



**FRIEDRICH NAUMANN
FOUNDATION** For Freedom.

Global Innovation Hub

EXAMPLES OF COLLABORATION BETWEEN CIVIC TECH COMMUNITIES AND GOVERNMENTS AROUND THE WORLD

Daniela Ramirez

David Bates

Henriette Litta

Kes Tuturoong

Matt Stempeck

Meichun Lee

Nourhane Ben Thabet

Oussama Abdelah Benhmida

Wana Alamsyah

Ya-wei Chou

ANALYSIS

Imprint

Publisher

Global Innovation Hub
Friedrich Naumann Foundation for Freedom
15F.-6, No. 171, Songde Road,
Xinyi District, Taipei City 110030
Taiwan

 freiheit.org/taiwan

 /FNFGIHUB

 /FNFGIHUB

 /FNFGIHUB

Authors

Daniela Ramirez
David Bates
Henriette Litta
Kes Tuturoong
Matt Stempeck
Meichun Lee
Nourhane Ben Thabet
Oussama Abdelah Benhmida
Wana Alamsyah
Ya-wei Chou

Editor

Friedrich Naumann Foundation for Freedom Global Innovation Hub

Contact

E-Mail: globalinnovation@freiheit.org

As of

September 2023

Notes on using this publication

This publication is an information offer of the Friedrich Naumann Foundation for Freedom.

It is available free of charge and not intended for sale.

It may not be used by parties or election workers for the purpose of election advertising during election campaigns (federal, state or local government elections, or European Parliament elections).

License

With the exception of any third-party images and photos, the electronic version of this publication is available under a CC BY-NC-ND 4.0 License. The licenses of all third-party images and photos are stated under those images and photos.

Disclaimer

The perspectives and opinions stated in this publication are those of the authors, and they do not necessarily reflect the view of Friedrich Naumann Foundation for Freedom.

Table of Contents

| | |
|--|-----------|
| Executive Summary | 3 |
| 1. Preamble | 7 |
| 2. Civic Tech Collaborations in Taiwan | 9 |
| 3. Combating Corruption Through Civic Technology in Indonesia | 14 |
| 4. Democratizing Technological Solutions: Civic Tech Community & Government Cooperation in Mexico | 19 |
| 5. Examples of Civic Tech Community-Government Collaboration Around the World: Case Study on Germany | 24 |
| 6. Filling the Gaps in Public Innovation with Civic Tech & Government Collaboration | 29 |
| 7. TechConnect Morocco: Building Bridges for Inclusive Governance through Civic Tech Collaborations | 36 |
| 8. Tunisia's Examples of Civic Tech Community-Government Collaboration | 40 |
| 9. About the Authors | 45 |

Executive Summary

This publication showcases how governments and civic tech communities around the world can work together to build digital services and projects. It also offers policy recommendations on what governments can do to facilitate such collaboration. Experts from different regions contributed their experience and observations to this publication: Daniela Ramirez and David Bates from Mexico, Henriette Litta from Germany, Kes Tuturoong and Wana Alamsyah from Indonesia, Matt Stempeck from the United States, Meichun Lee from Taiwan, Nourhane Ben Thabet from Tunisia, Oussama Abdelah Benhmida from Morocco. The examples they presented cover a wide range of topics: fighting corruption, enhancing transparency in government procurement, land management, pandemic prevention, improving digital literacy of governments and communities, local democracy, citizen participation, and making a city more accessible for people with physical disabilities.

Their case studies are summarized as follows:

The Development and Role of Civic Tech Communities

Civic tech communities around the world are part of the important legacy of democratization of each country. They also play a very important role in facilitating democracy by creating digital tools. This can lower the barrier to public participation, enhance government transparency, and facilitate citizen-government collaborations which aim to tackle serious crisis or problem of a nation. Successful experiences from the civic tech communities may inspire governments to collaborate with them, consider how to improve the process of creating digital service, and acquire policy recommendations from them.

What Governments Have Tried to Support or Engage with Civic Tech Communities

In the case of Germany, Litta presented that the German government adopts three types of approaches to engage with civic tech communities: offering funding, internalizing the innovation model or talents of civic tech communities by adapting existing government agencies or creating new apparatuses, and other formal or informal approaches. Similarly, Benhmida explained how the Moroccan government established the "Maroc Numeric Cluster" program to fund civic tech innovation projects. Stempeck elaborated on how the U.S. government has initiated programs to allow civic tech experts to bring innovation into government agencies, such as [the Presidential Innovation](#)

[Fellowship](#).¹ and some digital-related government agencies may actively hire talent from civic tech communities.

Alamsyah and Tuturoong explained how the Indonesian government also supports and collaborates with civic tech communities. It does that through a series of hackathons, such as Hackathon Merdeka. These hackathons have successfully served as platforms to initiate more collaborative projects between the government and civic tech communities. Lee and Ben Thabet pointed out how hackathons initiated by presidents or ministers have been held to encourage civic tech projects in Taiwan and Tunisia.

Open data and open government initiatives are also mentioned as important support for civic tech communities. Stempeck mentioned that the U.S. government launched Data.gov in 2009, which opened up enormous data sets, and that the U.S. local governments also followed suit. Benhmida introduced Data.gov.ma, an important foundation for civic tech communities to acquire open data, which has been established by [the Moroccan government](#). [It also initiated the Moroccan trophy for open data](#)² to encourage civic tech initiatives that are based on open data. Ben Thabet highlighted how joining Open Government Partnership (OGP) has motivated the government to increase its collaboration with civic tech communities in Tunisia.

The establishment of national digital policies and the improvement of Internet infrastructure were seen as crucial steps to encourage the development of civic tech in Mexico and Tunisia, as pointed out by Ben Thabet, Ramirez, and Bates.

¹ "Presidential Innovation Fellows," last modified July 20, 2023, <https://presidentialinnovationfellows.gov/>

² "Trophée national et Hackathon de l'Open Data," Data.gov.ma, Agence de Développement du Digital, last modified February 11, 2014, <https://data.gov.ma/fr/actualites/trophee-national-et-hackathon-de-lopen-data>

Examples of Collaborations

Litta noted that the #WirVsVirus, initiated in Germany in 2020, successfully demonstrated a possible model of partnership between government and civic tech communities. Pandemics, disasters, and pollution also spurred collaboration between the government and civic tech communities in Taiwan. Lee highlighted that face mask maps, the vaccine management platform, as well as reporting and medical information sharing platforms were created by civic tech contributors and later connected to Taiwanese government websites and systems. The Taiwanese government also released more data and provided more resources to support these projects later on. The Airbox and Sourcing Water, created by the LASS maker community in Taiwan, show that open source and open data allow citizens and government to collaborate on monitoring air and water pollution.

Lee further introduced vTaiwan as an example to show that government and citizens can have comprehensive and open discussions on how to improve laws with the help of digital platforms and tools. Ben Thabet presented the “Apps for Democracy Hack” in Tunisia, which is not just a competition but a valuable opportunity to encourage citizens, local elected officials, and candidates to actively interact with each other and to incentivize citizens to vote. Benhmida provided the example of Nouabook.ma in Morocco, which has pushed about 40 members of parliament to start dialogues with about 450 citizens.

Stempeck introduced BetaNYC, an NGO in the U.S., which has been helping Community Boards, a local government body in New York City, to enhance their digital and data literacy. They also established tools to facilitate data-driven decision-making, such as [BoardSTAT](#).³ The organisation furthermore initiated the [Civic Innovation Lab](#)⁴ to help government to address challenges by using technology, data, and design to create solutions.

Alamsyah and Tuturoong gave the example of [Opentender](#)⁵ in Indonesia, which shows how the government and civic tech communities can work together to facilitate transparency in government procurement through information sharing and citizen participation. Ramirez and Bates showcased the Visor Urbano digital land management platform in Mexico. It shows that involving all stakeholders, making open source the default setting of a digital platform from the beginning, and opening up data are key elements for successful collaboration.

Ben Thabet gave the example of the Collaborative Digital Geospatial Project in Tunisia. It was implemented through collaboration between different municipalities by providing training on collecting filed data and digitization to municipality employees and civil society members. By using OpenStreetMap, municipalities can build their geographic information system for various issues such as land management, heritage and green area preservation, as well

as infrastructure maintenance. For the case of Morocco, Benhmida mentioned that civic tech communities, civil society, government worked together to create the [Woussoul project](#).⁶ which comprehensively examined whether the infrastructure in the city of Rabat is accessible to citizens with physical disabilities. An app created as an extension of the Woussoul project can help these citizens easily access public services and infrastructure in the city of Rabat.

The examples that all the authors mentioned are summarized and demonstrated as the following map:

³ “BoardStat,” BetaNYC, <https://beta.nyc/products/boardstat/>

⁴ “Civic Innovation Lab,” last modified January 23, 2021, <https://civicilab.com/>

⁵ “Opentender”, <https://opentender.net>

⁶ Ristel Tchounand, “Woussoul : Un projet web pour identifier les lieux accessibles aux personnes à mobilité réduite,” Yabiladi, September 16, 2013, <https://www.yabiladi.com/articles/details/19647/woussoul-projet-pour-identifier-lieux.html>

Examples of Collaboration between Civic Tech Communities and Governments

United States of America

BetaNYC's programs:

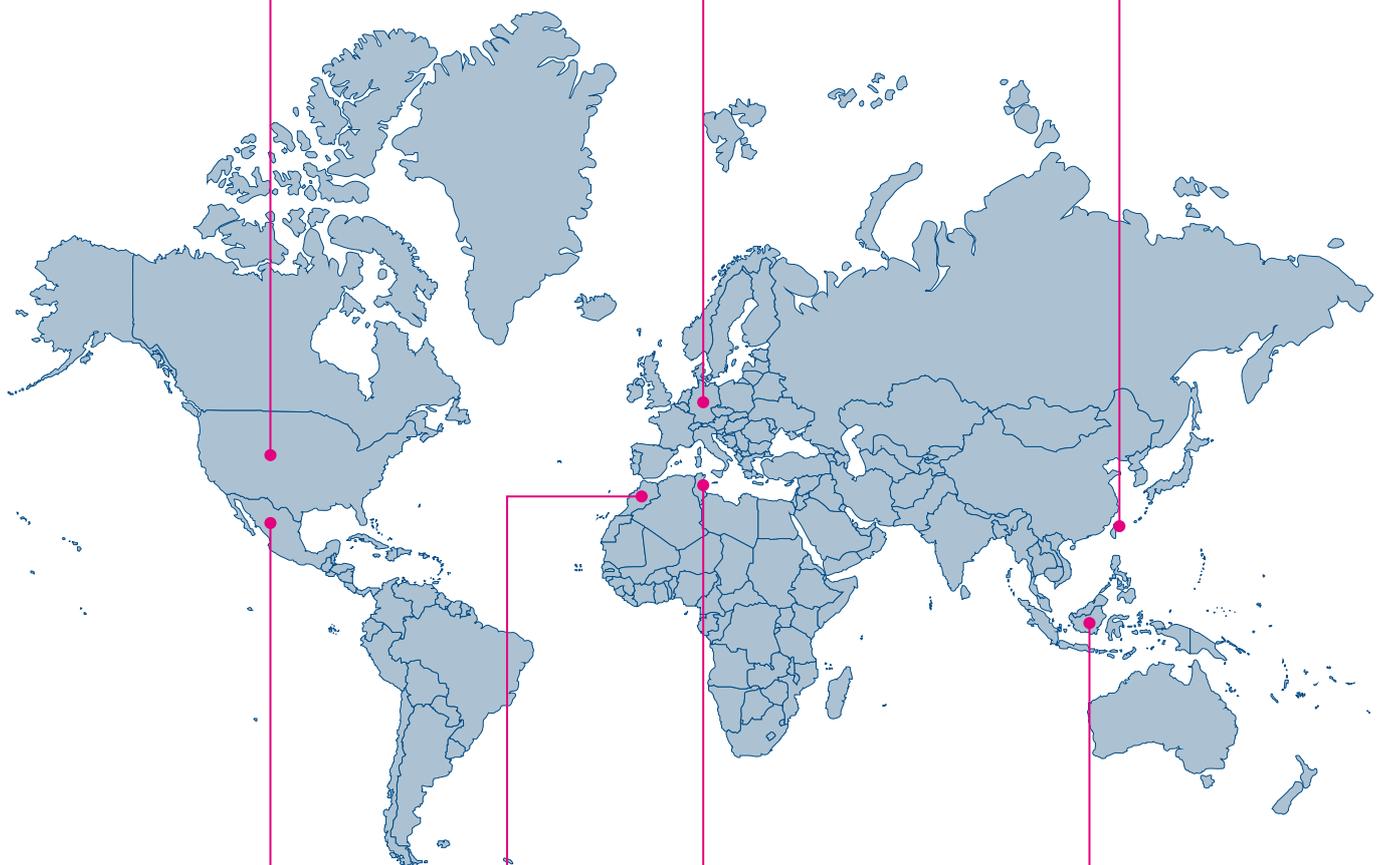
- BoardSTAT
- Civic Innovation Lab
- The NYC Civic Innovation Fellows program
- Research and Data Assistance Requests (RADAR) program
- Open Data Ambassadors (ODA)

Taiwan

- Face mask maps, apps, and chatbots during COVID-19
- Online platforms for people to search which hospital the injured were sent to and which hospital needed blood donation after the waterpark explosion accident in 2015.
- Vaccine management platform in Tainan
- Airbox and Sourcing Water by LASS
- vTaiwan

Germany

- #WirVsVirus digital hackathon
- The government and parliament increasingly invite members of civic tech communities to offer suggestion on legislative proposals or policies, and the civic tech communities themselves also form an alliance to facilitate their communication with the government.



Morocco

- Woussoul project
- Nouabook.ma

Mexico

- Visor Urbano

Tunisia

- Apps for Democracy Hack
- Collaborative Digital Geospatial Project

Indonesia

- Hackathon Merdeka
- Monithon events
- Opentender

Policy Recommendations

The authors also shared their recommendations on what governments can do to facilitate such cooperation. They can be summarized as follows, but readers can find more detailed and inspiring ideas of each case study.

• More Support to Civic Tech

Governments should provide more support for civic tech projects, for example through increased funding. Stable or even increased funding, as well as resources for civic tech initiatives are necessary to sustain the operations of great projects. Ben Thabet mentioned that such funding could be established through many flexible approaches, such as special funds for innovation or public-private partnerships. Institutional support is also a useful endeavor. Ramirez and Bates suggested that sandboxes can serve as spaces to test innovative civic tech solutions.

• More Support to Public Servants

Governments should furthermore initiate programs to enhance the digital capacity of both public servants and civil society. Stempeck stressed that building up connections between governments, civic tech communities, and under-represented communities should be seen as an important work. The government should therefore provide more support to public servants who work diligently to build up these connections. Administrations should also create such job positions for which capable people can apply.

• Open Data as an Infrastructure

Data is the foundation of everything and the key to unlocking more innovation. Opening up more government data and fulfilling open government initiatives are crucial steps in building up the infrastructure to support more civic tech initiatives. Provided that data privacy is well protected, valuable datasets should be accessible to civil society and businesses. In terms of data quality and format requirements, governments themselves should adopt consistent data standards so that citizens can easily monitor governments. Alamsyah and Tuturoong emphasized that governments should also ensure that open data standards are applied to all types of public data, such as environmental data, education data, and so on. As Ben Thabet pointed out, when governments establish legal frameworks to encourage collaboration with civic tech communities, they should ensure that transparency of procurement processes a supportive legal framework for data exchanges, and the protection of citizens' data privacy are key components.

• Encourage Collaborations Based on Openness, Trust, Participation, and Equality

Governments can create more opportunities and spaces to encourage collaboration between governments and civic tech communities, such as hackathons or fellowships for civic tech communities. When building collaborations, a fair working relationship is important. As Lee argued, governments should see civic tech communities as partners, not just as IT service providers or just as consultants. Litta also stressed that civic tech communities should be invited by governments to co-create projects or to provide feedback on how to evaluate the impact of a project. In addition, citizen participation is an essential element of successful collaboration.

• Improve Government Regulations for Collaborations

Many authors pointed out that governments need to improve regulations and reduce unnecessary bureaucratic procedures, as both are stumbling blocks. Many useful civic tech projects have no chance of being adopted by governments, or are not even on the radar of public officials because of these rigid and inconsistent regulations. Instead, government should establish a supportive and clear legal framework that encourages civic tech communities to innovate and collaborate. In order to achieve this, Stempeck suggests that governments, especially under-resourced government sectors, can work with civic tech communities to model an ideal process of collaboration.

1. Preamble

Ya-wei Chou

Program Manager, FNF Global Innovation Hub

Every day, people use digital services provided by governments. During normal days, people may file taxes or express their opinions to a public policy through governmental online systems; during a special period such as the outbreak of Covid-19, it might be an app made by the governments to book a vaccination appointment or receive the latest instruction on pandemic prevention. Sometimes people appreciate the digitization of these government services, while sometimes they are not satisfied with it. A tax filing system that only functions on Internet Explorer or a particular browser, for example, will definitely not generate happiness. Moreover, in authoritarian countries, people may encounter something more serious than a poorly designed government system: a surveillance tool may be installed in a government's app, and everyone in the country is required to install the app on their cell phones. And of course, no one is not allowed to inspect the app's source code.

As it is often the case with digitization of services, there is generally more awareness about the dangers of it. And while vigilance is certainly good and appropriate, it is equally important not to ignore the opportunities digitization provides. That is why we launched this publication: to explore more ideas to encourage governments around the world to collaborate with citizens to co-create digital services. By involving the participation of the people, governments can ensure that the design and operation of public digital services meet people's needs. People will be able to inspect these digital services to know whether they reach an ideal standard of quality, cybersecurity, personal data protection, accessibility, and transparency. Governments and the public can also inspire each other to innovate the approaches of providing digital services, thereby optimizing existing services.

Showcase Examples Around the World

By inviting experts from the Indonesia, Mexico, Morocco, Germany, Tunisia, Taiwan, and the United States to present examples from their countries, we aim to show how public digital services can be co-created by governments and the people. These examples can serve as an inspiration to global democracies, but also as a powerful wake-up call to authoritarian governments: in many countries, allowing people to participate in the process of creating public digital services is a quite normal thing, while forbidding people to participate in such a process should not be seen as a common practice around the world.

We are glad to learn from all the best practices around the world from all the authors, but this does not mean that we disregard those projects which could not be sustained in the end. Instead, we value those examples because they still represent a valuable attempt in a more difficult circumstances, or because they clearly reflect what needs to be done by governments. After all, we often learn most from things that did not work out.

Every Level and Scale of Collaboration Matters

For the definition of "collaboration with governments," we adopted the broadest scope, for it helps us to include cases around the world as many and various as possible, to explore all kinds of skills and lessons for establishing partnership with governments based on mutual trust, and to encourage governments and civil society to take their first step. This means that examples for "collaboration with government" can range from merely information sharing between governments and civic tech communities to enabling a government to adopt a civic tech project. As for the scale of collaboration, it can range from a hackathon to a digital platform that allows all the citizens in a country to propose and discuss a law amendment. Although in some cases the depth and scope of cooperation may be relatively low and small, this level of cooperation is still important. For instance, sharing information may sound like a cooperation of beginners' level, but it may be a good start since it is relatively simple so that governments will be encouraged to try it.

