

Amplifying Voices, Strengthening Impact: A Proposal for Civic Tech and Social Accountability



Acknowledgments

This framework proposal on integrating civic technology (civic tech) in the work of the Global Partnership for Social Accountability (GPSA) was developed by Open Data Collaboratives with lead author Katherine Townsend¹ and with the collaboration of the GPSA team.

— *Cover Image: Vincent Tremeau / World Bank*

¹ Katherine Townsend is an independent consultant with over 10 years' experience as an open government and civic technology strategist. She has worked for national governments on open data policies and implementation, working across government, tech industries, academia, CSOs, media, and civic technology actors for increasingly transparent and collaborative governance. Additionally, she worked with multiple donor partners from governments, philanthropies, and the technology sector in support of civic technology and innovation in global development.

Table of Contents

Acknowledgments	2
Table of Contents	3
Abbreviations	4
Executive Summary	5
Context, Methods & Definitions	8
Context	8
Methods	9
Definitions	9
Features of Successful Civic Tech for Social Accountability	11
Risks: Data Accessibility/Innovation vs. Utility	13
Data Stewardship	14
Digital Divide	15
Novel Overtaking the Useful	15
Corporations Overtaking Government Services	15
Do CSOs Have a Role in Advancing Digital Literacy and Demystifying Government-Held Data?	16
Civic Tech Applied to Social Accountability Tools	17
Report Cards	18
Participatory Procurement Monitoring	19
Participatory Budgeting	20
Social Audits	20
Civic Tech-Supported Social Accountability During COVID-19	21
Contextualization, Sustainability and Scalability	23
Challenges of Scalability and Replication	24
Conclusion	25
Bibliography	26
Annex 1 – Interviews	28
Annex 2 – Additional Case Studies	29

Abbreviations

Abbreviation	Name
ANSA- EAP	Affiliated Network for Social Accountability – East Asia Pacific
API	Application programming interface
Civic tech	Civic technology
CMS	CheckmySchool
CRA	Community Reinvestment Act
DARPA	Defense Advanced Research Projects Agency
DRC	Democratic Republic of Congo
FCV	Fragile, conflict-affected, and violent
GPSA	Global Partnership for Social Accountability
IT	Information technology
NEC	National Election Commission
NLP	Natural Language Processing
PB	Participatory Budgeting
SASKAN	“Social Accountability Knowledge, Skills, Actions and Networking” Project
SLOEDP	Sierra Leone Open Elections Data Portal
SMS	Short message service
SNAP	Supplemental Nutrition Assistance Program
SRH	Sexual and Reproductive Health Activities Map
TOME	“Transparency of the Mauritanian Education Budget” Project
WSP	Water service provider

Executive Summary

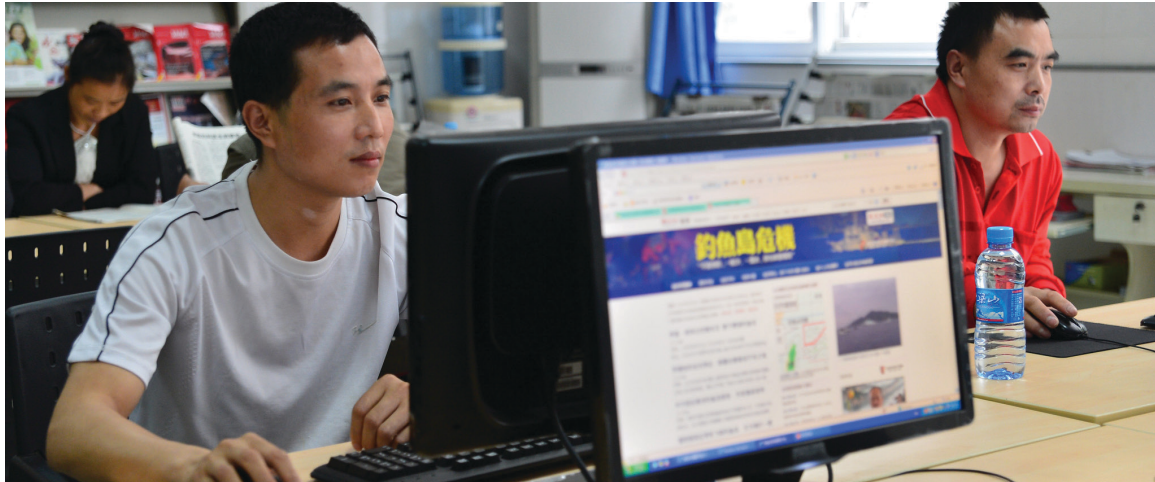


Image: Li Wenyong / World Bank

The following framework proposal explores the use of civic technologies (civic tech) for social accountability and how they may inform the engagement of the Global Partnership for Social Accountability (GPSA) and other organizations. The GPSA was created by the World Bank's Board of Directors in 2012 to support collaboration of civil society with governments to solve pressing development challenges. It does this through programmatic grants for civil society-led collaborative social accountability that engages citizens, communities, civil society groups, and public sector institutions in joint, iterative processes to solve pressing development problems.

The COVID-19 pandemic resulted in a move of many vital social services to the online space and demonstrated the pressing need for organizations to have technological acumen and the ability to further their cause virtually as much as in-person. Civic technologies offer expanded opportunities to improve efficiency and effectiveness of initiatives and build resilience in anticipation of the next disruptive disaster such as a pandemic, extreme climate-related events, or conflict. Civic tech has been used in social accountability for decades for overcoming constraints in face-to-face communication, expanding reach of social accountability, amplifying citizen voice, countering mistrust, supporting response to disasters, and providing independent monitoring and evaluation of programs and quality assurance, including for large donor programs.

Demonstrations of the benefits of integrating civic technologies into the practice of social accountability methods are wide and varied across the world.

- In the Philippines, [CheckMySchool](#) (CMS) created a digital tool in 2011 that enables citizens to access data on school facilities, report on poor conditions, and engage government representatives to resolve related issues². It has addressed school governance and learning addressing concerns such as enrollment, budget, availability of textbooks and test results.³

² CMS initially tracked the delivery of textbooks to the country's over 40,000 schools but has since expanded services to allow volunteers to assess the compliance of schools with government standards for sanitary facilities, the number of teachers, etc.

³ <https://gsdrc.org/document-library/check-my-school-a-case-study-on-citizens-monitoring-of-the-education-sector-in-the-philippines/>

- The Philippines' Pantawid Pamilya social protection program citizens use social media (Facebook and Twitter), in addition to SMS, phone calls, emails and in-person meetings, to file complaints as part of the program's grievance redress system.
- In the United States, [Benefits Data Trust](#)⁴ uses its website, phone, or text messages for any to receive guidance on eligibility criteria and entitlements for federal services, and its online platform makes it easier for citizens to claim their social services entitlements in one accessible place.
- In Nigeria, Connected for Development (CODE) applies civic tech in participatory monitoring of public procurement and spending by the Nigerian government, and regarding COVID-19 CODE demonstrated that 80% of the health facilities in Nigeria set to receive funding for vaccines did not meet the required health standards.
- In Tanzania, the "Raising the Water Pressure" (Maji Matone) Project of the Tanzanian CSO Daraja in 2009 facilitated use of mobile SMS phones for citizens to give real-time reports on access to rural water and the status of water point functionality in their area.⁵ Daraja used the data to engage government, and monitors its response.

Within the Global Partnership for Social Accountability, current and past grant partners apply civic tech in their social accountability operations.

- Building on its participatory multi stakeholder forums to improve learning and accountability in school governance in Mauritania, EcoDev's "[Transparency of the Mauritanian Education Budget](#)" project created an online monitoring platform – the Medrassety – for citizens to monitor schools.
- In Paraguay, the [CIRD](#) is using a web-platform to ensure transparency of COVID-19 fund flows. Citizens can access and download all the data on funding and use of resources in open format.
- In Ghana, [SEND- Ghana](#) and a national coalition are using an online platform and SMS outreach for citizens to give real-time feedback on the use of COVID-19 funds, and also to measure community perceptions, counter misinformation and promote behavior change.
- In Malawi, the Malawi Economic Justice Network used SMS texting to enable monitoring teacher absenteeism, and the data was shared and analyzed by the Education Ministry to inform policy.

The applications of civic technologies for social accountability have been valuable, but they have drawbacks and consequences. Effective application of civic tech tools to improve social accountability mechanisms does require balancing virtual and in-person collaboration, protecting privacy and security of users, and ensuring the sustainability of the intervention. The use of an overreliance on civic tech at the detriment of established tools may introduce new risks, particularly if the technologies in question are novel and untested. The potential exclusion of populations without necessary technology access or breakdown of digital infrastructure due to extreme weather events, weak institutions or conflict call for mitigation by analog contingency measures. In the case of Egypt's Takaful and Karama cash

⁴ A U.S. based non-profit organization that leverages digital technology to streamline application processes to different public benefits programs (including Medicaid, Supplemental Nutrition Assistance Program).

⁵ Gigler, Bjorn-Soren et al: Closing the Feedback Loop: Can Technology Amplify Citizen Voices? As of 2011, only 40 percent of Tanzania's rural population had access to a water source and only 54 percent of public water points were functioning ([Taylor 2011](#)).

transfer program use of Facebook to report problems – such as underserved sub-groups receiving cash – excluded many illiterate beneficiaries.⁶ The improper storage and use of personal data can further inflict harm, particularly on already vulnerable populations. Research indicates that most civic tech to date relies on philanthropy and is rarely designed around demand on the open market, which may reduce affordability – as well as sustainability in application.

As GPSA increases the role of civic technology in its portfolio, specific considerations will be needed to ensure responsible application that prioritizes privacy and data protections, expansion of outreach to ensure none are left behind, and use of technology in service of strengthened relationships that are core to social accountability. The framework proposal sets out the following recommendations to be considered for this purpose:

1. Sustainable integration of civic tech into GPSA-supported social accountability processes calls for criteria tailored to the highly contextualized nature of GPSA grants, adjusted to capacity gaps of grant-partners and maximizing the complementarity between partner organizations' technical expertise and the GPSA's social accountability knowledge
2. A survey of GPSA grant partners on how they integrate civic tech in social accountability operations, and a review of past project evaluations, would help establish cause-and-effect relationships of including civic technology on project results to respond to ongoing shifts toward greater demand for measurable impact in the donor community. The GPSA can engage funders on the outcome of this investigation to gauge potential interest by external funders and other World Bank programs⁷ to fund either civic-tech interventions in social accountability or impact evaluations.
3. The GPSA has a unique position as part of the World Bank, due to its capacity to convene government and development actors at the country level, and the resulting potential to scale work across Bank-funded programs. This may help overcome issues associated with the low sustainability of many civic tech projects. Seeking funding from philanthropic organizations, bilaterals, and the technology sector is possible but not easy due, in part, to competitive pressure from other Bank units.
4. GPSA is uniquely positioned to be able to demonstrate, through innovative grants, how civic tech solutions for collaborative social accountability can help to foster inclusion and equity, as well as restore trust in our public institutions. Public trust in institutions is at an all-time low, governments particularly, and there is a crisis of mis- and disinformation. Restoring trust can benefit from use of the tools of collaborative social accountability that can be augmented by civic technologies.⁸
5. GPSA can engage in dialogues and efforts, such as the ongoing development of an AI policy for the African Union, to advocate the ethical use of tech for good to advance equity and inclusion, and demonstrate the role of civic technology as an impact accelerator within government systems. The integration of civic technologies into GPSA's portfolio can transform government services and wider governance offerings. GPSA partners can demonstrate civic tech as an impact accelerator, including through government systems for greater potential for sustainability, and for wider partnership investment in the field of social accountability.

⁶ Daily News Egypt, March 31, 2020, Social Solidarity Ministry launches e-portal for Takaful and Karama complaints

⁷ For instance, the Governance Global Practice, Citizen Engagement and Social Accountability Global Solutions Group and Digital Development Global Practice

⁸ Civic tech solutions can scale up the reach of collaborative interventions. For instance, digital feedback channel social audits and population surveys reach a wider population quickly.

