From Airtable to Zoom:
An A-to-Z Guide to Digital Tech and Activism 2021

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Abstract

This policy brief maps how activists are using technology to pursue public interests in human rights, democracy and a livable environment. It begins with a look at how cell phone tech has upped the outreach and mobilising game for campaigns, dives into digital storytelling and fundraising, explores key digital tools for collaboration and training, covers cybersecurity considerations and closes with a broad look at topical creative tech-based nonviolent activist success stories. Though digital tech is no silver bullet for successful campaigns, there are clear uses and recommendations to build power and win with digital technology.

A Brief History of Early Digital Activism

The increased affordability, capacity and versatility of cell phone and other digital technology—including video, photography and live broadcast functionality—drastically improves the scalability of peaceful social justice movements. The ability to contact and mobilise people inexpensively, combined with the simplicity of documenting creative and inspirational activities with cellphone videos and other media, has unlocked new opportunities for activists.

Activists around the world are linked by environmental and social challenges as well as our desire to solve these mounting issues. Increasingly in this digital age, we are also connected

by vast systems for information storage, sharing, and communications that can be harnessed to serve us. Not surprising, since more than half of us use a social network and 62% of the world's population own a mobile phone[1].

All this comes with a caveat, of course: Authorities of all stripes, whether in democratic or authoritarian governments, are using technology in various ways to address their opposition. At a minimum they use tech to monitor civil society and human rights activists—as well as to spread disinformation—and at worst to harm and repress their populations.

The key to unlocking success is to use tech creatively in concert with strategic planning and powerful relational organising (whether digitally-based or in person.) This allows us not only to counter tactics by totalitarian or repressive actors, but also to create new and innovative means of creative nonviolent protest. It is worth noting that change in the tech scene is rapid and constant, even though internet activism only started in the early 1990s.[2]

It is worth looking at a few early campaigns that successfully incorporated topical technology for great effect, as detailed in this 2011 article. Back in 1994, In Chiapas, Mexico, the Zapatistas were some of the early adopters of the then 'new electronic fabric of struggle'. They knew that it would be critical to get their revolutionary message out widely beyond their limited geographic area, and so harnessed a broad collection of electronic communications not only throughout Mexico but also globally. This included computer messaging, community access to TV, wide distribution of timely videos, audio tapes and CD-ROM, and legal and pirate radio broadcasts. This was essential to overcome the scarce and often biased coverage by the mainstream media and helped to build international solidarity. The clear takeaway lesson for future campaigns: use ALL available tools.

When MoveOn.org started in the USA in 1998 as an online petition, initially it reached about 100 friends and family; it eventually garnered 500,000 signatures. Today, MoveOn has grown into an organisation with 15 million members who take online and in person action on national issues. A couple of years later in 1999, the anti-corporate globalisation protests in Seattle heavily relied on email to mobilise. Around 50,000 people responded to those emails and showed up to protest. On the ground coordination was augmented by a then relatively new cell phone group texting program.

Around the world, from Las Farc protests in Colombia in 2008, to the Iran Election protests in 2009, or the protests in Spain with 15 million people in 2011, social media networks, cell phone communication, and amateur video documentation have featured clearly in helping to build these mass mobilisations. The Arab Spring (2010-2015) harnessed blogs, Twitter and Facebook to jump start mobilisation in half a dozen countries. This is one reason why the Egyptian Revolution has often been referred to as the "Facebook Revolution", although that tells only part of the story.

An early critical happening at the intersection of tech/social change includes the advent of

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[1] See, for example, How Many People Have Smartphones Worldwide (Feb 2021) and Datareportal.com
[2] Meghan Peters. "A Brief History of Online Activism." *Mashable.* August 15, 2011. https://masha-ble.com/2011/08/15/online-activism/

WikiLeaks in 2010. As a non-profit organisation that publishes classified media by anonymous news sources and whistleblowers, it claims to have released online 10 million documents in its first 10 years. Its ability to share information online has helped galvanise and provide fodder for many campaigns across the globe.

Fast forward to 2020. Even though COVID-19 pandemic shutdowns and precautions slowed protests in the first months of the year, by April global protests rose to a new high level of one new significant anti-govt protest every 4 days! (Worldwide Protests in 2020: A Year in Review Global Protest Tracker) In fact, the largest protest in the history of the USA has been the dispersed and sustained BlackLivesMatter actions since May of 2020. (See a list of protests in the United States by size.) And there is no indication that this trend is slowing.

This policy brief now jumps ahead to 2021 to map some important ways activists are currently using technology to pursue public interests in human rights, democracy and a livable environment. It begins with a look at how cell phone tech has upped the outreach and mobilising game and potential for campaigns.

Spreading the Word and Mobilising Support Using Cell Phone Technology

Adoption of cell phones, including high quality video cameras, across the globe has opened potential organising, documentation, and communication capacity widely, although limits on coverage and bandwidth must be accounted for to make appropriate use of the technology. This means, in some locations, hand-posted leaflets, broadcasts from mobile sound trucks, or public speaking events may still be the tactic of choice to share info.