The Role of Civic Tech Communities

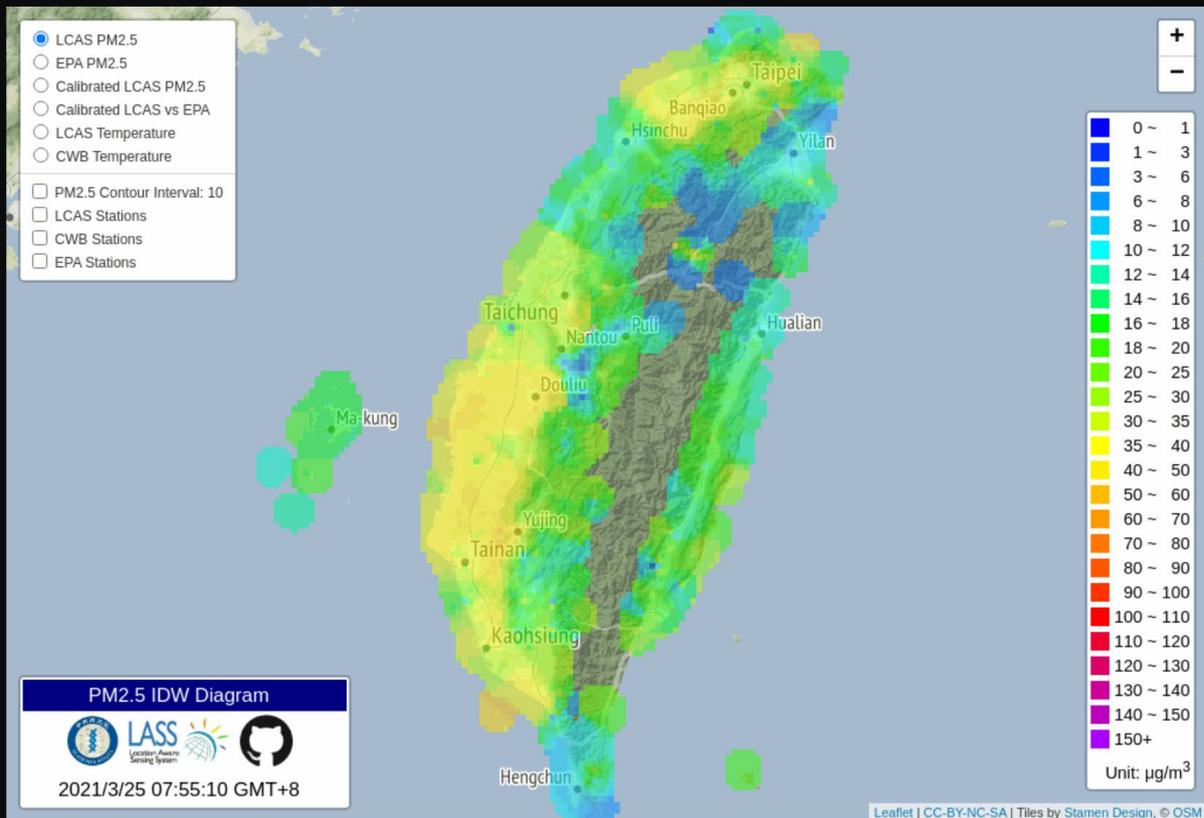
If you haven't heard the term "civic tech community," you may wonder how it is related to people's participation. The precise definition of civic tech is still under debate,⁷ but to clarify the definition is not the focus of this publication. One of the main pursuits and purposes of civic tech is certainly to facilitate people's public participation, transparency of the government, democracy, and any kinds of social good with the help of technology and collaborations between the people, governments, and businesses. On this basis, "civic tech community" is a term describing a group of citizens who voluntarily work together for the purpose of civic tech. The composition of the community is very diverse: its members can come from civic society, governments, technology, businesses, and any discipline. With the technology capacity of civic tech communities, the members of the communities are able to initiate all kinds of advocacy and projects that help to improve government's public services or policy through digital means. The communities thus become an energetic platform supporting civil society to push governments to optimize their public services, no matter if they are digital or not.

Our Expectations

By curating experiences from around the world, we hope this publication will inspire more collaborations between governments, civic tech communities, and citizens. When digital tools are advancing at a pace that no one can stop, civic tech communities play an important role in helping governments and people have a similar level of technology literacy when discussing the design of digital public services. This is very important if people do not want to see more public digital services that fail to meet people's needs or even become governments' tools of controlling citizens. Furthermore, the participation of civic tech communities and the public can improve the efficiency and quality of digital public services, because their participation will contentiously provide governments more innovative ideas to optimize public services.

⁷ If you would like to learn more about such debates, maybe you can start with this article: Hollie Russon-Gilman, "The future of civic technology," *Brookings*, April 20, 2015, <https://www.brookings.edu/blog/techtank/2015/04/20/the-future-of-civic-technology/>

IDW Animation of Taiwan (last 24 hr)



© The PM 2.5 Sensing Map was developed jointly by LASS (Location Aware Sensing System) and Academia Sinica. The screenshot was taken from LASS website: <https://pm25.lass-net.org/grafana/d/idw-taiwan/idw-taiwan?orgId=2>. CC-BY-NA-SA LASS

2. Civic Tech Collaborations in Taiwan

Meichun Lee

Assistant Research Fellow, Institute of Ethnology, Academia Sinica

Civic technology, or civic tech, is a mode of civic participation that engages with political causes through designing, critiquing, and applying information and communications technologies (ICTs) to improve community life and infrastructures of governance.¹ As civic tech communities often participate in “new affirmative engagement with data” and take the “tactics of resistance to massive data collection,” it is often seen as an approach to data activism.² In the past decade, we have witnessed the emergence of civic tech across the world, especially in democratic countries. Civic tech challenges the assumption of representative democracy that once we vote, we render our rights of decision-making to few politicians and passively wait for the government to deliver public service. It encourages civic participation in all sorts of public issues by providing accessible and hands-on ICT tools. Civic tech innovations cover a wide range of public issues, ranging from anti-corruption and political supervision to social welfare, human rights, disaster management, cultural preservation, sustainable development, environmental protection, and so on. In some places, civic tech opens new ways for citizens and civil servants to work together for public good;³

in other places, civic tech provides activists with weapons to fight for rights and freedom.⁴ As networked movements are threatened by surveillance capitalism, post-truth politics, and digital authoritarianism, civic tech provides an alternative to reshape and innovate democracy.⁵

- 1 Andrew R. Schrock, “Civic Hacking as Data Activism and Advocacy: A History from Publicity to Open Government Data,” *New Media & Society* 18, no. 4 (February 2016): 581–599.
- 2 Stefania Milan and Lonneke Van der Velden, “The alternative epistemologies of data activism,” *Digital Culture & Society* 2, no. 2 (October 2016): 57–74.
- 3 For example: Sung-Yueh Perng, Rob Kitchin, and Darach Mac Donncha, “Hackathons, entrepreneurial life and the making of smart cities,” *Geoforum* 97 (August 2018): 189–197.
- 4 For example: Mei-chun Lee, “Free the Data from the Birdcage: Opening Up Data and Crowdsourcing Activism in Taiwan,” *PoLAR: Political and Legal Anthropology Review* 43, no. 2 (September 2020): 247–261.
- 5 Fa-ti Fan et al., “Citizens, politics, and civic technology: A conversation with gov and EDGI,” *East Asian Science, Technology and Society: An International Journal* 13, no. 2 (October 2019): 279–297.

Civic Tech Communities' Relationship with Governments around the World

Civic tech advocates and practitioners adopt various relationships with governments from a more collaborative position to a resistant standing, depending on the political environment in which they are situated. In the US, where the term first emerged during the Obama administration (2009-2017), civic tech organizations mostly work with local or state governments to improve the digital infrastructure of public service and enhance people's participation in decision-making and political process. The most renowned example of this collaborative mode of civic tech is Code for America, and it has inspired many "Code for" organizations to spring across the world. In many parts of the Global South, civic tech provides alternative solutions when public institutions fail to respond to existing challenges, appearing as "a form of alternative/activist media that uses data and other technological tools to empower citizens and to challenge dominant power structures."⁶ Some of the prominent examples of this approach include the [Sinar Project](#)⁷ in Malaysia and [Ushahidi](#)⁸ in Kenya.

Civic Tech Communities in Taiwan

Taiwan presents an interesting case as the civic tech communities in this country adopt both the collaborative and resistant positions in their relationship with the government. Civic tech in Taiwan began as a bottom-up activist movement to push for a more transparent and open government. It has grasped a few opportunities to collaborate with the government since 2014. Taiwan is home to one of the world's biggest civic tech communities: g0v (pronounced gov zero). Founded in 2012, g0v started as a grassroots community that aimed to use open-source technologies and open data to supervise the government and encourage civic participation. The website of g0v explains how they decided their name by stating, "The name 'g0v' replaces 'o' in gov with '0', which reimagines the role of government from scratch zero and reflects the vision from 0 to 1 of the digital natives."⁹ The name signifies their attempt to challenge the bureaucratic government and exemplify a more transparent, open, and participatory alternative. As a polycentric community, g0v runs mainly through bimonthly hackathons and collaborative technologies such as HackMD, Hackfoldr, GitHub, and Slack. Its bimonthly hackathons have incubated many civic tech projects such as Open Campaign Finance, vTaiwan, Co-facts, and Disfactory, to name a few.¹⁰

While g0v provides spaces for civic tech activists to brainstorm various projects, there are also civic tech communities and organizations that focus on specific topics. For example, [Watchout](#)¹¹ is an organization that utilizes new media for parliament watch. [LASS](#)¹² (Location Aware Sensing System) is a maker community that builds affordable pollution sensors to raise citizens' awareness

of environmental issues. Taiwan's environmental non-government organizations have also been actively working with civic tech activists on various projects. For example, Green Citizens' Action Alliance's [Thaubing Footprint](#)¹³ project aims at opening up government's data on pollution control and expanding civic participation in pushing the green economy. Citizen of the Earth collaborates with g0v participants on [Disfactory](#)¹⁴ to build a crowdsourcing platform for reporting illegal factories on farmland. These activists, communities, and organizations often exchange resources and experiences, which, as a result, constitutes a vibrant civic tech network.

Amongst these endeavors, a few projects have displayed the potential of civic tech to bring the civil society and the government into an open collaboration that challenges hierarchical and bureaucratic ways of delivering public services. Below are some case studies:

Cases of Cooperation between Civic Tech Communities and the Government in Taiwan

• Civic Tech Collaboration of Disaster Management

In early 2020, the breakout of the COVID-19 pandemic led to a public health crisis and caused a shortage of medical supplies around the world, including basic ones like medical face masks. In early February, 2020, the Taiwanese government soon implemented a mask rationing plan to equally distribute face masks to citizens and prevent irrational hoarding. The plan, like the pandemic, came in a sudden, and pharmacies were overflowing with people in panic. To prevent long queues and potential virus transmission while people were waiting in line, g0v participants worked with the government, which provided live stock data, to release dozens of face mask maps, apps, and chatbots for citizens to check the locations of pharmacies and the remaining stock online.¹⁵ With the technological aid from the civil society, the government was able to implement a rationing plan without too much chaos.

⁶ Mei-chun Lee, "Free the Data from the Birdcage: Opening Up Data and Crowdsourcing Activism in Taiwan," *PolAR: Political and Legal Anthropology Review* 43, no. 2 (September, 2020): 247–261.

⁷ "Sinar Project," <https://sinarproject.org/>

⁸ "Ushahidi," last modified July 18, 2023, <https://www.ushahidi.com/>

⁹ "What is g0v?," g0v, last modified December 17, 2022, <https://g0v.tw/intl/en/>.

¹⁰ Mei-chun Lee, "The 'Nobody' Movement: Digital Activism and the Uprising of Civic Hackers in Taiwan," PhD diss, (University of California, Davis, 2020).

¹¹ "Watchout," <https://watchout.tw/>

¹² "LASS," <https://lass-net.org/>

¹³ "Thaubing Footprint," last modified July 27, 2023, <https://thaubing.gcaa.org.tw/>

¹⁴ "Disfactory," last modified May 17, 2023, <https://disfactory.tw/#-map=14.00/120.48504632216294/24.08825881648228>

¹⁵ Mei-chun Lee, "Jiuzai de keji, xingdong de gongmin: yiqingxia gongmin de xiezuo yu ziji [Technology for Disaster Relief, Citizens in Actions: Citizens' Collaboration and Self-Help During the Pandemic]," *Streetcorner Sociology*, November 30, 2021, <https://twstreetcorner.org/2021/11/30/mei-chun-lee/>.

The above was not the first time that civic tech activists in Taiwan collaborate with governments in crisis management. In 2015, when a dust explosion occurred at a water park and caused hundreds of injuries, civic tech activists also worked with the government to build platforms for people to search which hospital the injured were sent to and which needed blood donation. In this type of collaboration, the government provided up-to-date open data through API,¹⁶ and civic tech activists built platforms for citizens to access information. Such civic tech collaboration during crises avoided the long process of government procurement to facilitate timely support, and the multiple choices of service civic tech offered also helped ease the burden of civil servants.¹⁷ This model of public-private collaboration via open data has since become a norm, which was constantly adopted when typhoons or earthquakes hit. It was no wonder that civic tech activists and civil servants in Taiwan could soon find ways to collaborate during the pandemic.

After the implementation of face mask maps, some civic tech activists deepened their collaboration with the government. In Tainan, a southern city of Taiwan, a civic tech activist worked with the local government to design a vaccine management platform that not only helped local health centers and hospitals to roll out vaccination but also provided citizens with hands-on tools – a website and a messaging chatbot – for making appointments. In addition to filling in the gap of public service, civic tech activists also played a supervision role as they kept a close eye on the government's handling of the pandemic and warned of potential violations of digital privacy and rights.

• Civic Tech Collaboration of Environmental Protection

The above civic tech collaborations took place during moments of crises, so these projects have a relatively short life. In comparison, environmental-related civic tech projects require continuous contribution and long-time collaboration. Projects like Airbox and Sourcing Water by LASS are good examples. LASS is a maker community that builds low-cost pollution sensors. It has teamed with local governments, schools, and corporations to build a civic tech ecosystem.

The first public-private collaboration LASS engaged in is Airbox, a low-cost, open-source IoT solution to air pollution. Before the creation of Airbox in 2016, people could only know about air quality through official information since only the government and research institutions could operate huge and expansive air quality monitoring stations. The number of these stations was small, and it was hard for people to know the air quality around where they lived. Airbox solved this problem. Airbox is designed by LASS makers, calibrated by researchers in Academia Sinica, and, with the coordination of the Taipei City government, mass-produced by corporations. With a size smaller than a football, Airbox collects live temperature, moisture, and PM 2.5 level to the cloud. The information is then

turned into open data and visualized on multiple online maps, where citizens can easily check air quality on their mobile phones. Besides general users, public schools also incorporate Airbox into science education. Today, there are over 2000 Airbox sensors connected to the cloud and provide live air quality information across Taiwan.¹⁸

With the successful experience of Airbox, LASS went on to develop Waterbox for water quality sensing in 2019. But this time, they were not content with simply opening up water pollution data. Beginning in 2020, LASS started to collaborate with different government agencies on water governance. Using the Touqian River as an example, LASS began a two-year partnership with the government to open up water and river-related data sets and developed an interactive online map, Sourcing Water, for users to navigate and utilize the data even without coding skills. The most important contribution of [Sourcing Water](#)¹⁹ was that it pushed the government to standardize data formats and exchange data-sets between agencies so that the government could pursue data-driven water governance. The collaborative culture brought in by LASS changed the way in which government agencies worked and interacted with each other. After the exemplary case of the Touqian River, LASS continues to initiate water governance collaboration in the major rivers of Taiwan, including the Tamsui River, the Zhuoshui River, the Zengwen River, and the Xiuguluan River.

¹⁶ API is the abbreviation for application programming interface. API is a software interface that mediates the interaction between different applications and facilitates exchange of data among them.

¹⁷ Mei-chun Lee and Poyu Tseng, *Taiwan Open Government Report* (Taipei: Open Culture Foundation, 2017), <https://opengovreport.ocf.tw/en/>.

¹⁸ Ibid.

¹⁹ "Sourcing Water," <https://sourcingwater.lass-net.org/>

• Civic Tech Collaboration of Law Making

The third example of civic tech collaboration with the government is vTaiwan, a website-based rule-making platform combined with online tools and offline meetings to deliberate on cyber-related laws. This project was proposed by a minister without portfolio Ms. Tsai Yu Lin in a g0v hackathon in 2014 and soon gathered a group of volunteers to build the platform.

vTaiwan²⁰ is a collaborative process between the government and g0v. When government agencies propose topics that are controversial and difficult to reach public agreements, such as the introduction of Uber, [the Science & Technology Law Institute](#),²¹ a government sponsored think tank, helps organize the materials into easily-digestible slides and documents. Then, the vTaiwan taskforce, formed by a group of g0v participants, facilitates conversations online and offline.²² vTaiwan adopts a multi-stakeholder approach. It uses digital and non-digital tools to facilitate conversations and build a consensus. Some of the tools they use include [Po.lis](#)²³ (a visualized tool to show online opinions in clusters), [Discourse](#)²⁴ (an online forum), and [Miro](#)²⁵ (an online whiteboard). After gathering opinions online, vTaiwan will hold stakeholder meetings to encourage offline conversations. These meetings use the [ORID](#)²⁶ (Objective, Reflective, Interpretive, Decisional) method and deliberation techniques to have focused conversations, and they are always live broadcasted. All the notes and documents will also be published online.

vTaiwan has dealt with 27 rule-making proposals since its launch in 2015, including proposals related to crowdfunding, online liquor sale, cyberbullying, and sharing economy. In their weekly meet-ups, civic tech activists and civil servants would sit side by side to discuss the best way of civic deliberation. Free from the restriction of bureaucracy, vTaiwan provided a space for civil servants to experiment with new tools and methods. It also exemplified how a digital democracy might work at the national legislative level. However, even though vTaiwan had a vibrant community behind the platform, its operation relied deeply on the political will of the authorities – to allow government agencies to make proposals and to enforce the conclusions made in the process. In 2018, new proposals from the government decreased significantly. Later in 2020, the vTaiwan meet-up was suspended due to the pandemic. Since then, vTaiwan has been inactive.

Challenges of Civic Tech Collaboration

One of the challenges civic tech collaboration in Taiwan encounters is its lack of a sustainable model. Among all the proposed or prototyped civic tech projects during the past decade, only a very small number of them can be put into effect, and even fewer have proceeded. Civic tech projects might cease to develop for various reasons, such as the lack of resources, flawed plans, no business model, or changing political environment. There has been a debate in Taiwan on whether or not civic tech should be a profitable product. Some believe that it will help civic tech develop its scale of impact but some worry that it might become another government procurement and lose its civic spirit. To boost incentives for civic tech innovations, the Taiwanese government has held hackathon competitions or fellowship programs to excite ideas and projects, such as the [Presidential Hackathon](#).²⁷ But how these one-time grants help civic tech grow into impactful projects is still a challenge. We need a sustainable model for civic tech so that civic tech collaboration will not be a flash in the pan.

