result in a more competitive market than a platform controlled by a single, monopolist or monopsonist.[527] The most famous example of this is the breakup of the Bell system operated by AT&T that at one point dominated both the telephone service and telephone equipment markets in the United States. The divestiture of seven independent companies, following an agreed consent decree on January 8, 1982, spurred competition in the market for long distance telecommunication, allowing competitors such as MCI and Sprint to emerge as well with more productive R&D post-divestiture.[528] The need for more competitor platforms has been echoed by others.[529]

However, there is reason to be sceptical that such action will be taken in the United States at present, given the recent history of lax antitrust enforcement[530] and a narrow interpretation of anti-competitive behaviour. The latter was most recently demonstrated in the U.S. Supreme Court's decision in *Ohio v. American Express Co*.[531] That case concerned the operation of a two-sided market by credit card companies (i.e., involving cardholders and merchants), described by the Court as a "transaction platform," which varies from the other platforms discussed until now in that they cannot provide services to one side of the market independently but must

525 Anupam Chander and Uyên P Lê, 'Data Nationalism' (2015) 64 Emory University School of Law 677, 719.

526 See, for e.g., the role of lobbying by large cooperatives in the case of cooperative housing in Canada in Frank Lowery, 'National Report for Canada' (International Co-operative Alliance and the European Union 2020) 14 <https://bit.ly/3gL9ZrB>.

527 Vaheesan and Schneider (n 524) 225–226.

528 Anusua Datta, 'Divestiture and Its Implications for Innovation and Productivity Growth in U. S. Telecommunications' (2003) 69 Southern Economic Journal 644, 648, 656–657; John Pinheiro, 'AT&T Divestiture & the Telecommunications Market' (1987) 2 High Technology Law Journal 303.

529 Balkin, 'Fixing Social Media's Grand Bargain' (n 90) 11.

530 Shapiro (n 308) 70.

531 138 S. Ct. 2274 (2018).

facilitate simultaneous interactions between the two sides.[532] Through their contracts with merchants, companies like American Express were inhibiting merchants from steering their customers to other credit or debit cards that may offer lower merchant fees. The majority held that such “anti-steering” clauses were not anti-competitive as *inter alia* the higher merchant prices could be converted into benefits for cardholders on the other side of the platform (e.g., cardholder rewards).[533] This can be read as harm on one side of the platform being permissible if it translates to some form of gain on the other side of the platform, so long as the harm is not to competition generally.[534] This approach relies on a particular definition of the relevant market, which in this case was held to include both sides – merchants and cardholders – rather than each side operating in separate but interrelated markets. While some have interpreted this decision as not foreclosing the possibility of future antitrust cases against Facebook, Twitter, and others, given that the scope of the Court’s decision is limited to transaction platforms,[535] there has nevertheless been concern that this decision makes the task of mounting an antitrust challenge exponentially more difficult as it would require demonstrating harm on both sides of the platform.[536]

In short, private efforts to federate platforms continue to be a pressing need, not just because of the difficulties inherent in an antitrust action or the challenges in drafting and passing suitable legislation, but because they will contribute to the growing set of examples of what alternative platforms can look like and achieve.

4.2.3 Option 3: Tokenization

Our third option is perhaps the most future facing, as it involves the use of blockchain technology and therefore is predicated on this technology achieving mainstream adoption in upcoming years. In turn, it anticipates the reform of securities law to accommodate these technological devel-

532 ibid, at 2280-2281. While Facebook generates its primary revenue by matching users with advertisers, it provides other services to users such as games and a search function. Uber is closer to being a transaction platform, but it too is moving towards separately serving its riders through its stop-start efforts at launching a fleet of autonomous vehicles.

533 ibid, at 2287-2288.

534 Geoffrey A Manne, ‘In Defence of the Supreme Court’s “Single Market” Definition in Ohio v American Express’ (2019) 7 Journal of Antitrust Enforcement 104, 110–111.

535 Tim Wu, ‘The American Express Opinion, the Rule of Reason, and Tech Platforms’ (2019) 7 Journal of Antitrust Enforcement 117, 118.

536 Lina M Khan, ‘The Supreme Court Case That Could Give Tech Giants More Power’ *The New York Times* (2 March 2018) <https://perma.cc/TVW7-FVBU>. Wu posits that, after this decision, platform companies like Uber may be able to argue that their efforts at sabotaging competitors (e.g., creating and cancelling fake ride requests) were done out of an interest to retain drivers and keep rider waiting times low – in short, that the anticompetitive behaviour is beneficial to one side of the market. Wu (n 535).

opments.[537] In this scenario, as CoSocial's gig marketplace matured, the need for a new accounting system became clear. Increasingly, users were hiring each other with money earned on the platform, or spending money they earned on the platform with advertisers they discovered through it. Processing these transactions involved a multitude of currencies, exchange rates, transmission fees, and intermediary payment platforms. To reduce some of these costs for their users, CoSocial white-listed Bitcoin, Ether, and DAI crypto-tokens as additional accepted means of payment. These crypto-tokens were paid directly into individual user wallets.[538]

As had been the case previously, a small fee was levied after each transaction, denominated in the crypto-token used. While this allowed CoSocial to obtain a trove of crypto-tokens to be reinvested in the platform, CoSocial decided to return a part of this sum to individual users based on their patronage of the platform. This was effectively a crypto version of the *divis* issued under the scenario in section 4.2.1.

With the use of cryptocurrencies and blockchain technology becoming more mainstream, the board of CoSocial Corporation, with the support of the founders and their family members, decided through an amendment of the Corporation's articles of incorporation to represent all of their issued certificate shares on a public blockchain[539] as tokens, called "CoShares." These were to be distributed to the wallet addresses of existing shareholders in proportion to their shareholding (1 share = 1 CoShare, 1 CoShare-holder = 1 vote).[540] While this required a one-off valuation of the company, the expiration of contractual rights of first refusal and co-sale rights (if any), and

537 Chris Brummer, Trevor I Kiviat and Jai Massari, 'What Should Be Disclosed in an Initial Coin Offering?' in Chris Brummer (ed), *Cryptoassets: Legal, Regulatory, and Monetary Perspectives* (1st Edition, Oxford University Press 2019) 187. This reform process is already underway in the European Union in the form of the Markets in Crypto-Assets Regulation. *See Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937*, COM (2020) 593 final, (Sept. 24, 2020).

538 The integration of a wallet into a social media platform is akin to Telegram's ambition to integrate a Token Open Network (TON) Wallet into Telegram Messenger so as to facilitate adoption by Messenger's 300 million monthly active users. *See* SEC v. Telegram Group Inc., 448 F.Supp.3d 352 (S.D.N.Y. 2020) (hereinafter "Telegram").