Context, Methods & Definitions

Context

In 2012, the World Bank Board of Directors created the Global Partnership for Social Accountability (GPSA), as a multi-donor trust fund to support civil society-led social accountability working with governments. To this end, the GPSA makes 3 to 5-year grants of between \$500,000 and \$1 million for social accountability initiatives. These grants engage coalitions, local communities, and citizens including vulnerable groups, and work with public sectors at local, state, and federal levels, with the World Bank as a key broker. GPSA's goal is to co-create solutions to jointly identified problems, in sectors prioritized in the World Bank's Country Partnership Framework. Information generated from social accountability processes can enable corrective measures to be taken and improve policy implementation and service delivery.

Linking civil society-led processes with the public sector increases the opportunity for institutionalization and scaling up through government delivery systems. In this respect, the GPSA's work has four main pillars: (1) making programmatic grants to CSOs to advance collaborative social accountability, (2) implementation support and capacity strengthening of civil society and public sector actors for collaboration in addressing service delivery problems, (3) monitoring and evaluating grant operations to build evidence, support learning and course correction, and improve social accountability practice and project implementation to gain operational insights for future projects across the Bank and beyond, and, (4) building partnerships across civil society, academia, development partners and government for knowledge sharing and learning, and field-building.

The framework proposal explores the use of civic technologies in social accountability and how they can be incorporated into the GPSA's strategies and projects. The GPSA resolved to better understand associated challenges, risks, and opportunities, as well as potential modalities for doing so, including in fragile, conflict-affected, violent (FCV) and low-resource environments. This is relevant now more than ever as the global COVID-19 pandemic has redefined what kinds of vital services should be available online, and has shaped how many workers engage one another on a daily basis.

An increasing portion of private, professional, and public communications and media occur virtually, with considerable implications for the development landscape. While civic technologies have been applied in social accountability for a long time, CSOs could do more to use them to improve efficiency and effectiveness of their regular initiatives. This is also important in positioning civic tech for social accountability to respond to future disruptive disasters such as a pandemic, climate-related events, or human conflict. The GPSA anticipates engaging prospective sources of funding for civic technology for social accountability, which this proposal is seeking to support. The report takes account of the developing context of the global COVID-19 pandemic, in which virtually all sectors of society, including social accountability, have been disrupted and needed to adapt accordingly.

Methods

The research methodology for developing the framework proposal comprised:

- A series of 29 semi-structured key informant interviews with World Bank staff, the GPSA Secretariat, grant-partners, and selected external stakeholders conducted via video, phone, or in-person (see Annex 1).
- A literature review of 23 field reports on civic tech for social good, 16 GPSA project reports and numerous case studies on civic-tech and social accountability (see Annex 2) as well as web searches and desk reviews of other literature to scope out the landscape of funders that are salient to this theme and sectors.

Definitions

Civic technology (civic tech) is the application of technology in service of civil life, and is an ever-changing landscape, founded in civic participation and the application of a growing array of tech tools. Based on the society and governance structure in which they are situated, the role of civic actors changes:

- **Engaged to apathetic, national to local, democratic to authoritarian.**
Technology is no panacea to strengthen civic engagement and social accountability. It cannot supplant the role of relationships, nor can it substitute for the dedication of civic actors to their cause. Civic tech can enhance and facilitate the work of civic actors, foster dissemination of information to a broader audience and thereby build critical support. If, however, it substitutes for civic action on the ground, or worse, is appropriated to surveil actors, civic tech may also do harm and even disrupt people's livelihoods and wellbeing.
- **Civic tech is any digital technology used in the service of civic engagement.**
These include but are not limited to: short message service (SMS), web-based surveys and other interactions, community mapping, satellite technologies, scraping pdfs for machine-readable information, object-recognition capture of handwritten surveys and reports, crowdsourced reporting on mobile apps, digitizing laws and voting records and placing these on a public website, creating Application Programming Interfaces (APIs) to integrate government data from census, spending, or any other database, data visualizations for ease of communication, and many more.

In one of the first major analyses of civic technology as a sector,⁹ the Knight Foundation in 2013 synthesized civic tech into two major tracks:

- I. **Opening up government**, which includes transparency of data, facilitating the voting process, mapping, and visualization of public data, making use of public data, and the co-creation of laws and government decisions.
- II. **Citizens' participation**, which concerns the development of citizens' networks, the engagement of local communities, crowdsourcing information, or financial support, and sharing citizens' data.

⁹ Knight Foundation, "The Emergence of Civic Tech: Investments in a Growing Field: What does the Civic Tech landscape look like?" Communities, 2013, <https://knightfoundation.org/reports/emergence-of-civic-tech/>



Image: Almin Zrno / World Bank

The GPSA's model of collaborative social accountability lies at the intersection of these two. It is an approach that engages citizens, communities, civil society groups, and public sector institutions in joint, iterative processes¹⁰ to generate solutions to pressing development problems and help improve accountability, performance and results in sector governance and service delivery. Civic technology for social accountability is therefore salient to this in-between space. Civic technology has been framed as “an emergent area of practice where citizens, both information technology (IT) experts and those without specialized IT skills, [...] benefit their communities and improve government services by using government-provided open data.”¹¹

These technologies present novel opportunities for governments to engage citizens more effectively and collaborate with the public in designing programs and policies to align with public demand. For collaborative social accountability, particular value can lie in digital platforms that simultaneously provide citizens with issue-specific information and collect their feedback. These technologies can facilitate citizen oversight and accountability of government policies or services, course correction, plugging service delivery gaps and removing bottlenecks. In doing so, civic tech can help improve public trust and citizens' perception of government, and thus strengthen government legitimacy.

Since the Knight Foundation's 2013 publication, the landscape of civic tech has increased in complexity, and in the sophistication of accountability required. Fairness in algorithms, training datasets, distributed ledger technology, sentiment analysis all are data-rich methodologies that have been hailed as solutions to easily address societal problems. Yet, the problems with these technologies are the same as those of any poorly designed policy or intervention, regardless of the seeming level of technological sophistication: who defined the problem, who was part of designing the solution, who tested/monitored the testing of the solution, what is the process for identifying flaws and addressing them, what accountability and recourse exist for harms.

¹⁰ The Global Partnership for Social Accountability: Theory of Action (English). Washington, D.C.: World Bank Group. <http://documents.worldbank.org/>

¹¹ https://www.sog.unc.edu/resources/microsites/civic_tech

Features of Successful Civic Tech for Social Accountability

A 2021 World Bank report¹² on digital technologies for citizen engagement ([Amplifying People's Voices: Opportunities for Mainstreaming Citizen Engagement Through Digital Technologies](https://documents1.worldbank.org/en/publication/documents-reports/documentdetail/099102523151025995)) lists technology requirements of effective civic tech, namely that they ought to be inexpensive to buy, operate and replace, easy to maintain, readily usable by government and citizens with limited level of digital literacy, and available through multiple vendors to avoid price gouging. Based on prior experience, profiles and interviews with civic technology leaders from within and outside the GPSA's network, successful applications of civic tech for social accountability feature some or all of the following characteristics:

I. Problem definition

- A specific targeted problem is identified, and necessary tangible change is articulated.
- A beneficiary is identified, and how their voice is represented throughout the intervention.
- A plan for adapting and updating the work based on changing understanding of the problem definition is developed.
- Proposed civic tech solutions easily integrate into existing work.



II. Leadership

- An effective, trusted community member can act as ambassador for the civic tech project.
- The ambassador has both capacity and interest in sharing their story through media and during conferences and using media and marketing beyond the specific project sector.
- Strong, personal relationships exist with government, business, NGOs, and the donor community.

¹² Amplifying People's Voices: Opportunities for Mainstreaming Citizen Engagement Through Digital Technologies <https://documents1.worldbank.org/en/publication/documents-reports/documentdetail/099102523151025995>

III. Community

- Civic space is open enough to allow for regular community gatherings.
- Initial project development is often achieved by persistent, low-cost engagement of civic activists.
- Community members commit to populating civic tech tools, often through volunteer services.
- There is no viable alternative to the civic tech tool that is driven by other community members.



Image: K M Asad / World Bank



Image: Vincent Tremeau / World Bank

IV. Partnerships

- Experienced leaders volunteer mentorship and technical assistance.
- Local skills are matched to a data and tech savvy organization trusted by the donor community.
- The project receives letters of support/endorsement from diverse partners, including those previously providing support. The organization identifies its own strengths and weaknesses and proposes a clear plan for which organizations to partner with to fill capacity gaps.
- The organization is able to attract many donors or a single long-term donor.

V. Sustainability/scalability

- A plan for sustaining and scaling is articulated at the outset of the project.
- A narrow plan for replicating and scaling, either to focus only on a specific region, or to develop franchises with independent ownership to tackle additional locations is articulated.
- A marketing and engagement plan is articulated at the outset of the project to proactively attract and engage additional funders and supporters, beyond “putting out a report.”



Image: Dasan Bobo / World Bank

Risks: Data Accessibility/Innovation vs. Utility



Image: Arne Hoel / World Bank

Technology cannot fix problems of power that are inherent in a system, as they are ingrained in people's relationships. Any technical intervention, whether it is sophisticated and cutting edge or tested and rudimentary, cannot supplant trust-building and community-based networks vital to ensuring sustained development solutions.

Power imbalances also affect the implementation of civic tech solutions, beginning with the funders. Funding organizations tend to prefer the incorporation of technology tools that can produce quantifiable data to enable them to demonstrate impact, monitor, and evaluate a project, and produce data visualization to help in storytelling – yet by themselves, these data tools do not reflect the full picture of a program's successes, failures, and lessons learned.

Increasingly, donors recognize that digital transformation and a sustainability plan are needed, but too often civic tech solutions fall within a donor cycle of receiving just enough funding to execute a specific targeted project, little for learning or scaling, and recipients are left to jump from one donor to another to sustain even minimal functionality.

Another power imbalance in civic tech solutions results from who gets to determine what data is trusted. Government data, and national statistical data, are often regarded as most trustworthy.

There is a vital need for these data to be trustworthy – governments receive funding from donor countries, the private sector, and organizations like the World Bank based on expected data quality and trustworthiness. A new push for government transparency from organizations like the Open Government Partnership, and a continually growing open data movement, put great pressure on governments to make their data publicly available to citizens. All of this has increased scrutiny of the supply side of data, the assumption that government data must be trusted first, and that citizens must learn how to use it.

CSOs have had a great role to play in this effort, holding trainings in using government data platforms, cleaning up government data, and serving on boards of government data initiatives like the International Aid Transparency Initiative (IATI). Investments in communities collecting, sharing, independently verifying, and providing accountability with civil society collected data will be necessary and should be encouraged and facilitated to reduce bias and shift power away from a top-down approach.

The field of civic technology suffers from a lack of technological or digital literacy from all actors, including government. Too often governments outsource their technological solutions, and even their assessment of what technological solutions may be needed and where to procure them. CSOs have a role as translators, effectively communicating within civil society and across government how to understand data, how to recognize deficiencies and adopt needed steps to improve quality, usability, and reliability.

Data Stewardship

Technology is rapidly evolving, its uses are often experimental, and vulnerable populations tend to bear the brunt of this experimentation. Thus, developers and proprietors of civic tech ought to ensure responsible use of data.

One recent example of unintended and potentially harmful consequences of civic tech applications is the risk posed by the collection and distribution of Rohingya refugees' biometric data. In refugee camps in Bangladesh, UNHCR collected personal data, including biometric data, of around 830,000 Rohingya to ensure assistance and protection are delivered to entitled individuals.¹³ In parallel, refugees were asked if they consented to this information being shared with the government of Myanmar. This would serve to legally establish Rohingya refugees' prior residence in Myanmar and secure their right to return in the future.

Yet, it inevitably created the risk that these data - particularly the biometric records - would be appropriated by the Myanmar military to again persecute and kill Rohingya refugees. As articles by human rights organizations on the subject highlight, confronting refugees with this consequential decision at a time of dependency and personal insecurity may have restricted their ability to give informed consent.¹⁴ In employing civic tech for social accountability, funders such as the GPSA have to carefully assess all possible consequences of such technology in each project.