The second challenge civic tech collaboration faces is how to integrate this new mode of private-public collaboration within the bureaucratic government. In other words, how can the government open a space that allows innovative experiments to take place on the one hand and still make it accountable on the other hand? So far, civic tech collaboration relies heavily on the political will of the authorities. Due to the bureaucratic culture of the Taiwanese government, civil servants dare not take innovative solutions. The success of these cases in this article depends on the willingness of a powerful government leader to enforce these projects and undertake political responsibilities. Although civic tech brings the idea of open collaboration into the government, the change of government culture is slow and can be easily interrupted once the political environment changes.

²⁰ "vTaiwan," last modified April 30, 2021, <https://vtaiwan.tw/>

²¹ "Science and Technology Law Institute," <https://stli.iii.org.tw/en/index.aspx>

²² Yu-Tang Hsiao et al., "vTaiwan: An Empirical Study of Open Consultation Process in Taiwan," *SocArXiv xyhft, Center for Open Science* (July 2018).

²³ "Polis," <https://pol.is/home>

²⁴ "Discourse," last modified July 27, 2023, <https://www.discourse.org/>

²⁵ "Miro," [https://miro.com/?utm_source=google&utm_medium=cpc&utm_campaign=S\[G00\]BRN|WW|EN-EN|Brand|Exact&utm_adgroup=&utm_customer=18261731950&utm_content=620264720767&utm_term=miro&device=c&location=9040379](https://miro.com/?utm_source=google&utm_medium=cpc&utm_campaign=S[G00]BRN|WW|EN-EN|Brand|Exact&utm_adgroup=&utm_customer=18261731950&utm_content=620264720767&utm_term=miro&device=c&location=9040379)

²⁶ "ORID," <https://extensionaus.com.au/extension-practice/the-orid-method-objective-reflective-interpretive-and-decisional/>

²⁷ "Presidential Hackathon," <https://presidential-hackathon.taiwan.gov.tw/en/>

Policy Recommendations and Conclusion

Taiwan's experiences with civic tech have shown its potential to encourage civic participation, bring innovations into public service, and deepen democracy. Civic tech is a way to democratize technology. By putting the government and the civil society as equal and encouraging their collaboration, civic tech shows an alternative to digital authoritarianism that uses technology to survey, censor, and control people.

There are several things governments around the world can do to invite the talented to join the collaboration. First, governments can build the civic tech infrastructure by opening up government data and committing to open government initiatives. Second, governments have to show their openness to make a change. The goal of civic tech is to establish equal and collaborative relationships with the government, not to provide IT services for free. Lastly, governments can open up spaces for civic tech collaboration, which can be in the form of hackathons, fellowships, or some other new approaches.

Reference

- Andrew R. Schrock, "Civic Hacking as Data Activism and Advocacy: A History from Publicity to Open Government Data," *New Media & Society* 18, no. 4 (February 2016): 581–599.
- "Discourse," last modified July 27, 2023, <https://www.discourse.org/>
- "Disfactory," last modified May 17, 2023, <https://disfactory.tw/#-map=14.00/120.48504632216294/24.08825881648228>
- Fa-ti Fan, Shun-Ling Chen, Chia-Liang Kao, Michelle Murphy, Matt Price, and Liz Barry, "Citizens, politics, and civic technology: A conversation with g0v and EDGI," *East Asian Science, Technology and Society: An International Journal* 13, no. 2 (October 2019): 279–297.
- "LASS," <https://lass-net.org/>
- Mei-chun Lee and Poyu Tseng, *Taiwan Open Government Report* (Taipei: Open Culture Foundation, 2017), <https://opengovreport.ocf.tw/en/>.
- Mei-chun Lee, "Jiuzai de keji, xingdong de gongmin: yiqingxia gongmin de xiezuo yu zijiu [Technology for Disaster Relief, Citizens in Actions: Citizens' Collaboration and Self-Help During the Pandemic]," *Streetcorner Sociology*, November 30, 2021, <https://twstreetcorner.org/2021/11/30/mei-chun-lee/>.
- Mei-chun Lee, "The "Nobody" Movement: Digital Activism and the Uprising of Civic Hackers in Taiwan," PhD diss, (University of California, Davis, 2020).
- Mei-chun Lee, "Free the Data from the Birdcage: Opening Up Data and Crowdsourcing Activism in Taiwan," *PoLAR: Political and Legal Anthropology Review* 43, no. 2 (September, 2020): 247–261.
- "Miro," https://miro.com/?utm_source=google&utm_medium=cpc&utm_campaign=SIGOO|BRN|W-W|EN-EN|Brand|Exact&utm_adgroup=&utm_custom=18261731950&utm_content=620264720767&utm_term=miro&device=c&location=9040379
- "ORID," <https://extensionaus.com.au/extension-practice/the-orid-method-objective-reflective-interpretive-and-decisional/>
- "Polis," <https://pol.is/home>
- "Presidential Hackathon," <https://presidential-hackathon.taiwan.gov.tw/en/>
- "Science and Technology Law Institute," <https://stli.iii.org.tw/en/index.aspx>
- "Sinar Project," <https://sinarproject.org/>
- "Sourcing Water," <https://sourcingwater.lass-net.org/>
- Stefania Milan and Lonneke Van der Velden, "The alternative epistemologies of data activism," *Digital Culture & Society* 2, no. 2 (October 2016): 57–74.
- "Thaubing Footprint," last modified July 27, 2023, <https://thaubing.gcaa.org.tw/>
- "Ushahidi," last modified July 18, 2023, <https://www.ushahidi.com/>
- "vTaiwan," last modified April 30, 2021, <https://vtaiwan.tw/>
- "Watchout," <https://watchout.tw/>
- "What is g0v?," g0v, last modified December 17, 2022, <https://g0v.tw/intl/en/>
- Yu-Tang Hsiao, Shu-Yang Lin, Audrey Tang, Darshana Narayanan, and Claudina Sarahe, "vTaiwan: An Empirical Study of Open Consultation Process in Taiwan," *SocArXiv* (July 2018).

LOMBA MONITORING MARATON

#PantauDataPengadaan

Apakah di sekitar wilayah kamu terdapat jalan yang baru dibangun? Apakah jembatan menuju ke sekolahmu sudah diperbaiki? Apakah Pemerintah Daerah kamu sudah membangun fasilitas publik?

Untuk mencari tahu, mari kita pantau pengadaan barang/jasa!



Persyaratan:

1. Setiap tim beranggotakan 2-5 orang (minimal, 50%-nya adalah perempuan dan/atau minoritas gender lainnya)
2. Peserta adalah mahasiswa atau profesional
3. Pendaftaran di [https:// bit.ly/PantauDataPengadaan](https://bit.ly/PantauDataPengadaan)



Waktu Pelaksanaan:



DAFTAR SEKARANG!

NARAHUBUNG: +6285843003084

TOTALHADIAH

22.500.000,-



© This picture is made by Indonesia Corruption Watch and FNF is authorized to publish it under CC BY-NC-ND 4.0 license.

3. Combating Corruption Through Civic Technology in Indonesia

Kes Tuturoong

Officer of Knowledge Management Division, Indonesia Corruption Watch

Wana Alamsyah

Head of Knowledge Management Division, Indonesia Corruption Watch

Introduction

Public procurement is a crucial sector where the government performs its mandate to provide public services for citizens. A research conducted by Open Contracting Partnership and Spend Network on “How governments spend: Opening up the value of global public procurement” revealed that the world’s total annual public procurement spending is approximately US\$13 trillion.¹ In the context of Indonesia, the government allocated public procurement spending around 45 percent out of the total national budget.² The enormous budget allocated for public

procurement makes this sector vulnerable to corruption when exercised without due transparency and accountability from the government.

¹ Open Contracting Partnership and Spend Network, *How governments spend: Opening up the value of global public procurement* (Washington: Open Contracting Partnership, 2022), <https://www.open-contracting.org/what-is-open-contracting/global-procurement-spend/>.

² UNODC Regional Office for Southeast Asia and the Pacific. “Public Procurement Reform in Indonesia,” *United Nations Office on Drugs and Crime*, December 8, 2020, <https://www.unodc.org/roseap/en/what-we-do/anti-corruption/topics/2020/public-procurement-reform-indonesia.html>.

In 2014, Organisation for Economic Co-operation and Development (OECD) published a report regarding the Foreign Bribery³ which revealed that 57 percent of bribery cases occurred to secure public procurement. A similar condition also happened in Indonesia. During 2004-2019, 70 percent of corruption cases investigated by Corruption Eradication Commission involved public procurement, and 65 percent of them involved bribery. Deep-rooted corruption problems in Indonesia require all layers of society to participate in eradicating it and all kinds of corruption prevention measures embedded in government procurement processes - especially in the era of digital governance where the public and civil society can participate in shaping the government using civic tech.

The Rise of Civic Tech Communities in Indonesia

Civic Technology, or digital civic engagement where citizens exercise democracy by using digital and online tools to influence public policies, began flourishing in Indonesia since the Internet started to become more available to the people. In 1998, the *Reformasi* students movement forced President Soeharto to resign after 32 years of his New Order regime.⁴ The *Reformasi* movement was dubbed “the first revolution using the Internet” as activists tried to counter the regime’s monopoly of information by developing multiple alternative channels as public sources of information, including the mailing lists Apakabar.net, KDPNet, and SiaR.⁵

After Reformasi, civic tech continued to thrive with various initiatives emerging over the years. In 2014, a number of Internet activists and CSOs collaborated to kickoff the Kawal Pemilu (*Guard the Election*) initiative and mobilize more than 10,000 participants to upload a photo of their voting booth counting results to the website kawalpemilu.org. The movement was designed to prevent electoral fraud in regency and provincial counting centers. The platform received the Open Data Impact Award⁶ for organizing more than 700 volunteers to enumerate data and provide a way for people to compare voting results from official tallies with independent results.⁷

The website itself is no longer online; however, the source code is archived in Github.⁸ And as government electoral bodies continue to do very poorly in publishing standardized data, The Association for Election and Democracy (Perludem) initiated an application programming interface (API) of electoral candidates called Pemilu API for the 2014 election using data collected from the Electoral Commission (KPU). It was also decommissioned after the 2014 election and now archived in Github.⁹ Indonesia Corruption Watch (ICW) has also carried over further election monitoring initiative by engaging journalists to build a database of tracking results of public officials and electoral candidates in a platform called [Rekam Jejak](#),¹⁰ which translates as *track record*.

Then in 2017, a number of leading investigative news outlets and CSOs collaborated to build an independent whistle-blowing system called [IndonesiaLeaks](#).¹¹ The platform receives initial reports from the public then the team builds their cases with investigative reporting. IndonesiaLeaks’ report on a scandal within the Corruption Eradication Commission (KPK) received the Indonesian Udin Journalism Award¹² in 2019 for its significant impact on public interest. The investigation focused on a high-stakes case known as the red book scandal, referring to a red financial records book that kept tabs of an alleged graft implicating the police chief, which was tampered and had pages torn while in KPK evidence storage.¹³

Civic Tech is a Movement for Better Democracy and Good Governance

Over the years, Indonesian government offices have encouraged civic tech development while also developing gov tech initiatives. In December 2015, one of the organizers behind KawalPemilu.org, [Code4Nation](#),¹⁴ engaged with various government offices to organize a series of [Hackathon Merdeka](#)¹⁵ events (*Merdeka* means freedom or independence in Indonesia). Hackathon Merdeka 1.0 was organized in collaboration with the President’s Office to find solutions to government’s problems with a particular focus on management of commodities. It was quickly followed with Hackathon Merdeka 2.0 where they collaborated with the Coordinating Ministry for Political, Legal, and Security Affairs to focus on solving wider public services problems. Hackathon Merdeka 3.0 took place in the office of the National Public Procurement Agency (LKPP) where Code4Nation collaborated with ICW and KPK to prevent corruption in public services.

³ OECD, *OECD Foreign Bribery Report: An Analysis of the Crime of Bribery of Foreign Public Officials* (Paris: OECD Publishing, 2014), https://read.oecd-ilibrary.org/governance/oecd-foreign-bribery-report_9789264226616-en.

⁴ Iffah Nur Arifah, “Reformasi: 20 years after the fall of Suharto, activists reflect on Indonesia’s reforms,” *ABC News*, May 21, 2018, <https://www.abc.net.au/news/2018-05-21/activists-look-back-on-20-years-of-reform-in-indonesia/9783462>.

⁵ Merlyna Lim, “The Internet and Political Activism in Indonesia,” PhD diss. (University of Twente, 2005), https://ris.utwente.nl/ws/portalfiles/portal/6071353/Lim_thesis.pdf.

⁶ Auralice Graft, Stefaan Verhulst and Andrew Young, *Indonesia’s Kawal Pemilu* (New York: The GovLab Open Data Impact Repository, 2016), <https://odimply.org/case-indonesias-kawal-pemilu.html>.

⁷ Fanny Potkin, “Thwarting Fraud: Thousands to Crowd-Source Indonesian Election Results,” *Reuters*, April 16, 2019, <https://www.reuters.com/article/cnews-us-indonesia-election-volunteers-idCAKCN1RS0LU-OCATP>.

⁸ “Kawal Pemilu”, Github, <https://github.com/kawalpemilu>

⁹ “Pemilu API”, Github, <https://github.com/pemiluAPI>.

¹⁰ “Rekam Jejak”, <https://www.rekamjejak.net>.

¹¹ “IndonesiaLeaks,” last modified May 31, 2023, <https://indonesialeaks.id/index.html#about-us>

¹² Lani Diana Wijaya, “Investigasi Buku Merah Bawa IndonesiaLeaks Terima Udin Award”, *Tempo*, August 8, 2019, <https://nasional.tempo.co/read/1233428/investigasi-buku-merah-bawa-indonesialeaks-terima-udin-award>.

¹³ Ricky Mohammad Nugraha, “KPK Claims It Has No Authority in Red Book Scandal Inquiry,” *Tempo*, October 25, 2019, <https://en.tempo.co/read/1264186/kpk-claims-it-has-no-authority-in-red-book-scandal-inquiry>.

¹⁴ “Code4Nation,” Twitter, <https://twitter.com/code4nation>

¹⁵ “Hackathon Merdeka 3.0,” last modified December 8. 2015, <http://hackathonmerdeka.id/>

Many of the solutions developed from these events were sound and applicable to identify potential corruption and prevent corrupt practices. Ideally, solutions developed in Hackathon would be adopted by relevant offices as official practices. However, in most cases, the relevant office lacked the resources to adopt and maintain the systems. At best, some capable offices would develop their own systems by taking into consideration the concepts developed in Hackathon.

In an example of optimal collaboration between government and civil society in developing long-term civic tech projects, LKPP and ICW signed a Memorandum of Understanding to encourage data sharing, data publication, and public monitoring of national procurement process. The MoU was first signed in March 2013 as LKPP and ICW launched the first iteration of a collaborative platform called *Opentender*¹⁶ with periodically generated data provided by LKPP and analysis developed by ICW. All data made available in *Opentender* is published under the Open Data Commons Open Database License (ODbL) to ensure public use of data. The ODbL is a database license developed by the Open Knowledge Foundation to guarantee the user's freedom to share, create, and adapt a database.¹⁷

Building Trust as a Critical Counterpart

This partnership started in 2010 when the government issued a regulation requiring all public procurement to be processed in an information system called the Electronic System Procurement Service (SPSE). After the data was made available, ICW began to collect data manually by typing the data into a spreadsheet, since the website prevented copying text and data scraping was not an option at the time.

Tabulated data was analysed with a risk score based on quantitative indicators called Potential Fraud Analysis (PFA) method¹⁸ which was developed by ICW. At the time, PFA only had two indicators developed from ICW's research on corruption in public procurement. ICW presented the results of the analysis to the LKPP as a pathway to push the government to share the data with civil society. Upon receiving the results of the analysis, LKPP agreed to collaborate and share data under the provision of a Memorandum of Understanding (MoU).

Now, *Opentender* analyses more than 5 million datasets from 4 different types of procurement (goods, services, construction, and consultation) and 4 different methods (tender, direct procurement, direct appointment, and e-purchasing), all synchronized with LKPP systems.

In the current version, *Opentender* uses 7 indicators to analyze tender data. New indicators in PFA were also developed from ICW's further research as well as adopting from international documents, such as the Open Contracting Red Flag Indicators.¹⁹ In version 3.1, *Opentender*

started to provide a dashboard which measured competition, market opportunity, efficiency, and value for money.

The collaboration between LKPP and ICW has evolved beyond the initial MoU as they continue to use other frameworks to develop further collaboration. LKPP and ICW participate in the National Corruption Eradication Strategy²⁰ (Stranas PK) to improve adoption of e-procurement in sub-national governments, as well as continuous collaboration in Open Government Partnership action plans on Open Contracting, including to develop a national blacklist system (2015), open data projects in Bandung (2016) and Bojonegoro (2017), standards for procurement documents and information on all procurement process (2018), management of emergency procurement (2020), and currently on e-catalogue monitoring and complaint handling mechanism (2022).²¹

The 2018 commitment on procurement standards was achieved in 2021, when for the first time, Indonesian government specifically classified procurement documents as public documents.²² The new Information Commission Regulation on Public Information Service Standard of 2021 (PERKI SLIP No. 1/2021) replaced the same regulation from 2010 and specified 39 types of procurement documents that should be published by a public body.²³ Publication of these documents is crucial as most corruption cases involve document manipulation. Moreover, availability of these documents will encourage citizens' involvement in monitoring of procurement. In 2021, the collaboration between LKPP and ICW was globally recognized as best practice in co-creation and won the 2nd place at the 2021 OGP Award.²⁴

¹⁶ "Opentender", <https://opentender.net>.

¹⁷ "Open Database License (ODbL) Summary," Open Data Commons, Open Knowledge Foundation, last modified March 31, 2022, <https://opendatacommons.org/licenses/odbl/summary/>.

¹⁸ "Metode Open Tender," *Opentender*, <https://opentender.net/method/>.

¹⁹ Open Contracting Partnership and Development Gateway, *Red Flags for Integrity: Giving the Green Light to Open Data Solutions* (Washington: Open Contracting Partnership, 2016), <https://www.open-contracting.org/resources/red-flags-integrity-giving-green-light-open-data-solutions/>.

²⁰ Stranas PK, *Laporan Pelaksanaan Strategi Nasional Pencegahan Korupsi Triwulan III Tahun 2019* (Jakarta: Stranas PK, 2019), <https://stranaspk.id/publikasi/laporan-aksi/laporan-pelaksanaan-strategi-nasional-pencegahan-korupsi-triwulan-iii-tahun-2019>.

²¹ "Current Action Plans," Indonesia, Open Government Partnership, <https://www.opengovpartnership.org/members/indonesia/>.

²² Indonesia Corruption Watch, "Public Procurement Contract Is Expressly Public Information," *Indonesia Corruption Watch*, August 12, 2021, <https://antikorupsi.org/en/article/public-procurement-contract-expressly-public-information>.

²³ "Regulasi," Mahkamah Agung Republik Indonesia, <https://eppid.mahkamahagung.go.id/web/regulasi>.

²⁴ "Open Government Awards," Open Government Partnership, <https://www.opengovpartnership.org/open-government-awards/>.

Digitalisation: Leverage Factor to Push Transparency and Accountability

Aside from developing the monitoring platform as well as the policies required as the enabling environments to encourage public participation, ICW and LKPP have also learned from their experience in Hackathon Merdeka 3.0 and developed a new strategy for public engagement with Monithon events since 2021.²⁵ Monithon events were the serial initiatives held by ICW and LKPP. Instead of developing software, in a Monithon, participants would get into teams that initiate a public investigation of specific public procurement projects identified from Opentender as ICW and LKPP ensure that related government offices follow-up on the resulting investigation reports initiated by participants.