539 In California, "blockchain technology" means a mathematically secured, chronological, and decentralized consensus ledger or database. Cal. Corp. Code §204(a)(12)(B). In terms of functionality, the system must be able to decrypt the recorded information into a clearly readable format in a reasonable period of time, be usable to prepare a list of shareholders, record information required to be included on stock certificates, and record required transfers of stock.

540 On the electronic transfer of shares over a blockchain, see Cal. Corp. Code § 204(a)(12)(A). James F Fotenos, Edward C Rybka and C Hugh Friedman, *Corporations (The Rutter Group, California Practice Guide)* (The Rutter Group, a Thomson Reuters Business 2019) ss 4:126.2,5:475, 6:591.2. The default rule is one share, one vote but it is possible to vary this in the Corporation's articles of incorporation, so that a person only has one vote, irrespective of the number of shares they hold. Cal. Corp. Code § 700(a).

the surrendering of physical share certificates,[541] the issuance of tokenized share certificates enhanced the liquidity of the privately held corporation's shares as anyone could buy a CoShare (or a fraction thereof) through an exchange or a peer-to-peer transaction.[542] This included the users who had been accruing crypto-tokens in their individual wallets and could now use these crypto-tokens to purchase CoShares. This was particularly beneficial for employees who had accumulated vested shares and could now benefit from liquidity. In short, users were able to buy tokenized shares in CoSocial Corporation with little-to-no expense to themselves, given that they had been receiving crypto-tokens as a rebate for their transactions with the platform.

By reducing the number of intermediaries involved in holding share certificates and voting shares as well as potentially fractionalizing the ownership of individual shares,[543] retail investment became more affordable and shared governance became more transparent and direct. CoShare holders were able to individually monitor their holdings in near real-time and actively engage in the governance of the Corporation – from asking questions to voting – using the token-holders' dashboard developed by CoSocial. CoShare holders were empowered to elect and remove directors and, through the submission of proposals, suggest broad improvements to the platform. Conversely, the Corporation was able to track the ownership and transfer of the tokens on its electronic share register, as this information was linked to each token and was updated contemporaneously and accurately. The external investors who had viewed the crypto experiments of CoSocial with scepticism were pleased at the opportunity to exit the platform through the acquisition of their shares by the CoSocial community and thereby obtain a return on their investment, even if it may not have been as significant as they initially hoped.

At a future date, when the majority of CoShare holders were users, they were able to introduce a more complex voting system to CoSocial's articles of incorporation (i.e., a voting shift).[544] For instance, they could employ a reputation system that is not based on the wealth of users but on their *recent* valuable contributions to the CoSocial platform. This reputation score would be non-transferable and would degrade over time if the user ceased making valuable contributions. Holding a minimum reputation level could enable users to engage in the stewardship of the platform on a day-to-day basis, in addition to participating in shareholder governance. While their reputation-based voting power on day-to-day decisions could be calculated on the day the decision needs to be made, for annual general meetings this voting power could be calculated at the time the notice of the meeting is

541 Cal. Corp. Code § 416.
542 Cal. Com. Code §§ 8301-03.
543 Cal. Corp. Code § 407.
544 Cal. Corp. Code § 194.7.

sent out. This system would recognize that building reputation requires time, effort and skill – in short, an asset-specific human capital investment that must be retained for the long-term future of CoSocial.

The company continued to invest in advancing the platform's features and interface, but it eventually faded into the background as a servant to the vibrant, self-governing community it enabled.

4.2.3.1 Background

"Tokenization" is the process by which the right to perform an action on an asset is embodied as a transferable data element on a distributed ledger. A tokenization scenario such as this turns to the possibilities now emerging with the development of blockchain technology. Indeed, blockchain technology may be uniquely aligned with peer production, given the shared emphasis on decentralized processes, mutual use of collectively-owned resources, and facilitation of heterodox values by enabling both monetary and non-monetary transactions.[545] The above scenario is still marginally beyond the realm of what is currently possible, as a private placement by an issuer and an exemption from the securities registration requirement[546] is – depending on the type of offering – limited by requirements as to the wealth or professional knowledge of investors, their residence, and the caps on the size of the offerings.[547] Typically, these securities can only be resold to a limited set of buyers.[548] A recent decision concerning Telegram,[549] the private company behind Telegram Messenger, sheds light on why breaching the exemption requirements is a material risk. Telegram sold interests in Grams crypto-tokens to 175 well-heeled initial purchasers in 2018, so as to fund the development of a functional TON Blockchain and to subsequently issue Grams to these early investors by October 31, 2019 (extended to April 30, 2020).[550] A District Court held that the economic incentives behind the

545 David Rozas and others, 'When Ostrom Meets Blockchain: Exploring the Potentials of Blockchain for Commons Governance' [2021] SAGE Open 14.

546 15 U.S.C. § 77d(a)(1)-(2); 15 U.S.C. § 77e(a), (c).

547 The SEC recently provided an overview of the recent amendments to the exempt offering framework. This was preceded by a decision to expand the accredited investor definition to include certain defined measures of professional knowledge, experience or certifications. Press Release, SEC Harmonizes and Improves "Patchwork" Exempt Offering Framework, Release No. 2020-273, U.S. Sec. & Exch. Comm'n (Nov. 2, 2020), < https://perma.cc/26JP-PLWQ >; Press Release, SEC Modernizes the Accredited Investor Definition, Release No. 2020-191, U.S. Sec. & Exch. Comm'n. (Aug. 26, 2020), <https://perma.cc/C23C-YUQC>.

548 ibid, *See* 17 C.F.R. §§ 230.502(d); Section 4(a)(1), Rule 144A. The so-called Section 4 (1½) case-law based exemption is used to protect accredited investors who make the appropriate representations but are not qualified as qualified institutional buyers. This exemption is derived from a line of judgments after Gilligan, Will & Co. v. SEC, 267 F.2d 461 (2d. Cir. 1959). *See also,* Brummer, Kiviat and Massari (n 537) 183.

549 SEC v. Telegram Group Inc., 448 F.Supp.3d 352 (S.D.N.Y. 2020).

550 ibid, at 363.

sale, in terms of large discounts and lockup periods for re-selling Grams, meant that Telegram intended for the initial purchasers to sell Grams to the public rather than hold on to them.[551] The Court held that this violated the conditions of exemption from the registration requirement and amounted to a public distribution; it consequently granted an injunction against the issuance of the Grams tokens to the initial purchasers.[552] As such, the (re) sale of CoShares to users – the vast majority of whom would not fall within even an expanded definition of "accredited investor" or "qualified institutional buyer" (QIBs) – would likely be considered as a "disguised public distribution"[553] and run afoul of the necessary conditions to gain exemption from registration requirements.

