Building Collective Sovereignty

Common Knowledge

How might we define digital sovereignty? One definition comes from a paper by Luciano Floridi (2020, 370), Professor of Philosophy and Ethics of Information and Director of the Digital Ethics Lab at the University of Oxford. After surveying four examples of issues concerning digital sovereignty, Floridi writes:

> [T]he common thread that unites them is getting clear: these are all episodes in the fight for *digital sovereignty*, that is, for the control of data, software (e.g. AI), standards and protocols (e.g. 5G, domain names), processes (e.g. cloud computing), hardware (e.g. mobile phones), services (e.g. social media, e-commerce), and infrastructures (e.g. cables, satellites, smart cities), in short, for the control of the digital. Let me clarify that by "control" I mean here the ability to influence something (e.g. its occurrence, creation, or destruction) and its dynamics (e.g. its behaviour, development, operations, interactions), including the ability to check and correct for any deviation from such influence. In this sense, control comes in degrees and above all can be both pooled and transferred.

Traditionally, the concept of sovereignty has been associated with a state or a monarch. Digital sovereignty is often framed in relation to the individual user controlling their own data, rather than corporations. Relatively little attention has been given to the sovereignty of collectives under their own democratic governance.

Our work at Common Knowledge is primarily concerned with building digital sovereignty on a collective level, by creating digital technology that supports, amplifies and extends the work of grassroots activists, community groups and unions. We work in direct collaboration with these organizations to understand their needs and help them achieve their political goals. This work falls into three core activities: we design and build digital software, provide training and strategic advice, and facilitate the sharing of knowledge and resources amongst different groups.

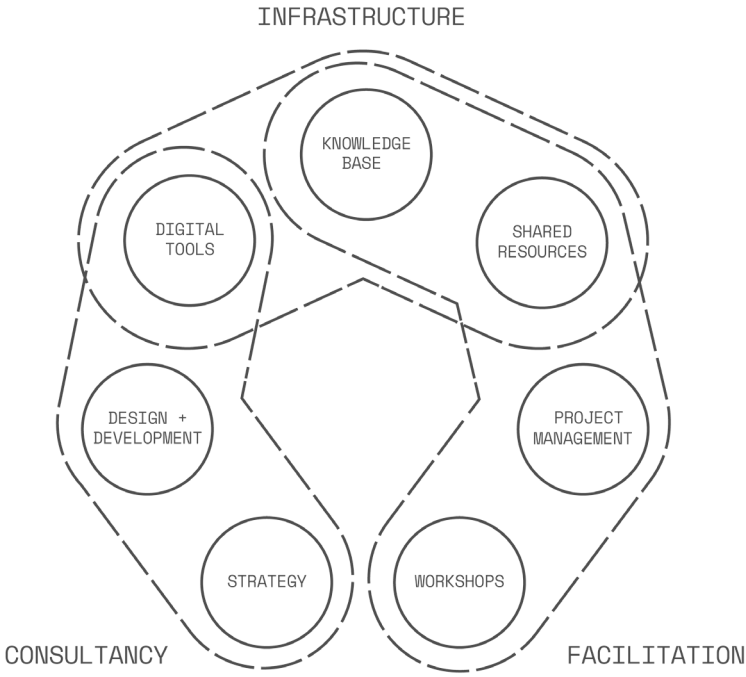


Fig. 1

There are a number of existing digital tools specifically geared towards political organizing. However, these tools are usually intended for electoral campaigning or lobbying, and often enable top-down communication rather than distributed and horizontal structures. We founded Common Knowledge because we saw an opportunity to leverage the power and ubiquity of digital technology to enable bottom-up organizing. We want to use digital technology to reduce the barriers to direct political participation, enabling people to build relationships, organize themselves and directly address problems in their own lives and communities.

We've worked with organizations that represent a range of different scales, methodologies and political concerns. These include precarious workers (United Voices of the World), renters (London Renters Union, Generation Rent) and healthcare workers (Nurses United). We've also worked with organizations who are focused on uniting progressive groups behind shared demands and strategies (Claim the Future, Progressive International) and facilitating radical political education at scale (The World Transformed).