This process loops back the public as the beneficiaries of services provided in public procurement and ensures that the public receives services optimally and prevents corruption and fraud in the process. In the first event in August 2021, 41 teams registered to participate, including teams of students, journalists, researchers, CSO workers, and civil servants.

Presently, ICW is adopting the Monithon model into Opentender itself by developing a complaint handling mechanism that would be integrated with governments reporting systems and be followed up by the respective inspectorate offices (internal auditors). Any findings resulting from citizens scrutiny would be filed for initial review and submitted to relevant government inspectorate officers or law enforcement offices when a stronger indication is found. When completed, an integrated complaint handling system could help the government to minimize corruption in public procurement.

The collaboration between LKPP as a government authority and ICW as civil society representation in developing sustainable civic tech projects facilitates the public to monitor public procurement in two ways: First, Opentender definitely makes it easier for the public to monitor procurement since it is the only platform that integrates 4 systems owned by the government, from the planning until award process. During 2021-2022, ICW's Monithon events mobilized citizens to monitor 630 projects and compiled 123 reports that were submitted to LKPP. Second, citizens can easily access information regarding the board of a company who won a procurement contract. Company information is usually difficult to be accessed, and it mostly depends on the willingness of the company to declare. However, this information is very useful for CSOs, journalists, academics, and citizens in general to carry out monitoring, especially in order to analyze potential conflicts of interest or collusion between companies and procurement committees.

Policy Recommendations

• Government Should Share Data by Following Common Data Standards

As corruption is a transnational crime, it is the collaboration between civil society and the government that opens up opportunities to replicate such best practice models in promoting good governance and democracy in other countries. Therefore, it is important for every country to be able to open procurement contracts by using common data standards to make it easier for the public to carry out oversight with a good quality work.

• Open Data Standards Should Be Applied to All Public Data

The procurement sector covers a wide range of issues, so other data such as data on education, health, natural disaster mitigation or those related to sustainability need to be available in a form fulfilling open data standards. By doing so, procurement data and public service data can be overlaid and thereby people can produce a comprehensive and holistic analysis in solving problems.

• Citizen Participation Is Essential

The public also needs to be involved in monitoring procurement. The first thing that can be done is to mainstream procurement issues and provide capacity building for the public. Each CSO group can play an active role in reporting irregularities that occur in procurement, as has been done in Ukraine through the [Dozzoro](#)²⁶ platform.

Although perpetrators will continue to exploit loopholes in the system for corruption, if sustainable and impactful civic tech projects are developed involving all stakeholders, including civil society and the government, quality public services, reducing the poverty gap, and equal opportunities in procurement for companies, are not merely utopian dreams.

²⁵ Indonesia Corruption Watch, "41 Tim Ikuti Lomba Monithon Opentender," *Indonesia Corruption Watch*, August 23, 2021, <https://antikorupsi.org/id/article/41-tim-ikuti-lomba-monithon-opentender>.

²⁶ "Dozzoro Ukraine Public Procurement Oversight Platform", <https://dozzoro.org/>.

Reference

- Auralice Graft, Stefaan Verhulst and Andrew Young, *Indonesia's Kawal Pemilu* (New York: The GovLab Open Data Impact Repository, 2016), <https://odimpact.org/case-indonesias-kawal-pemilu.html>.
- "Code4Nation," Twitter, <https://twitter.com/code4nation>
- "Current Action Plans," Indonesia, Open Government Partnership, <https://www.opengovpartnership.org/members/indonesia/>.
- "Dozorro Ukraine Public Procurement Oversight Platform", <https://dozorro.org/>.
- Fanny Potkin, "Thwarting Fraud: Thousands to Crowd-Source Indonesian Election Results," Reuters, April 16, 2019, <https://www.reuters.com/article/cnews-us-indonesia-election-volunteers-idCAKCN1RS0LU-OCATP>.
- "Hackathon Merdeka 3.0," last modified December 8, 2015, <http://hackathonmerdeka.id/>
- Iffah Nur Arifah, "Reformasi: 20 years after the fall of Suharto, activists reflect on Indonesia's reforms," ABC News, May 21, 2018, <https://www.abc.net.au/news/2018-05-21/activists-look-back-on-20-years-of-reform-in-indonesia/9783462>.
- Indonesia Corruption Watch, "41 Tim Ikuti Lomba Monithon Opendender," Indonesia Corruption Watch, August 23, 2021, <https://antikorupsi.org/id/article/41-tim-ikuti-lomba-monithon-opentender>.
- Indonesia Corruption Watch, "Public Procurement Contract Is Expressly Public Information," Indonesia Corruption Watch, August 12, 2021, <https://antikorupsi.org/en/article/public-procurement-contract-expressly-public-information>.
- "IndonesiaLeaks," last modified May 31, 2023, <https://indonesialeaks.id/index.html#about-us>
- "Kawal Pemilu", Github, <https://github.com/kawalpemilu>.
- Lani Diana Wijaya, "Investigasi Buku Merah Bawa IndonesiaLeaks Terima Udin Award", Tempo, August 8, 2019, <https://nasional.tempo.co/read/1233428/investigasi-buku-merah-bawa-indonesialeaks-terima-udin-award>.
- Merlyna Lim, "The Internet and Political Activism in Indonesia," PhD diss, (University of Twente, 2005), https://ris.utwente.nl/ws/portalfiles/portal/6071353/Lim_the-sis.pdf.
- "Metode OpenTender," Opendender, <https://opentender.net/method/>.
- "Open Database License (ODbL) Summary," Open Data Commons, Open Knowledge Foundation, last modified March 31, 2022, <https://opendatacommons.org/licenses/odbl/summary/>.
- "Open Government Awards", Open Government Partnership, <https://www.opengovpartnership.org/open-government-awards/>.
- "Opendender", <https://opentender.net>.
- OECD, *OECD Foreign Bribery Report: An Analysis of the Crime of Bribery of Foreign Public Officials* (Paris: OECD Publishing, 2014), https://read.oecd-ilibrary.org/governance/oecd-foreign-bribery-report_9789264226616-en.
- Open Contracting Partnership and Development Gateway, *Red Flags for Integrity: Giving the Green Light to Open Data Solutions* (Washington: Open Contracting Partnership, 2016), <https://www.open-contracting.org/resources/red-flags-integrity-giving-green-light-open-data-solutions/>.
- Open Contracting Partnership and Spend Network, *How governments spend: Opening up the value of global public procurement* (Washington: Open Contracting Partnership, 2022), <https://www.open-contracting.org/what-is-open-contracting/global-procurement-spend/>.
- "Pemilu API", Github, <https://github.com/pemiluAPI>.
- "Regulasi", Mahkamah Agung Republik Indonesia, <https://eppid.mahkamahagung.go.id/web/regu> Ricky Mohammad Nugraha, "KPK Claims It Has No Authority in Red Book Scandal Inquiry," Tempo, October 25, 2019, <https://en.tempo.co/read/1264186/kpk-claims-it-has-no-authority-in-red-book-scandal-inquiry>.
- Stranas PK, *Laporan Pelaksanaan Strategi Nasional Pencegahan Korupsi Triwulan III Tahun 2019* (Jakarta: Stranas PK, 2019), <https://stranaspk.id/publikasi/laporan-aksi/laporan-pelaksanaan-strategi-nasional-pencegahan-korupsi-triwulan-iii-tahun-2019>.
- UNODC Regional Office for Southeast Asia and the Pacific. "Public Procurement Reform in Indonesia," United Nations Office on Drugs and Crime, December 8, 2020, <https://www.unodc.org/roseap/en/what-we-do/anti-corruption/topics/2020/public-procurement-reform-indonesia.html>.

Visor Urbano Jalisco

Aquí podrás conocer los requisitos aplicables para abrir tu negocio y tramitar tu licencia totalmente en línea.

Conoce los requisitos



Bloomberg
Philanthropies


Jalisco
GOBIERNO DEL ESTADO

© This picture is made by Visor Urbano and FNF is authorized to publish it under CC BY-NC-ND 4.0 license.

4. Democratizing Technological Solutions: Civic Tech Community & Government Cooperation in Mexico

Daniela Ramirez

Communications Coordinator, Visor Urbano

David Bates

Outreach Coordinator, Visor Urbano

When looking out for methods of solving challenges of the public sector through technology, people should put connectivity as their top priority so that access to digital solutions can be inclusive, equitable, and transformative. That is also what civic tech aims to achieve. Given that civic tech seeks to generate a positive transformation in public life, the impact of its projects must be accessible to the majority since only with the participation of the citizens can we promote participatory decision-making and shape new public policies based on evidence. We will use Visor Urbano as an example to demonstrate why connectivity, accessibility, and participation of citizens, governments, and all the stakeholders are crucial elements

of public digital services co-created by governments and civil society.

Civic Tech Communities in Mexico

The consolidation of the civic tech ecosystem in Mexico is the result of the effort and dedication of different communities that emerged around 2013, when representatives of civil society, academics, technologists, and other profiles began to question the decisions and destination of government resources, particularly those that were related

to technological development to improve resident's lives. Thanks to this movement, several open innovation projects and initiatives could exist, such as public challenges, calls, and hackathons to encourage the development of digital solutions to social and environmental issues, where everyone could participate. Likewise, governments at the federal and state levels began to contribute to the ecosystem and published portals with open data from various government departments and agencies for free public use. This is how a new dialogue and relationship between civil society and the government began to develop and became fundamental pillars to foster citizen participation, which today has the potential to shape national and state digital strategies.

Internet Infrastructure as an Essential Basis to an Environment for Civic Tech

In 2013, article six of the Mexican Constitution included the constitutional guarantee of citizens' access to information, communication technologies, and broadband internet and the regulation for effective competition in such services. However, by 2020, only 52.1% of homes in Mexico had internet access.¹

The same year, the State of Jalisco which is located in western Mexico and is one of the top contributors to Mexico's GDP, has been also included in the Digital State Agenda promoted by the General Coordination of Government Innovation² and thus began the deployment of infrastructure for the [Red Jalisco](#)³ project. The project's objective is to provide free internet to the 125 municipalities of the state in their city halls and government offices, schools, health centres, police stations, and public places of recreation. This involved deploying more than 5,550 km of optical fiber infrastructure through public-private collaboration.

The Red Jalisco program has been recognized and awarded nationally in telecommunications development. Its value also lies in promoting different Open Government strategies and public policies of cooperation with the private sector; to democratize digital adoption in society and improve the quality of public services through technology in urban and rural territories. Moreover, it also enabled the most significant collaboration between a civic technology solution and the government in Mexico, a digital platform called *Visor Urbano* – in English translated as Urban Display – which is now available in 30 cities within the state and is entirely free of charge for municipalities.

Visor Urbano: an Example of Cooperation between Civic Tech Communities and the Government

[Visor Urbano](#)⁴ is a digital platform for land use management. This project began in Guadalajara, the capital of Jalisco, a city with 1.4 million inhabitants and a floating population of 3 million, where bureaucratic and political corruption enabled chaotic real estate development, pushing citizens to demand greater transparency and better procedural practices in urban development from the government.

With the objective of tackling corruption, the platform was designed to promote transparency and access to public information on urban development by using Geographic Information Systems (GIS).⁵ Thanks to its different features, *Visor Urbano* can help citizens to easily identify and highlight any irregular constructions or businesses on the city's map and give them the tools to participate in the development and preservation of their city actively. This was achieved by making the process for business and construction permits entirely online to cut off the corruption derived from the procedures and by facilitating public access to information more efficiently and free of charge.

With this solution, Guadalajara was one of the five winners of the Bloomberg Philanthropies 2016 Mayors Challenge.⁶ After two years, it obtained meaningful outcomes supported by an impact evaluation study from Columbia University,⁷ which demonstrated how *Visor Urbano* decreased bribery requests and corruption in Guadalajara by at least 74%, while optimizing the time required to receive permits by 84%, going from an average of three months to only a few days to get a license.

Initially, the platform was a solution designed specifically for Guadalajara according to its context and needs. After its success in the city, the scope and benefits of *Visor Urbano* began to attract the attention of civil society, institutes, universities, and even government commissions.

¹ "Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares (ENDUTIH) 2021 [National Survey on the Availability and Use of Information Technology in Households (2021)];" National Institute of Statistics and Geography, last modified December 1, 2022, <https://www.inegi.org.mx/programas/dutih/2021/>.

² It is the government department that has been in charge of providing innovation and technology solutions and projects in the State of Jalisco.

³ "Red Jalisco," <https://red.jalisco.gob.mx/>

⁴ "Visor Urbano Jalisco," last modified July 5, 2023, <https://visorurbano.jalisco.gob.mx/inicio>

⁵ "Geographic Information Systems, or GIS, are computer and software tools for gathering and analyzing data connected to geographic locations and their relation to human or natural activity on Earth," quoted from "GIS," Heavy.AI, <https://www.heavy.ai/technical-glossary/gis>.

⁶ "Bloomberg Philanthropies' Mayors Challenge is a competition designed to spark innovative, replicable ideas for improving cities, and the lives of people living in them, by encouraging leaders to think outside the box about how to confront their most difficult challenges," quoted from "Mayors Challenge," Bloomberg Cities Network, Johns Hopkins University, <https://bloombergcities.jhu.edu/mayors-challenge>.

⁷ Mellon Jonathan and Lara García Francisco, "Evaluation of the Guadalajara Visor Urbano Commercial Permitting System's Effect on Corrupt Practices," *Delivery Associates*, 2018, https://visorurbano.com/formatos/Visor_Urbano_Impact_Evaluation_Delivery.pdf.

A Collaboration of Civil Society, Businesses, and Academics

The achievements of *Visor Urbano* rely on the contributions from civil society, business, and academics, for their willingness to share their knowledge and experience and to collaborate together with the developing team to continuously improve the digital platform. Some of the most critical contributors of *Visor Urbano* continue shaping the platform, and they are listed as follows:

The first one is [ANADE](#),⁸ National Association of Corporate Lawyers. The Association contributed to this project by providing a legal point of view, which is necessary for every government's urban development policies and building control standards.

The second one is [AMPI](#),⁹ Mexican Association of Real Estate Professionals. The Association focuses on strengthening the development of the platform tools that generate knowledge and data for the real estate market projections, as its transparency allows people to identify opportunity areas through having quick access to public information on a land use georeferenced map.¹⁰ Before *Visor Urbano* existed, people would be charged around 500 USD for requiring any information. Now, citizens are able to process construction permit procedures for urban development online through the platform. It is essential to point out that any citizen has free access to the tools, whether they work for a real estate agent or not.

The third one is [the University of Guadalajara](#):¹¹ The active participation of future professionals, such as undergraduate students, as active members of civil society, has contributed significantly to this platform. Through forums, panels, and workshops with specialists in diverse fields, they helped to investigate and frame the scope of challenges to be solved both in urban planning and public administration, thereby co-creating more sustainable cities through the use of technology.

As for people working in the government, the success in the implementation and replication of *Visor Urbano* resulted from knowledge of creating the incentives to gear up bureaucracy work and of enhancing users' understanding of the laws that give clear guidance on the whole process. Only in this way efficient digital processes can be designed, and the bureaucratic biases of years of bad practices will not be replicated and legally enforceable.

The team of *Visor Urbano* knows that disruptive solutions are not achieved by planning on paper. Context, realities, and practical processes must be understood instead of merely applying the theory on paper. As a result, the team has visited around 50 municipalities to model user-centered design processes. One key learning in the implementation process was to understand people's demands: it is essential to facilitate cooperation and collaboration from a diverse network of citizens at the local level.

Thanks to the collaborations with these contributors from different disciplines and with different backgrounds, *Visor Urbano* has become a flexible and dynamic solution. Moreover, with a multidisciplinary team specialized in urbanism co-design solutions with civil society, this platform implemented by different local governments successfully facilitated the interaction between governments and citizens.

Finally, it is necessary to develop solutions by collaboration with the people, for it will also cultivate a working model that builds up a healthy ecosystem. For example, by collaborating with various actors and institutions, *Visor Urbano* became a more participatory technology. The platform was designed to be resilient enough to navigate challenges from different perspectives and with more significant potential to generate a positive impact. This mindset of developing a technology solution in collaboration with the people will also diversify the development costs because civil society, governments, and businesses can contribute their part of efforts; moreover, such mindset will expand the returns of the technological solution that generates an impact on the largest amount of people.

A Platform Evolves According to User Experience

In the municipality of San Pedro Garza García,¹² a city in a state serves as the second largest contributor of Mexico's GDP— Nuevo León, *Visor Urbano* plays a crucial role in initiating construction plans. *Visor Urbano* acts as a translator between the government and citizens: the platform compiles and makes complex territorial information available online in a simple, friendly, and georeferenced way.

In other municipalities such as Tepatitlán de Morelos¹³ in Jalisco, *Visor Urbano* works as a fundamental mechanism for the tax collection, transparency, accountability, and the creation of public policies. In addition, it has allowed people to plan sustainable urban development for the city's accelerated growth challenges.

⁸ "Asociación Nacional de Abogados de Empresa - ANADE," <https://anade.org.mx/>

⁹ "AMPI – Profesional inmobiliario en México," <https://ampi.org/>

¹⁰ A georeferenced map means that the map is equipped with the geographic coordinate system. With the system, users can easily find the exact location on the surface of the Earth of any specific place on the map. You can learn more on the website of United States Geological Survey: "What does 'georeferenced' mean?," United States Geological Survey, <https://www.usgs.gov/faqs/what-does-georeferenced-mean>.

¹¹ It is a public institution of middle-higher and higher education that is based in the Metropolitan Area of Guadalajara with a presence throughout the state of Jalisco.

¹² City in the state of Nuevo León, where a replication platform of *Visor Urbano* was firstly implemented in 2019. Website: "Visor San Pedro Garza García," San Pedro, <https://visorurbano.sanpedro.gob.mx/>.

¹³ City in the north of Jalisco. *Visor Urbano* was replicated in 2020. Website: "Visor Urbano," last modified October 26, 2021, <https://tepatitlan.visorurbano.com>.

The previous three cities, the municipality of San Pedro Garza García, Tepatitlán de Morelos in Jalisco, and Guadalajara City, share commonalities in the implementation of *Visor Urbano*: the institutional will to generate a systematic change and adapt their regulatory framework to new technologies, human capacities in technologies of information, the infrastructure, and economic capital to finance the work of gathering data altogether and structuring databases that effectively receive and compile inputs to operate the platform. Finally, *Visor Urbano*'s open-source software also offers excellent help.

The most critical challenges arrived when *Visor Urbano* was implemented in the entire state of Jalisco. The expectation of this platform was that it should be designed to be flexible and adaptable to the 125 municipalities of the state. However, this challenge opened a window of opportunity allowing a new approach to public innovation to be discussed. Some hidden problems were also identified: the everyday challenges of the scarcity of resources, infrastructure, and the digital gap. After discussions to tackle these challenges, people discovered that digital capacity building was fundamental to ensure the platform's sustainability, that communication strategies are essential, and that it is imperative to generate a hybrid approach of the solution between analog and digital to facilitate a progressive and systemic solution.