That being said, blockchain tools make possible strategies for user co-ownership and co-governance that bypass traditional mechanisms available to shareholders – problematic as they are for tracing the beneficial ownership of shares and engaging individual investors.[554] If companies develop symbiotic ties to a cryptographic protocol, that protocol can become a mechanism for governing their behaviour, thereby mutually shaping new forms of organization. In this way, the ubiquity of the modern corporation may be challenged, and even eclipsed altogether, by the token networks on which they operate.

There are precedents, at least in aspiration, to tokenization and rewarding user contributions. In 2014, Reddit CEO Yishan Wong announced that, as part of a $50 million financing deal, the investors would set aside ten percent of their shares to become the basis of a new cryptocurrency for users. The project was announced as Reddit Notes, but legal difficulties appear to have foundered the project by early the following year.[555] Other social media networks have employed tokenization as well. Twister, an early blockchain project, appeared in 2014 as a fully peer-to-peer microblogging system.[556] Steemit and Minds are web-based centralized platforms that employ their own cryptocurrencies, which trade on public markets, as internal payment systems for monetizing content.[557] Over the past decade,

551 ibid, at 373, 380.

552 ibid, at 381-382.

553 ibid, at 380.

554 J Travis Lester, 'The Block Chain Plunger: Using Technology to Clean Up Proxy Plumbing and Take Back the Vote' (2016) <https://perma.cc/U2NA-RYMS>; Wonnie Song, 'Bullish on Blockchain: Examining Delaware's Approach to Distributed Ledger Technology in Corporate Governance Law and Beyond' [2017] Harvard Business Law Review Online 9, 12.

555 Dan Primack, 'Ex-Employee: Reddit Notes Is "Not Going to Happen" (Update: Reddit Replies) | Fortune' (*Fortune*, 31 January 2015) <https://perma.cc/6A9Y-XV5X>.

556 Gareth Mott, 'A Storm on the Horizon? "Twister" and the Implications of the Blockchain and Peer-to-Peer Social Networks for Online Violent Extremism' (2019) 42 Studies in Conflict & Terrorism 206, 211.

557 Moon Soo Kim and Jee Yong Chung, 'Sustainable Growth and Token Economy Design: The Case of Steemit' (2019) 11 Sustainability 1, 1; Louise Matsakis, 'Minds Is the Anti-Facebook That Pays You For Your Time' [2018] *WIRED* <https://perma.cc/49L7-TC9X>.

Facebook has also been championing virtual currencies. They did so first through the short-lived Facebook Credits, which could be purchased to access gaming and non-gaming applications on the Facebook platform; users could also earn them by testing new games and watching branded videos.[558] However, Facebook Credits had limited functionality as they were non-transferable and could not be exchanged for fiat currencies.[559] More recently, Facebook announced the launch of the cryptocurrency Libra (now Diem),[560] that will have a broader range of functions and run on a permissioned blockchain governed by an association made up of member organizations. However, neither Facebook Credits nor Libra are used to reward valuable user contributions or extend governance rights to them. Blockchain projects such as Colony and DAOStack, in contrast, have different forms of reputation systems that seek to incentivize continuous, valuable contributions to decentralized organizations.[561]

Ever since Overstock.com raised $1.9 million by selling preferred shares on a blockchain in 2016,[562] businesses have sought to find ways to tokenize shares and other securities. It has now become common for companies engaged in blockchain technology to present the (off-chain) company as a temporary necessity, until the token network becomes a self-perpetuating vessel of governance and value creation.[563] In other words, they have suggested the possibility of "platform operator redundancy"[564] in which there is user control of a platform's technological architecture, as well as the company that developed it, through token ownership.[565] The tokenization scenario provides one stylised example of how such platform operator redundancy may be achieved.

558 Athima Chansanchai, 'Facebook Will Pay You to Watch Ads during Game Play' (*NBC News*, 6 May 2011) <https://perma.cc/UN7W-3R7F>; Miguel Helft, 'Facebook Hopes Credits Make Dollars' *The New York Times* (22 September 2010) <https://perma.cc/QR6P-6TV2>.

559 Joshua S Gans and Hanna Halaburda, 'Some Economics of Private Digital Currency' in Avi Goldfarb, Shane M Greenstein and Catherine E Tucker (eds), *Economic Analysis of the Digital Economy* (University of Chicago Press 2015) 261.

560 Libra Association, 'Libra White Paper' (*Libra.org*, 2019) <https://perma.cc/YK9S-SZYN>; Diem, Official White Paper v2.0 (diem.com, 2021) <https://www.diem.com/en-us/white-paper/>.

561 Mannan, 'Fostering Worker Cooperatives with Blockchain Technology' (n 152) 201.

562 Michael del Castillo, 'Overstock Raises $10.9 Million in First Blockchain Stock Issuance' (*CoinDesk*, 15 December 2016) <https://perma.cc/7P2P-SHW9>.

563 Lana Swartz, 'Blockchain Dreams: Imagining Techno-E Conomic Alternatives After Bitcoin' in Manuel Castells (ed), *Another Economy is Possible: Culture and Economy in a Time of Crisis* (John Wiley & Sons, Ltd 2017) 90–91.

564 Neufund, 'Whitepaper v.2.0: Community-Owned Fundraising Platform' (2017), at 55 <https://perma.cc/J7UF-UDYL>.

565 Peter Zeitz, 'Blockchain Governance' (*0x Blog*, 27 September 2018) <https://perma.cc/SSF7-8ELY>.

4.2.3.2 Implications for Governance

In the past five years, primarily after the emergence of the Ethereum blockchain, there has been interest in exploring how distributed ledger technology and token systems may improve corporate governance.[566] Some of the main advantages that have been posited are (1) improved transparency of corporate decision-making and operations, (2) more participatory and streamlined decision-making, at both the board level and in general meetings of shareholders, and (3) the reduction of socio-economic barriers to business ownership and financial independence.[567] In the sphere of corporate governance, most of the theoretical and preliminary empirical research[568] has focused on how these benefits can contribute to the reduction of agency costs within a corporate legal structure, rather than exploring how they may lead to a redrawing of the boundaries of both firms and legal structures. A notable exception to this is a recent article by Fenwick et al., in which the authors acknowledge that successful platforms need to foster open engagement and dialogue with a broad range of stakeholders beyond those in the legal structure of a company.[569]

The above scenario presents one form of token-based governance for platforms, which can potentially include a wider range of stakeholders in decision-making processes. For instance, in stewarding the updates and development of the platform, some decisions could be made on a one token-holder, one vote basis, and for others representation could be dynamically calibrated according to the token-holders' up-to-date reputation scores, proportional to the total reputation score in a quorum of token-holders. Drawing from the experience of the token-based social news platform Steemit, CoSocial could also allow "negative-voting,"[570] to enable smaller participants to band together to prevent collusion and arbitrary decisions by token-holders with high reputations. Conversely, by making reputation degradable, smaller participants would be incentivized to engage in

566 Harjit Singh and others, 'Blockchain Technology in Corporate Governance: Disrupting Chain Reaction or Not?' (2019) 20 Corporate Governance: The International Journal of Business in Society 67, 82.