Texting and email

Mobile phone use provides easy fast communication through individual use of messaging apps, with group/list options. The most commonly used apps are Signal, WhatsApp, and Telegram. Certain groups of people based in specific countries have favourites.

Signal is often preferred in some activist circles because it is believed to be more secure than WhatsApp, which is owned by Facebook. Signal's feature of placing emojis directly on a comment also allows direct and immediate response, whether asking members of a thread for a preference on a meeting time or an action proposal. New features, such as allowing sharing of a link to enable people to join a specific message thread, can smooth the growth of a group on Signal. Telegram has been used effectively to support mass education and mobilisation, and accommodates use by those who don't have phone numbers, with unlimited users on channels (Signal, for example, has a 1000 user limit.)

In addition to direct messaging or threads, SMS (short message service) provides groups who can afford it a broadcast system that only requires people to opt in, usually by texting some simple word to either a short or long code (the functional equivalent of a phone number). This allows a group to broadcast messages to large numbers of people all at once. More time-efficient than phone calls, SMS often is harnessed to expand a group's base. By asking people at a rally in person, or an event online, to join using a text, groups can easily grow their contact lists. The following benefits are also provided by SMS:

- If these SMS broadcasts lists are set up for peer-to-peer mass texting capacity as well, then the organisation can engage in two-way communication. This can be done with a live person or with automated/AI responses, and can help groups collect key data and move folks up a ladder of engagement from just receiving alerts to onboarding and activity with the group.

- The sheer volume of digital communications is notable: For example, MoveOn says its volunteers sent 35 million peer-to-peer text messages to potential U.S. voters in 2018. Open rates for text messages are so much higher than for email – close to 98% for text vs 20-25 % for email.[3]

- While many progressive groups use services tailored for them like StriveDigital, plenty of others go for agile and minimalistic support via groups like MoboMix, which was designed for business promotion and can be set up in minutes.

If you have established a line of communication, then sophisticated use of the information collected about people in your target list can increase the chances that they will become engaged members, beyond a one-time turn out at an event. This is very important, especially for longer term organising efforts, such as labour unions and electoral campaigns, which benefit exponentially by targeted outreach over time. A whole global industry has been built to enrich lists, helping organisations learn more about people they are communicating with. CATALYST and VAN (VoterActionNetwork) are two such businesses that maintain massive amounts of data on EVERYONE. Anyone can buy this info – and be warned: governments or opposition groups can also buy it, increasing the cost of NOT using this resource.

Knowing what your target group of potential new members is interested in (what issues? what principles?) can support more refined messaging, build a group identity, and in turn be the armature for a committed community. This is an investment in relational organising: peer-to-peer communication online can be both a substitute for in-person meeting as well as a more efficient way to build on that, particularly during an event such as the COVID-19 pandemic.

Some groups have offered modern day HELP lines via email, messaging or phone to continue to support engaged activists, field rapid response queries, or coach new folks. Resistance Hotline is an example. The Resistance Hotline is a new take on a 1-800 support line offering training and nonviolent action planning support to defend the integrity of our elections and build strong progressive movements. Materials can be easily downloaded/ shared via email or online file.

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[3] "What Are the Average Click and Read Rates For Email Campaigns?" *Campaign Monitor.* March 2021. https://www.campaignmonitor.com/resources/knowledge-base/what-are-the-average-click-and-read-rates-for-email-campaigns/#:~:text=Your%20average%20email%20open%20rate,be%20be-tween%2020%2D30%25

Memes and hashtag activism

Memes have become the omnipresent visual communication form of social media from Facebook to Twitter.[4] Within some of these platforms, enclaves like "Black Twitter" have blossomed, using hashtags to connect slices of specific communities across the globe. From #YoSoy132 to #MeToo, #DemocraciaEnExtinción and #FeesMustFall, #GambiaHasDecided and #SaveMyanmar, hashtags are now a feature of our cultural landscape.[5] Easily shared and trendy, re-posting or re-tweeting graphic meme images with identifying text hashtags not only provides a simple way to pass on information, or identify oneself with a specific sentiment or community, but also to share critical information and mobilise large crowds of digitally connected people to take action in real life.

Activists heavily used social media to get a message of #resistance out after the U.S. elections in 2016. The anonymity provided platforms for rogue or alt-Twitter accounts set up by disapproving Federal Agency employees as they were targeted by the Trump administration, such as @altUSEPA and @AltDptEducation. There was a rather poetic beauty to these actions since Twitter was the former president's preferred mode of communication with the U.S. public.

Digital Storytelling and Fundraising

The world-wide army of cellphone users has allowed just about anyone to become a documentary filmmaker or data scientist in service of their cause. With a phone in hand, there are so many ways to capture images, spread information, and map data, including the following:

Documentation and research

Cell phones with cameras are driving accountability through real time documentation. It wasn't too long ago that the ability to live broadcast required expensive equipment and contracts for transmission. Smartphones of all kinds and the growing availability of broadband, as well as cell networks, have made live broadcasts and real time streaming accessible around the world. Cell phones have democratised who can report the news and who can watch whom, speeding up the news cycle and providing almost instantaneous opportunity for activist mobilisation.