¹³ <https://www.unhcr.org/news/press/2021/6/60c85a7b4/news-comment-statement-refugee-registration-data-collection-bangladesh.html>

¹⁴ <https://www.thenewhumanitarian.org/opinion/2021/6/21/rohingya-data-protection-and-UN-betrayal>

Digital Divide

Many civic tech interventions rely on tools that only reach a portion of the population, often those with means. Internet-based solutions are increasingly included in requests for funding and receive support as innovators can design and execute tools from the comfort of a cosmopolitan location. Even first mile technologies, like SMS or radio, will exclude some who lack the necessary infrastructure to participate. The GPSA's network will particularly benefit from civic technologies that work both offline and online, combining local, community-driven approaches with the technical support of external actors. Civic tech, particularly if compared to cure-all solutions, have the benefit of being relatively affordable and can be adjusted to shifting contextual requirements. For instance, mesh networks can help mitigate disruption to internet access, SMS tools can mitigate loss of smartphone access. For populations with low network penetration or lack of access to technology, volunteers can carry single devices to transmit necessary information. Local community knowledge workers can help illiterate populations to use civic tech. In each case, civic tech's greatest asset remains the people and relationships they have built, and particularly in low-resource and fragile settings, investing in relationships is vital to building back stability and trust, and so civic technology for social accountability can be an integral methodology for securing stability.

Novel Overtaking the Useful

The growing recognition of the relevance of civic tech raises the risk of prioritizing its novelty over case-specific utility. Organizations working on civic tech for social accountability may play an important role in keeping an appropriate perspective and avoiding harm from misplaced innovation. For instance, the 2017 elections in Sierra Leone were incorrectly labeled as being conducted via blockchain technology. Due to its end-to-end encryption, this technology is perceived as infallible, and its faulty association with the election could have meant that election results would not have received adequate scrutiny. For a more detailed account, see the case study in Annex 2.

Corporations Overtaking Government Services

Due to capacity constraints and higher costs associated with in-house solutions, many governments outsource select services to private corporations that have limited oversight and responsibility to maintain accountability after services go offline. Further, local governments and social services rely on social media like Facebook to make public service announcements, live-stream events, and interact with constituents. Products like WhatsApp are used by humanitarian organizations, including UNICEF, to disseminate information about vital health concerns including COVID-19.

However, as a result, much of governments' critical digital infrastructure is controlled by private corporations that provide services globally, are legally registered in other jurisdictions and therefore only partially subject to individual countries' regulations. This limits the adjustments governments can make to these services, for instance in terms of data protection, and exposes them to the risk of losing access to services should corporations terminate their operations in the respective country. If not sustained, civic tech interventions carry similar risks of presenting an unstable substitute for building

government capacity. Thus, pathways to scale through government systems or options to sustain the civic tech application by recruiting additional funders ought to be identified as early as possible. Some of the tools and methodologies under analysis from the World Bank's Citizen Engagement report may be useful here.

Do CSOs have a role in advancing digital literacy and demystifying government-held data?

CSOs are often charged with building trust within government for statistics and data that the government does not wholly own. CheckMySchool – a project in the Philippines initiated in 2012 by the Affiliated Network for Social Accountability – East Asia Pacific (ANSA – EAP) supported by the Open Society Institute and World Bank Institute sought to monitor service delivery in schools across the country and thereby address capacity gaps in the Department of Education. For that purpose, the project drew on different education datasets totaling over 38 million data points provided by the Department of Education and utilized web-based applications and ICTs to inform civil society about the resources local schools should have, enabling volunteers to directly relay any discrepancies back to the Department.

However, according to CheckMySchool, the Department of Education initially rejected its findings that did not align with the Department's. It required CheckMySchool and the Department of Education to work together to begin to accept that there may be different ways of collecting and interpreting the information.¹⁵ For a more detailed account of the case study, see Annex 2.

CSOs serve a role of translator – to translate between government data and government understanding, and the data collected by CSOs on specific issues. There is a great amount of digital literacy needed, for civil servants and civic actors alike. The historical top-down nature of government statistics and information sharing, and the role that governments play in society, often raises expectations that government data is definitive, that it cannot be flawed, and that the civil servants who are stewards of that data should be able to understand and defend it. Yet the public's dependence on government publishing reliable information is undermined by difficulties in independently verifying the veracity of that data.

Part of the impact of civic tech movements has been to demonstrate and share examples of the difficulties and indeed failures of government data, and that the way to improve its quality, to improve government operations overall, and indeed to engender trust from the public, is to increase participation and transparency into government data and operations. This is one way by which civil servants can increase their own learning and literacy and expand their capacity to work more directly with CSOs to demystify government-held data.

¹⁵ <https://gpsaknowledge.org/wp-content/uploads/2014/07/CaseStudy-CheckMySchool.pdf> page 37

Civic Tech Applied to Social Accountability Tools



Image: Kelley Lynch / World Bank

Civic tech can support tools across the entire spectrum of citizen engagement, ranging from thin approaches of consulting citizens through report cards to thicker approaches of collaborating with them through social audits or empowering them in participatory budgeting exercises. Yet, leveraging civic tech to support requires diligence in balancing virtual and in-person engagements, keeping people and relational approaches at the center versus the technology, and protecting privacy and security of users, and planning for sustainability of the intervention. An example of a glossary of tools and approaches is posted by the World Bank's Social Development Practice.¹⁶ A collection of illustrative case studies detailing the use of civic tech for social accountability tools is presented in Annex 2.

¹⁶ https://www.worldbank.org/content/dam/Worldbank/Event/MNA/yemen_cso/english/Yemen_CSO_conf_glossary_SA_ENG.pdf

Report Cards

Traditionally, there has been a distinction between two types of scorecards: a) citizen report cards (CRC) which are perception-based surveys of citizens for feedback on public services based on their user experience. The quantitative data from these surveys are normally used to compare quality of services across service providers in different sectors and thereby often spur competition; and b) community scorecards (CSC), that involve in-person gatherings of local citizens to evaluate the quality of public services based on their experience, often using focus groups, town hall gatherings and voting systems. Results from voting are also presented in aggregate and serve to inform and ideally influence service providers and policymakers. Leading international CSOs have pioneered the digitization of community score cards¹⁷, whereas citizen report cards, being survey-based, now benefit from online surveys, SMS systems and other digital tools.

While the application of civic tech for report cards has been well socialized, the use of technology could be expanded to build on the value of ratings as report cards' central feature. Natural Language Processing (NLP) technologies, either with VOIP or chatbot, could be used to collect responses to open-ended questions and more detailed and subtle feedback and evaluation to improve government service, including from illiterate populations that would have otherwise been unable to use report cards.

Community Score Cards

World Vision's iteration of the Community Score Card is branded "Citizen Voice and Action" (CVA). It is the organization's unique approach to social accountability and local advocacy, which is designed to improve the relationship between communities and government, in order to improve services that impact the daily lives of children and their families. Since 2005, hundreds of communities in more than 600 World Vision supported programs around the world have used CVA to improve the quality of services in their areas.

The CVA process generates citizen-generated data through the process of community scorecards and the monitoring of service standards. This data is used to inform dialogue and collective action as part of the CVA process and when aggregated, has helped stakeholders connect local realities to sub-national and national dialogue. Citizen-generated data supports the measurement of the Sustainable Development Goals, especially indicator 16.6.2, Proportion of the population satisfied with their last experience of public services. A web-based CVA database has been created to facilitate the management of this data and enable aggregation and analysis of citizen data.

Citizen Report Cards¹⁸

In 2012, the organization Kwantu helped digitize Citizen Report Cards in Mozambique. More recently, they digitized the Public Expenditure Tracking Surveys (PETS) in Malawi. They ran PETS in 15 districts using mobile devices and collected around 30 survey responses (from District Commissioners, Area Development Committees, Public Works, Project Implementation Committee members, etc.). Local community-based organizations collected the interview responses on Android tablets working offline. These were aggregated into reports by the app that allowed for cross-district analysis of specific

¹⁷ [Care International, World Vision and VSO \(Volunteer Services Overseas\) https://www.wvi.org/local-advocacy/publication/citizen-voice-and-action-field-guide](https://www.wvi.org/local-advocacy/publication/citizen-voice-and-action-field-guide)

¹⁸ This case example was provided courtesy of Rob Worthington, Director of Kwantu

themes (like access to information, value for money, etc.). These surfaced some profound trends in data that provide an entry point for the work to improve transparency at local government level.¹⁹

A coalition of CSOs has made important strides in the digitization of the community scorecard, standardization of formats, and aggregation of datasets. Kwantu, CARE, World Vision and Voluntary Services Overseas have collaborated to develop a digitized platform to set 'data standards' for, and thus enable, the 'interoperability' of community scorecards. First, the organizations developed a series of 'micro data standards', first for CSC, then PETS.

These have been tested, first in Malawi and now widely in a number of other countries, and define the kind of data the organizations will collect: for a facility (where it is, what it's called, its government ID and so on); a citizen monitoring cycle (which facility it takes place in, when it took place); a focus group (the name, the gender, age and disability breakdown of its members); a scorecard (a list of indicators, the scores and the reasons for these scores); and an action (the name, who is responsible, the time frame, the status).

Having standardized what data to collect for each CSC, the organizations are able to aggregate and extrapolate from their local information more easily and compare across contexts. To enable aggregation and thus ensure interoperability, the coalition partners agreed on a standardized format to store and to exchange datasets, even while World Vision collects data in the CVA database and CARE, and VSO uses the CSC app.

These two building blocks make possible the creation of a national or global hub of CSC (or PETS or social audit) data that combines data from a range of CSOs. This approach signals a practical way to digitize social accountability tools and render them accessible and liable to common usage taking advantage of economies of scale. Other organizations, including DIAL and IATI are following a similar approach for the catalogue of digital solutions and open contracting, respectively. Kwantu, for instance, is collaborating with the World Bank's Governance to Enable Service Delivery in Malawi (GESD) project.²⁰

Participatory Procurement Monitoring

Civic tech has been successfully applied in procurement and tracking of public funding. This is largely because public funds and services are nearest and dearest to the citizens and therefore evoke passionate interest. Money and services are also amenable to traceability: either money was spent, misspent or not spent; and services are either completed, poorly done, not completed, or not done at all.

Procurement and budgeting are also well defined as roles of government to which citizens should have access. Whereas some civic tech interventions, including in monitoring teacher absenteeism, tend to muddy the line of who is holding who accountable, government spending of taxpayer money is firmly in the purview of social accountability, where citizens have the authority to hold government accountable. For examples, see the Budeshi and CODE case studies in Annex 2.

¹⁹ For more background, read the following case study: <https://kwantu.net/portal/kwantu/circular/602faa76e14abdb53447cfd6161dbfdfe6732efaba5f27990>

²⁰ For the catalogue of digital solutions, see <https://digitalimpactalliance.org/announcing-the-launch-of-the-dial-catalog-of-digital-solutions/>. Rather than create one platform, they signpost tools that respond to specific needs.

Participatory Budgeting

Participatory budgeting is a process by which community members vote and decide how to spend part of a public budget.²¹ It is usually designed as an integrated component of the annual budget cycle. A steering committee established by public authorities and headed by either public servants, community representatives, or issue experts creates the rules of engagement and supervises the subsequent deliberation process. Then, residents engage in meetings and via online tools to discuss ideas for projects, volunteers develop specific proposals, and residents ultimately vote on proposals to determine how to spend the money. The government funds and implements the winning bid.

This form of direct, deliberative democracy represents an effective method of holding governments accountable, as it directly links to specific commitments. Civic tech can support participatory budgeting at all points throughout the process, by enabling constituents to send information on priority themes, vote, and observe the process remotely. For examples, see the Mobile-Enhanced Participatory Budgeting in the DRC, Participatory Budgeting in Brazil, and Participatory Budgeting in California case studies in Annex 2.

Social Audits

Social audits verify if public service providers carry out services according to the standard expected by the community, with the ultimate objective of improving these services. This process involves the gathering of information on the quality of services, through monitoring and the evaluation of public records, the subsequent analysis of these data, and public feedback to the service provider, often presented by an appointed panel. Beyond improving services, social audits can build long-term capacity of both service providers and civic actors in the community. For a case study of a traditional social audit, see the Community Reinvestment Act of 1977 case study in Annex 2.