Through this work, we have come across a number of tensions and complexities in the way in which we approach digital sovereignty. In this piece, we begin by outlining our own organizational structure as a worker cooperative, how that influences the work we do and how it relates to collective sovereignty. We then examine two case studies – London Renters Union and United Voices of the World – as a means of reflecting, from a practical standpoint, on digital sovereignty. We end by reflecting on what these considerations might tell us about building collective sovereignty in times of crisis.

How we work

Common Knowledge is a not-for-profit worker cooperative. This means that each of our five members has equal control and ownership of the collective. We make decisions and govern the cooperative in a democratic, non-hierarchical and collaborative way. We support each other and contribute our own particular skills and experience for our mutual benefit and for the cooperative as a whole. Any surplus we generate through consultancy work is invested into either developing the cooperative or doing solidarity work for unfunded groups.

Being part of a worker cooperative is about exercising sovereignty over one's labor and time. We formed Common Knowledge as a worker cooperative because we think that how we work, support ourselves and collaborate with each other hugely impacts what we make. If our goal is to enable radical change, we need to begin by questioning the entire structure of our work. We see worker cooperatives as one way of prefiguring an alternative future, in which solidarity, interdependence and self-determination is at the center.

We use two practical frameworks to help us collaborate in a non-hierarchical way. The first of these is sociocracy. The goal of sociocracy is to optimize organization efficiency, while ensuring that everyone's voice is heard. One crucial aspect of this is that decisions are made by consent, not consensus. Any member can propose something to the rest of the group. Other members can ask for clarifications or amendments to the proposal. From there, they can decide to either give their consent or block the proposal. The criteria for consenting to a proposal is that it's "good enough for now and safe enough to try." This method recognizes that most decisions aren't permanent, and optimizes for efficiency and iteration over consensus.

This form of decision-making is about trusting the people you work with to make decisions that impact the collective as a whole. It removes the expectation that everyone must be deeply involved in, and supportive of, every decision that needs to be made. Although an individual member may give up a little of their personal agency, overall it increases the collective's ability to act, learn and grow rapidly.

The second framework is called Scrum, which is ubiquitous in the world of software development. Scrum prioritizes horizontal collaboration and iteration over formal processes and structures. However, in most tech companies, this distributed and adaptive method of working takes place within a more rigid and hierarchical organization.

Following this framework means working in sprints: two-week cycles of focused activity, with a number of rituals throughout. These include a planning session at the start, weekly backlog refinements, and a showcase and retrospective at the end. These events ensure that everyone on the team understands to work to be done, and can easily share work between each other. They also enable the team to work in an iterative way, adjusting their behavior as they go. The retrospective at the end allows the team to reflect on the successes and challenges of the sprint, so that they can improve in the next one.

Rituals like these are an important part of both sociocracy and Scrum. They provide a regular cadence for the team to follow, and allow for continuous reflection, iteration and renewal. They both provide a solid basis for building highly collaborative and non-hierarchical environments.

Another key part of our work is looking for ways where we can contribute to the wider ecosystem, from political organizing to open-source software engineering to the cooperative movement. For example, we release any custom software we create under an open-source license, so that it can be reused in future projects and by others as well. Wherever possible, we always prefer building upon and customizing open-source tools if they already exist, rather than starting from scratch with every project. Contributing to an existing project means we can achieve more impact, more quickly, and that our work will benefit others beyond our direct collaborators.

We look for patterns and needs that are shared by the different groups we work with. Our goal is to generalize the software we make and identify opportunities where it could be reused and extended. We hope that, in doing so, we will be able to increase the collective capacity of the movement as a whole, using digital technology to encourage and amplify effective organizing tactics.

We see cooperatives, community groups and unions as different but interconnected strands of worker cooperation. All are concerned with building working class power and sovereignty. They are self-directed, democratic organizations that can decide their own direction and are not answerable to any outside authority. They focus on building agency by addressing problems on a collective level, rather than an individual one.

