



University
of Glasgow

COMMUNITY WEALTH BUILDING THROUGH DIGITAL PLATFORM COOPERATIVES:

A STRATEGY FOR SCOTLAND

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EXECUTIVE SUMMARY

The economy has been transformed by the rapid expansion of digital platforms. These platforms include ubiquitous brands such as Spotify, Youtube, Google, Uber, Deliveroo, AirBnB and a range of smaller ventures operating across diffuse industry niches.

While platforms can bring about cheaper, faster, and better services, we argue this comes at a cost that is often underacknowledged. Specifically, we identify tax and regulatory arbitrage, exploitation of the labour market, manipulation of user data, anticompetitive practices, and reduced choice for consumers as negative outcomes of platformization. These problems are compounded by the network effects dynamic found in multisided markets, which results in winner-takes-all outcomes. For consumers, this means only a few large platforms tend to dominate markets, and there is little room for choice or competition.

We analyse platformization 'on the ground' and find that many popular platforms engage in exploitative practices that can have negative welfare effects on users. Our case study of the food delivery sector in Glasgow reveals that restaurateurs can pay up to 36% commission per transaction, with additional fees charged for favourable in-app search result placements. Many businesses report they are planning to raise the overall cost of food orders (both delivery and sit-in) to absorb the significantly increased operating costs they face as a consequence of platformization.

Is there a better way?

We think so. Three overlapping economic movements - platform cooperativism, municipalisation and community wealth building - offer compelling alternatives to big tech platforms. They point to a future of democratically-owned and operated digital cooperatives that prioritise fair working conditions while avoiding extractive surveillance capitalism practices. Most significantly, by taking control of economic exchange at a regional or city level, *wealth that is created locally, can be retained locally.*

We analyse the many barriers to achieving this vision, including skills and capacity gaps, platform infrastructure, access to capital, and developing a critical mass of users. We identify two strategic recommendations for taking forward platform cooperativism in Scotland:

- **Creation of a Digital Platform Lab & Accelerator (DPLA):** platform cooperatives are held back by high costs associated with technical development and growth. A shared 'lab' would enable research and development work to happen collectively at a community level. The DPLA would engage in community development, education, research, and technical work to support the design and development of digital platforms.
- **Develop a municipal platform cooperative 'builder':** to encourage formation of more platform cooperatives, we suggest municipalities invest in a 'Shopify' style development platform. By offering 'template' platform designs with a menu of add-in modules, an ecosystem of platform cooperatives can flourish within a municipality, catalysed by interoperability, consumer trust and reduced frictions to adoption (e.g., through minimising the numbers of 'apps' a user must download for different services).

CHAPTER 1

THE PLATFORM ECONOMY AND COMMUNITY WEALTH BUILDING



1.1 Introduction

In this report we set out a new vision for the digital economy in Scotland. Our work is motivated by a dissatisfaction with the high-growth Silicon Valley model of digital entrepreneurship, which we suggest extracts wealth and opportunity from communities across the country. We propose an alternative model of entrepreneurship that preserves the best parts of digital platform marketplaces, while introducing business models that seek to retain more wealth where it was created, and by those who created it.

Our report is structured as follows. First, we provide an overview of the platform economy and review some of the positive and negative aspects of these types of marketplaces. Next, we take a deep dive into practice, engaging with individuals on the frontline of the platform economy in Glasgow to learn from their experiences. We then analyse two alternative economic models that might be applied to digital platforms - platform cooperatives and municipal platforms - to consider how exchange may be conducted on more equitable terms. We then consider the barriers to implementing these alternative models, specifically by focussing on issues of funding, scaling, and technical expertise. We then conclude our report by suggesting two strategic recommendations that we believe could kickstart an alternative digital economy in Scotland, in turn helping pioneer community wealth building approaches to platform marketplaces.

1.2 The Platformization of the Economy

Perhaps the most significant economic trend of the past decade has been the platformization of the economy. Digital platforms are multisided marketplaces that connect buyers and sellers by disintermediating industry value chains to deliver new forms of value. Many of these platforms have evolved into powerful ecosystem orchestrators who coordinate large communities of economic actors. These buyers and suppliers provide goods and services to each other, all within the walled garden of a digital platform.

Most large technology companies, such as Apple, Alphabet (Google), Microsoft, Amazon and Facebook operate some variation of a platform business model. Other well-known platforms include Ebay, Etsy, Uber, Deliveroo, Spotify, AirBnB, Youtube, Twitter, Wikipedia, Eventbrite, Roblox and Pinterest. Even in more niche areas, such as accounting and bookkeeping, the popular Xero software package has grown an ecosystem of integrated third party 'apps' which are sold through the platform store, leaving Xero to set the 'rules' for exchange within the mini ecosystem.

Typically, platform owners benefit from this model as value is primarily created by external/third party actors. This means that the traditional notion of the firm is inverted, as platforms themselves have few employees (in relation to output). For example, 'Youtubers' create value when uploading content and Uber drivers do so when transporting passengers. In each case the business model transfers cost and risk

to users (the company does not pay for driver cars, petrol, or insurance for example), and the platform mediates the relationship, either profiting through advertising or transaction fees. This trend is apparently accelerating. The recent 'Meta' strategy announcement by Facebook hints at a future of even tighter integration of producers and suppliers within the company ecosystem.

A notable feature of the platform economy is that markets are dominated by a small number of very large firms. This is because of an economic dynamic known as winner-takes-all (WTA). WTA results in there typically being only room for one or two large platforms within a particular industry vertical. The company who acquires customers fastest typically 'wins', as they benefit from 'network effects,'¹ - a phenomenon whereby a platform has greater utility the more people use it (e.g., shoppers have a better experience on Ebay when there are more vendors selling things, and vice versa). Once a firm is established as the dominant platform, it is very difficult for challengers to enter the market. The need to quickly gain market share can therefore explain why firms such as Uber effectively paid for (or otherwise subsidised) customers to use their service during rapid growth phases (it is reported that investors paid for a 59% portion of all rider fares as the company scaled¹). Such growth models require significant venture capital funding to sustain. In many cases, critics are even beginning to question whether there are profitable business models in the medium to long-term following consolidation of market position².

¹ <https://www.vice.com/en/article/9a3vye/uber-true-cost-uh-oh>

² <https://americanaffairsjournal.org/2021/02/the-crisis-of-venture-capital-fixing-americas-broken-start-up-system/>



**SKYSCANNER
SOLD FOR \$1.75BN
IN 2016**

1.3 The Scope of Platformization

Digital platforms now dominate the economy. An online platform is defined by the OECD3 as “a digital service that facilitates interactions between two or more distinct but interdependent sets of users (whether firms or individuals) who interact through the service via the Internet.” These platforms now dominate the economy and can be found in diverse places, from emerging technology markets such as NFT exchanges (e.g., Opensea.ai) to traditional retail sectors like the motor trade (e.g., Carwow, Cinch), and tradesperson sites (www.ratedpeople.com). In each of these sectors, platforms have emerged, often abruptly, to reshape the structure and power dynamics within established industries.

A core trend in platformization is the so-called ‘sharing economy’⁴ which allows for spatially distributed actors to optimise underutilised resources and labour. For example, users can rent out their house for a few days on Airbnb (www.airbnb.com) or can hire an otherwise unaffordable dress for a special occasion on Tulerie (www.tulerie.com). They can even trade time and expertise on crowdsourced labour marketplaces such as Amazon Mechanical Turk and Task Rabbit. While each platform undoubtedly offers utility for buyers and sellers, this masks significant externalised costs that are passed on to often vulnerable user groups (e.g., Mechanical Turk workers reportedly make less than minimum wage working on the platform at times⁵).

It is important to note that there is no single type of digital platform. There are, in fact, an endless range of platform configurations, some of which expand horizontally (e.g., Uber acquiring various competitor platforms), some vertically (e.g., Spotify moving into podcast production) and some doing both (e.g., Amazon expanding into web services while supplying an ever-expanding range of product and service markets). Platforms can also be B2B, B2C, C2C and even multiple configurations at the same time. In short, platforms are characterised by their fluidity and variety as opposed to homogeneity and stasis.