Groups like Lil Sis, ProPublica, and others, not only do in-depth research and investigative journalism but also provide searchable online databases in support of government and corporate watchdogging. These services can be gamechangers in linking campaigners to addresses, donors, tracking money flows and supporting effective campaign strategy based on facts.

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[4] An Xiao Mina. Memes to Movements: How the World's most Viral Media is Changing Social Protest and Power. Boston: Beacon Press, 2018.

[5] Sarah J. Jackson, Moya Bailey and Brooke Foucault Welles. *#HashtagActivism: Networks of Race and Gender Justice.* Cambridge, MA: MIT Press, 2020.

Facebook Live and the ACLU app <u>Mobile Justice</u> not only enable campaigners to report from a hearing or demonstration in real time, but also to document the behaviour of law enforcement as it happens. Of course, these tools are in the hands of the other side, as well. However, that only makes it more important to make use of and master the tools for good.

Do-it-yourself media

Widespread digital access has increased our ability to create, share and access "Do-it-yourself" media. It is both easier and ever more imperative for social justice activists to tell our own story and make our own news, as mainstream news consolidates under corporate ownership and decreases local coverage. IndyMedia, a coordinated attempt at supporting independent media rooted in progressive values, came online in 1999 during the anti-corporate globalisation mobilisation in Seattle. Though the physical Independent Media Centers that existed all around the world are now closed, the motto of "Don't Hate the Media, Be the Media" remains a clarion call to independent activist reporters.

Most campaigns host their own online coverage via blogs – essentially an online form of citizen journalism, limited only by the communities they are accountable to – if any! Micro-blogging (via Twitter, Weibo in China) can be considered a subset of and complement for blogging, helping spread messages.

Digital mapping and visualisation

As the tools for mapping data and creating stark graphics to show relationships become more accessible, creative activists have used digital mapping in many ways to help "[make the invisible, visible](#)." If you can't see it, you can't change it, so the first task of an activist is to create a visual way for people to understand what is happening. Often activists on complex, hidden or distant issues face a challenge to illustrate the need for change. Data visualisation can create impactful visuals. Here are a few examples:

- Many frightening aspects of climate change can be predicted and shown by geographic area on [interactive maps](#), whether heat index, sea level rise, fire or drought risk.

- Activists working on Indigenous and First Nations' rights often find that current inhabitants have limited or no knowledge about the places they live. Want to know the Indigenous history of the land you are living on in North America? Enter your zip code into [this app](#) and you can find out.

- An innovative alliance of NGOs working on domestic violence issues released an online video disguised as a makeup tutorial to encourage women to seek help during COVID-19. After the beginning of what seems to be a makeup lesson, contact info is shared to [Mapa do Acolhimento](#) ("The Embrace Map"), a network of volunteer psychologists and lawyers who provide assistance to women facing violence and abuse. They have set up an emergency strategy, gathering 500 volunteers across the country to map local services (shelters, specialised police stations, reproductive health centres) that can assist women in these situations.

- Global climate activists have harnessed digital tech to put "the most important number in the world" up everywhere, from classrooms to city squares. Just in time,

Climate Clocks are being built and installed to emphasise and make public the countdown of our "carbon budget". The goal of the #ClimateClock is to make as many clocks available to people, governments and other climate advocates as possible, so that together people can "synchronize our watches" and coordinate global action to stop climate change.

Online free or affordable support for graphics images/videos

Since the use of videos and compelling graphics can be a gamechanger for driving viewership of posts online, many grassroots groups have found that harnessing even basic, free tools to up their visual design game can have a big impact on their posts' reach on social media platforms. It's worth mentioning the free or affordable apps like Canva for meme design or Lumen5 and VideoAsk for crowdsourced video production. Democracy Labs has a list of Resources related to helping activists create story Maps that communicate data that spans geography and time. They are an engaging and interactive way to tell a compelling story.

Crowdfunding

Crowdfunding is where storytelling connects to fundraising. The ability to document causes and data, is linked to a call for funds on crowdfunding websites. Not only have innovation and tech advances in crowdsourcing platforms opened up new streams for fundraising, they have also made it possible—in theory and sometimes in reality—to crowdfund solutions to seemingly intractable economic justice issues.

Many groups successfully run Kickstarter, IndieGoGo, or other programme campaigns to raise money for everything from specific projects to operating expenses to book publishing. These campaigns do take a significant amount of time and management to successfully deliver on the financial goals, and, just like any political campaign, there are no guarantees. With Patreon, supporters pay creative activists a monthly membership usually in exchange for access to exclusive content; this kind of reliable support can be a gamechanger for struggling activists. When done well, crowdfunding not only funds the work, but also helps to build and mobilise community involvement, connects and onboards new participants, and makes it much easier to donate.