The Essence of Open Source Inspires Innovation and Accessibility

Visor Urbano is a state project that has democratized technological solutions. The state government has invested in infrastructure for connectivity, and the sponsor Bloomberg Philanthropies, has provided the funding to make it possible. The report of Bloomberg Philanthropies described *Visor Urbano* in their own words as “*more than two dozen cities have used the same open-source software to digitize their business licensing—and in nearly every case, make their first big leap into public-facing digital services. And critically, none of them have to reinvent the wheel. Instead, they’re all replicating an innovative solution built right in their backyard.*”¹⁴

Creating *Visor Urbano* Jalisco with a default setting of open source software has made the platform a successful model. In only two years after its launch, the code of *Visor Urbano* Jalisco has already been adopted in the state of Hidalgo, which is located in central Mexico. The platform that the state of Hidalgo established based on the code of *Visor Urbano* Jalisco was ready for the 84 municipalities of the state to use it freely and without licensing fees.

Visor Urbano is a solution from the citizens to the government and from the government to the citizens. Six years after its creation, it has reached its maturity and impact in the public environment of 35 cities with entirely different contexts and needs. It allows these cities to embrace

innovation and digital transformation as their standard solution even when they are facing diverse challenges.

Visor Urbano also believes that freedom will always be the answer when it comes to software. Embracing the default setting of free and open-source software goes beyond avoiding licensing fees. It implies having the power to guarantee the correct execution of the program for the benefit of citizens and the protection and treatment of their personal data.

¹⁴ Bloomberg Cities Network, “Mexico mayors get results as a digital innovation spreads,” *Bloomberg Cities Network*, August 31, 2022, <https://bloombergcities.jhu.edu/news/mexico-mayors-get-results-digital-innovation-spreads>

Policy Recommendations

In order to ensure that digital tools such as *Visor Urbano* and other referents of civic innovation can thrive, we suggest the following recommendations for governments and civic tech communities.

Governments must continue promoting public policies that favour:

- The deployment of infrastructure for free internet access and reducing the digital divide.
- Initiatives and implementation of programs for developing and strengthening digital capacities, both for public servants and civil society.
- The access to valuable and understandable datasets for entrepreneurs and civil society organizations.
- The citizens' participation in decision-making and public tender procedures.
- The creation of financing mechanisms and investment attraction for developing civic tech initiatives and projects.
- Regulatory improvement and the reduction of bureaucracy through ICTs and digital government.
- An agile and secure regulatory framework to continue promoting the exchange of solutions based on open-source software.
- Enabling sandboxes for developing, testing, and launching the civic tech solutions of tomorrow.

From the perspective of civic tech communities, we encourage them:

- To continue promoting active collaboration and alliances between different actors in the ecosystem to ensure diversity and representativeness.
- To learn and exchange best practices with other national and international communities and ecosystems.
- To develop digital solutions, ideally based on evidence, data, and prior research, to improve residents' lives and their relationships with governments, following the parameters of [the 2030 Agenda and the Sustainable Development Goals](#).¹⁵
- To develop user-centred technology that can be customized according to the different needs, challenges, and particularities of each city.
- To design and develop new technologies from a human rights perspective that guarantees the reduction of gaps and inequalities to ensure they do not leave anyone behind.

Reference

- "AMPI – Profesional inmobiliario en México," <https://ampi.org/>
- "Asociación Nacional de Abogados de Empresa - ANADE," <https://anade.org.mx/>
- Bloomberg Cities Network, "Mexico mayors get results as a digital innovation spreads," Bloomberg Cities Network, August 31, 2022, <https://bloombergcities.jhu.edu/news/mexico-mayors-get-results-digital-innovation-spreads>
- "Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares (ENDUTIH) 2021 [National Survey on the Availability and Use of Information Technology in Households (2021)]," National Institute of Statistics and Geography, last modified December 1, 2022, <https://www.inegi.org.mx/programas/dutih/2021/>.
- "GIS," Heavy.AI, <https://www.heavy.ai/technical-glossary/gis>.
- "Mayors Challenge," Bloomberg Cities Network, John Hopkins University, <https://bloombergcities.jhu.edu/mayors-challenge>.
- Mellon Jonathan and Lara García Francisco, "Evaluation of the Guadalajara Visor Urbano Commercial Permitting System's Effect on Corrupt Practices," Delivery Associates, 2018, https://visorurbano.com/formatos/Visor_Urbano_Impact_Evaluation_Delivery.pdf.
- "Red Jalisco," <https://red.jalisco.gob.mx/>
- "Sustainable Development Goals," European Commission, https://commission.europa.eu/strategy-and-policy/sustainable-development-goals_en
- "Visor San Pedro Garza García", San Pedro, <https://visorurbano.sanpedro.gob.mx/>.
- "Visor Urbano Jalisco," last modified July 5, 2023, <https://visorurbano.jalisco.gob.mx/inicio>
- "Visor Urbano," last modified October 26, 2021, <https://tepatitlan.visorurbano.com>.
- "What does "georeferenced" mean?," United States Geological Survey, <https://www.usgs.gov/faqs/what-does-georeferenced-mean>.

¹⁵ "Sustainable Development Goals," European Commission, https://commission.europa.eu/strategy-and-policy/sustainable-development-goals_en



© Sompaen / shutterstock.com

5. Examples of Civic Tech Community-Government Collaboration Around the World: Case Study on Germany

Henriette Litta

Managing Director, Open Knowledge Foundation Germany

Germany has a rich and vibrant civic tech scene. However, collaboration between civic tech actors and governments has never been easy in the German context. German bureaucracy is known for its top-down, highly functional logic with strong inner efficiency and complicated procedures. Therefore, it has been easier to become a funder for civic tech activities without relying on government-funded initiatives, rather than being obliged to implement any of the results of those funded initiatives. And when it comes to digital projects, governmental agencies prefer to implement them in a controlled environment that they create themselves (within the state apparatus or close to it) instead of reaching out to collaborative partners. Very few examples of collaboration between the two exist in Germany, mostly on a local level and temporary in nature.

Many civic tech activities focus on the local level; however, the most visible and prominent ones in Germany operate on the national level. The development of European civic tech communities is tightly connected with the open data movement which took off about fifteen years ago in response to the global openness movement as well as the rise of Pirate Parties throughout Europe. Another even older branch of the hacking community is the Chaos Computer Club, founded in the early 1980s.¹ Civic tech activists have started with strong political motives, striving for more transparency, higher accountability of governmental activities through open data, and increased opportunities for citizens to participate through digital (open source) tools.

¹ "Chaos Computer Club," Chaos Computer Club, <https://www.ccc.de/en/club>.

The Open Knowledge Foundation

The Open Knowledge Foundation Germany² (founded in 2011) has been one of the most prominent initiators of civic tech activities in Germany. A representative project of this foundation is *FragDenStaat*³ (*AskTheState*), a transparency platform for filing Freedom of Information (FOI) requests in Germany on all federal levels, which was founded in 2011. Over the years, *FragDenStaat* has contributed immensely to making the right to FOI more visible and increased FOI requests in great numbers. The project has grown and expanded its focus towards strategic litigation, investigative journalism, and public campaigns for transparency.

Along with *FragDenStaat*, several other civic tech projects also focused on opening up governmental data for public scrutiny. For instance, *Offene Gesetze*⁴ (*Open Laws*) is a platform to access federal legislative texts openly and freely. *Offener Haushalt*⁵ (*Open Budget*) analyzes budgetary data from all federal level and visualizes public spending categories easily. *Kleine Anfragen*⁶ (*Parliamentary Inquiries*) was an open collection of parliamentary inquiries with numerous search filters. *Kleine Anfrage* was developed and implemented by one volunteer only, who had to terminate updates in 2021 due to a lack of capacity. Those and similar initiatives worked with governmental data, made it available according to the criteria of openness and added features for a better user experience like visualizations, filter, and search functions. These civic tech tools were widely used by citizens, journalists as well as policymakers. However, since development and maintenance were implemented by individuals from the civic tech community on a voluntary basis, many of those tools ended their operation after a couple of years due to a lack of capacity.

In 2014, the Open Knowledge Foundation Germany initiated *Code for Germany*,⁷ the German branch of *Code for All*, a global civic tech network of volunteers. At the core of *Code for Germany* are regional labs where civic tech enthusiasts meet up with local German administrators and other interested people to work on joint projects. Over the years, 30 labs have been initiated as well as a vibrant online community of many hundred people who exchange ideas and knowledge. Though projects and agendas are different in every lab, most activism flourishes around topics of mobility, climate crisis and advocacy for improving digitization in public administration.

Civic tech activism in Germany can be divided into two categories. First of all, there are projects like *FragDenStaat* that focus on political actions and demands concerning the state, showcasing the state's deficiencies and demanding reforms. The second category of initiatives focus on strengthening individuals in need and local communities with the help of technology. Several amazing attempts include *Wheelmap*,⁸ a map based on *OpenStreetMap* where accessibility information is added

in a community-based approach; *Sensor.Community*,⁹ a contributors-driven global sensor network that creates Open Environmental Data. On the platform *Nebenan*¹⁰ (*AroundTheCorner*), neighbors can connect online. Different German cities use the map *Gieß den Kiez*¹¹ (*Water the Neighborhood*) that visualizes trees and water basins in your neighborhood in order to organize watering them in the increasingly hot summers.

German Government Approaches to Civic Tech Engagement

Germany pioneered computer engineering and set standards for global developments in technology decades ago, but it has been a latecomer to the digital transformation of all societal sectors. Although budgets for massive investments in fiber connectivity have been made available recently, roll-out is delayed due to bureaucracy and unclear implementation procedures. Digital literacy and digital public services were only launched some years ago. In particular, the German public administration has long been neglecting the necessity of digitalization. It therefore developed huge internal efficiency deficits, and it is not able to provide better services to the public. In addition, public administration is highly compartmentalized and specialized and has not been trained to collaborate with external actors. On the other hand, as described earlier, civic tech communities of the early days have focused on exposing governmental inadequacies and mishaps. Hence, public administration and civic tech communities in Germany have not developed a relationship of collaboration; on the contrary, both groups met each other with hesitation and skepticism.

Over the years, civic tech communities and public administration diversified their strategies towards more cooperative approaches. Three different governmental approaches on how to engage with civic tech communities are presented in the following section.

² "Open Knowledge Foundation Germany," <https://okfn.de/en/>.

³ "FragDenStaat," <https://fragdenstaat.de/en/>.

⁴ "Offene Gesetze," <https://offenegesetze.de/>. [German only, not active anymore]

⁵ "Offener Haushalt," last modified July 20, 2020, <https://offenerhaushalt.de/>. [German only, not active anymore]

⁶ "Kleine Anfragen," <https://kleineanfragen.de/>. [German only, not active anymore]

⁷ "Code for Germany," last modified May 10, 2023, <https://codefor.de/>. [German only]

⁸ "Wheelmap," <https://wheelmap.org>.

⁹ "Sensor.Community," last modified September 28, 2022, <https://sensor.community/en/>.

¹⁰ "Nebenan," <https://nebenan.de/>. [German only]

¹¹ "Gieß den Kiez," <https://giessdenkiez.de/>. [German only]

• The Funding Approach

Over the course of the last decade, hackathon events found their way into the mainstream. A plethora of hackathon events was organized nationwide in Germany, with many being funded by governments on the state and federal level. The authorities increasingly fulfilled the role of funding partners of hackathons, whereas civic tech activists developed software prototypes. Government authorities were often intrigued by the creativity and innovation potential of those events, while civic tech activists liked the idea of being able to demonstrate directly to the Government what good solutions they could offer. In 2011, the City of Berlin initiated the Berlin Open Data Day¹² in collaboration with the urban civic tech community. The annual event brings together public administrators, state-owned enterprises and civic tech activists to exchange ideas and present projects. In 2022, the German Federal Ministry for Environment co-funded the large *Bits & Bäume Conference*¹³ (*Bits & Trees*), a two-day congress event bringing together environmental and tech communities with the aim to tackle environmental challenges with a civic tech approach. Similar to event funding, Government authorities fund civic tech activities that center on creativity and innovation, many including not only hackathon events but also implementing apps and platforms for a limited period of time. In 2016, the Federal Ministry for Research and Education started to fund the *Prototype Fund*,¹⁴ a civic tech project that distributes microfunds to individuals and tech communities in order to prototype open-source software ideas for the common good over the span of six months. The program, which is still running, has been a huge success and has helped to spotlight the potential of civic tech initiatives for society. Until today, it is the only funding program in Germany that explicitly focuses on open-source software with a public interest priority.

• The Internalization Approach

Governmental agencies have started to initiate their own units for digital transformation either within their existing structures or as new entities with public funding. Examples including the Cyber Innovation Hub of the German Armed Forces,¹⁵ the Berlin Citylab,¹⁶ Bayern innovativ in Bavaria,¹⁷ the Innovation Lab of the State Ministry in Baden-Württemberg,¹⁸ and the Digital Agenda Unit of the City of Ulm. While the focus areas differ, those units have the same approach: to create innovation and develop better solutions by imitating approaches from civic tech and start-up communities. Those units often have more room for creativity and exploration of new ideas within the administration; they often share the idea of being open to external input and inviting other actors to engage. The units actively recruit people who can act as the bridge between the administration and civic tech communities.

• The Formal and Informal Cooperation Approach

International commitments have led the German government to the introduction of multi-stakeholder processes in some policy areas. For example, within the frameworks of the Open Government Partnership¹⁹ (OGP) as well as of the Extractive Industries Transparency Initiative²⁰ (EITI), it is mandatory to cooperate on a regular basis with stakeholder groups from different sectors.²¹ German authorities also collect input from the civic tech community in these processes. But because the formalization is high, these formal processes are not able to change something outside of this process and therefore, they are not able to contribute to a real change in the general cooperation between the civic tech community and the state apparatus.

A more positive development can be observed in informal cooperation. In recent years, the German authorities increasingly reach out to civic tech actors for advice on legislative proposals, sometimes invitations to parliamentary hearings. This development was ignited due to the professionalization of civic tech organizations and their incorporation of policy and advocacy work. In addition, tech policy has risen further up the political agenda and has become more urgent and complex. Therefore, political actors do need external expertise and policy advice. But representation levels of organizations from the digital civil society,²² which is the broader and more common term used in Germany to describe civic tech and other tech communities, are still much below those of corporate lobby organizations or university professors. Instead, representatives from the civic tech community are often individuals with strong expertise; however, positive development is too strongly dependent on their personal engagement. In 2021, five organizations from the digital civil society founded *Bündnis F5*²³ (*Alliance F5*), referring to the refresh button, for a fresh start of digital politics in Germany that centers around tech for the common good serving the people. The idea behind the network alliance is to create higher visibility of civil society and offer a point of contact to political actors for various digital topics.

¹² "Berlin Open Data Day," <https://daten.berlin.de/>. [German only]

¹³ "Bits & Bäume Conference," last modified April 27, 2023, <https://bits-und-baeume.org/en/>.

¹⁴ "Prototype Fund," <https://prototypefund.de/en/>.

¹⁵ "The Bundeswehr Cyber Innovation Hub," <https://www.cyberinnovationhub.de/en/>.

¹⁶ "CityLAB Berlin," <https://citylab-berlin.org/en/start/>.

¹⁷ "Bayern innovativ," <https://www.bayern-innovativ.de/en/startpage>.

¹⁸ "Innovation is an integral part of our DNA," Staatsministerium Baden-Württemberg, <https://stm.baden-wuerttemberg.de/en/themen/innolab-bw/>.

¹⁹ "Open Government Deutschland," <https://www.open-government-deutschland.de/opengov-en>.

²⁰ "D-EITI," <https://d-eiti.de/en/>.

²¹ In the course of implementing the Online Access Act (Onlinezugangsgesetz, OZG), start-ups and other for-profit actors are increasingly involved in the digitization of public administration and services. The main motive for this cooperation is to increase efficiency.

²² There is a large overlap between "civic tech" and "digital civil society". However, "digital civil society" describes the broader, organized (civic) tech organizations (like the OKF or Wikimedia, think tanks, social innovation organizations) and individuals that do advocacy work on the state level. In contrast, the "civic tech community" mainly focuses on volunteers and communities who build technological tools.

²³ "Bündnis F5," last modified January 6, 2023, <https://buenndnis-f5.de/>. [German only]; member organizations are AlgorithmWatch, Gesellschaft für Freiheitsrechte, Open Knowledge Foundation Germany, Reporters Without Borders Germany, Wikimedia Germany.

Development for Development's Sake?

Collaboration with external actors has never come easy or natural for German authorities. Due to the mentioned specific logic of the bureaucracy, collaboration with external actors has not been a quite natural approach to solve challenges. Therefore, state actors have felt more comfortable taking on the role of funders of activities, as they are not obliged to implement the results. While the appreciation of the funding role is generally high within civic tech communities, there is also growing frustration among communities about the narrow focus on developing new ideas and prototypes without ever implementing or sustaining those ideas in the long run. The internalization approach acknowledges the need to go beyond prototyping and start to develop projects for the administration itself. Governmental agencies need to open up and abandon their preference to implement these projects in a controlled environment created by them.

These labs and units mentioned in the section of 2) The internalization approach in this article is often visible in media and public and showcase a number of innovative projects. They tend to work more successfully when given a high degree of autonomy, resources, and precise expectation management from the administration. For the latter, many examples show that expectations from the authorities differ considerably, ranging from “radical change agents to the way we work” to “in-house IT service.” Funding and internalizing are clearly the predominant methods of engagement for governmental actors. This leaves little room for true collaboration between governments and civic tech communities. Most of the collaboration counts on strong personal ties of the principal agents; collaboration works as long as the driving forces stay on board. There is hardly any structural layer behind collaboration this far.

In March 2020 when countries worldwide struggled to define policies for fighting the Covid-19-crisis, eight civil society tech initiatives in Germany organized the biggest hackathon that has ever been to contribute fresh ideas from civil society to make a difference. During the #WirVsVirus digital hackathon,²⁴ more than 28,000 participants developed more than 1,500 project ideas within a weekend. The Federal Government was fascinated by this endeavor, joined the initiative, and became the main host of the event. This partnership developed to be extremely helpful in stirring public attention, gaining participants and symbolizing to a broad audience that the German Government is willing and open to enter new approaches when facing an unknown challenge. A successful collaboration between civic tech and Government was created in a situation of crisis. Upon completion of the event, huge efforts were taken on both sides to secure a road to implementation of the most promising ideas for the next six months: potential funders were identified, selection criteria and jury members defined, coaching and advice for the projects were realized by the Prototype Fund (which offered its services). 147 projects received support in the

aftermath of the hackathon and were implemented. The most important successful factor of the example was the acceptance of collaboration as the only possible way to counter an unknown external threat (virus). Neither was there a standard procedure for the government on how to tackle the pandemic, nor could the civic tech community present existing digital solutions. Considering the history and tradition of (non) collaboration between government and civic tech communities, #WirVsVirus is a positive breakthrough.²⁵ However, the impetus of #WirVsVirus was unique and is tied to a state of emergency that prevailed in March 2020. The initiative has not led to a structural change in the relationship between governments and civic tech communities.

How Can the German Government Better Collaborate with the German Civic Tech Community?

To realize the vision of true collaboration between governments and civic tech communities, here are three policy recommendations for the German government.

First, the German government needs a new mindset about how to work and solve problems together with civil society. Policy challenges like climate change, demographic development and social inequality will increase and administrations will continuously be dealing with unknown problems that go beyond existing routines and processes. The German authorities need to develop a more open attitude towards external actors. Building trust is the most important precondition but also a product of collaboration. Only with trust can both sides learn and improve by asking honest questions, making mistakes, correcting decisions, and acknowledging their own deficiencies. Public administrators should be encouraged to reach out to civic tech communities proactively and participate in joint activities.