Case studies

London Renters Union

The first project we're going to look at is a collaboration with London Renters Union (LRU), a members-led organization that campaigns to ensure all Londoners have a decent, secure and affordable place to call home. This project illustrates an essential tension when it comes to approaching digital sovereignty in the context of distributed groups: Is it better to use existing proprietary software that members

and organizers already use, or to build something custom that can be entirely owned and controlled by the organization?

In May 2020 LRU launched their Can't Pay Won't Pay campaign, which focused on bringing renters together to support each other and build power during the pandemic. We worked with them to build two iterations of a custom website to support this campaign.

The website had three functions:

1. Collect information on people's rental situation, in order to provide them with the most relevant support and advice. This information was also used by LRU to understand where they were most needed, look for patterns, and lobby the government.

2. Encourage renters to show their support for the campaign by pledging to withhold their rent and resist illegal evictions.

3. Direct people towards joining the union and attending renter solidarity meetings.

We began the project by running a workshop with a number of member-organizers. In this workshop, we discussed their theory of change and identified where our work fitted within this. The goal of the campaign was to enable organizing, rather than mobilizing. LRU's strategy for building power is to decentralize leadership and facilitate members to become organizers, rather than just encouraging people to sign a petition or share the campaign on social media.

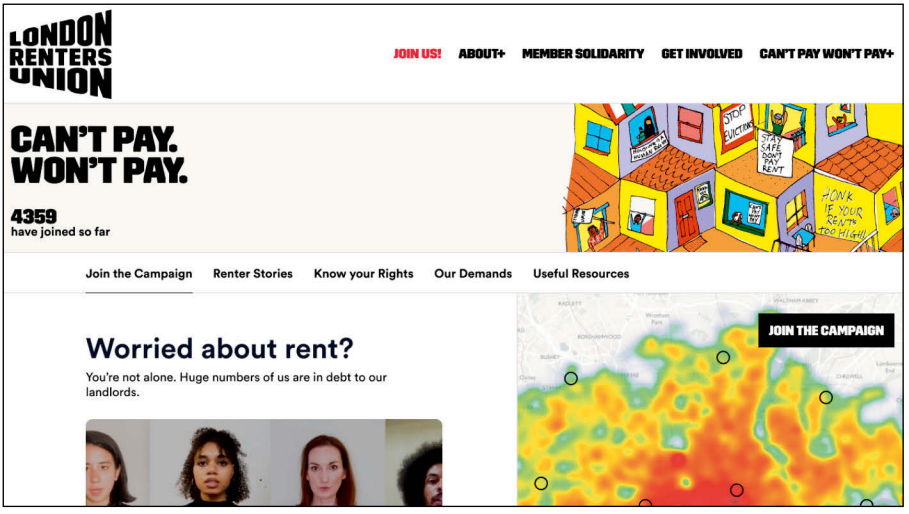
Surveying London Renters Union's current technical stack, we made a number of technical choices to maximize their digital sovereignty. In this case, sovereignty was expressed as their ability to modify their website and adapt it to the changing needs of their campaign. User customization always adds an additional layer of complexity when coding and designing. However, we knew that the pace of the campaign would require rapid and last-minute changes, so we optimized for this in our technical choices.

Like many political groups, London Renters Union use the open-source content management system WordPress to run their website. They were also using a WordPress plugin called Gravity Forms, which allows forms to be created with a drag and drop interface.

Working within this existing technical stack, we set up the campaign website on their own servers, in a way that was usable across the organization. We also configured it to allow for a high level of user customization. Given the sensitivity of the project, and the possible opposition to it by landlords and others, we also created a threat model and reinforced the security and robustness of their existing WordPress setup.

Working in sprints, we first launched a lightweight version of the campaign site and observed how people used it before designing and building a second iteration with more features. The first page of this site featured a heatmap overlaid with personal stories from renters around London.

From there, renters could fill out a step-by-step form to specify whether they were at urgent risk of being evicted, needed support with rent debt or wanted to act in solidarity with other renters by helping resist evictions. Those who indicated they needed assistance were asked for details about their rental situation: what type of tenancy they had, how much rent they paid, and what housing issues they were facing.