One entirely new area of fundraising includes the use of blockchain technology. UNICEF has a dedicated Blockchain Learning Hub , and Mercy Corps The Next Generation Humanitarian Distributed Platform, that explore applications to accelerate impact as these new systems allow users to send value directly from one party to another without using intermediaries. Not only are these groups harnessing cryptocurrencies to accept donations and transfer funds, they are also piloting and testing ways to leverage this new tech for public good, from allocating blockchain IDs for migrants to educational diplomas.

As far as intractable issues go, theoretically, the "Greek Bailout Fund" campaign could have raised enough money to help Greece avoid austerity, even as it did expose the unjust system. On the other hand, almost $32 million of medical debt has been forgiven by online crowdfunding to purchase debt for cents on the dollar, and then forgive that debt. The National Bailout programme also provided direct relief through a mass donation to bailout

Black mothers and others affected by mass incarceration. Though these ingenious campaigns serve to model potential solutions, it is also true that the underlying systemic injustices need to be publicly addressed and transformed for a truly sustainable solution.

Tools for Collaboration and Training

Technological advances have enabled remote sharing of resources and materials that boost the power of activism. Cloud storage applications such as the ubiquitous Google Suite (G-Suite) apps have spawned improvement in organisational functioning and everyday processes. From back-end office support, to tools for better group communications, as well as more effective security for activists, these apps can be a gamechanger. Most activists have adopted the following tech tools for collaboration.

Online file cabinets/ collaborative spaces

Digital infrastructure for project and data management, from a simple website or basic cloud document used to support team collaboration, is a baseline for most groups with long distance staff (or, during the COVID-19 pandemic, a social distancing protocol). For simultaneous editing and access, many use Google docs, or more secure apps like CryptPad. There are also open source alternatives such as https://etherpad.org/ or others listed here: 5 open source collaborative text editors. One issue that needs to be addressed specifically with multigenerational groups today: reluctance to learn or lack of familiarity with the technology of participants may create a tiered knowledge system in your group. Solutions include 1:1 training and support to learn the new tech, or duplicative alternative process (maintaining a hard copy of all notes that can be accessed by those who prefer that over digital access).

Internal coordination and process

To increase effectiveness, many groups invest in some kind of program management and internal communication software. Trello, Slack, Basecamp, MatterMost and Airtable are some of the most widely used to help teams organise, track, and manage their work. The dashboards and digital equivalent of file cabinets can be harnessed to track actions taken by supporters or donors, or can be used to coordinate complex projects with teams as well as write books! (*BeautifulTrouble* and *BeautifulRising* are two books that were written in a collaborative way in google docs and project managed in Trello.)

Over this past year, many Mutual Aid groups have managed their work with dedicated Slack (non-encrypted) or Keybase (encrypted) channels; electoral campaigns and election defense programs have as well.

Social media also offers an accessible, though not very secure, way to communicate and organise online for free. The ability to form private and public groups on social media platforms such as Facebook has supported many grassroots organising efforts, from local to global activism.

As mentioned earlier, Action Network, EveryAction, Salsa and many more offer the capacity to do full Customer Relationship Management (CRM.) Social change groups can find that

instituting a CRM system helps to track, build and grow participation in their group, union, or supporter base. This is critical as we know because winning nonviolent campaigns can be a numbers game, building power by leveraging active engagement of an ever-increasing percentage of a population. A downside is that many small groups do not have the funds or people hours to invest in formal CRM programmes as they can be expensive.

Electoral work often reaps big benefits from using tools to track constituents and votes. There are [mobile](#) [canvassing](#) apps that allow field workers to contact people, collect data and sync the information back to their main database in real time, eliminating paper lists and data entry. In the USA, major Democratic candidates often use NGP VAN (formerly Voter Activation Network) for this work. In 2018, the company reported record usage of the app: around 71% of progressive voter contact attempts were made on MiniVAN instead of paper lists. (Coulombe, Amanda. ["Organize Everywhere: How Technology Powered Grassroots Engagement in 2018"](#). Retrieved 2018-11-20.)

Internal conferencing

Groups that are working from home, dispersed or operating without physical offices at all, have benefited tremendously from the advances in communication technology. Significant decrease in the cost of long-distance communication as well as increased range of connection have followed the advent of Wifi /internet based free calls everywhere. And the mass free availability of high functioning video conferencing, from Skype to the current ubiquitous Zoom, GoogleMeet, WebX, Microsoft Office Teams, and more secure applications like Jitsi or Signal, or the open source [BigBlueButton](#), have made this kind of communication almost on a level with in-person meetings when facilitated well. Challenges are more often access to electricity and bandwidth in disparate international settings. Solutions may require purchasing newer hardware, updated service plans, or budgeting for travel to a location with better bandwidth. The choice of which service to use often comes down to familiarity, the numbers of participants, whether everyone needs access to screen sharing or other features, and the type of security concerns you have.