567 Wulf A Kaal, 'Blockchain Solutions for Agency Problems in Corporate Governance' in Kashi R Balachandran (ed), *Economic Information to Facilitate Decision Making* (World Scientific Publishers 2019); Carla Reyes, Nizan Packin and Ben Edwards, 'Distributed Governance' (2017) 59 William & Mary Law Review 1, 18–20.

568 Salvatore Esposito De Falco and others, 'Corporate Governance and Blockchain: Some Preliminary Results by a Survey', *Corporate governance: Search for the advanced practices* (Virtus Enterprises 2019) 107; Christoph Van der Elst and Anne Lafarre, 'Blockchain and Smart Contracting for the Shareholder Community' (2019) 20 European Business Organization Law Review 111, 127–128.

569 Mark Fenwick, Joseph A McCahery and Erik PM Vermeulen, 'The End of "Corporate" Governance: Hello "Platform" Governance' (2019) 20 European Business Organization Law Review 171, 193–194.

570 Negative voting is the practice of tactically downvoting decisions (or content) made on a platform.

governance processes rather than free ride on the efforts of others. If regular decisions have to be made – for instance, about content instead of just strategy – the platform could require that reputation scores be temporarily diminished to prevent voting abuses.[571] As reputation is not transferable across users and cannot be purchased, this voting structure could go some way towards mitigating plutocratic governance of platforms.

Blockchain projects such as Aragon, Colony, DAOstack, and Democracy Earth offer varying techniques for implementing token-based governance at scale, including reputation-weighted voting, prediction markets, and the aforementioned quadratic voting.[572] Such projects are highly experimental, and it remains to be seen which techniques will achieve widespread adoption or are demonstrably useful for their intended purposes. Indeed, while the proposed token-based decision-making system may address some of the concerns with voting, it does not – and cannot – capture the politicking (i.e., the motivations, interests, and negotiations) that determines a vote, much of which takes place off a blockchain.[573] This, however, does not mean that the internet cannot be a suitable alternative discursive arena to, among other things, express dissent about actions taken by delegated management in an organization.[574]

Thus far, the major token governance regimes in Ethereum and its ilk on the protocol layer have fallen short of the aspiration of decentralization[575] and, in doing so, left such projects in a vulnerable position in which private, competing interests can coalesce. This, in turn, has slowed decision-making and, in exceptional situations, enabled the rise of an unaccountable "sovereign" that fundamentally contradicts the values of public blockchains.[576] These concerns about the governance of public blockchain protocols consequently raise questions about the governance of the projects that are built on top of them as they are – to a certain extent – mutually interdependent. However, it is plausible that among the proposals on offer are the beginnings of mechanisms that will be suitable for enabling meaningful user participation through large-scale tokenized governance.

Separate from the platform's economics, there are other potential advantages to representing the share certificates of privately held platform

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571 Kim and Chung (n 557) 7.

572 Mannan, 'Fostering Worker Cooperatives with Blockchain Technology' (n 152); Zeitz (n 565); Posner and Weyl, 'Quadratic Voting as Efficient Corporate Governance' (n 434); Posner and Weyl, 'Quadratic Voting and the Public Good' (n 434); Posner and Weyl, *Radical Markets* (n 434).

573 Wessel Reijers and others, 'Now the Code Runs Itself: On-Chain and Off-Chain Governance of Blockchain Technologies' [2018] Topoi <https://doi.org/10.1007/s11245-018-9626-5> accessed 13 October 2020.

574 Marcos Barros and Valérie Michaud, 'Worlds, Words, and Spaces of Resistance: Democracy and Social Media in Consumer Co-Ops' (2020) 27 Organization 578, 581.

575 Nathan Schneider, 'Decentralization: An Incomplete Ambition' (2019) 12 Journal of Cultural Economy 265, 265.

576 Reijers and others (n 573).

companies as tokens on public blockchains. As observed by the lawyer Gabriel Shapiro, tokenized share certificates may be cleared faster than conventional shares and ownership of shares may be verified more accurately. Moreover, CoShare-holders are less required to trust those typically involved in corporate governance processes, such as proxy advisors and the corporation itself.[577] Instead, CoShare holders can be confident that the token represents share certificates owned and controlled by the token-holder, in contrast to having "book entries" in a corporation's share register (that may be inaccurate) or bundled with innumerable other shares (and potentially mis-voted). Hopefully, this enhanced individual sovereignty over their shares will encourage shareholders to participate in the general meetings of CoSocial Corporation and exercise their rights to inspect the corporation's books and records.[578]

The scenario deliberately omits discussion of the specific distributed ledger being used by CoSocial to store information about shareholder votes and the trading of shares, beyond noting that token-holders may have a dashboard to monitor their CoShares. Van der Elst and Lafarre have noted that it may be undesirable for a company to have a public blockchain as their share register,[579] given that it may lead to the inclusion of participants that are ineligible and perpetuate inaccurate information. At the same time, there are serious questions over whether permissioned blockchains afford meaningful benefits over conventional client/server architecture when used for a limited purpose,[580] such as tracking the transfer of tokenized share certificates. As Shapiro suggests, corporations could, instead, use a public blockchain but *ex ante* program tokens with certain functionalities that would impose transfer restrictions and include an event listener in the token's smart contract to track a transfer *ex post*.[581]

4.2.3.3 Implications for Financial Rights

Ordinarily, on platforms where a significant amount of external equity investment is needed (e.g., through a VC fund), agency theory suggests that the management of the platform company may exercise a suboptimal

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577 Gabriel Shapiro, 'Tokenizing Corporate Capital Stock' (*{Zero_Law}*, 28 October 2018) <https://perma.cc/QV8X-EXLG>.