1.4 The Platform Economy in Scotland

There are no formal or systematic analyses of platformization in Scotland, though analysis of venture capital-funded companies reveals many platform-oriented businesses⁶. The most successful homegrown platform is Skyscanner, an intermediary website that links consumers with cheap flights, hotels, and car hire. The company sold for \$1.75bn in 2016, which remains the largest exit for a digital platform in Scotland. There exists a healthy cohort of other medium-sized platforms in Scotland, particularly in the fintech space where Money Dashboard, Nucleus, Lending Crowd and Qikserve are performing well. An interesting feature of the platform economy in Scotland is the diversity of industry sectors in which platforms are operating. They include medical imaging (Blackford Analysis), Tourism (Travelnest), Recruitment (Willo) and retail (Mallzee, Swipii).

³ OECD (2019), An Introduction to Online Platforms and Their Role in the Digital Transformation, <https://doi.org/10.1787/53e5f593-en>.

⁴ Although ‘sharing’ implies a form of prosocial exchange activity, critics highlight that the corporatized sharing economy has very little to do with authentic sharing.

⁵ <https://www.theatlantic.com/business/archive/2018/01/amazon-mechanical-turk/551192/>

⁶ <https://www.failory.com/startups/scotland>

1.5 Social and Economic Issues Associated with the Platform Economy.

There have been many consumer and supplier benefits resulting from the rapid platformization of the economy. For example, transaction costs for products and services have fallen sharply, and in some cases, goods can be produced at zero marginal cost. Individuals have been able to sell unused items while also being empowered to source rare goods, with ease, from across the world. Small traders and creative entrepreneurs can sell to global markets with limited friction, potentially raising earnings and expanding customer bases. Local communities have developed social capital by connecting via social media platforms, trading local news and events, and even forming mutual aid groups during the Covid-19 pandemic. There have been environmental and transportation benefits too, as mobile phone technologies have unlocked the potential for mass market ride sharing and bike hire services. Some have even benefited from the power of advanced algorithms to meet their partner on dating sites.

In short, platforms have demonstrated an impressive capacity to create significant positive value. Yet, this progress has come at a cost. There are numerous social and economic issues associated with platformization, which threaten to undermine both the utility of existing platforms and overall consumer welfare. The following section will analyse some of these issues, focussing on a Scottish perspective where relevant.

- **Market Structure and Regulation:** As previously outlined, platform economies are typically dominated by a small number of powerful companies. This has created problems for regulators acting in the public interest as these firms typically engage in extensive and well-funded lobbying activity. In many cases, platform operators have simply ignored legislation governing their businesses as the penalties for breaching local and

national laws are small when compared to actualised revenues^{7,8}. The Future Says_ initiative run by the Minderoo Foundation even describes a context of lawlessness⁹ when talking about digital platforms, who operate beyond the reach of traditional spatial and judicial boundaries. Regulators, wary of being perceived as too heavy handed - and recognising the public enthusiasm for many platform services - have adapted laws to accommodate platforms, despite some of the consequential social and economic harms to other stakeholders.

- **Taxation:** Many of the larger platforms are cleverly structured to pay small levels of tax relative to their revenues. For example, Facebook paid £28.5m UK corporation tax on a gross profit of £1.04bn in 2019¹⁰, Google paid £50m on revenue of £1.8bn in 2020¹¹ and Uber paid no corporation tax on turnover of £82.5m in 2019¹². There are also well-documented challenges associated with ensuring temporary 'gig' workers who use digital platforms accurately record tax liabilities, which means a swathe of economic activity is not being taxed accurately^{13,14}. The perceived unfairness relating to taxation is even causing tensions among competing platform operators, with the CEO of Just Eat, a food delivery platform, criticising competitors for not paying tax¹⁵. While these taxation practices are, in most cases, technically legal, they nonetheless create a market advantage for large digital platforms who are competing with more traditional businesses (such as taxi firms) who do not have the resources or know-how to engage in tax or regulatory arbitrage. Uber, for example, exploited a loophole to avoid paying 20% VAT on fares (that traditional firms are compelled to pay), by recategorizing drivers as SME businesses who are too small to register for VAT¹⁶. This enabled them to leapfrog competitors to establish market share, despite not playing by the spirit of the rules.
- **Anticompetitive Practices:** Another concerning

⁷ <https://appleinsider.com/articles/22/02/23/eu-chief-says-apple-big-tech-firms-tempted-to-pay-fines-ignore-laws>

⁸ <https://www.axios.com/google-facebook-fines-profits--134d3567-1052-4d9d-aa70-dc7c25ed4ebf.html>

⁹ <https://www.futuresays.org/tackle-lawlessness/>

¹⁰ <https://inews.co.uk/news/business/facebook-uk-tax-sales-latest-news-798710>

¹¹ <https://inews.co.uk/news/google-uk-pays-just-50m-of-tax-on-revenues-totalling-1-8bn-966557>

¹² <https://www.mirror.co.uk/money/uber-paid-no-uk-corporation-23479583>

¹³ <https://www.ft.com/content/f4cb26b6-b7db-11e6-ba85-95d1533d9a62>

¹⁴ <https://www.accountancydaily.co/mps-call-action-gig-economy-tax-avoidance>

¹⁵ <https://www.thisismoney.co.uk/money/markets/article-9831513/Just-Eat-boss-urged-stop-arguing-rivals-Twitter.html>

¹⁶ <https://www.reuters.com/article/uk-uber-tax-britain-idUKKBN18Y1Z6>

**AMAZON HAVE BEEN
ACCUSED OF EXPLOITING
THIRD-PARTY SALES DATA
TO LAUNCH HIGHLY
PROFITABLE OWN-BRAND
PRODUCTS.** ^{17 18}



trend, related in part to market power of some platforms and a lack of competition, are anticompetitive practices directed towards platform users. Large platforms, which are conduits for vast flows of sensitive data, have been accused of self-dealing by using customer data to unfairly compete with sellers on their own platforms. Amazon, for example, have been accused of exploiting third-party sales data to launch highly profitable own-brand products¹⁷ ¹⁸. Similarly, Uber Eats has been accused of using in-app searches (as a proxy for market demand) to launch their own 'virtual brands' based in ghost, or dark kitchens. These practices often cannibalise the demand for local restaurants using the platform¹⁹ and put strain on already small profit margins. In a well-functioning market, sellers could easily switch to an alternative platform provider, yet the dynamics in many platform markets mean this is often not an option, and equally, not being 'on' a platform may be commercially unviable too given the shift in consumer behaviour.

- **Labour Market:** A core feature of platformization has been radical disruption of the labour market. As platforms seek to gain competitive advantage through lowering transaction costs, they have externalised many labour costs on to workers and government services. This is manifest through health and wellbeing issues caused by work and working patterns, and low pay rates that can require top-ups via the UK welfare system (e.g., Uber were forced into topping up pay to ensure drivers make minimum pay when they are working). Uber

has recently had to significantly raise fares to try and lure drivers back on to their platform, as there was a shortage of 20,000 drivers in London in late 2021²⁰. While part of this is down to pandemic adjustments, it is evident that there is dissatisfaction with how digital platforms pass costs on to suppliers when markets tighten. Furthermore, it is often the case that without transgressions of traditional labour market norms, many leading platforms would not be able to deliver the lower costs that are central to their value propositions.

- **User Data Exploitation:** Data is viewed as a form of capital, or asset, by most large platform organisations²¹. Consequently, it is central to the monetization of many platform business models. While commentators argue there is an implicit bargain between platform users and platform operators that services are provided for free (or subsidised) in exchange for data²², many users are arguably unaware to what extent their data is exploited. Some critics argue this data extraction can be considered a form of appropriation, or surveillance capitalism²³, where platforms both predict and engineer user behaviour to sell more products and services. This data exploitation and monitoring can be sinister. For example, investigative journalists discovered that manufacturers of CPAP breathing machines were covertly sending user data directly to health insurers who used this data to alter prices²⁴. In many cases, the autonomy of the consumer is undermined without their knowledge, and there is little transparency around how this is happening.