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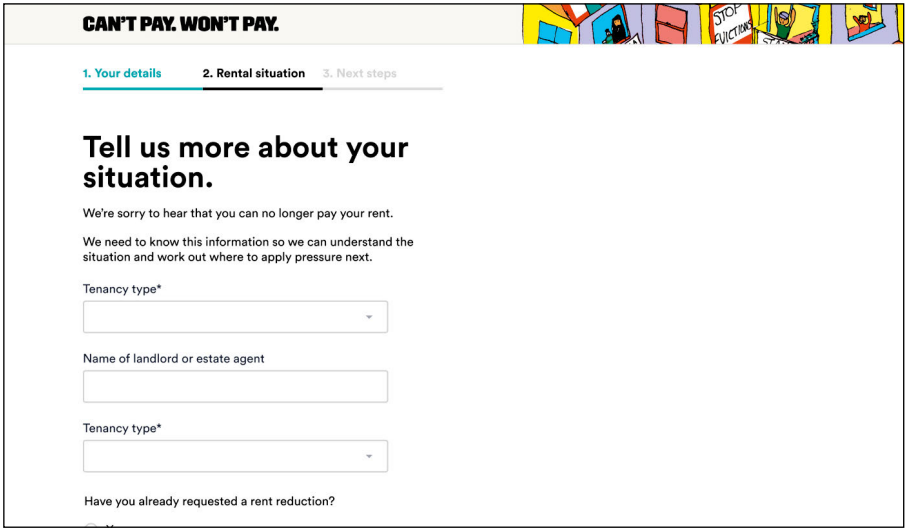

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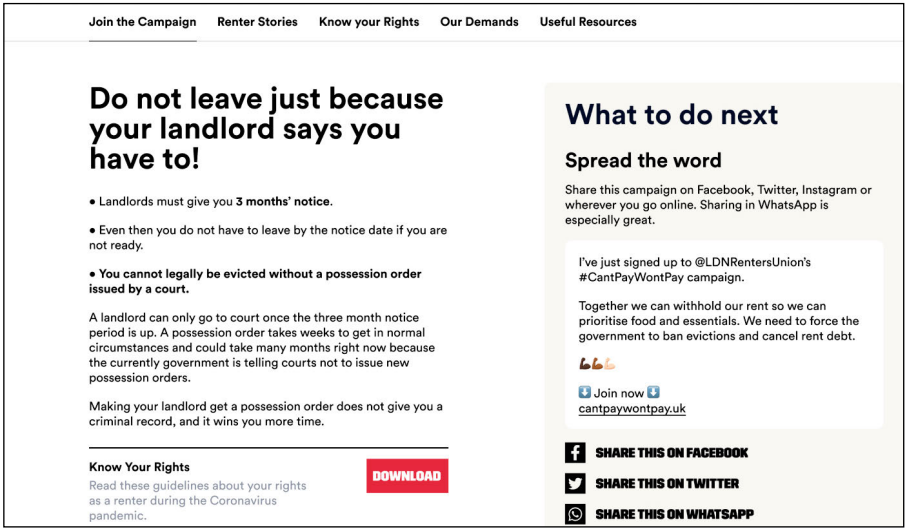


Fig. 4

Based on these answers, the final page displayed a summary of the most important information they needed to know, and a link to a more extensive "Know your Rights" guide, translated into 19 languages. It also directed people towards joining the union and attending upcoming organizing meetings.

So, how did this project increase London Renters Union's digital sovereignty?

The technical choices we made gave London Renters Union a lot of power and flexibility during their campaign. We used tools they were already familiar with, therefore lowering the barrier of entry. Organizers could use the information they collected to adjust the campaign very rapidly. They could adapt any element of the form, update copy and even change the flow of the form, moving elements of it from one page to another. Crucially, by using Gravity Forms, they didn't need to wait for a software engineer in order to make adjustments – they could simply make the changes themselves.