Civic tech has greatly increased the availability and analyzability of data citizens can present as evidence for their audits. Examples range from the ubiquity of smartphone cameras that allow citizens to record transgressive behavior by police or hold public service providers and politicians accountable for their verbal promises to application programming interfaces (API) that enable citizens to scrape vast amounts of online platforms for relevant information. Subsequently, civic tech can facilitate the social audit directly by enabling citizens to share additional feedback with the panel before or during the proceedings more expeditiously and systematically or to observe the proceedings remotely.

Beyond the individual audit, civic tech can also provide a platform for grievance redress where citizens can follow up with service providers to ensure that their case is followed up on. However, In her report, [“From Civic Tech to Civic Capacity: The Case of Citizen Audits”](#) Professor Sabeel Rahman notes that documenting police actions for social accountability purposes, and disseminating that information to a wider audience using online platforms is made more effective by combining these videos and reports with trainings and information about how to better advocate for accountability and fair treatment. This highlights that technology does not drive social accountability, and civic tech does not drive civic engagement.

²¹ <https://www.participatorybudgeting.org/what-is-pb/>

Civic tech-supported Social Accountability during COVID-19

Civic participation has played an important part in combating the COVID-19 pandemic, through information sharing about COVID-19 prevention, tracking outbreaks, monitoring of COVID-19 programs, and tracking expenditures, and provision of relief and response. As government capacity to distribute vaccines at the local level is often limited, particularly in rural and remote areas, much of the last mile delivery had to be supplemented by CSO efforts and community engagement. These have included use of civic tech.

Civic technologies were initially deployed for contact tracing to varying degrees and at times with insufficient consideration of privacy protections. Early on, privacy researchers rang alarm bells that contact tracing would be used to gather and store information about citizen behaviors, location, and movements that could be used for ill purposes. The tools employed ranged from apps reporting potential contacts to the individual end-user to self-reporting apps feeding directly into local government tracking, to household-level written inventories that were then uploaded to a machine-readable database.

The different approaches to contact tracing by the governments of Hong Kong and New Zealand illustrate the spectrum of potential applications, with intrusiveness varying based on the legal and political enabling environment. Visitors to Hong Kong have been required to wear electronic wristbands tracking their movement and sharing their geographic coordinates with public health officials to alert of quarantine violations.

New Zealand encouraged residents to download a government-issued app that can scan government-issued QR codes in public venues to create a track record of their daily movements. If a COVID case was detected at the user's location, the user was notified and received a call from a public health official offering advice on precautionary measures. The user could then voluntarily share their track record with the public authorities for contact tracing purposes.

Across countries, civic technologies are in use to map out locations of health centers, population centers, and roadway infrastructure to identify distance and quality of travel to reach health services. This has occurred with grassroots organizations like Open Street Map working independently in some locations and in others collaborating directly with multinational interventions like COVAX's GIS Working Group.²²

A major barrier to ending the pandemic remains vaccine hesitancy arising in part from mistrust of governments. Therefore, social accountability in the distribution of vaccines, including tracking and sharing adverse events following immunization, identifying vaccine hesitant communities, and countering mis- and disinformation are key services that can be uniquely aided by the tools of collaborative social accountability, supplemented by civic tech.

Relatedly, identifying, and countering misinformation is a relevant application of civic tech in the COVID-19 response. As with any public health intervention, whether a community will take the disease seriously is a key, if not the primary driver of success. In 2014, one successful initiative in the wake of

²² <https://www.openstreetmap.org/#map=5/38.007/-95.844>

the Ebola outbreak was the hit song, “Ebola Is Real”²³ to convince the public to take Ebola seriously and follow health guidance accordingly. The same concern permeates the response to COVID-19; people deny the existence of the disease or are in fear of it or of the vaccines intended to help them.

Holding government accountable for a successful vaccine rollout will require addressing the mistrust of public health interventions and disbelief in the severity of public health crisis, not unlike the response to Ebola. The digital #Fagarungirmuccu initiative launched by civic activist Abdou Toure in Senegal in March 2020 to counter fake narratives about COVID-19 is an example of successful efforts to counter vaccine hesitancy with civic tech tools.²⁴ Mamadou Diagne, Open Knowledge Foundation’s Ambassador for Senegal, reported that volunteers subsequently trained others and worked directly with the government of Senegal to counter misinformation.²⁵

Civic tech tools almost uniformly rely on public transparency and the potential for public participation to increase the impact of work, which presents significant risks for civic tech actors, depending on the government engaged. Civic actors and reporters keen on holding their government accountable for its COVID-19 response are often the same individuals who are pushing for better accountability and good policy overall.

Tanzanian journalist Hilda Newton reported on the jailing of Vitus Nkuna,²⁶ an activist who had used Twitter to share photos and observations of inadequate COVID-19 response in Shinyanga province.²⁷ As with any intervention seeking to leverage media coverage for widespread attention, civic tech actors demanding accountability receive high levels of attention. In turn, donors and supporters need to recognize the possibility of detrimental countermeasures from government.

At a global and donor coordinator level, GovLab published a guide to inventory ongoing projects using data for COVID-19 response and open calls seeking proposals.²⁸ This work supported specific initiatives with direct funding.²⁹ For the GPSA, its current work in Tajikistan serves as a valuable demonstration of how to incorporate collaborative social accountability to ensure a strong uptake of COVID-19 vaccines and integrate civic technology to do so.

As part of the project, civil society undertakes third-party monitoring, relying on an array of in-person and digital tools, ranging from on-site checking of medical equipment to beneficiary polls and vaccine perception surveys, to virtual interviews. The project also utilizes an innovative online platform to compile results and make them accessible to a joint forum of CSO and government representatives, as well as the wider public. The forum relies on these data to co-jointly propose policy amendments to the vaccination program.

In addition to the applications of civic tech for COVID-19 shared above, many health interventions benefit from incorporating civic tech for social accountability. Prominent among these are healthcare attendance and staff absenteeism.³⁰

²³ <https://www.theatlantic.com/international/archive/2014/08/how-to-make-a-hit-ebola-song/378980/>

²⁴ <https://www.youtube.com/watch?v=QIHhgq07hfU>

²⁵ <https://eu.boell.org/en/2020/12/03/how-covid-19-spurring-civic-tech-senegal>

²⁶ <https://twitter.com/HildaNewton21/status/1414947646079475718>

²⁷ <https://twitter.com/VitusNkuna/status/1414616170179739652>

²⁸ You can visit GovLab at <https://thegovlab.org/>. The referenced document is publicly accessible at https://docs.google.com/document/d/1tWeD1AaIGKMPry_EN8GjIqWx4I4KlQIAqP09exZ-ENI/edit

²⁹ <https://list.data4covid19.org/index.html>

³⁰ <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/13003/Digital%20approaches%20to%20managing%20staff%20absenteeism.pdf?sequence=70&isAllowed=y>

Contextualization, Sustainability and Scalability

Like any other activity, conducting civic tech interventions in fragile and low-resource contexts is difficult. The foundation of civic tech for social accountability of verifiable, detailed, accessible, and usable data can be only maintained if people who collect and manage the data have trusting relationships. Much fanfare has been made of the potential of dispassionate collection models – earth observation data being primary among these.³¹ Yet even earth observation data requires on the ground verification to confirm data quality, as is the case with the OpenStreetMap model for mapping out public infrastructure.

Another example is blockchain technology, which has often been incorrectly depicted as a silver bullet technology solution to protect information in a low-resource environment – see the case study of elections in Sierra Leone in Annex 2. Vociferous opposition to this oversimplification has instigated greater skepticism toward the technology’s utility in development contexts, despite its seeming technological sophistication. Using civic tech for social accountability in any setting, and especially fragile and conflict-affected, requires capacity for responsible data practices. The Internet Society has established three useful principles of responsible data handling.³²

I. It is transparent.

The objectives and components of programs supported by collected data are well established and intelligible to the population from which data are collected. Appropriate and certified data safeguards are put in place to allow individuals to withdraw their consent to their data being used.

II. It is fair.

Collected data should not be used to unfairly discriminate against groups, particularly based on sensitive markers such as race, religion, or political affiliation. Collected data should only be used in the declared context and for the originally intended purpose. Appropriate storage, including the anonymization, and accuracy of collected data should be ensured.

III. It is respectful.

Only necessary data are being collected, in a way that considers and respects the participants’ limited time and knowledge of the context. The collecting organization educates its staff on responsible and ethical data handling as part of regular operational quality management, and builds a corresponding operational culture based on these principles.

A deep understanding of interventions that ensure personally identifiable data are collected responsibly, managed securely, and only collected if necessary are important to ensure that GPSA-supported civic tech interventions do not do harm to most vulnerable populations. Social accountability comes first, with civic tech as a means to an end, when appropriate.

³¹ OECD, Earth Observation for Decision Making, 2017. <https://www.oecd.org/env/indicators-modelling-outlooks/earth-observation-for-decision-making.htm>

³² <https://www.internetsociety.org/policybriefs/responsible-data-handling/>

Challenges of scalability and replication

Challenges for civic tech in development projects include funding constraints, lack of donor coordination, proprietary systems, and lack of adoption by government. Funding for civic tech interventions is mostly from non-local donors who are not incentivized to invest in sustainability beyond the time of their support. Though some donors have invested in the development of incubators to ensure the creation of a business plan and independent program funding,³³ donors generally allocate little if any support to build project partners' marketing and business acumen so that projects may sustain beyond their initial funding.

Consequently, organizations and programs continuously seek out new donors for charitable funding to continue their vital work. And, as different donors hold different priorities, the original program may modify and change – not always to the benefit of social accountability. Often, as was the case with Clean Streets Accra or Kathmandu OpenStreetMap, the World Bank is the terminal funder to sustain or close the work of an initiative. For these case studies, as well as the one on Clean Ramani Huria, see Annex 2.

A further complication in scaling and replicating civic tech for social accountability is the lack of agreement among donors on definitions of key priorities and how to measure impact. For instance, there are no donor coordinated definitions of youth, of vulnerable or minority populations, and so each civic tech organization seeking support must divine how to present their current or potential work according to different donors' definitions. To address this, civic technologists need agile systems that are well documented to be readily adapted and updated as more information coalesces, and structures of data organization are improved.

Many technology interventions that present themselves as civic tech can impose undue restrictions on governments using their proprietary rights. This has been the case with ArcGIS, for instance. Once a great innovator in the government transparency space, they have expanded their portfolio of services, duplicating pre-existing offerings and content to simply secure more contracts. In the humanitarian and disaster response space this presents a tremendous problem. Some of the platforms providing open-source technology lament that they are unable to conduct immediate disaster response as they need a few days to recruit staff with the right expertise.

Proprietary organizations with more staff and more expendable funding, on the other hand, can conduct the initial response to a disaster, and likely use their proprietary technology. More open and transparent organizations have less ability to engage in follow-up work. Instead, to improve chances of sustaining and scaling an intervention, decentralized civic tech with a federated architecture is best suited. With subcomponents that focus on individual problems, encourage learning and collaboration across communities, these civic technologies enable potential partners to join at different points in time during project implementation and to continue using computer technologies they are experienced in.

³³ For an example, see the Patrick J McGovern Foundation's, formerly Cloudera Foundation, Data4change accelerator <https://blog.clouderafoundation.org/cloudera-foundation-announces-inaugural-data4change-accelerator-grantees/>

Conclusion



Image: Simone D. McCourtie / World Bank

Civic technologies are a set of tools that, if used well, can enable more collaborative, participatory, democratic, and accountable governments that lead to shared prosperity for all, especially the most vulnerable. The methodologies of collaborative social accountability can work directly with civic tech to create the conditions where their use is most likely to achieve an impactful and sustained outcome. For instance, civic tech can amplify the reach of different social accountability tools by enabling citizens to access and report data on service delivery digitally and attend and participate in town halls remotely.

If correctly adjusted, the affordability and adaptability of civic tech applications across offline, internet as well as phone network, solutions with audio and visual functionality can further help address inclusion of, for instance, illiterate populations or those without internet access.