¹⁷ <https://www.wsj.com/articles/amazon-scooped-up-data-from-its-own-sellers-to-launch-competing-products-11587650015>

¹⁸ <https://www.businessinsider.com/amazon-copied-third-party-sellers-competitors-india-reuters-report-2021-10?r=US&IR=T>

¹⁹ <https://www.newyorker.com/news/letter-from-silicon-valley/our-ghost-kitchen-future>

²⁰ <https://www.ft.com/content/8d118350-ba42-43bb-9300-b81996227f5c>

²¹ <https://www.theguardian.com/technology/2016/aug/31/personal-data-corporate-use-google-amazon>

²² <https://www.vox.com/recode/2020/1/29/2111848/free-software-privacy-alternative-data>

²³ <https://theconversation.com/explainer-what-is-surveillance-capitalism-and-how-does-it-shape-our-economy-119158>

²⁴ <https://www.propublica.org/article/you-snooze-you-lose-insurers-make-the-old-adage-literally-true>



**CWB HAS ACHIEVED SOME
SUCCESSSES IN THE UK
AND USA. PRESTON HAS
MOVED OUT OF THE
20% MOST DEPRIVED
LOCAL AUTHORITY AREAS
IN THE UK.**

1.6 Community Wealth Building

The second economic trend we consider in this report is Community Wealth Building (CWB). CWB is an approach to economic development that aims to repair the social and economic damage that has resulted from austerity, financialisation and automation²⁵. It does so by strategically coordinating local public, private and third sector ‘anchor’ institutions to transfer over more economic power and control to local people. This may involve a local institution such as a hospital choosing to spend an increased share of its considerable budget on locally owned and operated organisations. In practice this could involve catering or cleaning services being provided by a newly formed local workers coop rather than a large outsourcing firm. The economic benefit of this arrangement could include improved worker conditions (which may entail payment of a real living wage), and follow-on benefits from local spending on supply chains.

There are five core principles of CWB:

- “progressive procurement – developing local supply chains of businesses likely to support local employment and keep wealth within communities
- fair employment and just labour markets – Using anchor institutions to improve prospects of local people
- shared ownership of the local economy – supporting and growing business models that are more financially generative for the local economy
- socially just use of land and property – developing the function and ownership of local assets held by anchor organisations, so local communities benefit from financial and social gain
- making financial power work for local places – increase flows of investment within local economies by harnessing and recirculating the wealth that exists.”²⁶

CWB has achieved some successes in the UK and USA. The most notable UK-based case study is Preston City Council, who under the leadership of leader Matthew Brown, have bucked the trend of economic decline across Northern towns by halting the post-2008 recession trajectory. Preston has moved out of the 20% most deprived local authority areas in the UK, now outperforms the national average unemployment rate and recently won an award for ‘most-improved city’ in the UK²⁷, which is a strong commendation of the social and economic capital CWB policies have helped to develop. Notably, while CWB has demonstrated some very encouraging results, key advocates such as Council Leader Brown are careful not to present it as a panacea to all economic problems. It is, rather, an important component of a more balanced economy.

²⁵ <https://cles.org.uk/community-wealth-building/what-is-community-wealth-building/>

²⁶ <https://www.gov.scot/policies/cities-regions/community-wealth-building/>

²⁷ <https://inews.co.uk/opinion/community-wealth-building-saved-preston-council-from-budget-cuts-others-should-follow-suit-1130621>

1.7 Community Wealth Building in Scotland

The Scottish Government have placed CWB at the centre of their programme for government. This follows on from long-standing efforts to promote 'inclusive growth' through a range of policy measures that include the Fair Work Framework and the Agenda for Cities. To date, North Ayrshire Council have been the most proactive local council area to advance a CWB agenda, launching Scotland's first CWB strategy in 2020²⁸. As part of plans, they are seeking to better utilise land and assets, and have set a target of increasing procurement spend with local businesses to 26% by 2024. CWB activity at a national level, is now coordinated by the Scottish Centre for Regional Inclusive Growth (SCRIG).

1.8 Community Wealth Building and Digital Platforms

While the CWB concept has been experimentally applied to several industry contexts, it has rarely been considered in relation to digital platforms. This is surprising; we demonstrate in section 1.4 of this report that digital platforms engage in practices that can be considered as extractive, unjust to actors in local economies across the UK and beyond, and

anticompetitive. Given the volume of economic and social activity that is now conducted through digital platforms, we suggest they offer an exciting frontier in applying community wealth building principles to shape a more inclusive economy. Such an approach, as we shall argue in this report, is unlikely to happen organically, and without significant coordination across the public, private and university sectors. In the following sections we will outline a strategy for how Scotland can pioneer a new platform economy that delivers benefits for platform users, businesses, and broader society.

1.9 Summary

Digital platforms have transformed the economy in a short space of time. Consumers have benefited from increased choice, lower costs, and more efficient services. However, these gains often mask a transfer of risks and harms to those creating value, such as taxi drivers, restaurateurs, and other suppliers who now rely on platforms. Big tech platforms are also exploiting user data in ways that are not fully understood, often by deploying behavioural techniques to manipulate purchasing and platform engagement behaviours²⁹.

²⁸ <https://www.north-ayrshire.gov.uk/Documents/nac-cwb-strategy-brochure.pdf>

²⁹ <https://time.com/5872868/big-tech-regulated-here-is-4-ways/>

CHAPTER 2

PLATFORMIZATION 'ON THE GROUND'



2.1 Introduction

While platformization is considered as primarily an economic and technological phenomenon, its impacts on how people experience the economy are significant. In the following section we take a qualitative look at platformization through the eyes of service providers and consumers in Scotland. These vignettes illustrate the central paradox within platformization; namely, that there is clear utility for both customers and suppliers, but that the overarching ownership structure and market dynamics are perceived as unfair.



**JUST EAT LAUNCHED
IN GLASGOW IN 2008
AND NOW PARTNERS
WITH OVER 1,350
LOCAL RESTAURANTS.**

2.2 Experiencing the Platform Economy in Scotland

Jen³⁰, the owner of a West End smoothie bar, secures the lid of a to-go cup as she rings up the almost £7 drink. “Not everyone is able to come in here” she explains, “they are busy at work, so it is more convenient to order for delivery, and that’s why we use the platforms.” Although the increasing platformization of the global economy is evident, the impact of this macro trend on local neighbourhoods and small businesses is more unclear. To explore this context, we spoke with stakeholders who have experienced platformization within the restaurant sector in Glasgow. We interviewed seven restaurant owners and managers and spoke to various other users, to gain insight into their experiences of platformization.

In Glasgow, the restaurant sector has been particularly impacted by platformization, with Just Eat, Deliveroo, and Uber Eats all operating within the city. Some restaurant owners refer to these as “the big three,” signifying their dominance within the sector. The scope of these platforms is impressive – Just Eat launched in Glasgow in 2008 and now partners with over 1,350 local restaurants. The objective of these digital platforms is to connect restaurants with customers, providing online ordering facilities and delivery services. They do so in large quantities, with Deliveroo reporting order volumes of 71 million globally in the first quarter of 2021. As a result, these platforms are viewed as “a cheat code to get delivery

capabilities quicker” and “the DPD [Dynamic Parcel Distribution]” for the restaurant sector of the city.