Once information had been entered into Gravity Forms, it was written to two other digital products that LRU were already using to organize and mobilize their members: Airtable and Mailchimp. Airtable was used as a database, which the union could configure, analyze and share with its various local branches. Mailchimp was used to directly email those who had joined the campaign. These three systems were connected by Zapier, automation software that allows to connect different apps and automate workflows.

Their improved digital security also meant they had to rely less upon third party systems. They could trust the integrity of their data and the ability of their website to push forward the campaign at scale. However, this setup remained dependent on Airtable, Zapier and Mailchimp. All of these are proprietary tools that become more costly the more they are used. Arguably, the union's dependence on these tools impedes their true digital sovereignty. However, their reasons for using Airtable in the first place give us insight into why a compromise like this is sometimes necessary.

At its most basic level, Airtable is a database. It stores data in a column and row format and allows this data to be queried. In theory, this could be replaced by any of the commonly used open-source databases, like MySQL or Postgres. However, writing to a database like MySQL requires time and a level of technical expertise that makes it inaccessible to most of London Renters Union's organizers. As a

member-led organization, anyone can become actively involved in organizing the union. Therefore, they need tools that are accessible for any level of technical expertise. Airtable allows the union to distribute data to local organizers in a convenient and flexible way, without the need for extensive training or specialist expertise.

On one level, using Airtable as part of this technical stack reduces the union's sovereignty and subordinates them to the whims of a Silicon Valley company. On another, using a tool like this has given them more agency and increased their operating capacity. Organizers can view and share the data in different ways, modify it more easily and facilitate their activity more clearly.

This tension reveals a problem with the discourse around digital sovereignty. If the ability to act is a core element of sovereignty, then the barrier to entry for many open-source alternatives to commercial tools may actually reduce sovereignty in the short term.

United Voices of the World

Let's consider digital sovereignty from another angle, by examining the work we've done in collaboration with the grassroots trade union United Voices of the World (UVW). This case study demonstrates more of the complexities of digital sovereignty. Better digital systems, particularly ones that can be customized and configured towards very specific use-cases, bring a lot of value by helping an organization save time, improve working processes and increase collaboration between teams. However, custom technology also requires a substantial investment of time: not only to design and build but also to learn and maintain.

UVW helps migrant and precarious workers to organize. The bulk of their membership are cleaning and security staff, with newer branches that have been set up in the last year to support a broader range of sectors, including legal workers, designers and cultural workers, architects, strippers and sex workers. In comparison to mainstream trade unions, UVW is highly active and effective. Whereas mainstream unions might protect their members, they don't do so with the same speed, aggression and power as UVW is known for. As a result, UVW have won victories for their membership with a surprising frequency – they punch above their weight.

As with most activist organizations, much of UVW's work is reliant upon proprietary digital technology. For example, communication

between union staff, organizers and members was via WhatsApp, the messaging platform owned by Facebook. Internal communication amongst UVW staff also defaulted to this platform. The use of WhatsApp in this manner is extremely common in UK-based activist groups. Most organizers don't like having to use WhatsApp in this way: The constant stream of messages means that important messages get lost amongst the noise, and it stops them from maintaining their work-life balance.

Using WhatsApp as their main communications infrastructure also means the union is beholden to Facebook. No one pays for WhatsApp, no one can influence its direction of travel, and no one can make claims against it. If Facebook decided tomorrow that organizing trade union activity through WhatsApp was no longer permissible, the union would be considerably impeded on an operational level. However, WhatsApp is often seen as a necessary communication tool due to its ubiquity – it's very difficult to convince new members to download, learn and use a new tool just to be able to interact with an organization.

In terms of their systems for managing their membership, prior to this year they were disjointed and ad hoc. Members joined via a form on their website, which was output into multiple Google spreadsheets. Staff and volunteers would manually clean up this membership data and import into their Mailchimp database. The most reliable source of truth for the union's active member list was their payment system, GoCardless. One staff member was responsible for checking GoCardless for lapsed payments on a weekly basis, and then directly reaching out to those people to confirm their membership.