If there is no access to the internet or grid, either because of your geographic location or jamming by authorities, there are other options for communication to keep in mind. In Hong Kong, activists used a "walkie talkie" like app called Firechat that worked outside of the internet grid by connecting with close devices directly, as fairly simple walkie talkie radios would do. There are currently a few apps working within the ["Mesh Network"](#) framework. Of course, the spatial limitations are not insignificant: with a maximum of 100-200 metres between devices, its reliability rests on establishing many users to build a comprehensive mesh network. Some of [these apps](#)need to be downloaded and need internet connection, so planning ahead is a must! In addition, in a situation where there could be an anticipated crackdown on communication systems, simple FRS radios (walkie talkies) or more powerful UHF (Ultrahigh Frequency) radios that have a longer range could be employed to facilitate communications.

Training

New tech has much to offer social justice organisers for access to training and capacity development. Though online workshops currently do not offer some of the more intangible

perks of being in person—impromptu connection, networking, physical relationship—well designed interactive programs based on core principles of engaged facilitation can deliver online too! Check out Training for Change's free online down'n'dirty facilitation support booklet for ideas.

Even the mundane conference call has morphed into a huge platform, particularly as advances in video conferencing have made it much more ubiquitous and easier to use than even a few years ago. Not only does this technology support organising, it also allows for virtual trainings and international connections at an unprecedented scale. Some campaign coordination and training calls have been done with upwards of 60,000 participants. In fact, tens of thousands of MoveOn members joined their online training calls in 2018.

Even before the COVID-19 pandemic pushed many to fully embrace digital distribution, materials were already transitioning to online formats, google docs, basecamp, and pdfs to be printed at home. At the very least, this can eliminate the need to hide subversive materials in one's shoes to cross borders or pack in hundreds of pounds of printed materials.

At its best, online toolkits offer a myriad of ways to present materials, link content, and increase access through easily accessible translations and complimentary materials in diverse formats for learners of all types. 350.org, a global campaigning group, offers many online toolkits, like this one on WHY DIGITAL STORYTELLING matters, and how to use them to support action on climate change.

One of the groups I work with, BeautifulTrouble, offers a toolkit in five languages that also supports a physical card deck with QR popup codes that automatically bring you back to the specific webpage for in depth information when your cell phone camera recognises the code image. This toolkit also allows users to select their favourite entries and create their own individualised Toolkit pdf and even access modules via chatbot.

So many Learning Management Systems (LMS) have been developed that there is one to suit most group's desired outcomes, specific needs, and budget. Basic workshops or one-off training sessions can be handled in large part within collaborative google docs; although not as graceful or elegant as the fee-based alternatives, they are freely accessible. Current LMS are multimedia based, including a way to build and communicate within the learning community, monitor the progress of participants as well as direct learning flow. Programs like Mighty Networks and TalentLMS offer this kind of immersive experience to support elearning and can be valuable if you have the resources to make it work (both time to manage it and money to pay for it).

Other online tools like Jamboard or Miro, Mentimeter, and even the Whiteboard features in Google Suite or Zoom, help to make online training a truly interactive, collaborative and engaging space where learning happens. Still, all the principles of in-person facilitation and education apply online. Simply moving to the cyber world doesn't make your training better – or worse! Commitment to interactive methodologies and Popular Education frameworks can support more effective learning online and in person.

Cybersecurity Considerations

As pointed out at the beginning of the article, the bad news is that authorities are in the business of harnessing new tech to spy on activists and challengers as well as impeding our progress towards progressive change. Their work has only gotten easier in some ways with the current reliance on online actions and communication systems.

The good news is that there is much we can do as grassroots activists/ social change NGOs to protect ourselves and work smarter as well – both for in-person activities and digital ones. One of our specific challenges is the rate of change in tech. As organisers and activists who are already overloaded with campaign agendas, we are not necessarily able to keep up, and certainly many of us do not have time to be experts. There are many manuals to refer to, like this overall guide [Get in Formation: A Community Safety](#) from VisionChangeWin and Tactical Tech's [The Organiser's Activity Book - Our Data Our Selves](#). But to reiterate, don't let security get in the way of your organising work.

Luckily, good security starts with something as basic as good digital hygiene! This includes:

- Choosing applications that deliver security that matches your needs (If you are organising totally legal teach-ins or rallies, organising on an open text program is fine. If you are trying to do an action that would benefit from the authorities not knowing, then using an encrypted app like Signal would make more sense!)

- Include the right people in the right threads or messaging applications; vet those people who you invite onto secure channels.

- Develop clear, usable, protocol and agreements about how to use communications; perhaps having a commitment from all involved to simply not forward any messages, or to use code words if necessary, for example.

- Agree on what messages need to be kept (and for how long) and what to delete. The best way to keep your data from getting stolen is to not have data!

- Using disappearing message features (set to appropriate timeline, one day, one week, etc. Note that this also means you lose some institutional memory!)

- Use a password or pin—not facial or thumbprint recognition—for your phone, especially when going out to a protest. In the USA, authorities can compel you to unlock your phone with physical characteristics, but they cannot legally compel you to share your password to open your phone.