When asked about the benefits of these digital platforms for the smoothie bar, Jen explains “getting our name out there and getting more sales, we reach customers we wouldn’t be able to if we weren’t on the platform.” Demand for increased sales and access to new markets were frequently cited benefits of Deliveroo and similar companies. For example, an Indian restaurant located within Glasgow’s city centre was able to use the platform to access the lucrative student market. The restaurant manager, Harshil, explained “there are a lot of students from India nearby, so we get a lot of orders from them through Uber Eats and Deliveroo.” Some restaurants viewed this access to new markets as a “sales funnel” to try and increase custom directly to their business. Promotional materials are often included in orders, offering in-store discounts, or encouraging customers to order directly from the restaurant’s website. Harshil used student discount cards in his Uber Eats and Deliveroo orders, offering this market segment 20% off if they make a booking with the restaurant. However, it is difficult to measure the effectiveness of this tactic. On the backend of these digital platforms, restaurant managers typically only have access to two-to-four weeks’ worth of data. This data focuses on bestselling items and popular postcodes, but restaurants are not given customers contact details, making it “impossible to work out what the conversion rate actually is - so in reality, it’s a shot in the dark.”

³⁰ real names have been changed

TO COMPENSATE FOR THE COMMISSION CHARGED BY DIGITAL PLATFORMS, RESTAURANTS HAVE TO INCREASE WHAT THEY CHARGE.



2.2.1 Commission

These restaurants try to convince customers to purchase directly, as orders made through third party platforms are subject to commission. Restaurant owners explained platforms generally take a 36% commission plus VAT on each order. This reduces to a 14% commission plus VAT on each order if the restaurant uses their own delivery drivers. Most restaurant owners felt “the size of their fee is a little unfair” and “the cut that they take is a lot.” When asked to comment on this, Harshil remarked “they charge too much commission; the money they take is very, very high and the profit margin is not there, so the prices have to go up.”

To compensate for the commission charged by digital platforms, restaurants have to increase what they charge. While one might assume restaurants could maintain prices in-store while increasing prices on platforms like Deliveroo, this is actively discouraged and sometimes even restricted by digital platforms. Restaurants partnering with delivery platforms often have to sign contracts promising that their prices online and offline will not differ. For example, Just Eat has a pricing promise that states “we offer a guarantee that if you pay more for a delivery meal when ordering from Just Eat than from the restaurant direct, we will give you twice the difference.” As a consequence, prices within the sector have been forced higher to accommodate the cost of platform commission. Shamik, the manager of an Indian

restaurant in the West End of Glasgow explained, “whether they are aware of it or not, it is affecting the customer; because of these platforms it has become much more expensive, so the prices have had to go up.”

2.2.2 Pay-Per-Click Advertising

Besides taking a hefty commission, the stakeholders we spoke to explain that digital platforms also use pay-per-click advertising to drive increased revenues. When selling via an online platform it is beneficial to have your restaurant listed within the top five options for your category. For example, if a customer filters for Indian food, it is advantageous for Shamik's restaurant to be recommended first. This is likely to generate more traffic to your menu and, in turn, more sales to your restaurant. Restaurants could agree to have their menu promoted within the platform and each time someone clicked on their menu – whether they made a purchase or not – a fee would be charged. James, the owner of a pizza restaurant in the East End, used this type of promotion for three months. He explained platforms often charged £2.00 or £3.00 per click on their menu - even when this did not convert to sales. James clarified that some weeks he was paying almost £500 just for pay per click advertising, over and above the regular commission taken by the platforms. When asked about the impact of this on business, he remarked, “begrudgingly beneficial,” “it is good for a while, but it is unsustainable.”

2.2.3 Encouraging Discounts

On top of commission and advertising income, third party platforms also encourage local restaurants to offer discounts. “Their sales tactics involve a lot of discounts” Jen explained, “they encourage you to run discounts to get promoted on the platform.” In exchange for running discounts, restaurants would be advertised by these digital platforms. These sales tactics were viewed as quite aggressive, as restaurants “have to use discounts to get to the top again.”

Running a discount is as easy as clicking a button on the backend of the digital platform. Restaurant managers explained discounts including £10 off a £50 spend and 20% off the entire menu are pre-determined and can be activated instantaneously. This led managers to question the degree of autonomy they had over their offers. In most instances, restaurants are required to incur the loss associated with running these promotions, rather than sharing this expense with the platform, but were nonetheless regularly encouraged to do so by the platforms themselves.

James, the East End pizza restaurant owner, explained each of the ‘big three’ promote a discount day during the week. For example, Deliveroo host ‘Treat Yourself Tuesday’ where participating restaurants can offer 20% off their entire menu on this day. Getting involved in a promotion such as this comes with the promise of being promoted to customers within the digital platform. However, when asked about the effectiveness of these discount

schemes, James’s experience suggests these promotions do not increase the overall volume of orders received across the three platforms; instead, promotions simply channel the same volume of orders through one platform. “It’s beneficial for them” James explains, “but not really for us.” This demonstrates how these sales tactics benefit the platforms, while the same advantages are not always realised by restaurant partners.

2.3 Looking to the Long-term

Engaging with stakeholders in the restaurant sector in Glasgow makes the “begrudgingly beneficial” influence of these platforms on the industry clear. While restaurants can increase sales quickly and access new markets with ease, it is important to recognise the significant costs associated with partnering with these platforms. The aggressive sales tactics and high commission fees have increased costs within the restaurant sector and this “will inevitably reflect on menu prices and portion sizes.” Within this context, restaurant owners feel quite isolated. “It’s worth re-emphasising” Shamik explains “restaurant folk are generally tired of these companies.” Customers are happy to place orders through third party platforms, taking advantage of the simplicity of using these services and the hefty discounts that are associated. However, restaurant owners feel customers are unaware of the long-term impact these platforms are having on the restaurant industry. “They’re happy right now” Shamik concludes, “until a curry costs them £30.”

ALTERNATIVE OWNERSHIP MODELS FOR DIGITAL PLATFORMS IN SCOTLAND



3.1 Introduction

Our conversations with restaurant owners and digital platform users surface many of the tensions at the heart of platformization. On one hand, platforms increase market reach for restaurateurs and provide utility for consumers (through choice and convenience). At the same time, digital platforms are perceived as profiteering, or otherwise exploiting a captive market. According to our findings, these practices are dramatically raising operating costs within the industry, leading to an aggregate increase in consumer prices - even for those who do not use digital platforms. From a community wealth building perspective, this is concerning. The restaurant delivery industry is dominated by small, often family-owned businesses, many of whom operate on relatively thin margins. Equally, they tend to be spatially distributed across towns and cities, avail themselves of local suppliers and professional services, and contribute to local taxes. In short, they are hugely important for recycling money within local economies.

As things currently stand in the restaurant sector in our case study city of Glasgow, many of these small businesses are foregoing in excess of 36% of core revenue streams, often simply to stand still (i.e., there is no net benefit to being on the business as increased sales are balanced against increased operating costs). The revenue captured by digital platforms does not typically recycle locally. Instead, echoing examples highlighted by proponents of community wealth building³¹, the money transfers to large platform operators based in low-tax jurisdictions, and who, according to multiple reports, are likely to engage in ethically questionable practices such as profit shifting³². Such practices further consolidate the power and positioning of these platforms, enabling them to operate to a different set of rules than other businesses in their value chain (e.g., smaller restaurants, delivery drivers, start-up competitors), giving them additional scope to set favourable market conditions.

Large technology platforms, in an open market economy, have a right to operate of course. However, at present their competitive practices (in part due to slow or inadequate regulation) are removing the oxygen necessary for alternative ownership models (and therefore consumer choice). In this section we analyse two promising alternative ownership models - platform cooperativism and municipal platforms - that each have potential to introduce pluralism, choice, opportunity, and fairness into digital platform markets.

³¹ <https://repeaterbooks.com/product/paint-your-town-red-how-preston-took-back-control-and-your-town-can-too/>

³² [https://www.europarl.europa.eu/RegData/etudes/STUD/2016/579002/IPOL_STU\(2016\)579002_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2016/579002/IPOL_STU(2016)579002_EN.pdf)

3.2 Community Wealth Building in Scotland

Platform cooperatives “are businesses that use a website, mobile app, or protocol to sell goods or services. They rely on democratic decision-making and shared ownership of the platform by workers and users.”³³ Contemporary platform cooperativism extends on traditional models of cooperative business ownership first pioneered in the North of England in the 1840s. There, workers developed a set of principles for operating member-owned, democratically managed businesses, committed to the wellbeing and personal development of participants³⁴. This led to a significant improvement in the welfare of workers and their families at the time, and the legacy has been carried on by a thriving contemporary cooperative sector, which includes notable organisations such as the John Lewis Partnership and the Cooperative Group.