COVID-19, pandemic prevention and health service delivery in general are highly relevant sectors for the deployment of civic tech for social accountability. In the case of COVID-19, the manufacturing and distribution of vaccines are slow, and mistrust of the vaccine as well as rampant mis- and disinformation are increasing caseloads and prolonging the pandemic. Social accountability frameworks are uniquely suitable to address this specific crisis of mistrust. Social accountability can be an important tool for vaccine rollouts to ensure civic participation and engender trust in the vaccine supply chain and drown out the few but vocal conspiratorial voices with far too great a reach.

Civic tech can be integrated into collaborative social accountability approaches and tools. Doing this requires the creation of criteria for the kinds of civic tech integration into social accountability an organization seeks to support, preferably driven by an analysis of the needs of its own community. The organization would need to identify organizations with technological expertise to complement their own social accountability expertise, by plugging gaps in knowledge of civic technologies that are sustainable.

Bibliography

Azim, Tariq, Binyam Tilahun, and Stephanie Mullen. 2018. Use of Community Health Data for Shared Accountability: Guidance. Chapel Hill: Measure Evaluation, <https://www.measureevaluation.org/resources/publications/tr-18-238.html>

Bughin, Jacques, and Eric Hazan. 2019. “Can artificial intelligence help society as much as it helps business?”, McKinsey Quarterly. <https://www.mckinsey.com/~media/mckinsey/business%20functions/mckinsey%20analytics/our%20insights/can%20artificial%20intelligence%20help%20society%20as%20much%20as%20it%20helps%20business/can-artificial-intelligence-help-society-as-much-as-it-helps-business.pdf>

“Case Studies of Open Data in Europe.” Data Europa EU. 2022. https://data.europa.eu/en/news-events/news?keywords=&type=highlights&country=All&items_per_page=10

Coldicutt, Rachel. “Why Community Organizations need Community Tech.” Medium. Sep 13, 2021. <https://rachelcoldicutt.medium.com/why-community-organisations-need-community-tech-56cea0ca1740>

“D4D Hub at a Glance.” Toolkit Digitalisierung. 2020. <https://toolkit-digitalisierung.de/en/partners/multilateral/d4d-hub/>

“D4D Hub Forum.” European Commission. 2020. <https://futurium.ec.europa.eu/en/Digital4Development/Dalberg.2018.Retrospective.assessment.Open.Data> <https://luminategroup.com/storage/436/Open-Data-retrospective.pdf>

EU Independent High-Level Expert Group on Artificial Intelligence. 2019. Ethical Guidelines for Trustworthy AI. Brussels: European Commission, [file://wbgvdiprfile/vdi\\$/wb584360/RedirectedFolders/Downloads/ai_hleg_ethics_guidelines_for_trustworthy_ai-en_87F84A41-A6E8-F38C-BFF661481B40077B_60419.pdf](file://wbgvdiprfile/vdi$/wb584360/RedirectedFolders/Downloads/ai_hleg_ethics_guidelines_for_trustworthy_ai-en_87F84A41-A6E8-F38C-BFF661481B40077B_60419.pdf)

European Commission, Directorate-General for Communications Networks, Content and Technology (CNECT). 2021. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL LAYING DOWN HARMONIZED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS. 2021/0106/COD. Brussels, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52021PC0206>

Fox, Jonathan A. 2015. „Social Accountability: What Does the Evidence Really Say?”, World Development. Vol. 72, Aug. 2015, 346-361. <https://doi.org/10.1016/j.worlddev.2015.03.011>

Gigler, Bjorn-Soren, and Katherine Mann. 2015. “Opening Up Development-Towards a More Open, Collaborative and Inclusive Paradigm”, Context-Driven Technology Choice for Development Conference. https://www.researchgate.net/publication/318494882_Opening_Up_Development-Towards_a_More_Open_Collaborative_and_Inclusive_Paradigm

Global Partnership for Social Accountability. 2020. Theory of Action. Washington, D.C.: World Bank, <https://documents1.worldbank.org/curated/en/425301607358292998/pdf/The-Global-Partnership-for-Social-Accountability-Theory-of-Action.pdf>

GODAN. "Impact Stories." Global Open Data for Agriculture & Nutrition. 2022. <https://www.godan.info/impact-stories>

GovLab - NYU Tandon School of Engineers. The Living Library. <https://thelivinglib.org/collection/>

Grandvoinet, Helene, Ghazia Aslam, and Shomikho Raha. 2015. Opening the Black Box – The Contextual Drivers of Social Accountability. New Frontiers of Social Policy. Washington, DC: World Bank and Personal Democracy Press. © World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/21686/9781464804816.pdf?sequence=1>

Infrastructure Transparency Initiative. 2019. Transforming lives and infrastructure in Wakiso District, Uganda. <https://infrastructuretransparency.org/wp-content/uploads/2019/11/Uganda-Web-Final.pdf>

McDonald, Sean. "#CivicBusiness." Medium. May 15, 2015. <https://medium.com/organizer-sandbox/civicbusiness-cd5a80aea2fe>

McGee, Rosemary. "Navigating Civic Space in a Time of Covid-19." Institute of Development Studies. 2020. <https://www.ids.ac.uk/projects/navigating-civic-space/>

Okiya, Stephen, Karen Bett, Jenna Slotin, and Davis Adieno. 2020. Citizen-generated data in Kenya: a practical guide. Global partnership for Sustainable Development. https://www.data4sdgs.org/sites/default/files/file_uploads/Citizen-Generated%20Data%20Improving%20Quality%20and%20Use%20for%20Policy%20and%20Decision-making%20in%20Kenya.pdf

Peixoto, Tiago, Micah Sifry. 2017. Civic Tech in the Global South: Assessing Technology for the Public Good. Washington, DC: World Bank and Personal Democracy Press. © World Bank. <https://openknowledge.worldbank.org/handle/10986/27947>

"Reestablishing Trust in Government in ECA and Beyond Citizens Assemblies & civic tech." Kaltura. May 5, 2021. https://cdnapisec.kaltura.com/index.php/extwidget/preview/partner_id/1930181/uiconf_id/29317392/entry_id/1_cfwpr80j/embed/dynamic

Reuben, William. 2003. The Role of Civic Engagement and Social Accountability in the Governance Equation. Social Development Notes No. 75. Washington, DC: World Bank and Personal Democracy Press. © World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/11313/275200PAPER0sdn75.pdf?sequence=1&isAllowed=y>

Annex 1 – Interviews

Name	Organization
Lindsay Alexander	Care International
Gigler Bjorn-Soren	European Commission
George Bimpeh	Freelance
Javier Carranza	GeoCensos
Alan Hudson	Global Integrity
Stefaan Verhulst	GovLab
Cem Dener	ID4D
Seth Ayers	ID4D
Aleem Walji	IMF
Robert Worthington	Kwantu
Joe Powell	OGP
Kathrin Frauscher and Kaye Sklar	OpenContracting
Carey Kluttz	OpenContracting
Gilbert Sendugwa	U-Report
Gilbert Muyumbu	VSO
Florencia Guerzovich	World Bank
Saad Filali Meknassi	World Bank
Jose Antonio Cuesta Leiva	World Bank
Michael Anthony Roscitt	World Bank
Tiago Peixoto	World Bank
Aly Rahim, Erik Caldwell Johnson, Manuel Emilio Figueredo Thomson	World Bank
Marieta Fall	World Bank
Shomikho Raha	World Bank
Samia Melhem	World Bank
Steve Davenport	World Bank
Craig Hammer	World Bank
Anna Quaye-Thompson	World Bank
Caroline Cassidy (GPSA)	World Bank
Ann-Sofie Jespersen, Amr S. Moubarak, Jeff Thindwa	World Bank
Ingo Wiederhofer and Louise Cord	World Bank
Rosemary Chepkirui Rop	World Bank
MacBain Mkandawire	YONECO

Annex 2 – Additional Case Studies

Sectors

Environment: Land Investment Mapping in Lower Mekong, Cambodia

Cambodia's approach to improving the availability of its public information illustrates how progress can be driven by an ambitious civil society. Open Development Cambodia (ODC) established [a website in 2011](http://www.opendevdevelopmentcambodia.net)³⁴ to compile as many public resources as possible about government activities and international organizations that contribute to Cambodia's development. ODC seeks to present data with context but without editorial comment. The intention is not to support analysis and opinions, but rather to provide resources for the public, for data journalists or for experts on particular issues so that they can provide their own perspectives and draw their own conclusions. Data are shared, whether sourced from the government or elsewhere, and are perceived as credible and objective across sectors, without being provocative or biased. The website has remained available online, regardless of changes in government or policy. ODC has developed resources to make the data easier to understand and more attractive to a wider audience. For example, it developed an animated map showing the rate of the decrease in forest cover in Cambodia over time. The data used were not new, but the method of presentation, in the Cambodian national language, Khmer, as well as in English, was. It clearly shows the discrepancy between policy and reality. The launch of the map was covered by two major Cambodian newspapers, and within weeks, it reached almost 2,000 users, with almost a third of them able to access it in Khmer. The release of this information triggered action by local, national, and international organizations, and as a result, the government was required to account for its decision-making. Eventually, it began working with ODC to create an updated forest cover map.

The ODC platform was developed in response to shortcomings in the government's ability to provide easy and timely access to information that had real value to citizens – in this case, environmental data for the Mekong Region. The ODC's success is reflected in the steady growth of its holdings, the

high-quality and highly relevant data that it collects, maintains, and makes available, and the increasingly diverse audience of users and contributors. Nevertheless, ensuring the quality and integrity of the data and being able to prove their trustworthiness through time will inevitably present challenges, especially given the growing diversity in the types of data being collected, the potential for mashing up data from related and diverse sources, and the increase in the number of organizations participating in the initiative. Though the ODC platform has demonstrated its value to the people of Cambodia in holding government accountable, and indeed to the Cambodian government by engendering greater trust, it exists solely from the grit of its founders and from philanthropic funding by larger donor organizations based in the UK, Canada, and the U.S. Whether ODC will be able to sustain itself will depend on the longevity of these factors as there is no plan in place to integrate the platform either into government operations, or into an established independent body.

³⁴ <http://www.opendevdevelopmentcambodia.net>

Environment: Klima-Gebäude-Check (Climate-Building-Check)

Despite strict environmental regulations, many public buildings in Germany feature insufficient insulation and waste energy, as research by Environmental Action Germany (DUH) has shown. With 30% of emissions coming from buildings, this means that Germany may not fulfill the Paris Climate Pledge to reach climate neutrality by 2050.³⁵

To publicize this shortcoming and increase public pressure on the government to remedy it, DUH has partnered with civic tech firm FragdenStaat (translation: “asks the state”) to launch the

Climate-Building-Check. The Climate-Building-Check tool allows users to request the energy certificates of public buildings. These efforts are aided by Germany’s federal Environment Information Law and similar state laws that compel responsible agencies to respond to related requests for information within one month. The Climate-Building-Check automatically uploads responses and relevant documents onto an online platform for all users to see, in addition to instructions on how to read and interpret individual energy certificates and what courses of action can be taken to address deficiencies.

Between September 2020 and April 2021, users were able to collect energy certificates for 533 public facilities, from the Bundestag and federal ministries to city halls. However, across 3,066 total requests, this means that certificates were only forwarded in roughly 17.4% of all requests, despite the legal obligation on responsible agencies.

Climate Change and City Planning: Ramani Huria

The World Bank also initiates civic tech for social accountability. But to ensure sustainability of interventions often requires other, similarly funded organizations to carry the work forward after project completion. Such was the case with Ramani Huria, an initiative started by the World Bank’s Urban Global Practice and Tanzania Open Data Initiative aimed at mapping out flood zones in the city of Dar Es Salaam and correlating these with problems in the community, including cholera outbreaks. The intention of the work was to demonstrate the value of community mapping to facilitate social accountability and for preventative interventions to curb disasters.