578 *See*, *e.g.*, Cal. Corp. Code § 1601(a) (2019).

579 Van der Elst and Lafarre (n 568) 127.

580 In public blockchains, consensus about the state of a blockchain is open to any interested miners, consensus is determined by miners, transactions on the blockchain are visible to the public, and the platform is near-immutable and has high latency. By contrast, in private blockchains, access to the consensus process is permissioned, consensus is determined by a centralized organization, transactions on the blockchain may not be visible to the public, and the platform is not immutable and has low latency. *See* Zibin Zheng and others, 'An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends', *2017 IEEE International Congress on Big Data (BigData Congress)* (IEEE 2017).

581 Shapiro (n 577).

level of effort, as much of the financial risk is externalized and they can exploit the information asymmetry that exists with investors.[582] With regard to those platforms reliant on platform-specific investments by users (e.g., through contributions of specialized knowledge or capital-investments for gig work), this suboptimal effort may prevent users from joining and, in a bid to attract more users, could lead the platform company seeking more external funding to finance user subsidies. This would cause holdup problems for both the investor and the user, inhibiting either from participating. For the investor, the holdup problem may arise in deciding the control rights that should be in a VC contract to mitigate agency risks and for the user, the holdup problem may arise from knowing that their platform-specific costs will be sunk.

For the platform, the prospect of users receiving crypto-tokens would be beneficial as they may be motivated to make frequent contributions. The fact that the users can also become shareholders of the company may stimulate greater feelings of ownership over the platform and encourage higher-quality contributions, which in turn may draw new users. The consequence of this will be that the financial gains of CoSocial will be shared more widely for valuable and previously neglected labour, from remunerating content curation and work supervision to the provision of computing power to the network and framing the strategies of CoSocial. In short, financial gains will be allocated on the basis of the value of the work done for the platform, as determined by the token-holders themselves.

Through this distribution of wealth, it will become easier for a broad range of users to become shareholders in CoSocial Corporation. However, it is unlikely that most users will hold shares in the Corporation for the purpose of receiving a dividend; rather, they will allow holders of CoSoC (including users) to become residual claimants of the company in the event that the Corporation is liquidated.

4.2.3.4 Implications for Public Policy

The scenario outlined above is predicated on the understanding that over time a more conducive environment will emerge for crypto-tokens and tokenized share certificates to be circulated. This not only concerns the regulatory status of the crypto-tokens but also the rules governing the transfer of private company shares and the manner in which companies identify, communicate with and disclose information to their shareholders.

Tokenized share certificates such as CoShares raise distinct complications. The shares of privately held companies are typically illiquid, often deliberately so, due to mandatory restrictions set by applicable securities

582 Jens Burchardt and others, 'Venture Capital Contracting in Theory and Practice: Implications for Entrepreneurship Research' (2016) 40 Entrepreneurship Theory and Practice 25, 34.

laws in the interest of those who cannot fend for themselves[583] and due to common default contractual provisions in share purchase agreements to protect the corporation/other shareholders.[584] The restrictions on transferability of the shares are typically mentioned on a legend on the share certificate. The result of this is that early investors can preclude the involvement of potential late investors.

This is not to say that the transfer of restricted securities cannot take place altogether. Rule 144 of the Securities Act of 1933 provides a safe harbour for a share certificate holder to endorse and transfer their share certificates to others if they have held the certificate for at least a year and have not been an executive or controlling shareholder of the company in the past three months.[585] As briefly discussed in section 4.2.3.1., Rule 144A of the Securities Act of 1933 also provides an exemption to the registration requirement if the shares are resold to a QIB (and under limited circumstances, a non-QIB).[586] From the purchaser's perspective, if they have not been given notice of any adverse claim, their payment and control over the certificate would be sufficient to perfect their property right over the share.[587] In other words, a transferor can endorse the share certificate in favour of the transferee without informing the issuing company.

However, there are difficulties in programming tokens to be compliant with securities regulation.[588] To accommodate existing investor protections, there needs to be a possibility to expand/contract the supply of tokens, enable transfer restrictions, track tokens, burn tokens on a forked blockchain,[589] and potentially swap tokens with other tokens with identical rights and obligations on other blockchains. [590] Even if this were possible, there would be questions of whether a given state jurisdiction would permit the representation of a share certificate on a blockchain and in what manner,

583 *See* S.E.C. v. Ralston Purina Co., 346 U.S. 119, 125 (1953).

584 For example, shareholders' rights of first refusal or co-sale rights when a shareholder wishes to transfer shares.

585 See 17 C.F.R. § 230.144 (2019); U.S. S.E.C., Rule 144: Selling Restricted and Control Securities (Jan. 16, 2013), https://perma.cc/CWS8-54DR.

586 Pursuant to section 201(a) of the JOBS Act, Rule 144A was amended to "permit the use of general solicitation under Rule 144A, as long as the purchasers are limited to QIBs or to purchasers that the seller and any person acting on behalf of the seller reasonably believe are QIBs". U.S. S.E.C., *Eliminating the Prohibition Against General Solicitation and General Advertising in Rule 506 and Rule 144A* Offerings (Sept. 20, 2013), https://perma.cc/6FVB-KP6K.

587 Cal. Com. Code § 8303.

588 Reyes, Packin and Edwards (n 567) 25.

589 In exceptional circumstances, a new, upgraded blockchain can fork from the older blockchain, with the result that the blocks or transactions from the older blockchain are not recognized. Participants in a blockchain-based system then have to decide which chain to follow. This may be determined by a technical rule, such as choosing the chain with the most confirmed blocks, but it may also be influenced by social norms, including the social capital of certain participants. Primavera De Filippi and Aaron Wright, *Blockchain and the Law: The Rule of Code* (Harvard University Press 2018) 24, 188.

590 Shapiro (n 577).

given the personally identifying information generally available on a share certificate. It appears that U.S. states such as Wyoming are closer to enabling pseudonymity, given that they allow shareholders to be identified by their blockchain addresses.[591]

Following these caveats concerning the feasibility of tokenization, it is important to acknowledge the legislative efforts across the United States – and the world – to facilitate the use of blockchain by businesses. These initiatives range from deregulation and accommodation of the features of blockchain technology within the existing state record-keeping infrastructure,[592] to regulating tokens,[593] to promoting new legal entity forms.[594] Given the novelty of such legislation, structures such as the one described in the scenario above have yet to be tested. There is reason to be optimistic though that the emergent regulatory competition between states (within the U.S. and abroad) will provide the necessary innovations and the SEC will issue further clarifications.