In some regards, many relying on gig work, at the margins of today’s economy, are experiencing forms of exploitation and low pay that would be familiar to the early cooperative workers. This reflects the power imbalance between workers and industrialists, which has grown more unequal in the digital era owing to the winner-takes-all dynamic that has distorted markets³⁵ and concentrated rewards in fewer hands. Such conditions have led to the emergence of cooperatives that are adapted to digital platforms and contemporary labour and economic issues.

Platform cooperatives have developed in communities across the world and operate in a range of industry niches. According to the Platform Coop Directory³⁶, as of 2022, there are 522 ongoing projects in 49 countries. In France, for example, there are successful

courier coops such as Coop Cycle³⁷ and in the UK food platforms such as Open Food Network (<https://openfoodnetwork.org.uk>) provide a platform for community food enterprises, and start-ups such as Wings (www.wings.coop) provide ethical courier services. The emerging ecosystem of platform coops coalesces around the Platform Cooperative Consortium, led by Prof Trebor Scholz of the New School, New York. Within the community, there are strong norms around collaboration and sharing. Many organisations open source their code³⁸ and software, to enable the rapid parallel development of the movement. It is also not uncommon to see federations of cooperatives emerge to spread successful platform coop business models through economies of scale (e.g., Coop Cycle).

While there is sometimes an assumption that cooperatives are less capable than their privately-owned competitors, evidence shows this is not the case. Cooperatives are significantly more likely to survive their first five years of trading than non-cooperative organisations³⁹. They are also more productive, have higher staff retention, lower pay inequality and lower absenteeism⁴⁰. That said, there remain several barriers to expansion of the platform cooperative model in practice. The primary barrier is access to capital. In many cases, launching a platform can be extremely capital intensive as the cost of customer acquisition can be prohibitively high. Venture capitalists are unlikely to fund cooperatives as the structure prevents large returns to individual investors⁴¹. Therefore, platform cooperatives are at a significant disadvantage to commercial ventures when raising funds, and this affects ability of the sector making inroads in established markets.

³³ <https://ia804605.us.archive.org/20/items/policy-paper-dec-6/Policy%20Paper%20%28Dec%206.2%29.pdf>

³⁴ <https://www.ica.coop/en/whats-co-op/co-operative-identity-values-principles>

³⁵ https://unctad.org/system/files/official-document/ser-rp-2019d12_en.pdf

³⁶ <https://directory.platform.coop/#/1/31.1/-84.8>

³⁷ <https://coopcycle.org/en/>

³⁸ <https://medium.com/bettersharing/why-sharetribe-is-open-source-9462384a2f81#.kn5pfb79q>

³⁹ <https://www.uk.coop/start-new-co-op/start/benefits-co-op>

⁴⁰ https://media.nesta.org.uk/documents/Nesta_Platform_Report_AW_v4_3.pdf

⁴¹ <https://medium.com/resonatecoop/about-platform-cooperatives-and-the-investor-problem-3d76c47b2e05>

PUBLICLY-OWNED SCOTTISH WATER IS NOW THE CHEAPEST IN THE UK.



3.3 Civic/Municipal Digital Platforms

An alternative to bottom-up worker platform cooperatives, is the municipal ownership of digital platforms. Civic platforms can offer similar high-level functionality to existing commercial platforms, though facilitate economic exchange on more equitable terms. Given the significant costs to start-ups in developing generic elements of a platform (e.g., web hosting, payments systems, database management and all other typical software development expenditures) we suggest municipalities could operate a platform coop management platform, that is, a form of enterprise system similar to commercial offerings such as Shopify and Bigcommerce.co.uk. An interesting (non-cooperative focussed) example is Decidim (www.decidim.org). This software offers a platform for civic organisations to coordinate various participatory democracy activities, such as budgeting, with the opportunity to add a range of 'modules' (e.g., analytics, feedback, maps) depending on project needs. There is also a strong tradition of municipalities developing platforms in the sharing economy, to support asset sharing and activities such as time banking⁴².

3.4 Should the Public Sector Engage?

While public ownership of infrastructure is often stigmatised in contemporary economic debates, there is a growing remunicipalisation movement that is attempting to address market failures associated with privatization and laissez-faire governance (e.g., lack of investment, poor performance, mistreatment of workers)⁴³. The general sentiment towards deregulation is turning, even amongst those with strong ideological beliefs in privatisation⁴⁴. This was powerfully illustrated by the totemic example of rail privatisation in the UK, in which the GNER line was nationalised after the private operator failed. The nationalised operator returned over £1bn in premiums to the government, and customers were more satisfied with the service. Similarly, after deregulation of water provision in the UK, the publicly-owned Scottish Water is now the cheapest in the UK⁴⁵ as significant investment in infrastructure (as opposed to paying dividends to investors) has created a modern and relatively efficient system.

Public ownership of platform infrastructure that

⁴² <https://www.weforum.org/whitepapers/collaboration-in-cities-from-sharing-to-sharing-economy>

⁴³ https://www.gla.ac.uk/media/Media_755971_smx.pdf

⁴⁴ <https://www.theguardian.com/uk/2000/oct/21/thatcher.hatfield>

⁴⁵ <https://www.opendemocracy.net/en/opendemocracyuk/water-in-uk-public-versus-private/>

**OUR PRINCIPAL
JUSTIFICATION FOR
PUBLIC SECTOR
INVOLVEMENT IS
TO OFFER CHOICE
WHILE PROTECTING
CONSUMERS AND
SUPPLIERS FROM
EXPLOITATION.**



exclusively connects buyers and sellers within a municipal area is a reasonable proposition, on these grounds. Considering that most value is created and consumed within the spatial confines of a municipality, then it is reasonable that a locally owned utility platform should connect market actors to facilitate trade, particularly where there are suggestions that incumbent platforms are extractive or exploitative. There is a long history of publicly-owned institutions operating alongside thriving commercial sectors. For example, the BBC and Channel 4 offer a complementary public service-oriented output to privately-owned television channels, and The TOTE was established as a safer (publicly owned) way to bet on horse racing in the 1920s. It existed alongside a flourishing commercial gambling market until it was privatised in 2011.

We acknowledge there are likely to be concerns around public sector involvement from stakeholders across the political spectrum. These fears can in some instances be legitimate, and there are examples that illustrate where government or public sector activity inadvertently harms productivity, innovation, or welfare⁴⁶. However, we suggest the digital platform sphere is structurally dysfunctional, and that there are both pragmatic economic reasons and broader moral justifications for proactively rebalancing the sector. As Marianna Mazucatto argues in her book, *The Entrepreneurial State*, government has an important role to play in shaping innovation and entrepreneurship. The concentration of gains from digital innovation into a small number of hands legitimises the development of a municipal alternative that returns a degree of economic agency to local communities.

It should also be noted that local authorities regularly engage in physical 'bricks and mortar' retail markets. For example, some municipalities act as landlords,

and some even own and operate entire shopping centres. West Canterbury Council, for example, bought the failing Whitefriars shopping centre for £75m as they believe they are best placed to regenerate the centre by finding new uses and revenue streams⁴⁷. Within this context, the leap to curating a high quality and safe 'platform foundation' for other local cooperatives to operate on top of (analogous to a physical shopping centre) becomes less dramatic.

To conclude, our principal justification for public sector involvement is to offer choice while protecting consumers and suppliers from exploitation. We draw on the libertarian paternalism framework developed by Thaler and Sunstein⁴⁸ to support this case for intervention. Here, we suggest it is legitimate to introduce a welfare enhancing public innovation (e.g., a digital platform that facilitates exchange/ consumption within a municipality) as there is no compulsion or coercion for any individual to use the platform (i.e., they can freely use any of the alternative commercial platforms). In this sense, the consumer and supplier always retain free will around consumption choices, but their range of choices is expanded to include options that will be more advantageous for the local community.