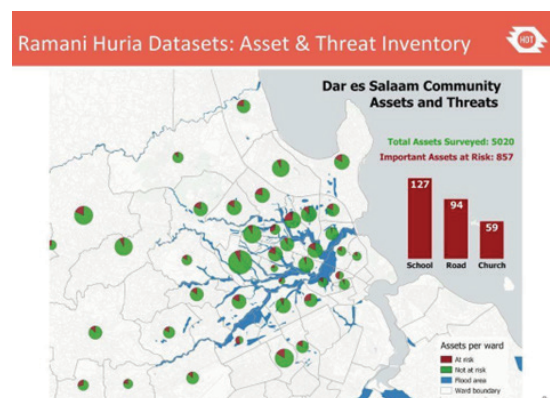


Image: Ramani Huria community mapping for flood resilience slide deck presentation, 2018. Source: RAMANI HURIA³⁶

After five years of investment, the government of Dar Es Salaam decided to integrate the insights of Ramani Huria into its own mapping and planning, but without allocating meaningful funding. Instead, the work continues with support from the UK’s Foreign Commonwealth and Development Office and the World Bank.

³⁵ <https://www.duh.de/klima-gebaeude-check/>

³⁶ <https://ramanihuria.org/en/>

Water: MajiVoice

MajiVoice is an online platform developed by the World Bank's Water Global Practice, Kenya Water Services Regulatory Board, and participating water service providers (WSPs). Launched in Kenya in 2014, it allows citizens to submit complaints to public WSPs and enables WSPs to track related workflows at staff level, simplifying follow-up and assuring time-sensitive complaint resolution. As a joint feedback and coordination channel, the platform is intended to improve access to water, particularly among the country's poor.

Since implementation, WSPs have recorded a ten-fold increase in complaints per month from 400 to 4000. Similarly, a staff survey from December 2014 shows that the rate of satisfactory complaint resolutions increased; from 46% to 94% at Nairobi City Water and Sewerage Company (NCWSC), Kenya's largest WSP and first adopter of MajiVoice.³⁷ The average resolution time decreased by 50%. The vast majority of staff (98.1%) at NCWSC indicated that MajiVoice has also improved the company's process to address complaints. Initially piloted in Nairobi, the system has since been expanded to WSPs in Nakuru, Nanyuki, and Mathira.

However, despite these apparent improvements, MajiVoice's success in connecting complainants to WSPs efficiently and resolving issues in a time-sensitive manner was limited by institutional constraints. Participant WSPs operated hierarchically, creating processing bottlenecks and stretching workflows. For instance, because regional offices were not authorized to handle billing complaints, key staff at the WSPs' headquarters receive thousands of unrelated complaints that keep them from other work. In this context, MajiVoice's value-add did not lie in empowering citizens directly but rather empowered WSPs, to better structure and coordinate operations and increase their capacity to deliver adequate public services.

Released under a Lesser General Public License³⁸ MajiVoice's open-source software can be adapted by practitioners around the world without explicit permission or license fees. Additionally, its efficient design is optimized for low bandwidth, ensuring smooth operation, even with poor internet connections, making it suitable for many environments.

Water: China Water Reporting

China provides a stark lesson of the sophistication of civic tech for social accountability. In its pursuit of curbing pollution, or at least in curbing the bad reputation that comes with pollution, the government has set up citizen reporting platforms to identify violations. In one instance, the website received over 300,000 independent reports of violations, resulting in a government response, and shutting down 13 factories that were actively polluting waterways.³⁹ However, this responsiveness to citizen needs has limitations. The feedback requires a critical mass of support such that government "proactively monitors citizen opposition to state policies and selectively responds to policy changes when it gauges opposition to be particularly widespread."⁴⁰ Reports suggest that when the reporting does not reach this critical mass, the government may instead opt to target and silence individual critics instead of addressing underlying concerns. This is a lesson for the GPSA and its partners to consider the effects

³⁷ <https://www.wsp.org/sites/wsp/files/publications/WSP-MajiVoice-New-Accountability-Tool-to-Improve-Public-Services.pdf>

³⁸ <https://github.com/CustomFeedbackSystem/code/blob/master/LICENSE>

³⁹ "Citizen monitoring of waterways decreases pollution in China by supporting government action and oversight" Mark T. Buntaine, Bing Zhang, Patrick Hunnicutt Proceedings of the National Academy of Sciences Jul 2021, 118 (29) e2015175118; DOI: 10.1073/pnas.2015175118

⁴⁰ Heurlin, C. (2016). Responsive Authoritarianism in China. In Responsive Authoritarianism in China: Land, Protests, and Policy Making (pp. 3). Cambridge: Cambridge University Press.

of levels of anonymity needed in reporting on government malfeasance, particularly in contexts where an election and administration may result in vastly changed social circumstances.⁴¹

Water: World Bank, DRC Urban Water Supply Project

Only 42% of the Democratic Republic of Congo's (DRC) population has access to basic service drinking water. As a result, only 20% of the population has access to safely managed sanitation and hygiene, putting large parts of the population at greatly increased risk of contracting infectious diseases, including COVID-19.

The World Bank in 2009 initiated the DRC Urban Water Supply Project to increase access to sustainable water services in urban areas. The project comprised two components. First, through investments in and rehabilitation of water production capacity and distribution systems, the project improved and expanded water supply services in urban centers. Second, to ensure the sustainability of Bank support in the DRC's water sector, the project aimed to support sector reform, capacity building and improved governance.

This component incorporated a social accountability dimension. A communications campaign was initiated to inform public service recipients across the DRC about the importance of proper hygiene and the required standard of water services. As a result, citizens could monitor the quality and integrity of water services and report any insufficiencies via SMS to the National Water Agency, which was thus empowered to follow up on citizen feedback and repair the water service in question.

Systems put in place for the DRC Urban Water Supply Project were adapted and scaled up for emergency response in the wake of the COVID-19 pandemic, which hit densely populated urban areas particularly hard. This applies to both physical infrastructure and communications strategies. Television and radio announcements, as well as WHO guidance sent via social media and messaging services (Facebook, Twitter, and WhatsApp) inform the population about critical hygiene and distancing guidelines. Residents can share positive COVID-19 cases via SMS with the Ministry of Health to support its contact tracing and localization of hotspots. Further, residents continue issuing complaints about insufficient sanitation services, informing government investments in water services and COVID-strategy. This example illustrates the adaptiveness of civic tech for social accountability to changing circumstances and emerging issues.

Education: Medrassety

A most promising example from the GPSA's portfolio is Medrassety, an online platform developed under the 'Transparency of Management of the Education Budget' project in Mauritania.

The project's social accountability processes sought to advance reforms of school governance, improving quality of education services and transparency of budgets. The platform presents an accessible overview of individuals expected to attend, with adults' names and sometimes contact phone numbers linked to their role or profession, and students disaggregated by gender. The data

⁴¹ "Community pressure can be a possible driver towards compliance. Examples are the cases of community protests against pollution at the Ningshi fertilizer factory and protests for a larger amount of compensation in Jiacun village. Similarly, a lack of community pressure correlated with continued violations. This occurred in Baocun village where a Huawei factory could continue to pollute the local environment without any opposition. Another example is Licun village where local leaders could make illegal profits from other peoples' lands unopposed. While no such study has been made concerning land violations, the findings on community pressure at Lake Dianchi are in line with research on pollution concerning other parts of China. Studies about pollution control have found that a lack of community pressure correlates with continued pollution." Van Rooij, Benjamin. (2011). Regulating land and pollution at Lake Dianchi: lawmaking, compliance, and enforcement in a Chinese and comparative perspective.

Molecular and Cellular Biochemistry - MOL CELL BIOCHEM. 367-403.

are collected and shared in Arabic and thus rely on NLP for translation services into English. Additional fields include names of those involved in parents' associations, and the name and contact number of key staff members of the school, and potentially a real-time update of school attendance. This project presents a strong opportunity to build on civic technologies tracking attendance used in previous contexts and apply lessons learned and best practices to ensure sustained social accountability for the schools in Mauritania.⁴²

jeudi 21/10/2021	
Taux d'absence des enseignants نسبة الغياب بالنسبة للمعلمين	Taux d'absence des élèves نسبة الغياب بالنسبة للتلاميذ
0 %	0 %

مكتبة مطور المعلمين	
المعلم	حاضر / Present
الحسين / بركة	<input type="checkbox"/> Présent حاضر
خديجة / المختار السليم	<input type="checkbox"/> Présent حاضر
العروض / اسم	<input type="checkbox"/> Présent حاضر
أحمدو / عبد الله	<input type="checkbox"/> Présent حاضر
سويدي / عبد الحمي	<input type="checkbox"/> Présent حاضر
ابراهيم / أحمد	<input type="checkbox"/> Présent حاضر
فلة / التتكال	<input type="checkbox"/> Présent حاضر
فلمعة / عبد الله	<input type="checkbox"/> Présent حاضر
زياد ماني	<input type="checkbox"/> Présent حاضر
كادو / أحمدو	<input type="checkbox"/> Présent حاضر
مريم جاسونو جا	<input type="checkbox"/> Présent حاضر
أمنة يور صلال	<input type="checkbox"/> Présent حاضر

Image: Own construction

Education: CheckMySchool

Many schools in the Philippines lack adequate access to textbooks as well as basic amenities like desks or sanitary facilities. Yet, the Department of Education does not have the capacity to monitor the over 44,000 schools and effectively address these shortcomings.

One solution is presented by CheckMySchool - a project in the Philippines initiated in 2012 by the Affiliated Network for Social Accountability – East Asia Pacific (ANSA – EAP) supported by the Open Society Institute and World Bank Institute. Drawing on different education datasets totaling over 38mm data points provided by the Department of Education, CMS utilizes web-based applications and ICTs to inform civil society about the resources local schools should have, enabling volunteers to directly relay any discrepancies back to the Department. The governments of Indonesia, Kenya, and Moldova have since expressed interest in replicating CMS. One year after project inception, by aligning its efforts with existing local initiatives, ANSA – EAP has been successful at leveraging a network of more than a thousand volunteers to operate in 14 regions, geo-code more than 8,500 schools and generate results at scale. Relying on local volunteers also enabled ANSA – EAP to continuously monitor progress through on-the-ground visits in 245 schools. The constructive engagement between the civil society network and Department of Education has encouraged the government to share more information on public schools and consider cooperating with civil society in other areas.

Lagging internet penetration in rural communities has prevented CMS from realizing the full potential of its online application. Despite this, the program's integration with ICTs and ANSA – EAP's extensive network of partner organizations have enabled the project to increasingly rely on offline components, depending on context-specific demands.

Social Protection⁴³: OpenUp

OpenUp, a civic tech firm from South Africa, has developed numerous tools to address gender inequalities in terms of national pay gaps and access to public services. For instance, Open Up's Living Wage Calculator uses data on area-specific costs of food, housing, transportation, and education as well as user information on, for instance, user gender and family size to calculate the living wage required to support a single family. Results regularly far exceed the national minimum wage and can thus, after being anonymized and saved, be drawing on to inform employers' payment decisions and public policy.

⁴² Accessed 21 October, 2022 <http://medrassety.net/index.php?r=ecole/tdb2> attendance fields state 0 for many of the locations viewed, indicating that real time data is not yet available.

⁴³ <https://www.worldbank.org/en/topic/socialprotection/overview#1> "Social protection systems help individuals and families, especially the poor and vulnerable, cope with crises and shocks, find jobs, improve productivity, invest in the health and education of their children, and protect the aging population. Social protection programs are at the heart of boosting human capital for the world's most vulnerable."

OpenUp's data suggests that South African men earn up to 60% more than their female counterparts; the national average female unemployment rate in the wage of COVID-19 is 34%, the male unemployment rate is 25%.⁴⁴

Together with Media Monitoring Africa, OpenUp has created Wazimap, an open-source platform to communicate census as well as regional and municipal survey data on geographic differences in public service provisions and standard of living. The Sexual and Reproductive Health Activities Map (SRH) add-on to Wazimap helped communicate information on public health clinics, SHR services, and

pharmacies to women in need of specific services. In addition, OpenUp has created resources for South African Women – a database on additional services, such as counseling, soup kitchens, shelters, support for drug and alcohol addiction, and crisis lines.⁴⁵ Both SHR activities map and resources for South African women are intended to make relevant information available to women and also inform policymakers, social organizations, and other stakeholders that are engaged in supporting women's rights.