Second, cooperation that is limited to input and brainstorming is not enough. The German government needs to move beyond just collecting expertise from different stakeholders. There need to be multiple points of collaboration between the German government and civic tech communities during the course of a policy project. A draft of the project plan, the definition of goals, and indicators of success can be created jointly. Civic tech communities should also be consulted for evaluating a policy's success and for giving feedback and proposing adjustments. Openness to external feedback and criticism is a unique feature of democratic governments. Openness needs to be embraced in order to strengthen our trust in governmental action, ensure that participation is possible for everybody, and create better policy outcomes.

²⁴ “#WirVsVirus,” <https://wirvsvirus.org/>. [German only]

²⁵ Following the German format/example, a hackathon was also held at the European level (“#EUvsVirus”).

Lastly, there is no shortage of innovative ideas. The German authorities should broaden their perspective of digital projects towards a more comprehensive analysis. This could be fulfilled by defining the problem to be solved, building in-house expertise to assess possible solutions, developing ideas for solutions in an iterative and user-centric process, and securing infrastructure demands, especially for long-term maintenance and hosting. The German government should invite civic tech communities to discuss all of these aspects in order to contribute valuable insights for sustainable solutions that benefit all societal groups.

Reference

- “#WirVsVirus,” <https://wirvsvirus.org/>.
- “Bayern innovativ,” <https://www.bayern-innovativ.de/en/startpage>.
- “Berlin Open Data Day,” <https://daten.berlin.de/>. [German only]
- “Bits & Bäume Conference,” last modified April 27, 2023, <https://bits-und-baeume.org/en/>.
- “Bündnis F5,” last modified January 6, 2023, <https://bueundnis-f5.de/>.
- “Chaos Computer Club,” <https://www.ccc.de/en/>.
- “CityLAB Berlin,” <https://citylab-berlin.org/en/start/>.
- “Code for Germany,” last modified May 10, 2023, <https://codefor.de/>.
- “D-EITI,” <https://d-eiti.de/en/>.
- “FragDenStaat,” <https://fragdenstaat.de/en/>.
- “Gieß den Kiez,” <https://giessdenkiez.de/>.
- “Innovation is an integral part of our DNA,” Staatsministerium Baden-Württemberg, <https://stm.baden-wuerttemberg.de/en/themen/innolab-bw/>.
- “Kleine Anfragen,” <https://kleineanfragen.de/>.
- “Nebenan,” <https://nebenan.de/>.
- “Offene Gesetze,” <https://offenegesetze.de/>.
- “Offener Haushalt,” last modified July 20, 2020, <https://offenerhaushalt.de/>.
- “Open Government Deutschland,” <https://www.open-government-deutschland.de/opengov-en>.
- “Open Knowledge Foundation Germany,” <https://okfn.de/en/>.
- “Prototype Fund,” <https://prototypefund.de/en/>.
- “Sensor.Community,” last modified September 28, 2022, <https://sensor.community/en/>.
- “The Bundeswehr Cyber Innovation Hub,” <https://www.cyberinnovationhub.de/en/>.
- “Wheelmap,” <https://wheelmap.org>.

Research and Data Assistance Requests (RADAR)

A community service provided by BetaNYC's Civic Innovation Lab



© Beta NYC / CC BY 4.0

6. Filling the Gaps in Public Innovation with Civic Tech & Government Collaboration

Matt Stempeck

Curator, Civic Tech Field Guide

Introduction

Partnerships between civic tech organizations and governments have become increasingly important to realize more responsive public institutions worthy of citizens' engagement. But effective partnerships between US government agencies and outside civic tech groups are still too sporadic, for a variety of reasons which will be discussed in this paper. One prime example of effective collaboration is the ongoing work of [BetaNYC](#),¹ a nonprofit organization partnering with multiple levels of government in New York City.

While the US has numerous national programs aimed at improving federal government technology, BetaNYC's collaborations with local government bodies such as the [Manhattan Borough President](#),² [Office of Technology](#)

[and Innovation](#),³ and the city's neighborhood Community Boards showcase the significant value that civic tech organizations can bring to the public sector. Despite real challenges, BetaNYC's persistence has established productive working relationships that benefit many New Yorkers.

¹ "BetaNYC," <https://beta.nyc/>

² "Manhattan Borough President," last modified July 17, 2023, <https://www.manhattanbp.nyc.gov/>

³ "NYC Office of Technology & Innovation," last modified May 23, 2023, <https://www.nyc.gov/content/oti/pages/>

To foster similar collaborations, the US and other governments should develop their will and capacity for meaningful public engagement, empower key staff, streamline collaboration processes, and increase available funding and resources. By focusing on these areas, governments can strengthen connections with civic tech communities, leading to more effective, innovative, and inclusive solutions for public services and social challenges.

Background

The United States is home to one of the most active civic tech communities in the world, and has led the field in many ways. While there are many [examples of earlier work](#)⁴ that precede what we might today call civic tech, the communities we associate with the civic tech movement today coalesced primarily in the late 2000s and early 2010s. The flowering of projects, community groups, and eventually, more formal organizations and jobs, was sparked by a confluence of mutually reinforcing trends: increasingly accessible technology like mobile apps, social media and organizing platforms like Twitter and Meetup, and significant philanthropic investments in the open government data movement. These trends coincided with Millennials, a socially consciousness and tech-savvy generation, entering their working years. [Meetup](#)⁵ was particularly instrumental in facilitating civic tech community convenings, including the many local [Code for America](#)⁶ Brigade chapters that sprung up in cities across the country.

The most immediate example of government policy that enabled and promoted outside contributions was the wave of open government data efforts that swept the US, and much of the rest of the world, in the 2000s. It's debatable whether the open data movement achieved its goal of improving government transparency, but it certainly accelerated the civic tech community and provided an invitation to take on challenges faced by governments.

The US civic tech community has generated numerous projects aimed at a wide range of social good goals, including 'shadow' digital tools and services that, in an ideal world, government itself would have developed itself, like websites to follow elected representatives and allow citizens to co-create policy.

Common areas of focus for the US civic tech community typically include:

Democracy: Civic tech projects in this area often promote increasing civic engagement, government transparency, and improving the US's fractured electoral process. Examples include platforms to facilitate voter registration, provide election information, and tools for facilitating communication with representatives.

Social Good: Many civic tech projects aim to address social issues, from education and healthcare to poverty and justice. Examples include improving nonprofits' own use of technology to fundraise, raise awareness, and communicate online and apps to help communities access the essential services and resources that government officially provides, but too often with barriers to access.

Human Rights: Civic tech initiatives in this domain work to raise awareness, protect, and advocate for human rights, including advocacy to expand traditional human rights to digital arenas. Examples include platforms for anonymously reporting human rights abuses, tools for monitoring hate speech online, and legal tech applications that help under-resourced communities navigate the US's justice system.

Climate Change: Civic tech communities also work on projects addressing climate change and environmental issues, such as tools for tracking pollution at the local level, analyzing climate data, and promoting renewable energy. The US is also home to a larger climate tech sector, which supersedes the civic tech community itself.

Unfortunately, many early civic tech projects suffered from techno-solutionist approaches, a disconnect with their intended users, and general difficulties inherent in sustaining volunteer technical projects over time. The result is a substantial [graveyard of civic tech projects](#),⁷ many of which began at hackathons and had little real impact.

Partially in response to these challenges, many of the US civic tech community's practitioners have gone into government, philanthropy, and other strategic democratic institutions to work to create change from within. In doing so, they are often better able to leverage existing public resources to improve society, and build more sustainable services and careers than volunteer roles allow. As outside reformers became institutionalists, the civic tech movement lost some of its activist energy, even though their migration inside will likely lead to more lasting impact. Instead of struggling to build, launch, and sustain services that government itself should be providing, they are now able to contribute to the government's capacity to actually provide those services.

Beginning in 2020, COVID lockdowns decimated the event-driven civic tech community and many of its local Meetup groups, and drove the closure of some of the key venues that hosted its community gatherings. Around the same time, Code for America gradually divested from its Brigade program to focus its efforts on its own government partnerships.

⁴ "Predecessors," Civic Tech Field Guide, <https://directory.civictech.guide/listing-category/predecessors?q=>

⁵ "Meetup," <https://www.meetup.com/>

⁶ "Code for America," last modified July 25, 2023, <https://codeforamerica.org/>

⁷ "The Civic Tech Graveyard," Civic Tech Field Guide, <https://civictech.guide/graveyard/>

Over the years, the US civic tech community has grown more sophisticated in how it approaches its work. The best civic tech projects today are more likely to include partnerships with subject matter experts and include user testing or other early access to their intended users. The result is a relatively mature US civic tech field, which is learning how to fuse the new possibilities that technology unlocks with the absolutely critical abilities to include communities and navigate institutions.

Supportive Government Programs

For many years, US government bodies were among the last stakeholders to encourage or even accept civic tech initiatives. While motivated citizens and their allies in civil society worked to drive the field forward, government was too often a laggard, at best ignorant of the work taking place, and at worst actively undermining it.

Fortunately, this dynamic has shifted significantly at the federal level of government and in many bright spots at local and municipal levels. Where government still fails to connect with the civic tech community, it's often the result of limited human resources, misprioritized budgets, and/or inefficient bureaucratic structures and systems.

Some of the key projects and policies US government agencies have developed to encourage cooperation between the civic tech community and government, and public participation in the development of digital infrastructure and technology policy, include:

Open Data Initiatives:⁸ The U.S. was a global leader in open government data efforts, including the federal government's launch of Data.gov in 2009 to provide access to thousands of datasets from agencies. These initiatives sought to promote government transparency and unlock economic innovation. Many local governments followed suit, launching [their own open data portals](#).⁹ It's debatable whether this trend led to the transparency and oversight outcomes advocates sought, and technologists too often find the datasets provided to be inconsequential and/or poorly documented.

Challenge.gov:¹⁰ Launched in 2010, Challenge.gov is an example of a platform that enabled federal agencies to host innovation competitions and engage the public in solving complex problems, but it is no longer maintained.

The Presidential Innovation Fellowship¹¹ (started in 2012), and programs like it, created an opening in the government's hiring bureaucracy that adds an additional tech talent pipeline to government service and deploys them to strategic projects.

The two most notable US government agencies related to civic tech are [18F](#)¹² and [US Digital Services](#)¹³ (each founded in 2014). Both organizations hire extensively from the civic tech community and advance many of its goals inside of government.

Over the years, the US federal government's focus has shifted from external collaboration with the civic tech community to developing its own much-needed in-house tech capacity. In the US, the civic tech community is more likely to initiate engagement with government than government with it.

Since its pivot, Code for America has focused more or less exclusively on establishing partnerships with US government partners to develop civic tech together. Priority areas include easing access to social benefits and mitigating some of the harms of an unequal criminal justice system. These partnerships can include government support for the civic tech organization, although navigating the public sector's procurement processes is a major barrier to smaller civic tech organizations.

Other civic tech groups have self-organized to support specific government goals, developing relationships with their public sector counterparts to ensure their work gets traction inside of government. For example, the [Center for Technology and Civic Life](#)¹⁴ (CTCL), a nonprofit, spent years building relationships with election administrators across the country to help solve the lack of available data about US polling places, as well as deliver design improvements, cybersecurity upgrades, and communication trainings. These efforts have been instrumental in bolstering the US's decrepit election infrastructure, especially in the 2020 election, held during the pandemic.

[US Digital Response](#)¹⁵ is a nonprofit organization founded by civic tech community leaders in response to the COVID pandemic. It has already succeeded in mobilizing over 1,000 private sector tech workers as volunteers to help US government agencies achieve public interest objectives.

While these are encouraging examples of US government collaboration with the civic tech community, there is considerably less emphasis at the federal level on inviting the public to make meaningful decisions and co-create policy. This highly potent area of civic tech has been relegated to symbolic performances, like sourcing a political debate question from internet users.

⁸ "Open Data Initiative," last modified April 3, 2019, <https://opendatainitiative.github.io/>

⁹ "Open data publishing portals," Civic Tech Field Guide, <https://directory.civictech.guide/listing-category/open-data-publishing-portals>

¹⁰ "Challenge.gov," last modified June 5, 2023, <https://www.challenge.gov/>

¹¹ "Presidential Innovation Fellows," last modified July 20, 2023, <https://presidentialinnovationfellows.gov/>

¹² "18F," last modified July 22, 2023, <https://18f.gsa.gov/>

¹³ "US Digital Service," last modified June 22, 2023, <https://www.usds.gov/>

¹⁴ "Center for Technology and Civic Life," <https://www.techandciviclelife.org/>

¹⁵ "US Digital Response," <https://www.usdigitalresponse.org/>

The US federal government's general failure to continue inviting participation in creating digital infrastructure and policy isn't for lack of effort on the part of the civic tech community, which has launched numerous platforms that facilitate such public involvement at the technical level. These platforms have failed primarily due to a limited government willingness to engage on them (and then directly related to that obstacle, a lack of sustained funding revenue).

Even the US's traditional channels for citizen engagement in policymaking, the public comment period hosted by regulatory agencies, has been abused by bad actors. When the [Federal Communications Commission](#),¹⁶ a core regulatory body on tech and digital connectivity policies, opened the public comment period around a plan to repeal net neutrality, the process was flooded with millions of falsified comments in support of eliminating net neutrality,¹⁷ despite widespread public support for the policy. The wider accessibility of generative AI is likely to exacerbate this problem, as forging evidence of public support becomes easier, cheaper, and more credible by the day.

For the most part, the US government lags behind leading countries like Spain and Taiwan in sharing actual decision-making power with citizens and residents. The situation is slightly better at the local level, where many towns and cities have experimented with [digital participation platforms](#).¹⁸ Even here, however, public participation and involvement is made possible in less-strategic arenas like voting on features for a public park.

Local government is too often dependent on private sector companies selling participation platforms in order to run these processes. These companies have driven significant public involvement in many of the places they've been involved, but local governments' limited capacity and desire to engage the public on meaningful questions of public import is a strike against US government adoption of civic tech.

In a nation as large and diverse as the US, there are notable counterexamples, of course. The [NYC Civic Engagement Commission](#),¹⁹ a new voter-mandated city agency, is developing a local Decidim instance for the city's residents. Another bright spot is the continued expansion of local participatory budgeting programs, which often leverage civic tech tools for administering the stages of the program, including online voting.

Despite these counterexamples, US government collaboration with the civic tech community too often comes down to graces and extraordinary commitment of individual government staff, or a sympathetic executive, rather than formal government policy. Particularly at local levels of government, individual members of staff act as vital bridges between the inside and outside of the institution. But they often must perform this role at their own expense and in addition to their formal job responsibilities. Some local governments have created dedicated staff positions

to formalize these types of roles, such as Seattle's former civic tech community liaison, or [Boston's Office of New Urban Mechanics](#).²⁰ These government positions act as important conduits between their colleagues and outside collaborators, including the civic tech community but also local universities and startups.

BetaNYC: A Case Study of Civic Tech & Government Collaboration

A prime example of US government cooperation with the civic tech community is BetaNYC's ongoing partnerships in support of several government offices in New York City. While the US has a growing array of national programs designed to improve federal service delivery, BetaNYC's work with local government bodies like the [Manhattan Borough President](#)²¹ and the city's Community Boards demonstrates how a civic tech organization can bring much-needed tech capacity to the public sector while co-developing their projects with government partners.

Inspired by the [Sunlight Foundation](#),²² BetaNYC was founded as an open government meetup in 2008, preceding the boom in local civic tech groups. Since then, the small nonprofit organization has been instrumental in passing multiple pieces of open government legislation (including the nation's first Open Data Law passed by a legislative body) and demonstrating how community technology groups can effectively partner across sectors with government, universities, and private sector entities like tech companies with a New York presence. BetaNYC has accomplished this work through its data and technology literacy trainings for the general public and policymakers, research products like a community tech roadmap and formal legislative efforts. For the purposes of this essay we will focus on their work assisting Community Boards, as it's one of the most illustrative examples of civic tech community and government collaboration.

[Community Boards](#)²³ are New York City's most hyperlocal level of government, envisioned by Jane Jacobs in the decentralization movement of the 1960s and 1970s.²⁴

¹⁶ "Federal Communications Commission," last modified July 25, 2023, <https://www.fcc.gov/>

¹⁷ James V. Grimaldi and Paul Overberg, "Millions of People Post Comments on Federal Regulations. Many Are Fake," *Wall Street Journal*, December 12, 2017, https://www.wsj.com/articles/millions-of-people-post-comments-on-federal-regulations-many-are-fake-1513099188?mod=article_inline

¹⁸ "Guide to Digital Participation Platforms," People Powered, <https://www.peoplepowered.org/digital-guide-home#gsc.tab=0>

¹⁹ "New York City Civic Engagement Commission," <https://www.nyc.gov/site/civicengagement/index.page>

²⁰ "New Urban Mechanics," City of Boston, last modified July 25, 2023, <https://www.boston.gov/departments/new-urban-mechanics>

²¹ "Manhattan Borough President," last modified July 17, 2023, <https://www.manhattanbp.nyc.gov/>

²² "Sunlight Foundation," last modified February 26, 2021, <https://sunlightfoundation.com/>

²³ "Community Boards," NYC Mayor's Community Affairs Unit, <https://www.nyc.gov/site/cau/community-boards/community-boards.page>

²⁴ Nolan Gray, "Decentralized Urban Planning and Local Knowledge: Jane Jacobs's Contribution," *FEE Stories*, December 22, 2022, <https://fee.org/articles/decentralized-urban-planning-and-local-knowledge-jane-jacobss-contribution/>

The neighborhood-based boards are driven by local residents of that precinct and public meeting attendees, serving an official advisory role to city government on local quality of life issues like parking, zoning, liquor permits and landmark preservation. But they're also generally under-resourced and run by a handful of staff and volunteer boards with limited technical capacity.

BetaNYC has been instrumental in promoting data and tech literacy on these boards, enhancing their local decision-making role in NYC's many neighborhoods. They have developed interactive and user-friendly tech solutions like [BoardSTAT](#),²⁵ which maps the city's open data sources to facilitate data-driven decision-making. When the COVID pandemic forced Community Boards to meet virtually, BetaNYC "worked with Manhattan Borough President Gale Brewer's office to rapidly review the available video conferencing solutions, help Boards procure Zoom licenses, and train Community Board Meeting Chairs and Members in best practices."²⁶

BetaNYC also supports Community Boards through its NYC [Civic Innovation Lab](#)²⁷ and Fellows Program, which "fosters the next generation of community leaders by developing digital and data literacy practices that are appropriate for the local constituencies they serve." The fellows are recruited from the City University of New York (CUNY)'s Services Corps program.²⁸

At the start of the fellowship, the students go through a bootcamp training in civic technology fundamentals and data and design skills. Afterwards, fellows join innovation teams to help develop public interest technology projects.

[The NYC Civic Innovation Fellows program](#)²⁹ simultaneously expands access to the field of civic tech, builds a local professional talent pipeline, and supports Community Boards and other public partners with open data and technology expertise.