Although the union owned and controlled the data on its own membership list, it was mostly dependent upon third party platforms. This dependence was not absolute: It was still possible to export their data from any of these platforms into a standard format and migrate it elsewhere. However, this system was not actually usable by any of the union members themselves. Only one or two organizers were able to access this data. The data was also incomplete, out of date and incoherent. People didn't know what changes they wanted, other than a solution to their problems, but a lack of time to think and inexperience in data management prevented them from making substantial changes themselves. So, while in theory UVW had sovereignty over their data, in practice their sovereignty was very limited.

Knowing if a member is active is a particularly crucial detail for the casework team, who support members to deal with their problems at work. The union only offers legal support to active members who have joined more than a month prior to needing support. This requirement is partially due to the resources and time required to bring a case to the employment tribunal, which should be seen as a last resort to resolve a workplace issue. It is also because casework is often about solving an individual concern. While supporting members in this way is important, the real power of a union is through collective action.

UVW identified that this casework system was in most dire need of improvement, so this is where we focused most of our attention and time. However, before improving their casework system, UVW needed to have a definitive membership list that they could easily manage. For this, we introduced them to an organizing platform called Zetkin.

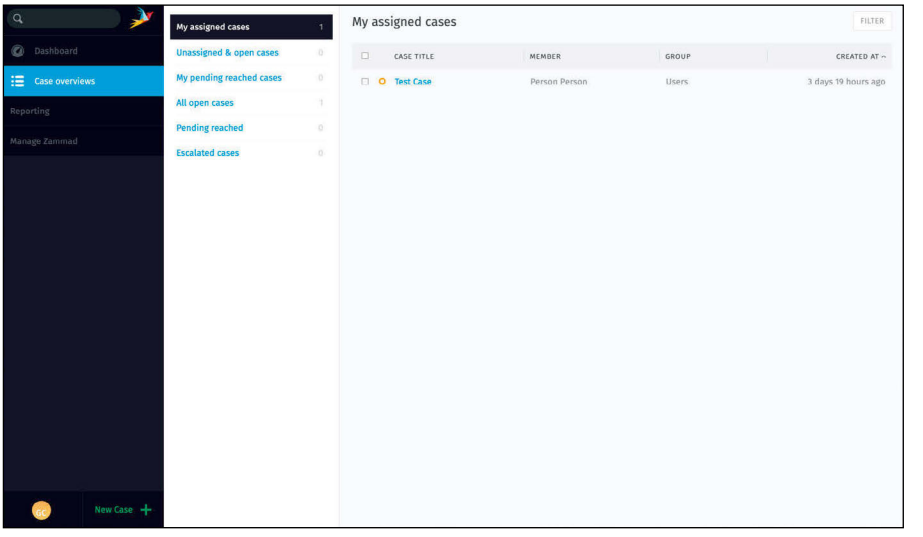
Zetkin was originally built by the Malmö branch of the Swedish Left Party (*Vänsterpartiet*) to meet their own organizing needs, but has since been expanded and generalized so it can be used by any progressive political organization. It provides a suite of tools for organizing large membership groups digitally, from carving up membership lists into local groups, to phone-banking members and conducting surveys. In collaboration with the developers at Zetkin, we helped onboard UVW to this new system. Much of this time was spent cleaning up and migrating their data to the new platform.

Once this migration work was underway, we moved our attention to the casework system. We started this process by interviewing a range of caseworkers, organizers and staff. We used what we learned during these interviews to map out the casework process and identified which parts of it weren't functioning. One of the key findings during this research process was that the most successful cases were the ones where organizers and caseworkers worked in collaboration, reinforcing their campaigns and strikes with strategic legal cases. In one particular case, UVW were able to not just win wage parity for their members through successful strike action, but they also achieved structural change on a UK-wide level by challenging the legal definition of an outsourced worker.

However, many caseworkers we spoke to reported that they were overwhelmed by their workload. We discovered that each caseworker

had their own system for managing their cases. Sometimes, key evidence for a case was saved on a caseworker's local machine. This meant that no one had oversight to what others in their team were working on and that work was often unevenly distributed. These existing systems were needlessly time-consuming and difficult to use as a team. We saw an opportunity to use the affordances of digital technology to not only improve the day-to-day experience of union staff but also to build the power of the union as a whole, by helping them reclaim the time and headspace to look for broader patterns and opportunities for collective action.