Social Protection: Benefits Data Trust⁴⁶

The [Benefits Data Trust](#) is a U.S. based non-profit organization that leverages digital technology to streamline application processes to different public benefits programs (including Medicaid, Supplemental Nutrition Assistance Program (SNAP)). Citizens can reach the organization via web, phone, or text message to receive guidance on eligibility criteria and entitlements. Data analytics generate specifically tailored packages, and the organization's online platform makes it easier for citizens to claim the social services that government should be available in one accessible place.

Benefits Data Trust is a Philadelphia, USA-based organization that serves to support the social safety net. The organization builds a profile of individuals that would be eligible for government services but who will likely not have connected to those services because of bureaucratic red tape needed to navigate to apply for eligibility. In the 2000s, "BDT worked with the Departments of Public Welfare (now called DHS) and L&I to unlock \$24 million in SNAP benefits annually for unemployed Pennsylvanians. Over the first three years of the partnership, BDT contacted 253,000 households and screened 48,000 for potential eligibility, resulting in the submission of over 17,000 SNAP applications; those approved received an average benefit of \$193 per month." BDT continues today as a call center, combining person-to-person connection and data analysis and modeling, to link eligible citizens to the financial services they need.

Social Protection: The Value of Record-Keeping⁴⁷

There is no doubt that publicly shared social accountability initiatives, including those under the head of an open data initiative can empower communities, equipping them with knowledge of key issues that affect them. It is important that the data they provide should be accurate and trustworthy, not only in the present but that the information should remain reliable and accessible through time. Open data initiatives can serve as important catalysts for galvanizing organizations to address long-standing data quality and integrity issues, presenting valuable opportunities for the data management and records

⁴⁴ <https://openup.org.za/blog/age-gender-and-unemployment-in-south-africa>

⁴⁵ <https://openup.org.za/blog/civic-tech-vs-gender-inequality>

⁴⁶ <https://bdtrust.org/benefits-data-trust-and-the-commonwealth-of-pennsylvania-collaborate-to-connect-unemployed-workers-to-food-and-other-assistance/>

⁴⁷ Insights drawn from book chapter published for <https://humanities-digital-library.org/index.php/hdl/catalog/view/amot/188/372-1>

management communities to work together to address not only the quality and integrity of open data but of the data generated by administrative and operational activities of the government itself. Open data initiatives are not stand-alone projects. The data used in these initiatives have often been derived from, or are based on, data generated to support the administrative and operational activities of a government agency or some other participating organization. The entire process should be supported by policies, procedures and technologies set up to administer the elections and manage both the process and the various forms of data that it generates. Designing a comprehensive management framework for ensuring the quality and integrity of data and records and the processes that support an open data initiative needs considerable care. An interdisciplinary approach with common strategies can have substantial benefits for both communities and for the citizens that they serve. Ultimately, a coordinated approach can serve the dual purpose of activating public engagement to improve the use of information and protect its quality, integrity, and accessibility through time. Records will be necessary if evidence (or proof) is required

regarding how the steps were carried out and that the data are reliable. When well-managed, records document the entire process, provide evidence of how the various steps were carried out, make it possible to assess the quality and integrity of the data generated at each stage and identify accountability for the data generated. By serving as authoritative, trusted sources of information, records can augment any publicly developed initiative serving social accountability.

Social Protection: United States Community Reinvestment Act of 1977⁴⁸

The U.S. Community Reinvestment Act (CRA) of 1977 used social accountability to empower local community groups to counter banking institutions that discriminated against non-white Americans. First, the CRA broadly defined a requirement for local community needs, which meant that local community groups had a direct hand in defining needs that were most relevant to their community. Second, banks were required to collect and publish data on lending. Third, the CRA gave citizens and community groups the power to demand bank audits, giving banks a direct incentive to develop and establish relationships with community groups to avoid audits. This policy would have benefited from simultaneous efforts to build the technical capacity and raise awareness of this open data, by disseminating the information more widely and gaining further traction. Yet, the actions that ensured accountability rested on the agency of these civic organizations to define the terms of what would be acceptable reform, and to conduct audits to ensure those reforms had been met.

Social Protection: Sierra Leone Open Elections Data Portal

At the time of the 2017 national elections in Sierra Leone, the government's open data portal had been down for months. A civic technology-driven civil society organization, the Sierra Leone Open Elections Data Portal (SLOEDP)⁴⁹ started a parallel open data portal. This duplication caused some contention, with the government perceiving that its role had been overtaken, however, discussion and debate occurred in a relatively public sphere on a diversely represented WhatsApp group of approximately 250 professionals, journalists, government representatives and international actors. As the government could not defend why it was not providing the service itself, opponents from the government bowed to strong public opinion and allow the site to continue. The SLOEDP followed

⁴⁸ Rahman, K. (2017). From Civic Tech to Civic Capacity: The Case of Citizen Audits. *PS: Political Science & Politics*, 50(3), 751–757. doi:10.1017/S1049096517000543

⁴⁹ Author's Note: Unusual among many open data initiatives in developing economies, this organization began without any global donor funding but rather through people coming together through volunteer effort, self-funding, and small-scale crowdfunding. The result is a solution sponsored and provided by Sierra Leoneans, for Sierra Leoneans.

principles of open elections⁵⁰ and issued a Freedom of Information (FOI) request⁵¹ to seek out the full list of candidates running for office. According to SLOEDP, the National Electoral Commission had advised, via Twitter, that the majority of the population was illiterate and did not have access to the internet. The more effective approach, the NEC advised, would be to post the list on a wall at polling stations. SLOEDP founder Tamba Lamin went to Twitter and asked a CNN reporter to raise the issue with the National Election Commission directly. Two days later, following a series of publicly viewed tweets, the NEC did respond to SLOEDP’s FOI request with the count and voter roll of each of the stations. SLOEDP posted the information on its own website and shared it on Twitter as well as through shared WhatsApp groups. Shortly afterward, the NEC posted the information on its own website.⁵²

The second implementation of civic technology and social accountability combined technology solutions designed with transparency and federated control, and volunteerism building off of the resources and infrastructure already available. The team at SLOEDP introduced the ingenious process of training and paying motorcyclists to take photographs of each polling station and post them via multiple WhatsApp groups. Managing sixteen WhatsApp groups, one for each district, it aggregated over 10 thousand snapshots of the actual results of each station. SLOEDP’s methodology and capacity meant that it could cover more than Presidential Elections and could, moreover, produce results within 24-48 hours, as opposed to the week that the NEC required. The team at SLOEDP suspected that the NEC favored a single political party, and that NEW, which should have been an independent representative of civil society needs, had aligned too closely with NEC. On election day, NEC launched a new website with most of its historical content gone.

The lessons of SLOEDP demonstrate that the value of public spaces for discourse on contentious issues cannot be overstated. Tamba’s technique of going to the media and specifically to Twitter to engage publicly when the discussions on the group could not be resolved is also a necessary tactic of social accountability and is only available because Tamba had enough followers, could communicate from a position of authority, and was able to communicate clearly and succinctly in the language that journalists and other public figures were using. Sierra Leone’s Open Data Collaboratives WhatsApp group is immensely popular. It has reached its capacity of 250 persons, with many more waiting to join. The forum is a true marketplace of ideas, which draws together open data players as one forum to explore civic issues and how to solve them. This group has been the most engaged and active of Sierra Leone’s WhatsApp groups, with the most robust discussions. The smaller WhatsApp groups, which are focused on different geographic divisions within Sierra Leone, have also been vital in providing support, answering questions, and facilitating coordination among the group monitors. SLOEDP has made its platform and methodology available for anyone to use via an open-source license, which has meant that anyone can use the platform, provided that they made their findings and any improvements and modifications publicly available.

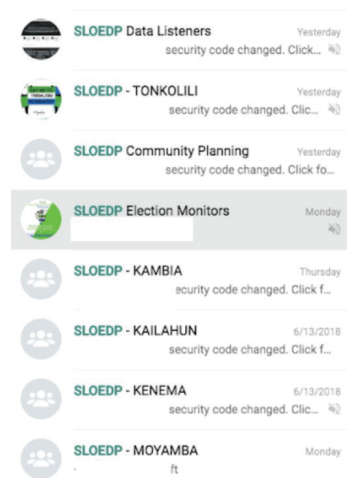


Image: Own construction

⁵⁰ data are timely, granular (at the finest level of detail possible), available for free on the internet, complete and in bulk, analyzable, non-proprietary, non-discriminatory, license-free, and permanently available. <https://openelectiondata.net/en/guide/principles/>

⁵¹ Sierra Leone’s OGP Action Plan commitment to implement a FOI law: <https://www.opengovpartnership.org/members/sierra-leone/commitments/SLO010/>

⁵² All this accountability is testimony from Tamba Lamin and SLOEDP and has not been independently verified.

Similar efforts and initiatives for civil society-driven monitoring and data collection to help in election monitoring have occurred across the continent, from Nigeria, to Tunisia, to Kenya and more. With a greater commitment to open data and public participation in election monitoring, ideally supported by government but with leadership and initiative from civil society, more eyes can ensure trust in elections and historical records of elections can be produced to help support fair elections and better systems for running them. With election monitoring more transparent, more public involvement during the election cycle, greater knowledge about candidates and issues, and larger voting turnout, more peaceful, trustworthy outcomes should become the norm.

Tools

Report Card: California Report Card

There is scant evidence of civic tech used in report cards. California's government in cooperation with UC Berkeley's CITRIS Data and Democracy Initiative launched a citizen report card in January 2014 to initially gather feedback on issues in five categories: healthcare, education, marriage equality, immigrant rights, and marijuana decriminalization. The initiative enjoyed a lot of public support and as of April 2014 had already reached over 7,000 individuals across every state county, 9,000 in June of the same year.⁵³ However, as of October 2021 this website no longer exists and there is nothing in the public record (Wikipedia or Google) to advise why this work was discontinued.

Participatory Policy-Making: U-Report Uganda

U-Report is a SMS-based platform by UNICEF in 2007 that conducts weekly polls among young citizens with the goal of increasing civic participation in policy-setting; UNICEF launched U-Report in Uganda in 2011.⁵⁴ Poll results are disseminated through the project's website and also regularly feature in mass media including newspapers and radio programs. Additionally, UNICEF presents a condensed summary of most relevant results in a weekly brief to members of parliament. Created by UNICEF in 2007, the application is now used by more than 540,000 individuals and provides critical insights into public attitudes on issues spanning public service delivery (e.g., access to education and polio vaccinations) and inflation and social norms (e.g., early marriage).

More than 50% of users think that U-Report has led to positive change in their community. At the subnational level, U-Report feedback has contributed to 15 local by-laws and ordinances on child rights. Moreover, U-Report has a direct influence on national policy-making as well, with 40,000 SMS messages analyzed in the process of drafting the country's third peace recovery and development program for northern Uganda. However, while U-Report enables more people to participate in politics, the platform's reach is not inclusive. Even though interested individuals can conveniently subscribe for future U-Report polls by sending an SMS to a toll-free number, this excludes almost one-half of the population that does not know how to send SMS.⁵⁵ In line with this finding, the average U-Report user is not representative of the Ugandan population but more likely to be male and from a privileged background in terms of education and occupation. While U-Report was never intended to generate representative population samples, this finding indicates inclusivity issues that bear consideration when interpreting findings.

⁵³ <https://thelivinglib.org/the-california-report-card/>
<https://reason.com/2014/07/15/democratic-accountability-in-an-app/>

⁵⁴ <https://ureport.ug/>

⁵⁵ Peixoto, Tiago; Sifry, Micah L.. 2017. Civic Tech in the Global South : Assessing Technology for the Public Good. Washington, DC: World Bank and Personal Democracy Press. © World Bank. <https://openknowledge.worldbank.org/handle/10986/27947> License: CC BY 3.0 IGO.