3.5 Summary

In this section we have reviewed two emerging economic approaches that can be used to address the most harmful elements of platform capitalism. We acknowledge there is often a reluctance from public sector actors to intervene in markets, however we argue there is both an economic and moral case for doing so. We propose that municipalities should develop foundational platform infrastructure that local cooperatives can develop on top of.

⁴⁶ <https://doi.org/10.1002/sej.1395>

⁴⁷ <https://www.cityam.com/the-local-councils-embarking-on-a-shopping-centre-spending-spree/>

⁴⁸ <https://www.jstor.org/stable/3132220?seq=1>

CHAPTER 4

A COMMUNITY WEALTH BUILDING STRATEGY FOR DIGITAL PLATFORMS IN SCOTLAND



4.1 Introduction

Thus far we have illustrated how digital platforms can offer valuable new technological affordances for users. These include cost, time, and environmental efficiencies, enabled by reduced transaction costs associated with online platforms. Digital multi-sided markets have also lowered barriers to entry for those participating in economic activity, and smaller producers have access to larger markets. However, these gains often come at a significant cost, most notably through reductions in worker pay and conditions, decreased local and national tax revenues, and limited market competition (at a platform level). Furthermore, the dominance of large platforms holds back community-level innovation in digital technology as there is limited scope for small platforms to survive and scale in any meaningful way.

We suggest there is a compelling case for developing a national strategy for supporting and coordinating an alternative, community-focussed platform economy. We advocate for a digital economy that builds innovation capacity in Scotland to support forms of platformization that raise individual welfare and return more benefits to the people who create value. The prize is considerable: Scotland can increase the wealth of small business owners, enhance productivity through digitisation, and reduce the money that is appropriated from communities through regulatory arbitrage and other legal - though exploitative - practices.

The scale of the challenge associated with establishing this vibrant alternative economy cannot be understated. Yet, given many of the most famous contemporary digital platforms are not profitable⁴⁹, and apparently have no route to profitability^{50 51}, it is an opportune time to lay the groundwork for what comes next. We believe this future economy will be one in which the benefits of platforms are balanced with more equitable outcomes and innovative forms of community ownership. In this section we review the barriers to this future digital cooperative economy in Scotland, and then explain how fusing elements of various alternative economic models (i.e., platform cooperativism, community wealth building and municipalisation) can offer a path forward.

⁴⁹ <https://www.businessinsider.com/tech-companies-worth-billions-unprofitable-tesla-uber-snap-2019-11?r=US&IR=T>

⁵⁰ <https://marker.medium.com/end-of-the-line-for-uber-901e3077bbbc>

⁵¹ <https://blogs.lse.ac.uk/businessreview/2021/10/29/will-uber-still-exist-by-the-end-of-the-decade/>

**THE SCOTTISH TECH
ARMY CONSISTS OF OVER
2000 VOLUNTEERS WHO
HAVE CONTRIBUTED TIME
AND EXPERTISE TO
CREATING PUBLIC VALUE
THROUGH DIGITAL
TECHNOLOGY.**



4.2 Barriers to Digital Platform Cooperatives in Scotland

We identify five core problems that should be addressed to optimally position Scotland for the next wave of platformization⁵². These are hurdles which must be acknowledged if a more equitable digital economy is to emerge:

1. Skills and Capacity
2. Platform Infrastructure
3. Data ethics
4. Access to Capital
5. Critical Mass

4.2.1 Skills and Capacity

A core issue preventing greater digital innovation in the cooperative sector, and the digital sector in Scotland more broadly, relates to skills. Developing a viable platform requires a range of competencies in both software development, user experience and business strategy. While all the individual components necessary to develop a digital platform in Scotland are present, at least to some extent (as evidenced by the success of various home-grown digital platforms), competition for highly skilled workers is considerable. For example, Digital Skills Scotland report that 75% of employers in Scotland are experiencing difficulties recruiting qualified digital staff⁵³. The Logan Report⁵⁴ also highlights some of the capability gaps that prevent digital firms located in Scotland from achieving their full growth potential. Thus, action is required to build capabilities that respond directly to the needs of a fledgling digital cooperative movement.

One factor that bodes well for overcoming skills shortages through traditional labour market strategies (e.g., hiring full time staff) is the apparent civic mindedness of the tech community in Scotland. Specifically, the Scottish Tech Army⁵⁵, formed during the coronavirus pandemic, consists of over 2000 volunteers who have contributed time and expertise to creating public value through digital technology. Additionally, there is evidence of a progressive approach to public sector innovation in Scotland through the work of organisations such as CivTech⁵⁶. CivTech show how private and public sector innovation can be coordinated to address societal grand challenges, developing shared technical expertise in the process. These examples are intended to downplay the significance of skills shortages, but nonetheless highlight there are innovative non-market workarounds to development capacity.

4.2.2 Platform Infrastructure

While the costs of developing digital infrastructure is falling⁵⁷, it can still present notable technical challenges for small, resource-constrained firms. A core barrier for smaller platform cooperatives lies in some of the more technical areas of development, such as artificial intelligence. For example, a coop ride-sharing app might struggle to deliver the efficiency of service that a leading platform might as it will not have access to the large training data sets that are required to deliver the algorithmically optimised services consumers are now familiar with. Similarly, we believe consumers will expect minimum friction with any coop platform they use, and this means not having to download different apps for different services.

⁵² We do not include any policy issues that may affect platformization in this report, and instead focus on available actions within current frameworks.

⁵³ <https://digitalskillscotland.co.uk>

⁵⁴ <https://www.gov.scot/publications/scottish-technology-ecosystem-review/>

⁵⁵ <https://www.scottishtecharmy.org>

⁵⁶ <https://www.civtech.scot>

⁵⁷ For example, developing a website 10 years ago would have been a costly endeavour, but now it can be done to a reasonable standard by an amateur.

4.2.3 Data Ethics

A material difference between traditional digital platforms and cooperative platforms relates to how customer data is used. For example, a fundamental competitive advantage that big tech platforms have over smaller competitors, is again, access to large datasets that can train machine learning systems to optimise business operations and sales processes. These systems are also used to exploit behavioural data through hypernudging and other surveillance capitalism techniques. This can involve the manipulation of customer decision architectures to shape purchasing or engagement activity, which many argue undermines the individual autonomy of platform users. Academics such as Shoshana Zuboff⁵⁸ claim this threatens the free will of individual users and can reduce the overall welfare of consumers. A core challenge for platform cooperatives therefore, rests in how to operate an efficient platform that provides similar utility to large incumbents, without reducing autonomy through exploitative data-driven behavioural methods.

4.2.4 Access to Capital

A major barrier to the successful development of platform cooperatives is financial. Nesta and Cooperatives UK highlight the ‘capital conundrum’⁵⁹ that holds back the growth activity required to compete with incumbent platforms. There are specific

financing mechanisms, such as community shares, which are tailored towards cooperative businesses. These forms of capital offer flexible means of raising funds and allow community members to part own the cooperatives they invest in, giving additional voice to community members⁶⁰. Despite the potential of such funding mechanisms though, they generally have a ceiling in terms of how much funding can be raised, and it should be acknowledged that there are additional costs and challenges from securing many small investments as opposed to one or two larger investments. This is a material issue that must be considered when raising funds to achieve some level of scale for a digital challenger platform.

4.2.5 Critical Mass

The final barrier to operating a start-up challenger platform relates to how the venture will achieving a critical mass of buyers and sellers. Given that network effects dictate utility will increase for users when more users join a platform, this is a difficult dynamic to overcome (it is certainly the main reason that even well-funded commercial platform challengers regularly fail). Many ‘gig work’ firms, for example, only survive for 2-3 years owing to low user numbers and limited job postings⁶¹. Platform cooperatives therefore must find a way to build market share quickly, without burning through excessive funding – all while finely balancing supply and demand on both sides of the platform.