Much of BetaNYC's productive working relationship with New York City government can be traced back to the organization's strong partnership with former Manhattan Borough President and [civic tech champion Gale Brewer](#).³⁰ They first began working together to pass the city's 2012 Open Data Law, when Brewer was a New York City Council Member, and continued developing the relationship when she reached her term limit. BetaNYC maintains a productive partnership with Brewer's successor, Manhattan Borough President Mark Levine, whose office hosts the Civic Innovation Fellows program and provides BetaNYC with office space and strategic inroads to other government partners. The program has been funded by several New York City-focused philanthropies as well as CUNY.

BetaNYC also runs programs like the Civic Innovation Lab, where they work with government agencies to help solve problems, particularly if they can bring data, technology, and/or design to bear on the challenge. This includes the [Research and Data Assistance Requests \(RADAR\)](#)³¹ program to advise people across government, civil society, or media on open data hurdles and acquiring digital literacy. Their [Open Data Ambassadors](#)³² (ODA) program equips "cohorts of volunteer ambassadors to teach about NYC Open Data across the diverse communities of New York City," extending the City government's own community outreach efforts.

Finally, BetaNYC co-produces popular annual open data events with the local civic tech community as well as local government, where civic technologists, students, members of the public, and key government staff come together to meet, collaborate, and learn from each other.

Taken together, it's remarkable how a relatively small organization like BetaNYC, with 4 full-time and 4 part-time staff members, has been able to develop its offerings in tandem with the city government's own civic tech capacities. The journey hasn't been as smooth as this description might suggest: not every NYC government agency is keen to partner with outside civic tech groups. Yet BetaNYC's persistence over fifteen years of community service has led to very productive and symbiotic relationships where all parties benefit – most notably New Yorkers.

BetaNYC's work to support the Community Boards enhances New York City government, not only in terms of the digital services it provides, but also in better achieving the actual goals of local representation, collective decision-making, and meaningful avenues for public engagement. In this example, and others, BetaNYC and civic tech groups like it have evolved to fill in the gaps left by government. Initially, the groups are often expected to assist with technology and digital services, as they have these skills and many areas of government still do not. Ultimately, though, what civic tech organizations bring is a more open stance to partnering with the public, a better feedback loop with constituents, and more innovative engagement methodologies, whether or not they're digitized.

²⁵ "BoardStat," BetaNYC, <https://beta.nyc/products/boardstat/>

²⁶ Rohit T. Aggarwala et al., *Rebooting NYC An Urban Tech Agenda for the Next Administration Draft for Discussion* (New York: Jacobs Cornell-Technion Institute, 2021), 96. <https://cpb-us-w2.wpmucdn.com/sites.coecis.cornell.edu/dist/4/371/files/2021/05/Rebooting-NYC-1.pdf>

²⁷ "Civic Innovation Lab," BetaNYC, <https://beta.nyc/programs/civic-innovation-lab/>

²⁸ CUNY is both a public university and the largest urban university system in the US.

²⁹ "NYC Civic Innovation Fellows," BetaNYC, <https://beta.nyc/programs/civic-innovation-fellows/>

³⁰ "Gale Brewer, Civic Honoree," Mouse, <https://mouse.org/mouse20/gale-brewer>

³¹ "Research and Data Assistance Requests (RADAR)," BetaNYC, <https://beta.nyc/products/research-and-data-assistance-requests/>

³² "Open Data Ambassadors," NYC Open Data, <https://opendata.cityofnewyork.us/open-data-ambassadors/>

Policy Recommendations

All levels of US government could meaningfully improve how they facilitate collaboration with the civic tech community. Many of these recommendations would also be effective in other governments.

- **Every level of US government should develop the culture and technical and organizational capacities to meaningfully engage the public in decision-making.**

Democracy is in a crisis, and the disconnect between people's votes and the actions their government takes is partially to blame. To renew political legitimacy, government should grant the public enhanced decision-making power. Participatory budgeting programs are a strong example of how this can be done.

Today, few local governments have the capacity to administer digital participation platforms themselves. This should be a priority for the near future, so that government staff can develop a regular practice of consulting the public beyond polling and elections. This capacity should include using popular open source digital participation platforms, so that government becomes less dependent on proprietary platforms to facilitate public engagement.

Even where US government bodies do have sufficient technical capacity, it must shift its expectations of public participation. Staff cynicism may be well-founded in experiences at rancorous public meetings, but many civic tech platforms have proven entirely capable of giving people meaningful agency without losing control of the process.

- **Empower the government staff who already serve as conduits to civic tech, and others who might excel at it.**

Government should support the individual staff who already act as conduits to both civic tech and underrepresented communities. Staff must often perform this role in addition to their full-time duties, leading to burnout and putting them in the unenviable position of playing switchboard operator for the community's engagement with government. Government could make outreach to engage underrepresented communities a formal job responsibility for staff who shine at this work. This should include rewarding staff who drive civic tech engagement within underrepresented communities.

- **Streamline Collaboration Processes.**

Bureaucratic red tape often hinders collaboration between government agencies and civic tech communities. Simplifying and streamlining processes for engaging with external partners can facilitate cooperation and encourage innovative projects.

Governments must develop their currently limited capacity to adopt successful outside projects. This is an all too common pattern in civic tech: a public group creates a sorely needed digital service that's years ahead of the government's own solution, only for government to completely neglect their project until its leaders eventually shut it down.

Governmental capacity to support these projects is limited by a variety of factors, including poorly-allocated technical budgets, outdated procurement policies, difficulty of mapping citizen-centric services to siloed government departments, and a general bias against external innovation.

Civic tech organizations and their allies in civil society could help model this process, developing resources to help governments learn how to bring a needed civic tech project in-house. Well-resourced initiatives like 18F and USDS are still critical to building the government's own internal tech capacity, but at so many levels of US government (most egregiously the state, regional, and town levels), under-resourced public sector agencies would greatly benefit from improving how they collaborate with civic tech groups.

The tragedy underlying much of the US's bad govtech, as well as the unrealized potential of much of its civic tech, is that government agencies often have decent technology budgets. The budgets are just poorly allocated to large government contractors.³³ Government systems are still optimized to buy tech from large companies rather than innovating with the civic tech community and public at large. In the US, some progress has been made on this front over the years, but those examples are still the exception rather than the rule.

- **Increase Funding and Resources.**

Between the government's uneven partnership and the pandemic's destructive effect on in-person civic tech communities, the US's independent civic tech landscape is not as strong as it was even a few years ago. Allocating more funding and resources to support civic tech initiatives would help accelerate the development and implementation of technology-driven solutions.

These resources should prioritize proven civic tech organizations like BetaNYC and others that have demonstrated their ability to partner with both government and underrepresented communities. Resources could include grants, event support, data, expertise, and infrastructure. For example, BetaNYC has benefited from the Fund for the City of New York's cashflow loan program, which enables them to make strategic investments between funding cycles.

³³ For further discussion of this point, see Rohit T. Aggarwala et al., *Rebooting NYC: An Urban Tech Agenda for the Next Administration Draft for Discussion* (New York: Jacobs Cornell-Technion Institute, 2021), 24. <https://cpb-us-w2.wpmucdn.com/sites.coecis.cornell.edu/dist/4/371/files/2021/05/Rebooting-NYC-1.pdf>

These resources should also be focused on expanding diversity in civic tech, as both the civic tech sector and the US tech industry in general are far too white, wealthy, and male relative to the US population.

By focusing on these areas, the US government can strengthen its connections with civic tech communities, leading to more effective, innovative, and inclusive solutions for public services and social challenges.

Reference

- “18F,” last modified July 22, 2023, <https://18f.gsa.gov/>
- “BetaNYC,” <https://beta.nyc/>
- “BoardStat,” BetaNYC, <https://beta.nyc/products/board-stat/>
- “Center for Technology and Civic Life,” <https://www.techandcivicle.org/>
- “Challenge.gov,” last modified June 5, 2023, <https://www.challenge.gov/>
- “Civic Innovation Lab,” BetaNYC, <https://beta.nyc/programs/civic-innovation-lab/>
- “Code for America,” <https://codeforamerica.org/>
- “Community Boards,” NYC Mayor’s Community Affairs Unit, <https://www.nyc.gov/site/cau/community-boards/community-boards.page>
- “Federal Communications Commission,” last modified July 25, 2023, <https://www.fcc.gov/>
- “Gale Brewer, Civic Honoree,” Mouse, <https://mouse.org/mouse20/gale-brewer>
- “Guide to Digital Participation Platforms,” People Powered, <https://www.peoplepowered.org/digital-guide-home#gsc.tab=0>
- James V. Grimaldi and Paul Overberg, “Millions of People Post Comments on Federal Regulations. Many Are Fake,” Wall Street Journal, December 12, 2017, https://www.wsj.com/articles/millions-of-people-post-comments-on-federal-regulations-many-are-fake-1513099188?mod=article_inline
- “Manhattan Borough President,” last modified July 17, 2023, <https://www.manhattanbp.nyc.gov/>
- “Meetup,” <https://www.meetup.com/>
- “New Urban Mechanics,” City of Boston, last modified July 25, 2023, <https://www.boston.gov/departments/new-urban-mechanics>
- “New York City Civic Engagement Commission,” <https://www.nyc.gov/site/civicengagement/index.page>
- Nolan Gray, “Decentralized Urban Planning and Local Knowledge: Jane Jacobs’s Contribution,” FEE Stories, December 22, 2022, <https://fee.org/articles/decentralized-urban-planning-and-local-knowledge-jane-jacobss-contribution/>
- “NYC Civic Innovation Fellows,” BetaNYC, <https://beta.nyc/programs/civic-innovation-fellows/>
- “NYC Office of Technology & Innovation,” last modified May 23, 2023, <https://www.nyc.gov/content/oti/pages/>
- “Open Data Ambassadors,” NYC Open Data, <https://opendata.cityofnewyork.us/open-data-ambassadors/>
- “Open Data Initiative,” last modified April 3, 2019, <https://opendatainitiative.github.io/>
- “Open data publishing portals,” Civic Tech Field Guide, <https://directory.civictech.guide/listing-category/open-data-publishing-portals>
- “Predecessors,” Civic Tech Field Guide, <https://directory.civictech.guide/listing-category/predecessors?q=>
- “Presidential Innovation Fellows,” last modified July 20, 2023, <https://presidentialinnovationfellows.gov/>
- “Research and Data Assistance Requests (RADAR),” BetaNYC, <https://beta.nyc/products/research-and-data-assistance-requests/>
- Rohit T. Aggarwala et al., Rebooting NYC An Urban Tech Agenda for the Next Administration Draft for Discussion (New York: Jacobs Cornell-Technion Institute, 2021), <https://cpb-us-w2.wpmucdn.com/sites.coecis.cornell.edu/dist/4/371/files/2021/05/Rebooting-NYC-1.pdf>
- “Sunlight Foundation,” last modified February 26, 2021, <https://sunlightfoundation.com/>
- “US Digital Response,” <https://www.usdigitalresponse.org/>
- “US Digital Service,” last modified June 22, 2023, <https://www.usds.gov/>



© photofriday / shutterstock.com

7. TechConnect Morocco: Building Bridges for Inclusive Governance through Civic Tech Collaborations

Oussama Abdelah Benhmida

Civic Tech and Digital Transformation Expert

In the landscape of civic technology, Africa's contribution is often underrepresented. One significant milestone, however, traces back to Kenya in 2007 - a period marked by intense post-election violence. A collective of engaged citizens, including bloggers and computer developers, perceived the urgent need for a systematic way to record these incidents. Their solution was creating an online platform named [Ushahidi](https://www.usahidi.com/) - 'testimony' in Swahili.¹

Civic Tech in Morocco

Building upon civic technology's continental and global momentum, Morocco carved out its niche in this field. Civic tech in Morocco has witnessed steady growth, aiming to promote transparency, engagement, and accountability through the innovative use of technology.

¹ "Ushadi," <https://www.usahidi.com/>

From the emergence of online activism and citizen journalism in the early 2000s to the transformative impact of the Arab Spring uprisings in 2011, technology has played a pivotal role in empowering citizens to voice their opinions and advocate for political reforms. Additionally, independent initiatives like [Tanmia.ma](https://tanmia.ma) and the Moroccan Civic Tech Association ([AMTIC](https://amtic.org.ma)) have emerged,² fostering collaboration between the government, civil society, and the tech community. These efforts continue to shape the civic tech landscape in Morocco, enabling citizens to participate actively in decision-making processes and driving positive social change.

The Role of The Government

The Moroccan government has also actively contributed to enhancing collaboration around civic tech in the country through various initiatives and actions. In 2013, the government launched the "[OpenData.ma](https://www.data.gov.ma)" platform,³ which provides access to government, budget, and public service information, promoting transparency and collaboration. Furthermore, the government introduced the "[e-Participation.ma](https://www.eparticipation.ma)" platform in 2014,⁴ enabling citizens to report local service issues and monitor the performance of local governments, thereby fostering collaboration and accountability at the local level, and finally in 2018,⁵ Morocco officially joined Open Government initiative,⁶ proving the intent to invest more in the civic tech scene.

In addition to policy and regulation, the government has provided financial support to civic tech initiatives. Through the Moroccan Ministry of Interior, the government initiated the "Maroc Numeric Cluster"⁷ program, offering funding and resources to innovative start-ups and civic tech projects. This funding encourages collaboration and innovation, allowing civic tech solutions to be developed and scaled effectively.

The government has also taken steps to promote open data and data sharing. In line with this, the Moroccan government has launched [the Moroccan trophy for open data](https://www.data.gov.ma) on "Data.gov.ma" platform.⁸ This initiative aims to facilitate collaboration between the government and civic tech developers by making relevant data accessible, thus enabling the creation of impactful solutions based on reliable information based on article 27⁹ of Moroccan constitution related to access to public data. More recently, the [Economic, Social and Environmental Council \(ESEC\)](https://www.cese.ma),¹⁰ launched an initiative called [Ouchariko.ma](https://ouchariko.ma) ("I participate" in English), gathering over 21 consultations initiated on various vital topics (women's situation, youth inclusion, sexual harassment, pension reform, fake news, Moroccans living abroad, sports economy, mountainous areas, etc.) and serving as a space for participation,¹¹ listening, debate, and collective intelligence with over 21,000 citizen contributions that have helped refine the diagnosis and recommendations of the ESEC.

Examples of Collaborations between the Government and Civic Tech Communities

The government's role was not only boxed in creating and launching platforms but also in supporting existing initiatives. Back in 2013, as founders of the [Woussoul project](https://woussoul.ma),¹² we recognized the challenges faced by our coworkers living with physical disabilities while exploring the city of Rabat. These difficulties arose from a lack of accessibility infrastructure, hindering their mobility and participation. Adopting a human-centered approach, we set out to address this issue and create a more inclusive environment.

To ensure an effective response, we conducted extensive consultations with various individuals living with disabilities. Collaborating with esteemed organizations like [Humanity & Inclusion](https://humanityandinclusion.org) (the organization's previous name was [Handicap International](https://handicapinternational.org))¹³ and the Moroccan Collective for NGOs Promoting Rights for People with Disabilities (Collectif pour la promotion des droits des personnes en situation de handicap, CPH)¹⁴ working on disabilities, we sought to gain valuable insights and perspectives. In addition, we engaged with the Moroccan Ministry of Family Affairs, the governing body responsible for disabilities, aiming to garner support and facilitate collaboration.

Through relentless persistence, we gained the active participation of the Ministry, which facilitated access to different resources such as experts, city plans, and meeting spaces. Drawing on our collective expertise and the contributions of architects, urbanists, and representatives from local city authorities, we embarked on a series of consultations. These consultations catalyzed the development of the Woussoul app¹⁵—an innovative mobile application that would revolutionize accessibility in Rabat.

² "Tanmia.ma," <https://tanmia.ma/>; "Association Marocaine des Technologies de l'Information et de la Communication," <https://amtic.org.ma/>

³ "OpenData.ma," <https://www.data.gov.ma/>

⁴ "e-Participation.ma," <https://www.eparticipation.ma/fr>

⁵ Abdellatif Chentouf, "The Open Government in Morocco: Context, Objectives, and Outcome," Moroccan Institute for Policy Analysis, July 11, 2023, <https://mipa.institute/en/9309>

⁶ "Open Government Partnership," <https://www.opengovpartnership.org/>

⁷ "Maroc Numeric Cluster," <http://marocnumericcluster.com/>

⁸ "Trophée national et Hackathon de l'Open Data," Data.gov.ma, Agence de Développement du Digital, last modified February 11, 2014, <https://data.gov.ma/fr/actualites/trophee-national-et-hackathon-de-lopen-data>

⁹ "Morocco 2011 Constitution art. 27," https://www.constituteproject.org/constitution/Morocco_2011#s134

¹⁰ "Economic, Social and Environmental Council (ESEC)," <https://www.cese.ma/en/eseec/>

¹¹ "Ouchariko.ma," <https://ouchariko.ma/>

¹² Ristel Tchoumand, "Woussoul : Un projet web pour identifier les lieux accessibles aux personnes à mobilité réduite," [Yabiladi.com](https://www.yabiladi.com/articles/details/19647/woussoul-projet-pour-identifier-lieux.html), September 16, 2013, <https://www.yabiladi.com/articles/details/19647/woussoul-projet-pour-identifier-lieux.html>

¹³ "Humanity & Inclusion," <https://www.hi-us.org/en/index>

¹⁴ We can only find its introduction from Wikipedia webpage below, but please inform us if anyone find more information directly from the organization's website. "Collectif pour la promotion des droits des personnes en situation de handicap," Wikipedia, last modified March 30, 2017, https://fr.wikipedia.org/wiki/Collectif_pour_la_promotion_des_droits_des_personnes_en_situation_de_handicap

¹⁵ Par Ilham Mountaj, "Woussoul, l'application qui facilite la vie des handicapés," [Medias 24](https://medias24.com/2013/10/04/woussoul-lapplication-qui-facilite-la-vie-des-handicapes/), October 4, 2013, <https://medias24.com/2013/10/04/woussoul-lapplication-qui-facilite-la-vie-des-handicapes/>

As founders, we organized data marathons in collaboration with NGOs such as [JCI](#),¹⁶ [Global Shapers](#),¹⁷ and [Eden Initiative Association](#).¹⁸ With the support of local authorities, we roamed the city, meticulously collecting data on accessibility features. These marathons ensured the acquisition of accurate information and prioritized the data collectors' safety, particularly in areas where traffic posed potential risks.

[Woussoul](#)¹⁹ stands as a testament to the power of collaboration between passionate founders, government entities, NGOs, and the private sector. Through inclusive consultations and the collective efforts of all stakeholders involved, we successfully created an invaluable tool—the Woussoul app—that provides users with accessibility scores for different locations in Rabat. The project exemplifies collaborative initiatives' impact in fostering inclusivity, empowering individuals with disabilities, and transforming communities for the better.

Another case of government/NGO collaboration is [Nouabook.ma](#),²⁰ the flagship project of [SimSim](#),²¹ a non-governmental organization in Morocco with a mission to utilize technology tools for empowering citizens and fostering constructive engagement in public decision-making. [Nouabook.ma](#) is a web platform that facilitates interaction between citizens and their elected representatives. This online tool empowers citizens to express their concerns, highlight their priorities, and question their representatives about their parliamentary work through text and video formats. Nouabook incorporates public voting mechanisms and integrates with Facebook to attract participants and foster constructive dialogue. Moreover, it enables Members of Parliament (MPs) to respond publicly to citizens' inquiries and share updates regarding their legislative activities using text, video, and image formats directly on the site.