Participatory Procurement Monitoring: Budeshi

A marked example of the benefit of Procurement as a tool of social accountability is Budeshi. Initiated in 2014, this virtual platform served as a landing space to track and report on open and awarded tenders by the Nigerian government. The platform endured because of the engagement of the community, who too often felt unheard or that when they were heard they saw no impact of their voice. By creating an open platform to monitor and report on contracts, citizens either actively working in or interested in government accountability were able to engage with each other. The platform was created and sustained largely through sheer force of will of its founder, Seember Nyger, then a Program Officer for the [Public and Private Development Centre](#). From the success of Budeshi she went on to serve as an Open Government Fellow for Code for Africa, which expanded the capacity and reach of Budeshi. This is one of several reasons Code for Africa has a strong reputation for identifying good projects, individuals, and work, and creating a difficult work environment in its pursuit of consolidating power for civic tech and social accountability in Africa. In 2014, simply having a web platform could be innovative enough to attract attention and support. By 2021, myriad civic tech organizations have established themselves and seek to serve as centers of gravity for government accountability.



Image: Mustapha Bulama, 2019⁵⁶

Participatory Procurement Monitoring: Connected Development

CODE, or Connected Development, founded by Hamzat Lawal in 2021, has become a leading force for government accountability, all through its core mission and original name, “Follow the Money” CODE’s success is founded not solely in the dogged persistence of its leader, but its assemblance of a strong team of diverse technical talent as well as acumen for marketing and public engagement. By emphasizing a public persona for their work, they have gained traction and profile that allows them to bring additional media attention to any cause. Because of this, policy and decision-makers are obliged to meet and listen to their perspective.

⁵⁶ <https://bulamacartoons.com/>

Hamzat himself has made a particular point of being a recognized face and received accolades and profile for his work including [Guardian Nigeria](#) in [New York Times](#) and has lately been recognized by [UNESCO for special consultive status](#). Turning its talents and attention to COVID-19, CODE found that 80% of the health facilities in Nigeria do [not meet NPHCDA health standards](#) for storing and distributing COVID-19 vaccines, a vital and previously absent dataset for donors and investors seeking to evaluate applications and proposals for funding to store, distribute, and track COVID-19 vaccines.

Participatory Budgeting: Mobile-Enhanced Participatory Budgeting in the DRC

In the DRC, public authorities have long controlled their budget unaccountable to citizen oversight in relative opacity, with detrimental effects for public trust in government and social cohesion. A program by the World Bank Institute is making use of the DRC's rapidly increasing mobile penetration to leverage ICTs for participatory budgeting processes.⁵⁷ Through geo-targeted SMS, public authorities were able to announce the dates and location of assemblies to introduce participatory budgeting. SMS was then used to vote on project proposals and inform citizens on which projects were chosen, making the process more transparent and inclusive than before. Via SMS, locals can also give feedback on individual projects after their completion. The program has yielded tangible results. After identifying community priorities, 54 classrooms and a bridge in Luhindja and a sewage system in Bagira were repaired, and a water fountain and toilets were built in local markets in Ibanda, inter alia. The program has also had a demonstrable effect on social cohesion and trust in institutions, by showcasing how tax money is being spent. Tax evasion among citizens in the targeted areas has dramatically decreased and overall tax yield multiplied 4 times.

Participatory Budgeting: World Bank in Brazil

This case study drawn from the World Bank's own How-To notes demonstrates the needed combination of civic technologies, in this case, the application of SMS-voting, and traditional social accountability methods of in-person voting centers and trained individuals providing in-person support.

"Participatory budgeting (PB) began in Brazil in the southern city of Porto Alegre, Brazil, in 1990. Less than 20 years later, it has spread to more than 200 cities throughout Brazil as well as many other countries in Latin America, Africa, Europe, and Asia. ICT has been used to make PB more accessible, especially to the poor. In 2006, electronic PB (e-PB) was added to a longstanding PB process in Belo Horizonte. People could vote electronically by using the internet or by phone. There were 178 public voting centers with trained personnel for assistance. Internet and cell phone access were provided by supporters. An internet-equipped bus, which traveled to voting sites, made e-PB even more accessible by coming to the voters. There was a 42-day e-voting period. A total of 172,938 people voted. About 7.5 percent of residents participated in e-PB. The highest turnout was in the poorest areas. Other Brazilian cities have seen ever-higher participation rates. In Ipatinga, 31,000 geographically targeted phone calls and 3,000 text messages inviting citizens to PB assemblies led to a 16 percent increase of participation in selected districts compared to a 14 percent decrease of participation in non-participating districts. ICTs have expanded participation, helped reach the poor, and reduced transaction costs. Both the government and citizens have benefitted. This has led to expanded use of ICT in PB in several cities in Brazil."⁵⁸

⁵⁷ <https://blogs.worldbank.org/digital-development/mobile-enhanced-participatory-budgeting-in-the-drc>

⁵⁸ HOW-TO NOTES: How, When, and Why to Use Demand-Side Governance Approaches in Projects <https://openknowledge.worldbank.org/bitstream/handle/10986/13064/692320ESW0P1250proachesoInoProjects.pdf?sequence=1&isAllowed=y> Page 4, Box 2

Participatory Budgeting: Vallejo Municipality in California

The City of Vallejo California in 2013 became the first American municipality to adopt city-wide participatory budgeting.⁵⁹ The city runs an online platform for citizens to vote to distribute a set amount of government funds to various social safety net services, shares the funding proposals from the various organizations, and displays the voting total and budget total on their website.⁶⁰ Also included are links to previous years' funding and outcomes provided by the projects supported.⁶¹ One explicit objective of this initiative is to improve representation of underrepresented groups and thereby increase the city's population communal spirit, and civic pride following years of economic hardship during which the city had filed for bankruptcy. Toward this objective, the city council selected 13 members from local civic organizations and 7 local volunteers to serve on the project's steering committee, which surveilled project implementation and organized town halls to inform the public about the components and benefits of participatory budgeting, and the project implementation process.

In total, roughly 4,000 residents cast their votes on where to allocate the municipal budget. The top priorities listed included inter alia (1) repairing streets and other public infrastructure such as streetlights and parks, (2) decorating the city downtown, (3) granting scholarships to successful high school students and installing security cameras in public areas. A total of \$3.3 million was allocated to the top twelve projects, equating to approx. \$28 per capita.⁶²

Yet, a turnout of 4,000 voters in the first project cycle is low and suggests that the project only engaged a more political portion of the local population. This points to several underlying issues. As the town halls held for this purpose were conducted almost exclusively in English – with only one meeting in Spanish – they did not reach other minority and immigrant groups such as Vallejo's Filipino population. The high turnout of youth at these meetings is notable and may point toward easier uptake of innovative governance methods among younger demographics. Another issue is that town halls were held infrequently throughout the project period – one break lasted 4 months, raising the concern that the steering committee may not faithfully represent the community's interest at large but pursue its own agenda or be captured by the city council.

Regardless of these areas of possible improvement, particularly concerning horizontal legitimacy, Vallejo residents have largely been enthusiastic about the project, as it empowered residents to participate in local politics. Following the first project cycle in 2013, the second round swiftly followed in 2015. The Vallejo case is particularly important for its implications for participatory budgeting across the US and for its ability to leverage web-based outreach to the citizens for input into the budgeting process. Following the pilot project in Vallejo, a number of other cities adopted participatory budgeting, including St. Louis, Cambridge, or Greensboro.

Citizen Audits: Police Reform

In her report, "[From Civic Tech to Civic Capacity: The Case of Citizen Audits](#)" Professor Sabeel Rahman notes that accountability made available by documenting police actions, and the dissemination of that information to a wider audience using online platforms in a civic tech approach, is made more effective by combining these videos and reports with trainings and information about how to better

⁵⁹ <https://participedia.net/case/4230>

⁶⁰ https://www.cityofvallejo.net/city_hall/departments_divisions/city_manager/participatory_budgeting

⁶¹ <https://www.cityofvallejo.net/cms/One.aspx?portalId=13506&pageId=52118>

⁶² <https://participedia.net/case/4230>

advocate for accountability and fair treatment. This is an important lesson for civic tech and social accountability; that technology does not drive social accountability, and civic technology does not drive civic engagement.

Civic tech can a) be an alternative medium for direct feedback (e.g., from service users) where it is physically difficult to provide – because of remoteness and other factors, b) enable wider and more efficient dissemination of information, for more people to access and potentially use it, c) make aggregation of feedback more expeditious and systematic, to name but some of the advantages. All power and influence, however, come from the persistence of key actors and work to couple information that may otherwise inflame, anger, or even discourage actors, with practical guidance and tools on how to be better advocates for their cause. It also comes from effective facilitators who can help to mediate collaborative interfaces between citizens and governments, and infomediaries who can help to translate complex information for easier access by citizens, and likewise to channel citizen interests/preferences back to government. Further, Rahman argues that all the data collected, shared, and analyzed must be directly sourced from civil society and cannot rely on government open data initiatives as civil society has no leverage to ensure that the data will be shared in an unaltered, timely, and consistent manner. There is also scope for investing in the capacity of civil society to triangulate government-held data, by accessing alternative sources.

Participatory Monitoring: Countering Blockchain and Ensuring Fairness in Elections-2017 Elections in Sierra Leone⁶³

Sierra Leone's 2017 Presidential elections were labeled by reputable publications from Fast Company to TechCrunch⁶⁴ as the “world's first blockchain elections”. These publications relied almost solely on information from a press release, [now removed](#), by Agora, a Swiss NGO with the self-declared role of “bringing voting systems into the digital age”. Still today, but especially true in 2017, blockchain is associated with security and immutability. The idea that an election could be driven on blockchain would mean that the results were irrefutable. Blockchain requires end-to-end encryption, unavailable for a country conducting its elections on paper ballots that are handled by the National Electoral Commission (NEC). Tamba Lamin, the head of a civil society independent election monitoring organization, Sierra Leone Open Elections Data Portal (SLOEDP), tried to contact Agora to get them to change their press release, but his requests were ignored. Instead, Tamba took to Twitter and reached out directly to the journalists to explain, as kindly as possible, that what they were reporting was a technological impossibility, and wrote as much in a medium post.⁶⁵ (Tamba had similarly used Sierra Leone's Freedom of Information act to compel NEC to publish the names of the candidates). Two days later, the tech publications issued retractions,⁶⁶ and the NEC stated publicly for the first time that Sierra Leone's elections were not conducted on blockchain.⁶⁷ Without this public action, the coverage of the elections would be about a novel technology, one that is presented as being infallible, and the election results would not receive adequate scrutiny.

⁶³ PowerPoint presentation by SLOEDP founder Tamba Lamin to the International Open Data Conference, 2018, Buenos Aires: <https://docs.google.com/presentation/d/1AnTHjITK-r66Sb7XrtPYyWg3yoYIVryB/edit#slide=id.p25> and at Africa Open Data Collaboratives webinar and workshop series: https://docs.google.com/presentation/d/1WqoSLd_AgkorN4lsUiheRRUJoHG2HDICjbaQ8Art2Lw/edit#slide=id.p7

⁶⁴ <https://techcrunch.com/2018/03/14/sierra-leone-just-ran-the-first-blockchain-based-election/>

⁶⁵ <https://medium.com/@tlamin/setting-the-record-straight-about-agoras-blockchain-elections-misleading-headlines-on-the-internet-afc20c7a3b7>

⁶⁶ <https://futurism.com/sierra-leone-election-blockchain-agora>

⁶⁷ <https://www.fastcompany.com/40547127/voting-blockchain-startup-demo-turns-controversial-in-sierra-leone>

Participatory Monitoring: Clean Streets Accra

In 2016, Mobile Web Ghana acquired a microgrant from Open Knowledge Foundation to develop Clean Streets Accra, a tool that relied on crowdsourced documentation of illegal waste dumping sites across the city, building off of a model developed in Los Angeles. The team trained over 200 volunteers and secured the support of the member of parliament for the City of Accra to endorse the project that would identify hotspots of waste and encourage the municipal government to reallocate support for sanitation services. When the microgrant funding ran out, the team were able to secure funding from the World Bank's Open Cities Initiative and rebrand the work as Open Cities Accra to continue the work forward. Ultimately, the funding ceased, and without support from the government the work did not continue.



Image: Mobile Web Ghana's Executive Director Florence Toffa shows U.S. Ambassador Stephanie Sullivan the results of the Open Cities Accra initiative, 2019. Image Credit: Bernard Talika, Mobile Web Ghana