⁵⁸ Zuboff, Shoshana. “Surveillance capitalism and the challenge of collective action.” *New labor forum*. Vol. 28. No. 1 SAGE Publications, 2019

⁵⁹ https://media.nesta.org.uk/documents/Nesta_Platform_Report_FINAL-WEB_b1qZGj7.pdf

⁶⁰ https://www.uk.coop/sites/default/files/2020-10/community-shares-report-2020-final_0.pdf

⁶¹ <https://hbr.org/2019/05/a-study-of-more-than-250-platforms-reveals-why-most-fail>.



WE RECOGNISE THERE ARE MANY BARRIERS TO TRANSFORMING THE DIGITAL ECONOMY IN SCOTLAND.

4.3 Towards A Strategic Vision

We recognise there are many barriers to transforming the digital economy in Scotland, not least the high start-up costs and technical challenges associated with seeding an alternative digital economy model at scale. Individually, platform cooperativism, municipalisation and community wealth building are unlikely to realize the latent potential for change in the digital sector. Therefore, we suggest a strategy that combines individual elements of each approach can offer a viable model for growing a strong, more equitable digital economy.

The key elements we emphasise are:

- The Platform Cooperative Model: Platform cooperatives provide a sound organisational logic, set of operating principles, and legal structure for coordinating exchange on fair and socially just terms in the digital economy. We propose this model can form a strong foundation for many configurations of digital platform.
- Utilisation of Anchor Institutions: We recognise problems of consumer trust and growth that are specific to platform cooperatives. We therefore suggest integrating 'anchor' institutions into these platform cooperatives to a) legitimise the use of platform coops, and b) to support a critical mass of activity that can spur subsequent organic growth.
- Platforms as a Municipal Utility: We suggest developing a foundational municipal-led open-source platform builder on which start-up platform cooperatives can operate upon (e.g., by extending on the www.decidim.org model). We suggest pursuing a modular approach that would allow nascent cooperatives to construct their own platform without significant technical expertise. Through this approach, it would be possible to reduce start-up costs, enforce common standards, and increase interoperability across multiple cooperative services.

In summary, our strategy builds on the platform cooperative ideal, but offers a technical solution and community wealth building-derived growth strategy that can overcome barriers preventing more impactful digital transformation.

WHAT COMES NEXT: SPECIFIC RECOMMENDATIONS FOR CATALYSING DIGITAL PLATFORM COOPERATIVES



5.1 Introduction

There is clear enthusiasm in Scotland to do business differently. Recent policy initiatives have highlighted a commitment to fair work, inclusive growth, and community wealth building, while also establishing a vision to grow world-leading commercial technology businesses through the tech-scalars proposed in Mark Logan's Scottish Technology Ecosystem Review. What we propose in our report, therefore, is a set of activities that fuse Scotland's progressive approach to economic activity with cutting-edge digital technologies, to capture and recirculate more value from these new modes of exchange.

We suggest two strategic objectives and a set of associated recommendations that can help achieve the vision outlined in section 4.3. Undertaking these activities can position Scotland as a world-leading hub for digital platform cooperatives and community wealth building innovation. These objectives and recommendations are outlined in the following sections.

5.2 Objective 1: Develop a Digital Platform Lab and Accelerator in Scotland

Our analysis of the platform cooperative sphere reveals a dynamic movement of entrepreneurs, activists, academics, policymakers and third sector organisations working to shape an exciting new economic model. Despite this enthusiasm, there is considerable intellectual and applied work still to do. For example, there are only a handful of truly successful platform cooperatives to showcase globally, and our review of barriers reveal the sector is beset by limited funding, scaling challenges and low levels of stakeholder awareness. These are all considerable problems that must be solved to grow a sustainable community wealth building alternative to the extractive technology platforms that dominate the economy.

There is no formula to guide the creation of a thriving platform cooperative economy. Our primary recommendation, therefore, is that a Digital Platform Lab & Accelerator (DPLA) is created in Scotland to undertake experimental research, knowledge exchange, technology development and capacity building work that has the purpose of establishing a platform cooperative economy in Scotland. The DPLA would create interdisciplinary project teams to work on R&D problems for collectives seeking to form their own platform cooperatives. The DPLA would also develop and host incubator and accelerator programs for promising platform cooperatives, building on newly commissioned research that will seek to develop a growth playbook for organisations operating under cooperative business principles.

Specific DPLA activities would include:

- Community engagement and awareness building
- Building a modular developer toolkit
- Education and student projects
- International academic engagement
- Economic modelling
- Growth and scaling strategy
- Legal and governance strategy
- Responsive problem solving
- Tracking and monitoring the development of the sector

These activities will be outlined in the following sections:

5.2.1 Community engagement and awareness building

We previously identified ‘critical mass’ as a barrier to the organic growth of platform cooperativism. Accordingly, a central activity of a DPLA would be outreach work to raise awareness of the social and economic benefits of alternative ownership models. Specifically, a DPLA would work with community stakeholders (including potential anchor organisations) to identify and scope opportunities for founding digital cooperatives and would support platform start-ups with market identification and customer development work. A core target for early awareness-building activities would be the 564 traditional cooperatives who already operate in Scotland⁶². These are considered the most likely early adopters of digital platform cooperativism and would provide valuable proof-of-concept cases to support broader expansion of activities into entirely new market sectors.

⁶² <https://socialenterprise.scot/co-operative-social-enterprise-in-scotland/>

**WE ARE REASSURED
THAT THERE IS SIGNIFICANT
CURIOSITY AND
ENTHUSIASM FOR
ALTERNATIVE BUSINESS
MODELS IN THE
DIGITAL ECONOMY.**



5.2.2 Building a Modular Developer Toolkit

We are enthusiastic about the Decidim (www.decidim.org) model of civic platformization. This model offers high quality foundational platform templates for the kind of activities that support participatory democracy (e.g., providing tools for participatory budgeting or consultations). Users can then select from a range of ‘modules’ that can plug in to their platform for additional functionality. We see great value in such an approach for nascent platform cooperatives, who could easily use a default template with additional plug-and-play modules (e.g., payment or scheduling modules) that reflect their specific value-creating needs. By developing shared resources that can be deployed by any aspiring cooperative, costly R&D processes can be externalised (and shared) by the organisation, allowing them to focus on core value creation activities. Furthermore, by creating an ecosystem of interoperable tools, the robustness of any digital platform can be enhanced, and new modules can be contributed by others in the network.

5.2.3 Education and student projects

In line with the open-source ethos of the platform cooperative community, we recommend developing a world-class series of digital education resources that can be shared across universities, colleges, and entrepreneurship incubators/accelerators in Scotland.

We are reassured, based on our own experiences teaching undergraduate, postgraduate and doctoral students, that there is significant curiosity and enthusiasm for alternative business models in the digital economy. Building a broad base of entrepreneurs who are versed in these progressive and sustainable approaches will encourage a healthy pipeline of future entrepreneurial activity. We also propose that a DPLA act as a conduit for student projects and industry placements across Scotland. This would be a valuable means of increasing awareness of platform cooperativism while also expanding the available labour pool for (resource constrained) platform coops to draw on.

5.2.4 International academic engagement

Platform cooperativism is a global economic movement, and there is an active community of scholars, think-tanks and policymakers who are developing conceptual frameworks to support the expansion of this activity. A Scottish DPLA would engage with these networks to synthesise the key insights from the community for practitioners in Scotland. For example, the Platform Coop website publishes a range of open-source tools⁶³ to help other coops manage calendars, customer communication, decision making and payments. The DPLA would assist start-up platform coops in integrating these tools and other best practice insights into their entrepreneurial activities.

⁶³ <https://tools.platform.coop/#tools>



CUSTOMERS ARE WILLING TO PAY MORE TO PURCHASE BOOKS THROUGH SITES SUCH AS WWW.BOOKSHOP.ORG TO SUPPORT LOCAL RETAILERS.