We decided that the most efficient way to meet UVW's casework needs was by repurposing an existing ticket management system. After some research we found Zammad, which seemed to fulfil many UVW's requirements. Crucially, Zammad is also open source. This meant that any requirements that it did not already meet could be added to by us, as we had access to the source code and the relevant expertise.



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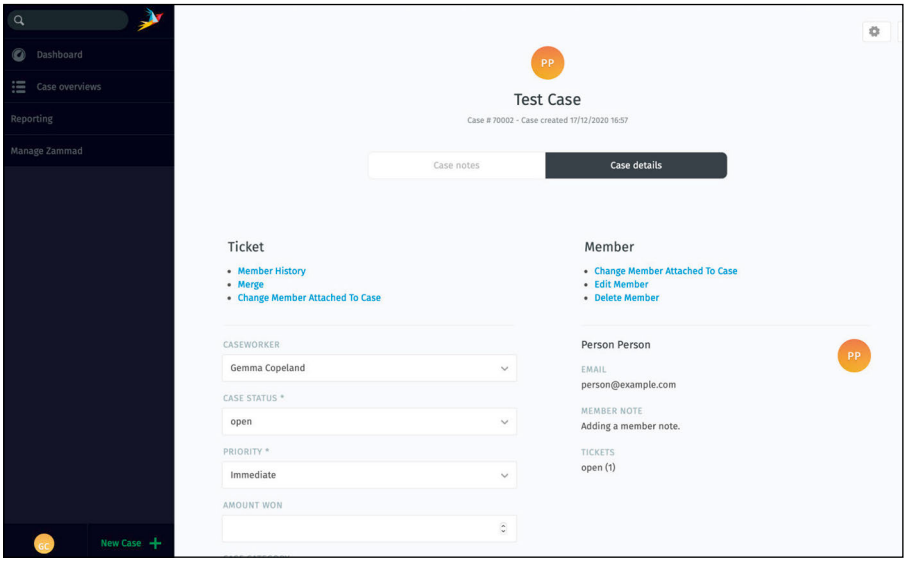

Fig. 6

Zammad allows for low-friction recording of communication history between UVW staff and members, including communication conducted by email, message or WhatsApp. Every case, including communication history, evidence documents and deadlines, are visible to everyone on the casework team, making it easier for them to distribute workload, look for patterns between cases and see upcoming deadlines.

We set up a self-hosted instance of Zammad and configured it to better suit the context casework. We built custom software to integrate Zammad with the rest of UVW's digital infrastructure, similar to how LRU uses Zapier to connect their various databases. This meant that caseworkers could search directly in Zammad to find members, their payment history and other relevant details. It also meant that new cases submitted via the website or to caseworker emails would show up in Zammad.

We onboarded the caseworkers to the new system, trained them how to use it and customized it based on their feedback. These customizations included changing the language and fields to be more appropriate for union casework, and simplifying the interface to make it easier for them to use.

Through this process, UVW have moved from an almost unusable digital set-up to a system where their data has better quality and is more accessible and more useful to them. They are now in a position where they have significant power over their digital systems: They can have almost any custom feature added, thanks to the close collaborative relationship between UVW, Zetkin and ourselves.

However, this collaboration is only possible due to substantial investments from both organizations and from external funding bodies. Zetkin is accessible to UVW in a way that Airtable or Google are not, due to their small size and political alignment with progressive organizations. Like us, they choose to invest any surplus time towards benefiting the wider movement, rather than generating profits. Our own ability to do this work came from a lengthy funding bid with substantial reporting requirements. Achieving digital sovereignty is a costly affair.

We also encountered some difficulties in onboarding casework staff to the new system. While most could see the benefits of using a tool like Zammad, it was difficult for them to invest the time required to learn this new tool and adjust their mental model and processes. This demonstrates that digital sovereignty takes work. It takes substantial time and effort to onboard and train people; it's not simply a matter of creating software and expecting it to be used.