- Your weakest link is, well, your weakest link! Even if 99 of 100 people are using a secure phone or app, if 1 of 100 people do not, that means all of you are now in that lower security rung. Reminder: digital security is only as secure as the people using it. Using end to end encryption isn't helpful if somebody in your group is going to share (or be careless with) the information.

It is very important for civil resistance activists to engage in good cybersecurity practices, recognising that secrecy is bad for organising generally, as openness supports movement building. Secrecy should be used as necessary, knowing that it can impede outreach, lead to

hierarchies of knowledge and then exclusion, and feed distrust within groups.

In addition to good basic digital hygiene, groups in very restrictive environments or facing specific challenges to security, could consider additional tactics for better security.

- If you are engaging in a situation where arrest or confiscation of equipment is likely, investing in 'burner' phones that are essentially 'disposable' with minimal or no data on them can be worthwhile. (Make sure to buy them with cash, not a traceable card or app!)

- Using public facing accounts that do not link to specific individuals. This could include sharing all materials through an organisation's account, or using a temporary email address, for example, through a service like 10minutemail.com.

- You may also instruct people who document your actions to avoid taking photos of people's faces (though during the COVID-19 pandemic our mask wearing is helpful in this way!) or other identifying features; and, if you are concerned about implicating attendees at an event, clean all photos of their identifying metadata before using them in any public format. There are a number of apps to do this, including: Free Metadata Remover.

- Use a VPN (virtual private network) as an intermediary between yourself and a website. VPNs are used to mask your IP address (your computer's digital address), to circumvent government intervention or corporate limits on which sites are accessible, and to encrypt data. A VPN routes all of your internet traffic through one of its servers, which hides your IP address, enabling you to bypass geoblocks (censorship based on your IP address or presumed geographic location.) Note that in some countries, most famously China, use of VPNs is illegal. However, there have been a number of activist campaigns that have effectively used proxy servers in a 'cat and mouse game' to keep governments from shutting them down in the short term.

- Monitor the authority's tactics and have plans in place to deal with them if possible. For example, police in the USA have been using "StingRay" surveillance tech that mimics a legitimate cell tower to capture information about people in the vicinity of a first amendment protected protest. With additional tools, the authorities can pinpoint the cell phone's location, and have apprehended people in this way. This is one situation where ongoing discussion is happening within activist communities on potential defense strategies, which may include fighting for regulation, transparency in use of tools like StingRay, and banning its use without a warrant.

- Use digital apps to support safety in person. Some Android and iPhones offer a version of a "Panic button" or Emergency SOS option which may be useful to alert emergency services or a network of human rights defenders if available. Other apps, like Kitestring, designed for general personal safety needs can be utilised for monitoring safety of activists coming and going from meetings, for example. For threatened activists who must travel on their own, or individuals at risk of deportation or disappearance, alert systems like this can be invaluable.

- Encrypt your laptop. It's a commitment to do it well, but can pay off if strategically important for protection of human lives, for example.

Creative Success Stories: Technology for Nonviolent Activists

Aside from the broader categories of technology use by activists discussed here, there are many success stories of how technology has created opportunities for activist victories throughout the world.

Coordinated phone calls

Beyond a one-off call, new Phone calling applications can drive the Old Skool tactic of live phone calls to elected officials or CEOs of corporations into a scale that can have a magnified impact on recipients. There are several online tools, https://5calls.org/ being one that drives calls to elected officials on specific topics. (https://www.wired.com/2017/01/apps-make-pestering-congress-easy-cant-keep/

Online games/ app hacks

Online dating sites have newly become a way to mobilise people to get to the polls – whether it's Tinder, Grindr, or OKCupid. Some sites are not happy with soliciting or "Tinderbanking." (Yes, someone even coined a name for it.) Two British women figured out how to get folks to loan their profile to a chat bot to engage in dialogue encouraging the suiter to hook up with the political process – not just a date. This was especially important in the United Kingdom, where younger voters are disproportionately unregistered and, therefore, unable to vote.

Meanwhile, in the United States, there is even an app called VoteWithMe. It works with your cell phone contacts and can tell you a person's voting history and if they are in a flippable state. It was designed to increase the number of people who vote because research shows that a personal reminder increases the likelihood of someone actually going to the polls.

In Russia, activists are using a popular SatNav tool that allows drivers to report on road conditions in real time to tag themselves in politically symbolic locations with protest messages in their comments. Note that this may help authorities geolocate activists and may not be appropriate in certain contexts.

Gamers with political intentions are also taking their politics into this new virtual public square in creative ways. For example, Toontown Rewritten, a family friendly, free-to-play, not-for-profit recreation of Disney's defunct MMORPG (massively multiplayer online role-playing game) Toontown, has become a place where Black Lives matter protests occur. This is a current part of a lineage of activists who have intervened in various online games to make a statement. Hong Kong activists took to the virtual streets in 2013's Grand Theft Auto V by the hundreds in what was considered an "unprecedented display of mass political theater in the gaming world."