4.3 Discussion

The three options presented here offer diverging models for how a start-up in the online economy might transition into becoming an enterprise owned by its stakeholders, including its users. The focus of the chapter has primarily been on the inclusion of individual end-users, but it is hoped that the options are capacious enough to include other important categories of users, such as businesses and advertisers, as needed.[595] While Professor Post has previously suggested that users could benefit from a 'market of rules' in which platforms compete to provide "rule-sets" of access and participation that users prefer,[596] this chapter takes this further by suggesting pathways for a "market for ownership structures" for users to choose from. A number of assumptions are at play and need to be acknowledged. The hypothetical

591 Wyo. Stat. Ann. § 17-16-140(a)(xlvi) (West 2019) (current through the 2020 Budget Session).

592 Del. Code Ann. tit. 8 §§ 219(c), 224 (West 2017).

593 Liechtenstein has enacted the Law on "Tokens and Trusted Technology Service Providers", LGBI 2019.301 (entry into force on Jan. 1, 2020)

594 Vermont has introduced a new legal entity known as the Blockchain-Based Limited Liability Company. *See* Vt. Stat. Ann. tit. 11, §§ 4171-75 (2019).

595 For instance, as of late 2018, Facebook has over 80 million businesses and 6 million advertisers on its platform. They are also arguably in a position of dependence with respect to the Facebook platform. Anne Helmond, David B Nieborg and Fernando N van der Vlist, 'Facebook's Evolution: Development of a Platform-as-Infrastructure' (2019) 3 Internet Histories 123, 127, 134. For instance, as of late 2018, Facebook has over 80 million businesses and 6 million advertisers on its platform. They are also arguably in a position of dependence with respect to the Facebook platform. Uber Developers, 'Introducing the Uber API' (*Uber Developers*, 2 April 2016) <https://perma.cc/M75R-3UJE>.

596 David Post, 'Anarchy, State, and the Internet: An Essay on Law-Making in Cyberspace' [1995] Journal of Online Law para 42.

company, CoSocial, is seen to be at a crossroads and it is presumed that they recognize that an important part of their value proposition depends on being considered trustworthy by their community. The hypothetical original term sheet of CoSocial confers relatively weak control rights to external investors, and it is possible to imagine that many platforms have VC contracts in which, for example, the VC firm has a veto right to a change in a business plan or has the right to replace management.[597] An early-stage, cash-strapped platform entrepreneur is often willing to allow VC funds to have such rights if they are able to attach themselves to a reputable VC fund. However, the effect of these assumptions is mitigated by the fact that there is some empirical evidence that California-based start-ups are subject to less onerous cash flow and control right terms by VCs.[598] In other words, it is assumed that (intense) negotiation took place with external investors to change exit strategies. However, as the example of Kickstarter indicates, it is possible for external investors to support ambitious shifts in value systems.[599] It is also worth noting that while VC funds have a duty to their limited partners to maximize their investments, the business model of venture capital relies on achieving a "home run" in only 10-20% of investments – not all of them.[600]

With respect to the employees of CoSocial during this transition process, it is assumed that some will stay, and some will leave, as ordinarily occurs within the tech sector, with those among the former potentially wearing both hats – employee and user – working to improve the functionality of the platform, engaging in governance, and benefitting from financial returns beyond their wages.

From the perspective of users, all strategies grant users a significant voice in the design and construction of online communities that have become a prominent part of daily life. The governance rights that are made available to users through these strategies, directly or indirectly, could be used to have these businesses voluntarily commit to higher privacy

597 Burchardt and others (n 582) 28.

598 S Abraham Ravid and Ola Bengtsson, 'Geography and Style in Private Equity Contracting: Evidence from the U.S. Venture Capital Market' (2011) SSRN Scholarly Paper ID 1782382.

599 Kickstarter PBC, 'Kickstarter PBC 2017 Benefit Statement' (2017) Public Benefit Statement published in compliance with Del Code Ann 8 Del § 366(b) <https://perma.cc/VU4Z-983M>.

600 Pollman (n 389) 168; Bob Zider, 'How Venture Capital Works' [1998] *Harvard Business Review* <https://perma.cc/WD2A-G55C>. VC funds are well aware that only about 30% of seed-funded companies exit to an IPO or acquisition, with the rest either winding up or becoming self-sustaining.CB Insights, 'The Venture Capital Funnel Shows Odds of Becoming a Unicorn Are About 1%' (*CB Insights Research*, 6 September 2018) <https://perma.cc/92PZ-KHQ7>. As Cable notes, at a certain stage the opportunity cost of continuing their investment in the hope of a profitable exit is be too high relative to monitoring and extracting value from their other portfolio companies. Abraham JB Cable, 'Opportunity-Cost Conflicts in Corporate Law' (2015) 66 Case Western Reserve Law Review 51, 53, 73–76.

standards than is required by the law by limiting the personal data that is collected, used, sold or disclosed.[601] Platform companies such as Craigslist have long been emblematic of this approach, driven by the vision of their founder and CEO.[602]

Conversely, each strategy could also be seen as a bulwark against the transfer or sale of their personal data in the event of a merger, restructuring, or bankruptcy proceedings of a platform company[603] by providing users a voice during such changes of corporate control.[604] This is a pressing need, given that the acquiring company may process the personal data in a different manner and for different purposes than for which it was collected, even if the acquirer consents to remaining bound by the original privacy policy.[605] The FTC and state regulators in the United States have underscored the importance of obtaining the consent of users when their personal data is transferred as part of an asset sale. For instance, in the bankruptcy cases concerning RadioShack[606] and Borders,[607] the court-approved settlement and judgment respectively required that *inter alia* users be allowed to "opt-out" from the transfer of their data to the acquiring company. The existence of a representative Trust Protector Committee, CoNet Cooperative or a tokenized CoSocial would provide a forum in which such transfers

601 Balkin, 'Information Fiduciaries and the First Amendment' (n 322) 1199.

602 Jessa Lingel, *An Internet for the People: The Politics and Promise of Craigslist* (Princeton University Press 2020) 154.

603 See, e.g., LinkedIn, LinkedIn Privacy Policy (Aug. 11, 2020), § 3.7, <https://perma.cc/Q5HX-DFNS>; Twitter, Twitter Privacy Policy (June 18, 2020), § 3.4, <https://perma.cc/E7DT-PTRG>.