5.2.5 Economic modelling

An underdeveloped facet of platform cooperativism relates to the economic modelling of key value creation and exchange activities. For example, analysis is required to understand the price sensitivity of various economic actors operating across different configurations of digital platforms (mispricing is identified as the primary reason for commercial platform failure⁶⁴). Looking to other ethical platforms, it is notable that customers are willing to pay more to purchase books through sites such as www.bookshop.org (a platform that sells books on behalf of independent bookstores) to support local retailers. Equally, more detailed modelling is needed to understand the relative weighting of ethical dimensions on consumer decision making relating to digital platform usage. For example, would consumers be willing to pay more for a platform cooperative food delivery (on a similar basis to the aforementioned [bookshop.org](http://www.bookshop.org)) as they know money is retained in the community? Or must platform cooperatives aggressively compete on price to thrive and survive?

These fundamental insights can inform the development of platform cooperatives by helping position cooperative value propositions optimally between price, efficiency, and ethical consumption (something that is not systematically achieved, or well understood at present).

To compete with large commercial platforms, platform cooperative start-ups must also grasp complex behavioural economics techniques. For example, such methods are often used to understand how various cognitive biases such as loss aversion, halo effects and anchoring biases shape buying decisions in different purchasing contexts. Many large digital platforms expend significant effort understanding and then shaping customer decision architectures to 'nudge' particular outcomes within their services. Deploying these techniques ethically within the platform cooperative sector is necessary to help challengers compete, though experimentation is required to successfully adapt practices to align with the value frameworks of the cooperative sector.

⁶⁴ <https://hbr.org/2019/05/a-study-of-more-than-250-platforms-reveals-why-most-fail>

5.2.6 Growth and scaling strategy

As our analysis demonstrates, one of the defining characteristics of successful technology platforms is a laser-like focus on customer acquisition and growth. To benefit from network effects (and the ensuing self-sustaining growth), it is necessary to scale ventures quickly (we are not suggesting platform cooperatives emulate the growth-at-all-costs mentality of commercial platforms but acknowledge that rapid growth is a necessary condition to improve the utility of most multi-sided markets). Platform cooperatives do not have the resources to acquire customers in the same way venture capital-funded ventures do, and therefore work is required to develop scaling mechanisms that do not rely on subsidising customers at the expense of suppliers (we do not believe this is a sustainable model, either in the private sector or social sector).

We are optimistic about the possibilities of experimenting with low-cost methods of scaling. For example, we believe platform cooperatives have not yet fully experimented with the low-cost entrepreneurial marketing or ‘growth hacking’ techniques that many bootstrapping commercial digital ventures have. We also suggest that explicitly positioning these platform cooperatives as ‘ethical’ businesses may be counterproductive too, as it leads many potential users to pre-judge the service (i.e., they will assume it is worthy, though inferior in some way).

A digital platform lab and accelerator is an optimal vehicle for bringing together start-up platform cooperatives and those at the cutting edge of entrepreneurial marketing and computing science, to

experiment with growth mechanisms, viral marketing techniques, and new value proposition testing.

5.2.7 Legal and Governance Strategy

There are many ongoing debates around the best way to operate and govern online platforms⁶⁵. These issues are compounded when it comes to democratically owned cooperatives⁶⁶. For example, there are trade-offs around multi-stakeholder decision making, transparency and competitiveness and therefore analysis is required to support optimal outcomes for start-up platforms. Equally, the structure of cooperatives restricts some forms of external funding that might be required to achieve the scale necessary to compete and survive. Thus, a DPLA would work with scholars in the areas of law and governance to develop solutions to any barriers raised by alternative organisational structures.

5.2.8 Responsive problem solving

As the platform cooperative sector in Scotland grows, it is necessary for a DPLA to operate in a responsive mode. Since the global movement is in its infancy, it is not possible to anticipate all the issues and obstacles that will arise as the sector matures, and regulations evolve. Equally, many of the platform cooperative organisations that emerge in Scotland will not have the research and development capacity to solve complex legal, technical, and strategic problems they encounter either. Therefore, extending on the principles of open-source problem solving, the DPLA would coordinate crowdsourced innovation challenges in response to emerging problems.

⁶⁵ <https://www.econstor.eu/handle/10419/214074>

⁶⁶ <https://blog.p2pfoundation.net/platform-coops-governance-ii-from-coop-platforms-to-platform-ecoopsystems/2018/06/19>

**MANY COOPERATIVES
OPERATE IN TRADITIONAL
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DIGITAL EXPERTISE AND
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LIMITED RESEARCH AND
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5.2.9 Tracking and monitoring the development of the sector

For our final recommendation, we suggest an important activity for a DPLA would be to track and record the development of the platform cooperative sector in Scotland. For example, it would be valuable to have an annual report of activity, with key industry trends and challenges identified, to raise awareness within the policy community and broader stakeholder groups. It is notable that there is no central resource for commercial digital platforms in Scotland, and this significantly limits support and advice that can be provided to these organisations. Similarly, a website tracking theoretical developments, in the vein of www.platformpapers.com, would be a valuable resource for the interdisciplinary community of scholars working on platform cooperativism problems.

5.3 Objective 2: Develop a Municipal Platform Builder for Coop Start-ups

For our second recommendation, we suggest that it is vital for the public sector to support platform cooperativism, both in terms of infrastructure, and procurement.

5.3.1 Municipal-level digital infrastructure

Our analysis of the barriers to increased platform cooperativism activity emphasise skills gaps and technical challenges. Many cooperatives operate in traditional industries with little digital expertise and with scope for only limited research and development investment. We suggest therefore that municipalities take responsibility for providing a platform development ‘utility’ that allows nascent platform cooperatives to easily build a service with modular drag-and-drop tools. Our vision is that platform cooperatives can be established and operated with the ease of e-commerce sites developed on services as Shopify.

We propose a shared development and operational platform for organisations trading within a municipal area. This common platform will minimise many of the frictions that hold back widespread consumer adoption. For example:

- Consumers will not be required to download multiple apps to access different cooperative services – these can be accessed through one app (with users opting in or out of available cooperative services).
- Consumer trust/acceptance will be enhanced by the involvement of the municipality.
- With consumer consent, data can be pooled across various cooperative services operating on the platform to optimise services and train machine learning models.
- Common standards can be enforced in terms of platform design, payments, and worker conditions.
- UX can be optimised at a platform-level through well-crafted modular tools.

In short, we suggest such a platform is necessary to give credibility to platform cooperatives who suffer acutely from liabilities of newness when launching. Pooling this R&D work also gives platform cooperatives more chance to invest in customer acquisition and other activities that will help them compete with incumbents.

5.3.2 Using Anchor institutions to Develop Critical Mass

To ensure the viability of nascent platform cooperatives, we suggest that local anchor institutions become lead customers on platform cooperative services. For example, universities might use a taxi platform cooperative for travel or a catering cooperative for events. The Tax office in Glasgow may use a platform cooperative for building maintenance services. The SECC can engage a platform cooperative to manage ticket resales for events at the venue. JP Morgan might even use a rideshare cooperative to reduce the carbon footprint of staff travel in Scotland.

These are only indicative examples, but they illustrate the benefit of having a large user who will attract more suppliers to a platform. This, in turn, will encourage non-institutional actors to join the platform, and long-term growth and sustainability can be achieved.

5.4 Conclusion

In this report we have outlined the good and bad elements of digital platforms. We suggest that there is no reason why the negative aspects of platformization should be accepted as ‘just the way things are.’ Indeed, we believe that the current model of big tech platforms will recede in the coming years, as the evidence is becoming clear that venture-capital backed growth does not always lead to a sustainable value proposition. So, we consider what comes next and set out a vision that synthesises the best features of digital platforms, with ownership and operational structures that retain wealth and tax revenues in Scotland, where value is primarily being created. We identified a range of barriers that prevent this more equitable economy from emerging and suggest two strategic activities that can help platform cooperative entrepreneurs in Scotland overcome these challenges.