Coordinated use of Twitter via a 'twitter storm" can magnify sent messages, or "hijack" threads and take over the messaging of your opposition on specific issues. Recently, gay activists (re)claimed the term "PROUD Boys" from the right-wing white supremacist group using that name on Twitter in a joyous celebration of queer images.

To disrupt racist and pro-police posts online and support the BLM movement, Korean pop music fans have been winning this game by posting K-pop videos and various blue animated characters under right-wing hashtags such as #bluelivesmatter, #alllivesmatter, #whitelivesmatter, and #MAGA, flooding them and overwhelming the other posts. When the Dallas, TX Police Department asked the public to submit videos of alleged crimes committed during protests, K-pop fans flooded the service with videos of Korean pop idols, shutting the app down.

In a further blurring of online and actual worlds, another activist-artist played a video game that was originally launched by the U.S. Army as an Iraq conflict recruiting tool. When he was killed in the game, he would enter a name of one of the 4,484 service members who had actually been killed in Iraq into the game's chat feature, in effect creating a virtual memorial to someone who had actually died in the real world. Though it is difficult to document the effects of this essentially symbolic protest in VR, certainly this practice expands the field of protest to those who are unable to participate in real life and, as a minimum, exposes those who interact in the game world to this information.

Electronic Civil Disobedience (ECD)

Many digital actions are symbolic or expressive rather than concrete, and therefore not traditionally "disobedient'. ECD, also called cyber disobedience or hacking, refers to the use of information technology, computers and/or the internet to intentionally challenge laws or regulations that one considers immoral or unjust, or that protect the unethical.

ECD may be legal, or illegal; an individual reloading a website repeatedly is not illegal, but if enough people do it at the same time it can make a website inaccessible and disrupt service which could then be considered a crime. Generally, it is more effective when used by large numbers of people. A public mass challenge to specific laws (e.g., copyright law) is another variation of ECD, including the use of intentional file sharing networks that disregard and challenge the ban on reproducing copyrighted material.

Denial of Service (DoS) hits are one direct way to interrupt business as usual in the cyber realm by either crashing or flooding service, similar to physical sit-ins or blockades of doorways or roads. In 1998, the EDT (Electronic Disturbance Theater) collective created the "FloodNet" program to act in solidarity with the Zapatista Army of National Liberation against web sites of the Mexican presidency, the Frankfurt Stock Exchange, and the Pentagon. When users downloaded FloodNet, the program would reload a URL quickly several times, effectively slowing down the website and network server, in what is known as a Distributed DOS (DDOS) attack. In keeping with the U.S. Civil Rights movement, the EDT collective was public and took responsibility for its actions. Another approach was taken by the international hacktivist group Anonymous. Started in 2003, they have endeavoured to remain unknown as 'hackers'; though collectively the decentralised movement has taken credit for various cyber attacks against governments, institutions and corporations.

Though there are many sophisticated forms of DDOS attacks, lo-fi actions have been effective for activists and have enabled effective campaigns like the coordinated simultaneous browser refreshing action of Thai activists which disabled government websites in 2015.

It's also worth noting that DDOS attacks have also been reportedly used by state actors to disrupt the messaging application Telegram during the Hong Kong anti-extradition protests in 2019, in order to limit its use to activists. As well, because of increasing reliance on digital transactions in our globally connected government and corporate systems, retaliation for the many types of digital disruptions that are possible is often swift with high consequences. This has limited the space for activists due to the high costs/ risks associated with prosecution.

Digital haunting

A unique creative ECD action was taken for one day in 2011 by about 700 people from 28 countries. Dubbed " Border Haunt", participants sent the names of migrants who had died trying to cross from Mexico into the USA from a database compiled by an Arizona newspaper to another database run by a company tasked with policing and surveilling the same border. The effect was to ethereally 'haunt' the border for the day: the border surveillance company received more than 1000 reports of deceased people trying to cross the border.

Drones

Sure, high-flying remote-controlled technology has been around for a while, but the advent of mass produced small, cheap and, therefore, accessible drones has opened up a world of aeronautic protest and documentation for ordinary folks. It has included the surveillance of game poachers and commercial outfits in hard-to-access, protected areas. Drones have also been used to fly abortion pills into countries that have outlawed their access, and they have documented authorities illegally attacking water defenders at Standing Rock. Greenpeace crashed a Superman drone into a nuclear power plant containment dome in 2020 to expose its vulnerability.

Zoom bombing

Though Zoom bombing (the process of disrupting a live webinar) is often thought of as a negative, there have been times when progressive activists have been able to intervene for good. In London, residents were able to crash an online party hosted by a landlord who was also the party's DJ. Previously he had been petitioned to stop an eviction of a local grocery store, and they used the party as a time to make their demands heard. This opportunity is hard to replicate as it requires already scheduled events, but good research and following your opponents' schedules may create an opportunity for those who would digitally disrupt an opposing group's meeting – although it is critical to keep in mind security protocols in order to get in the digital door!