604 In certain situations, regulators have stepped in. For instance, at the federal level, the Children's Online Privacy Protection Act (COPPA) requires verifiable parental consent before children's information is collected, used or disclosed. 15 U.S.C. § 6502(b)(1)(A)(ii) (1998). At the state level, California enacted the Student Online Personal Information Protection Act (SOPIPA) in 2014, which restricts websites selling, using, or distributing K-12 student data for targeted marketing purposes; in the case of a merger or acquisition, the acquirer is also bound by SOPIPA. Cal. Bus. & Prof. Code § 22584(a)-(b)(4) (West 2016). California's pathbreaking Consumer Privacy Act confers consumers of certain businesses that sell user data the right to request disclosures about the categories of personal information sold and the categories of business that buy this data, as well as the right to opt-out from this sale. Cal. Civ. Code §§ 1798.115-1798.120 (West 2020). However, transfers of data as part of a merger, acquisition or bankruptcy are not included in the definition of "sale" under the Act. ibid § 1798.140(t)(2)(D). In general, the "U.S system of virtually unlimited resale of information to third parties leaves data subjects vulnerable." Tsesis (n 329) 599.

605 The GDPR, however, protects EU data subjects from such "function creep." GDPR, art 6(1)(a).

606 *In re* RadioShack Corp., No. 15-10197 (BLS), 2015 WL 10322202 (Bankr. D. Del. 2016). For a concise overview of this case, see Kayla Siam, 'Coming to a Retailer Near You: Consumer Privacy Protection in Retail Bankruptcies' (2017) 33 Emory Bankruptcy Developments Journal 487, 497–500, 517.

607 *In re* Borders Grp., Inc., No. 11-10614 MG, 2011 WL 5520261 (Bankr. S.D.N.Y. Sept. 27, 2011). For a concise overview of this case, see Michael St Patrick Baxter, 'The Sale of Personally Identifiable Information in Bankruptcy' (2018) 27 ABI Law Review 1, 12–13.

could be deliberated. These would provide a mechanism to gauge the views of users individually or collectively and a body to oppose transactions entered into by the CoSocial board that are contrary to an extant Privacy Policy. This approach concedes that the business model of corporations like CoSocial will need some form of data collection and use but addresses the chronic information asymmetry confronted by users and installs measures that provide them with a voice in how such policies evolve. In the words of McKenzie Wark, what is dystopian about information sharing is less the sharing "than the asymmetry of the sharing."[608] This asymmetry in sharing is seen not only through exclusion from participatory decision-making, but also through the lack of sharing in the financial rewards of the platform, thereby failing to acknowledge the multifarious contributions users make towards a platform being successful.

As such, each proposal deliberately pushes against the path dependent tendencies of platform start-ups, but each is also plausible, given historical precedents and existing frameworks. Each comes with their respective strengths and weaknesses, touched upon in the sections above. The purpose of juxtaposing these strategies is not to identify one model as superior, but rather to demonstrate the range of outcomes that could become available through community ownership. Past scholarship on collective user-based enterprises indicates that these strategies can be promoted to users by highlighting how they are being underserved by capitalist alternatives or by doubling down on the humanistic and solidaristic values embodied by the platform.[609] Yet the appropriateness of choosing one strategy over another is likely to be context-dependent – depending on such considerations as the platform's revenue sources, the culture of its user community, the local regulatory environment, and forms of path dependence such as its financing history.

For example, a platform whose users make a wide variety of financial transactions through it on a regular basis might be better suited to tokenization, whereas a platform that gathers user data but does not regularly transact with users might have an easier path toward a non-charitable purpose trust devoted solely to oversight and governance. In the context of a communications protocol with a large user base, which arguably has the characteristics of a natural monopsony, the federation scenario would enable competitive dynamics to operate within such a market. Alternatively, a governance-focused trust could provide oversight comparable to that of a utility regulator – without having to decide which state is responsible for such regulation. In contrast, federation would not likely be a wise strategy for a start-up in a market that is already competitive and dynamic as it could impose crippling governance overhead. A solely governance-focused

608 McKenzie Wark, *Capital Is Dead: Is This Something Worse?* (Verso 2019) 1.

609 Marie-Claire Malo and Martine Vézina, 'Governance and Management of Collective User-Based Enterprises: Value-Creation Strategies and Organizational Configurations' (2004) 75 Annals of Public and Cooperative Economics 113, 125, 130.

trust would not appeal to a community of stakeholders solely interested in reaping financial returns alongside outside investors. Accommodations will need to be made accordingly.

The online economy thus far has relied on a narrow range of strategies for ownership and financing, largely dictated by the venture capital ecosystem.[610] These serve certain purposes very well. But strategies based on ownership by user communities would broaden the repertoire of options for start-ups and maturing companies. It remains to be seen in the field of practice which such strategies best meet user needs and take hold. Indeed, it is possible that a hybrid version of these strategies will emerge, blending the strategies described above or others.[611] Whichever strategy is utilized, it is imperative that the stakeholders involved are mindful of the overarching objectives of all the strategies: sensitivity to power dynamics, meaningful inclusion in decision-making, and serving the public interest.

This raises an important general point concerning the long-term feasibility of exits to community: *the need for responsibility and stewardship from the top*. This may initially be a founder who is willing to countenance exploring the strategies discussed in this chapter, but will eventually be a board representing a coalition of stakeholders who take their duty to monitor seriously and make timely, carefully deliberated interventions in decisions made by mid-level management.[612] The fact that recent years have seen the emergence of cooperative start-up accelerators dedicated to incubating new cooperatives, including platform cooperatives, through financing,

610 Langley and Leyshon (n 25) 14, 23–24.

611 With respect to options 2 and 3, see Mennan Selimi and others, 'Towards Blockchain-Enabled Wireless Mesh Networks', *Proceedings of the 1st Workshop on Cryptocurrencies and Blockchains for Distributed Systems* (ACM 2018) <https://perma.cc/9LRN-BQ54>. See also the example of the Dash crypto-currency network described in Section 2.1.1 of this chapter for a combination of Options 1, 2 and 3 Dash Core Group Inc. (n 425); Taylor (n 426); Seitz (n 427).