While Zammad is an open-source tool that UVW will be able to adapt their casework system to their changing needs over time, this will still require external expertise, which means they don't have complete control of their digital infrastructure. While custom digital tools do increase sovereignty in one sense, they also require expert maintenance, attention and repair. This means that building digital capacity within organizations, or building strong relationships between technical experts and grassroots organizations, is an integral component of digital sovereignty.

Ultimately, much of the question of sovereignty comes down to time: the time required for maintaining ad hoc, manual systems compared to the time needed for UVW staff to learn a new tool; the limitations of our own time in each project we work on, and the technical decisions we make to optimize this time.

In addition, despite all this work, UVW are still largely dependent on two global corporations for much of their day-to-day operations: Microsoft and Facebook. We could still plausibly build new digital infrastructure that is not reliant on either. But is this a worthwhile use of our time, compared to other matters? At some point, UVW will remain entangled with systems that restrict their degree of digital sovereignty.

Conclusions (or, more questions)

What do these case studies tell us about the practice of digital sovereignty? It is certainly a complicated picture.

For London Renters Union, while our interventions increased their autonomy on one level, they are still enmeshed with Silicon Valley corporations. For United Voices of the World, they now have custom digital infrastructure, but are slow to adopt this and still reliant on experts to adapt it in future.

Neither organization had complete digital sovereignty as its goal, although they certainly wouldn't be opposed to the idea in principle. In both cases, we could have insisted on enabling their complete control over their digital infrastructure. We could have advised that LRU migrate from Airtable to an open-source database. We could have recommended that UVW use a self-hosted mail server instead of Microsoft, and move all of their communications from WhatsApp to a decentralized chat platform.

However, would this have enabled the effectiveness of either group in achieving their political aims? And where do we stop insisting on sovereignty? Should we own the physical infrastructure on which the servers reside? Should the source code itself be developed with no dependencies that would be outside the control of the organization?

On the other hand, we could have chosen to ignore the digital sovereignty of each organization entirely. Assuming money were no object, we could have bought each organization the best proprietary software available. However, even the most useful commercial tools are not intended to facilitate the political aims of grassroots unions. Moreover, these tools are not designed to be adapted. They are designed to provide a service to their user base and in doing so generate profits for the corporation that has built them. They do not

optimize for the sovereignty of their users, because vendor lock-in is their business model.

To us, it seems that "just enough" digital sovereignty is what the goal should be. Digital sovereignty consumes time and energy because, in order for it to be effective, sovereignty must be materialized in software. This software does not yet exist, primarily because it is not in the interests of those that create software to build it. While we can never compete with Silicon Valley companies in terms of financial resources, the most likely path to building software that the left owns and controls itself is through cooperation with other actors across a variety of fields.

With each project, we need to be pragmatic and consider the different ways that we might be able to build greater collective sovereignty. Should we spend our time building custom software that is completely secure and decentralized? Or should we spend our time training organizers how to repurpose and get the most out of their existing, off-the-shelf tools?

We don't think that there is a simple answer to any of these questions. They are dependent on political priorities, strategy and context. However, we think that the only way to achieve sovereignty, digital or otherwise, is to build it on a collective level. Above all else, this means collaborating with others, through social formations like grassroots unions, community organizations and cooperatives.

Digital technology has the potential to be used to increase the collective sovereignty of these groups, but only if we understand it as one piece of the puzzle. The COVID-19 pandemic has meant that many activist groups have become even more reliant on digital technology to fulfil their political goals, a trend which is only going to continue. Good organizing techniques are traditionally based on face-to-face contact: going to where the people are, forming relationships and building trust, and through this process, building power. As organizing moves more online, it's crucial that we understand and treat organizing digital spaces in the same way as in physical ones.

Digital technology must be seen as an enabler and multiplier of collective action and organizing techniques, not a replacement. It must be created by working directly with organizers, considering the broader social, political and cultural context of each project, and allowing ample time for support, training and maintenance along the way.

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