Cyber rallies, crowd sourced props

As noted, the global nature of many of today's movements and the advent of the COVID-19 pandemic has pushed much of traditional demonstrating online. From climate youth activists to indigenous rights protectors, everyone has held one form of online rally or "action-ar" (a place to take action—make a phone call, tweet, send a letter or email—while on a webin-ar!)

Thousands have zoomed in to be part of Fridays for the Future, Sunrise, 350.org virtual rallies, as documented by screen shots of participants. One early example includes nearly 1000 people at a [virtual rally calling on PM Trudeau](#) to stop the bailout to Big Oil executives and invest in workers instead.

Others have crowdsourced banner making, by coordinating dispersed art-making sessions and then digitally stitching the works together to make beautiful banners, as with this example for [WET'SUWET'EN SOLIDARITY: CLIMATE PROTECTORS](#).

And the toolkit on producing art is also available online, for easy reference and download: [How to Art guide](#).

Projections

The availability of powerful, smaller and more affordable projectors along with cool architectural computer mapping programs like [MadMapper](#) has quite dramatically opened up what is possible in the last few years. Whether it's the symbolism of shining a light on something to expose a wrong, or just its ephemeral nature—a statement seemingly coming from nowhere and gone in an instant—there's a love affair with large scale illuminations. In 2012 [Egyptian activists projected](#) videos of military repression onto prominent buildings. In 2018, Americans projected images of the slain journalist [Jamal Kashoggi onto a part of the Newseum](#), which has a quote from the first amendment. Following the military coup in Myanmar, the 3-finger salute used to signal [resistance was projected on buildings](#) around the capitol. Part public service announcement, part luminous artistic statement, projections are increasingly used to glowing effect around the world.

An update on projection technology wouldn't be complete without mentioning the world's first [holographic protest march](#), which took place in Spain in 2015. The surreal threat of outlawed public protest drove artist-activists in the group [No Somos Delito](#) (We Are Not a Crime) to fight back in an equally surreal way. It was considered a big leap for how technology is used in activism.

Online Petitions

Online petitions are a more accessible form of traditional physical petitions, and generally not effective in and of themselves at making social change though they can be a key step in building a list of stakeholders. The key here is to use an application that allows you to capture the contact information for those who sign on. [Action Network](#), [Salsa Labs](#), [ActionKit](#), etc. which have stated progressive operating principles that allow this feature; [beware of the outfits](#) like Change.org, NationBuilder, and others who may own the contact info of your signers and gatekeep your interactions with them (and possibly be actually supporting your rightwing/corporate opposition as well.)

Many of these groups like [Coworker.org](#), a global peer-based platform designed specifically to support workers advocating for change in their workplace, offer petitions as one piece of their overall campaign offerings.

Recommendations

If you read this far, you know that access to modern tech is increasingly valuable to social movements for effective communication internally, increased mobilisation opportunities externally, and innovative tactics overall. But still: there is no silver bullet in tech itself. As far as Campaigning goes, strategic analysis and planning to identify and then integrating the appropriate tech is what will increase our collective agency, in turn supporting our ability to build power and win.

- Don't fetishize tech! Even as digital Tech is just another tool in the toolbox, it is important to integrate advances and invest judiciously in those who stay up to date, in as much as it helps us build power towards achieving our goals and long-term visions.
- Pay heed to security: Invest in strong digital hygiene practices; know your options, and choose your course to support organising not fear; schedule (re)assessment times as change is fast paced.

Finally, consider the high energy price tag of all this digital technology. For some perspective: Fortune Magazine noted that the music video "Despacito" had burned as much energy as 40,000 U.S. homes use in a year when it reached 5 billion views on YouTube in April 2018! It would not be surprising if we are moved (forced?) to consider lower consumption, more sustainable, lower enviro-cost options in a moment of upheaval sometime soon. Of course, smart devices can also support better energy conservation and improvements in efficiency, but right now we are on the upward curve of digital energy use, and foreseeable disruptions of electric service due to increasing storms/ climate chaos. So, for redundancy in the long haul, it is important not to abandon all low tech and non-digital tools, from Mesh Networks to bicycle couriers! Because if a natural or anthropogenic disaster doesn't disrupt our work, the authorities certainly will (try to) pull the plug at some point if we are being effective! #PeoplePowerWorks.

The Author

Nadine Bloch is an outside-the-box activist artist, political community organiser, strategic nonviolent actionista and the Training Director for Beautiful Trouble. Her work explores the potent intersection of art and politics, where creative cultural resistance is not only effective political action, but also a powerful way to reclaim agency over our own lives, fight oppressive systems, and invest in our communities — all while having more fun than the other side! In addition to contributing content to Beautiful Trouble, Beautiful Rising**,** and We Are Many: Reflections on Movement Strategy from Occupation to Liberation (2012, AK Press), she is the author of Education & Training in Nonviolent Resistance (2016, USIP) and the co-author of SNAP: An Action Guide to Synergizing Nonviolent Action and Peacebuilding (2019, USIP.) Find more of her writing on arts & activism at WagingNonviolence.org.

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