612 The duty to monitor is one of the directors' duties, as noted in the seminal Caremark case. In re Caremark Int'l, Inc. Derivative Litig. 698 A.2d 959, 967-70 (Del. Ch. 1996). To discharge the duty to monitor, corporations are required to establish "risk oversight, internal controls, and monitoring systems," as well as periodically evaluate their effectiveness. Hillary A Sale, 'Fiduciary Law, Good Faith, and Publicness' in Evan J Criddle, Paul B Miller and Robert H Sitkoff (eds), *The Oxford Handbook of Fiduciary Law* (Oxford University Press 2019) 779. This means that corporate officers inform the board of directors about these systems and the board asks questions about how these controls and systems are performing. ibid. Such systems can, for instance, concern content moderation or policies concerning how personal data is used or sold.Kadri and Klonick (n 311) 59–60, 89; Balkin, 'Fixing Social Media's Grand Bargain' (n 90) 14. Failure to establish such systems, can lead to breach of fiduciary claims. This has taken place, for instance, in the case of Facebook, with a trade union in its capacity as a shareholder filing a demand to inspect the books and records of Facebook to assess whether there has been a breach of fiduciary duties. *See In re* Facebook, Inc. Section 220 Litig., No. 2018-0661-JRS, 2019 WL 2320842, at *1 (Del. Ch. May 31, 2019).

mentorship, knowledge-building, and training is a promising method for inculcating the values of cooperative leadership and stewardship.[613]

As discussed throughout, the strategies detailed here are intended to be privately ordered, but they would benefit from the support of legislative reforms that make exits to community more attractive. In recent years, there has been an emergence of regulation to support the development of online social media, ride-hailing, and home-rental applications that operate under a capitalist logic. A "Cooperative Economy Act" is now being proposed in California that would, for instance, allow gig workers to gain worker protections and voice by being employed by a cooperative staffing agency, which would act as an intermediary in interactions with platforms and consumers.[614] It remains to be seen whether such laws will emerge to support platform alternatives that operate under a logic of communitarianism and solidarity or whether there will continue to be a carving out of worker protections and benefits by platform incumbents, as demonstrated by the 2020 approval on Proposition 22 in California, which reinforced gig platforms' ability to classify workers as independent contractors.[615]

In order to make user ownership models possible, advocacy blocs will need to form to develop and implement the necessary policies. The need for this is increasingly being recognized, with the General Assembly of the International Co-operative Alliance (the global representative body of the cooperative movement) unanimously passing a resolution on November 17, 2017 to explore the potential of platform cooperatives.[616] It is useful to tentatively consider what those advocacy blocs and policies might look like. These advocacy blocs might be broad-based and populist, such as those that achieved enabling legislation for rural cooperatives in the early twentieth century[617] or the more recent campaigns in support of net neutrality.[618] They might also arise more in the realm of experts, such as the campaign that

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613 Start.coop, 'Home Page' (*Start.coop*, 2020) <https://perma.cc/ZM6U-RGQD>; UnFound, 'Home Page' (*UnFound*, 2020) <https://perma.cc/EK3L-XYNP>.

614 Megan Rose Dickey, 'The Future of Gig Work Could Involve Unions and Co-Ops' (*TechCrunch*, 3 March 2020) <https://perma.cc/KY7M-8HZY>.

615 Conger reports that Prop 22 classifies "app-based drivers" as independent contractors and, as a concession, provides a wage floor and a very limited set of insurances and subsidies for these drivers. Kate Conger, 'Uber and Lyft Drivers in California Will Remain Contractors' *The New York Times* (4 November 2020) <https://perma.cc/JT8U-JUGR>.

616 ICA, 'Motion to Support Platform Co-Operatives Passed at General Assembly in Malaysia' (*International Co-operative Alliance*, 13 December 2017) <https://perma.cc/2YTC-JXSH>.

617 Vaheesan and Schneider (n 524) 20.

618 Jonathan Perri, 'Building a Movement for Net Neutrality' (2018) 15 SUR 51; Cyndi Suarez, 'Campaign Seeks to Build a Grassroots Movement to Protect Net Neutrality' [2017] *Nonprofit Quarterly* <https://perma.cc/K5GG-XY88>.

enabled pension funds to invest in venture capital[619] or the development of the ESOP.[620] A wide range of stakeholders could be potential allies – and strange bedfellows – in such an effort. Labour unions could see an opportunity to build worker power through co-ownership. Venture capitalists could see a new means for delivering returns from portfolio companies. Start-up founders could see avenues for combining financial returns with social purpose.[621] Established companies could see an attractive means for addressing crises of accountability. User advocates and grassroots activists could see tactics for holding platforms accountable. There would surely be critical differences among these types of stakeholders, but each might also have something to gain, and to fight for, in a shared agenda for ownership.

4.4 Conclusion

This chapter argues for the promise of multi-stakeholder ownership as a means of addressing the ongoing accountability crises of the online platform economy. Using hypothetical scenarios involving a fictional platform company, it described three strategies for conversion to multi-stakeholder ownership: buyout with a non-charitable purpose trust, federation, and tokenization. These rely on structurally distinct mechanisms to achieve democratic accountability through co-ownership. The overriding purpose in proposing these strategies is to spur further discussion about broadening the repertoire of company ownership and financing in the online economy, as well as about whether multi-stakeholder ownership of platforms would be a worthwhile norm.

Although the chapter has attempted to show that each of these strategies is precedented enough to be plausible, it is recognized that much more discussion and experimentation are needed to determine whether they can be regarded as truly feasible, practical, and even desirable. First, there is a need for experiments in practice that approach and approximate these strategies where possible, recognizing that further policy reform will be needed to fully accommodate them; as noted at the outset, there does

619 Bruce W Marcus, ‘A Vote for ERISA’s “Prudent Man”’ *The New York Times* (New York, NY, 14 May 1978) 14.

620 Kelso and Kelso (n 415) ch 6.

621 That start-ups are exploring options other than IPO and sale is clear from their delays in deciding to IPO and the trend towards private secondary sales of early investor and employee shares. *See, e.g.,* Eliot Brown and Greg Bensinger, ‘The Latest Path to Silicon Valley Riches: Stake Sales’ *The Wall Street Journal* (New York, NY, 19 November 2017) <https://perma.cc/2SA9-AH3Y>. However, instead of a sale to wealthy investment firms with opaque interests, the proposed strategies in this chapter would help ensure that the corporations continue to serve those who who make these platforms valuable by using them. Nathan Schneider and Morshed Mannan, ‘Let Users Own the Tech Companies They Help Build’ [2021] *Wired* <https://bit.ly/3w9Mk8D>.

appear to already be a growing appetite for such experimentation. Second, both in theory and practice, these strategies need to be more fully evaluated in comparison to alternative approaches to accountability for the online economy, such as regulation of platform behaviour, civil-society pressure campaigns, market competition, and activism among employees or existing shareholders. Finally, recognizing that the three strategies presented here do not encompass all possible options, typologies of multi-stakeholder ownership strategies that improve on those that have been offered are welcome. Wherever future research and discussions lead, it is hoped that this chapter offered a constructive set of invitations for how to imagine democracy operating not just outside the online platform economy as it exists today, or against its abuses, but within it.