SimSim supports Nouabook.ma through several initiatives, including Google Hangouts with MPs. In this live, online town hall format, citizens' questions collected through Nouabook.ma are posed to MPs, allowing for real-time discussions. Citizens also have the opportunity to ask questions during the event through their Facebook accounts. Additionally, SimSim has deployed a team of ten youth ambassadors strategically located throughout Morocco. These ambassadors educate citizens about the workings of parliament, facilitate citizen engagement by assisting in questioning elected representatives, and encourage MPs to participate in the Nouabook program actively.

SimSim's efforts have been encouraging. Over 40 MPs representing major political parties have participated in the project, demonstrating a solid commitment to engaging citizens. More than 450 citizen questions have been answered through the platform, leading to further inquiries directed to ministers or government officials. Online events have witnessed the active participation of thousands of citizens.

Through Nouabook.ma and its associated initiatives, SimSim has successfully created an avenue for citizens to interact with their elected representatives, fostering dialogue and promoting transparency in decision-making. The organization's dedication to utilizing technology for citizen empowerment has resulted in tangible outcomes that have positively impacted citizen participation and government responsiveness in Morocco.

In summary, the civic technology landscape in Morocco is evolving with impressive dynamism. The case studies of DataGov.ma, Woussoul, and Nouabook.ma demonstrate the transformative power of civic tech in promoting transparency, fostering engagement, improving public service delivery, and providing platforms for citizens to voice their concerns.

The collaborative spirit and the collective efforts of various stakeholders, including the government, NGOs, and the tech community, have proven instrumental in propelling the growth of civic tech. However, the evolution of civic tech is an ongoing journey, and there is significant potential for improvement and scaling. Recognizing this, Morocco has made an ambitious leap towards enhancing open governance and civic technology in its jurisdiction. Morocco has signed 22 commitments for the Open Government Partnership²² in a significant development. This bold step demonstrates the nation's dedication to transparency and accountability and reinforces its commitment to fostering an environment that encourages the growth of civic tech. This initiative establishes Morocco as a leader in open governance, marking a milestone toward improved democratic government.

Policy Recommendations

In this regard, the governments aiming to enhance their civic tech ecosystem should consider the following strategies:

- **Embrace Open Data:**

By providing open access to government data, authorities can stimulate innovation in civic tech.

- **Financially Support Civic Tech Initiatives:**

Investment in civic tech projects can accelerate their development and promote their effectiveness.

¹⁶ "JCI," <https://jci.cc/>

¹⁷ "Global Shapers," <https://www.globalshapers.org/>

¹⁸ "Association Eden," <https://www.assoHELP.org/asso-62-association-eden-maroc>

¹⁹ Ristel Tchounand, "Woussoul : Un projet web pour identifier les lieux accessibles aux personnes à mobilité réduite," Yabiladi, September 16, 2013, <https://www.yabiladi.com/articles/details/19647/woussoul-projet-pour-identifier-lieux.html>

²⁰ "Nouabook.com," <https://nouabook.ma/>

²¹ "SimSim-Participation Citoyenne," <https://simsim.ma/>

²² You can find Morocco's 22 commitments for OGP from here: "Morocco," Open Government Partnership, <https://www.opengovpartnership.org/members/morocco/>

• Foster Collaborations:

Partnerships between the government, NGOs, tech communities, and citizens can spur growth and enhance the effectiveness of civic tech initiatives through hackathons and similar formats.

• Leverage Technology for Citizen Participation:

Governments can amplify citizens' voices, contributing to the refinement of government policies and actions, using nouabook.ma as an example, and replicating the experience in other areas.

• Ensure Inclusivity:

Civic tech can be a powerful tool to foster inclusivity and ensure services are accessible to all citizens, including those with disabilities and marginalized communities.

• Support Existing Innovative Platforms:

Alongside creating new platforms, governments should actively support and collaborate with impactful existing initiatives to speed up the adoption of beneficial civic tech.

• Promote Civic Education:

Working with civic tech organizations to educate citizens on their rights and the workings of government can encourage more active and informed civic participation.

These steps are not just recommendations but necessities for any government looking to exploit civic tech's potential. By pursuing these strategies, governments can significantly enhance the growth and impact of civic technology in their respective regions. The Moroccan civic tech landscape is a testament to the potential that collaboration, innovation, and dedication can unlock, empower citizens, and transform societies.

Reference

- Abdellatif Chentouf, "The Open Government in Morocco: Context, Objectives, and Outcome," Moroccan Institute for Policy Analysis, July 11, 2023, <https://mipa.institute/en/9309>
- "Association Eden," <https://www.assoHELP.org/asso-62-association-eden-maroc>
- "Association Marocaine des Technologies de l'Information et de la Communication," <https://amtic.org.ma/>
- "Collectif pour la promotion des droits des personnes en situation de handicap," Wikipedia, last modified March 30, 2017, https://fr.wikipedia.org/wiki/Collectif_pour_la_promotion_des_droits_des_personnes_en_situation_de_handicap
- "e-Participation.ma," <https://www.eparticipation.ma/fr>
- "Economic, Social and Environmental Council (ESEC)," <https://www.cese.ma/en/esec/>
- "Global Shapers," <https://www.globalshapers.org/>
- "Humanity & Inclusion," <https://www.hi-us.org/en/index>
- "JCI," <https://jci.cc/>
- "Maroc Numeric Cluster," <http://marocnumericcluster.com/>
- "Morocco 2011 Constitution art. 27," https://www.constituteproject.org/constitution/Morocco_2011#s134
- "Morocco," Open Government Partnership, <https://www.opengovpartnership.org/members/morocco/>
- "Nouabook.com," <https://nouabook.ma/>
- "Open Government Partnership," <https://www.opengovpartnership.org/>
- "OpenData.ma," <https://www.data.gov.ma/>
- "Ouchariko.ma," <https://ouchariko.ma/>
- Par Ilham Mountaj, "Woussoul, l'application qui facilite la vie des handicapés," Medias 24, October 4, 2013, <https://medias24.com/2013/10/04/woussoul-lapplication-qui-facilite-la-vie-des-handicapes/>
- Ristel Tchounand, "Woussoul : Un projet web pour identifier les lieux accessibles aux personnes à mobilité réduite," Yabiladi, September 16, 2013, <https://www.yabiladi.com/articles/details/19647/woussoul-projet-pour-identifier-lieux.html>
- "SimSim-Participation Citoyenne," <https://simsim.ma/>
- "Tanmia.ma," <https://tanmia.ma/>
- "Trophée national et Hackathon de l'Open Data," Data.gov.ma, Agence de Développement du Digital, last modified February 11, 2014, <https://data.gov.ma/fr/actualites/trophee-national-et-hackathon-de-lopen-data>
- "Ushadi," <https://www.ushahidi.com/>



© This picture is made by Tunisian e-Governance Society and FNF is authorized to publish it under CC BY-NC-ND 4.0 license

8. Tunisia's Examples of Civic Tech Community-Government Collaboration

Nourhane Ben Thabet

President, Tunisian e-Governance Society

Collaboration between the civic tech community and governments is an increasingly important phenomenon around the world, with Tunisia being a prominent example. This collaborative approach brings together the grassroots civic tech community and government agencies to address societal challenges, promote transparency, and increase citizen participation in the decision-making process.

In Tunisia, following the 2011 revolution, the civic tech community emerged as an influential actor using technology to advance democracy, human rights, and social welfare. The Tunisian government recognizes the potential of these communities and has actively worked with them to foster collaboration and support efforts to use digital tools to benefit society.

Civic Tech Communities in Tunisia

Civic Tech Communities in Tunisia consists of various organizations and individuals, and this paper will introduce some of them as examples as follows.

The Tunisian e-Governance Society¹ is a non-governmental, non-partisan, and non-profit organization dedicated to advancing good governance through digital technologies. Since its establishment in 2015, the society has been at the forefront of promoting informed governance in Tunisia. Their multi-stakeholder approach involves collaboration with various sectors, including the government and the public sector in general (e.g., TicDCE, Municipalité de

¹ The Tunisian e-Governance Society, "The Tunisian E-Governance Society," 2023, <https://www.linkedin.com/company/the-tunisian-e-governance-society>

Zriba, Municipalité de Ariana, InAI), the private sector (e.g., the Dot GoMyCode), civil society (e.g., Velorution Social Accountability Association, Carthage Business Angels, We Youth, IEEE Tunisia Section, Association Robotique ENSI), and academia (e.g., Google Developer Student Clubs, IHEC, ISAT, SMU Université Centrale). They have organized and participated in numerous impactful events, such as the Smart Cities Workshop, Open Geo Data Hackathon, and the Tunisian Metaverse Summit, among others.

IWatch Organization² is a non-profit, independent Tunisian oversight organization that aims to combat financial and administrative corruption and promote transparency. They have developed a mobile app³ that allows citizens to anonymously report corruption cases. Using technology, IWatch has created a secure and accessible platform for citizens to expose corrupt practices without fear of reprisal. Information obtained through the app has led to the exposure of several corruption cases and has played an important role in promoting accountability.

Mourakiboun⁴ (watchers) is an organization focused on electoral transparency and oversight in Tunisia. They use technology-driven projects to ensure the integrity of the electoral process. For example, they developed innovative tools for election monitoring in the years 2011, 2014 and 2019, and 2020⁵ for citizen observer training, and fraud reporting. By actively involving citizens in overseeing the electoral process, Mourakiboun contributes to transparent and fair elections and strengthens trust in the democratic process.

Chnowa Barnemjek⁶ (What is your program?) is a platform launched in 2019 by a group of young independent Tunisians. The platform is designed to help citizens in their electoral choice and to make the Tunisian democratic transition a success. The platform allowed potential voters to discover the presidential candidates and compare their electoral programs and those of the parties running for the legislative elections, as well as their positions around different themes. These themes mainly concerned the economy, finance, employment, the environment, and sustainable development, technology, transport, education, higher education, and scientific research, health, youth, agriculture, society, and individual freedoms, tourism, culture, defense, and security, as well as foreign affairs. The associative initiative also offered a presidential and legislative quiz which included 45 questions on a dozen topics of concern to public opinion. These questions were established through a survey conducted by the "Chnowa Barnemjek" team among a large sample of Tunisian youth in the 24 governorates of the country.

Ektbelhom.tn⁷ (Write for them) was Chnowa Barnemjek's new platform, through which Tunisian citizens were able to write an email to the 217 deputies of the Assembly of People's Representatives (ARP) to send them their concerns. The deputies had a heavy workload between plenary sessions, work in the committees, and did not always give the necessary time to go to the regions and listen to

the concerns of the citizens who elected them, leading to a detrimental atmosphere of tension and mistrust from their electorates. Therefore, the platform Ektbelhom.tn was initiated to solve this problem and successfully enhance a participatory democracy.

These civic tech communities and organizations in Tunisia play a key role in promoting transparency, public participation, and democracy. Through the use of technology and open data, citizens can access information, hold officials accountable, and participate actively in governance. The projects and platforms developed by these organizations have contributed to improving transparency, civic control, and participation in Tunisia's democratic process. They demonstrate the potential for collaboration between technology and the private tech community and governments to strengthen democracy, promote good governance, and ensure that the public voice is heard in decision-making processes.

² "IWatch Organization," <https://www.iwatch.tn/ar/>

³ "Billkamcha.tn," <https://saha.billkamcha.tn/>

⁴ "Mourakiboun," <http://www.mourakiboun.org/>

⁵ "Rapports d'observation électorale," Mourakiboun, <http://www.mourakiboun.org/elections>

⁶ "Chnowa Barnemjek," last modified June 8, 2023, https://www.chnowabarnemjek.tn/?fbclid=IwAR33s1qRZYGNuN6OG2rZlk1di1lv2RkFwtc_TH3nQ6lX-GAcBNA

⁷ "Ektbelhom," last modified June 8, 2023, <https://ektbelhom.tn/en>

The Government's Efforts

Several noteworthy projects, policies, and events in Tunisia highlight the government and Civic Tech's commitment to promoting citizen participation in digital infrastructure, technology policy-making, and partnership with the government. These initiatives include:

• Joining the Open Government Partnership (OGP):

Tunisia became a member of the OGP in 2011⁸, signaling its dedication to transparency, citizen engagement, and innovative governance. Through this partnership, the government collaborates with civil society organizations and the tech community to develop and implement open government initiatives that facilitate co-creation and leverage technology for democratic governance to promote transparency, public participation, and democracy. For example, the National Open Data Portal offers public access to diverse government data for analysis and scrutiny.⁹ In its development, active engagement with civil society organizations was integral, aligning with the OGP Tunisia plan. All engagements under the OGP were collaborative and involved the participation of civil society to discern their specific data needs and requirements. This inclusive approach ensures that the portal empowers citizens, researchers, and organizations to leverage data effectively, fostering transparency, accountability, and informed decision-making in governance. Another important project is the Open Budget Tunisia platform.¹⁰ The platform will enable citizens to monitor public spending by providing detailed information on state budgets, allocations and spending. This will allow the public to track how public money is spent, facilitating accountability and public oversight.

• OpenGovDataHack:¹¹

In cooperation with various ministries, the government's presidency orchestrated two editions of the OpenGovData Hack in 2020 and 2023. This event served as a platform that united technologists, entrepreneurs, and members of civil society to collaborate and innovate together, aiming to find tech-driven solutions for various sectors, including governance, education, healthcare, and the environment by using OpenData.

• E-Government Initiatives:

The Tunisian government has implemented e-government initiatives to enhance public services and promote citizen engagement. The "Tunisia Digital 2020" strategy,¹² for instance, focuses on digitizing government services, improving accessibility, and streamlining administrative processes.

• Startup Act:

In 2018, Tunisia introduced the Startup Act, which supports the growth of the startup ecosystem and encourages entrepreneurship.¹³ This act includes measures such as tax incentives, funding access, and simplified administrative procedures, fostering the active involvement of the tech community in developing innovative solutions.

• National Digital Strategy:¹⁴

To accelerate the country's digital transformation and ensure digital inclusion, the Tunisian government launched a National Digital Strategy. This comprehensive strategy concentrates on infrastructure development, digital skills training, and promoting innovation and entrepreneurship.

⁸ "Open Government Partnership Tunisia," <http://www.ogptunisie.gov.tn/fr/>

⁹ "Plateforme Nationale des Données Ouvertes," Data.gov.tn, <https://www.data.gov.tn/fr/>

¹⁰ "Portail Mizaniatouna Du Ministère Des Finances De La Tunisie," last modified March 1, 2017, <http://www.mizaniatouna.gov.tn/>

¹¹ "Organisation du Hackathon national "OpenGovDataHack2023" sur la réutilisation des données publiques ouvertes (2ème édition)," Data.gov.tn, <https://www.data.gov.tn/fr/evenements/organisation-du-hackathon-national-open-govdatahack2023-sur-la-r%C3%A9utilisation-des-donn%C3%A9es-publiques-ouvertes-2%C3%A8me-edition/>

¹² "Tunisia Digital 2020," Republic of Tunisia Ministry of Communication Technologies, <https://www.mtc.gov.tn/index.php?id=14&L=2>

¹³ Katrin Sold, "The Tunisian Startup Act," Carnegie Endowment for International Peace, June 26, 2018, <https://carnegieendowment.org/sada/76685>

¹⁴ "Digital Tunisia," Tokyo International Conference on African Development (TICAD), <https://www.ticad8.tn/content/11/digital-tunisia>

Examples of Collaborations between Civic Tech Communities and the Government

One of the best examples of collaboration between the Tunisian government and the civic tech in public service is the “Apps for Democracy Hack”¹⁵ project, which was carried out in 2015 and 2016 in collaboration with the Tunisian e-Governance Society and the African digital governance Foundation for Inclusive Development (AeGID Foundation)¹⁶ with the support of the Friedrich Naumann Foundation for Freedom. The competition brought together more than 50 participants with the aim of developing applications using open data to encourage voters to vote, facilitate interaction between citizens and local candidates/elected officials, and help voters make informed decisions. These applications can be made available to municipal election candidates from all the different parties to interact with their fellow citizens, present their programs, and answer their questions. The basic functional requirements are minimal, allowing participants the freedom to imagine and propose additional features and modules (games, quizzes, voting tools, etc.).

Another example is the Collaborative Digital Geospatial Project,¹⁷ which aims to support participatory municipalities in their partnership with open government by building a geographic information system (GIS) on topics such as urban development, roads and lighting, industrial areas, green spaces, and heritage sites. In this project, collaboration was established with the municipality to train its employees and representatives from the local civil society on field data collection and digitization, followed by the development of a geospatial information system using OpenStreetMap.

By involving citizens in the analysis and scrutiny of government data, the project breaks the myth of digital services being inaccessible and opaque. Citizens can actively participate in understanding and monitoring decision making and also these projects create a loop of participation, empowering citizens to contribute to service development and improvement.

Effective cooperation between project teams and governments is a key factor in the success of any civic technology initiative. Governments play a key role in these collaborations by providing support, data and expertise to ensure that projects are effectively implemented.

Policy Recommendations

Taking the two projects of Apps for democracy and Citizen GIS as example, in addition to fulfill people's need, it was also important to engage in dialogue and actively listen to what the government needs and what challenges the government faces. By understanding their issues and priorities, the community developed targeted solutions that address specific problems, like the problem of citizens' reluctance to vote or the absence of geographical data.

One approach to fostering collaboration is to involve young people and empower them to find innovative solutions. By encouraging youth participation and entrepreneurship, governments can tap into the creativity and energy of the younger generation.

The cooperation can be a win-win situation. Governments benefit from the expertise and innovative solutions developed by civic tech communities, while civic tech communities gain access to resources, data, and the support necessary to implement their projects. This collaborative approach ensures that the projects are aligned with the government's priorities and can have a meaningful impact on society.

To foster collaboration between governments and civic tech communities, certain recommendations can be considered:

- **Funding and Support:**

Governments should allocate targeted funding and resources to support civil society's technology efforts. This can be done through grants, public-private partnerships, or the establishment of innovation funds specifically targeted at civil society technology projects. With the right funding, the private tech community can innovate and stay operational.

- **Capacity Building and Education:**

Governments should invest in capacity building programs and education efforts to improve the digital literacy and technical skills of civil servants. This will enable government officials to better understand and engage with the private tech community, fostering a collaborative environment for co-creation.

¹⁵ “Apps for Democracy,” <https://www.facebook.com/appsfordemocracy/>

¹⁶ “La Fondation Africaine de la Gouvernance Numérique pour le Développement Inclusif,” <http://www.aegid-foundation.org/home>

¹⁷ “Zriba Citizen GIS,” The Tunisian e-Governance Society, last modified November 20, 2021, https://geoportail.commune-zriba.com.tn/?fbclid=IwAR2n-a2B2XBw4L_P0w97T9JVghc-YlJnYaPQ4-xT3wMSGtykg0kkpFjFoDk

• Regulatory Framework:

Governments should create a clear and supportive regulatory framework that fosters collaboration and innovation in civic technology. This includes creating favorable legal frameworks for data exchange, protecting the privacy and security of citizens, and ensuring transparency in government procurement processes.

Based on Tunisia's experience, here are recommendations on how civic tech can help:

• Promoting Digital Rights:

Civic Tech can claim digital rights and privacy protection. By developing tools and platforms that enable secure communication and data encryption, the Civic Tech Community enables individuals and communities to protect their digital identities and participate in online activities without fear of surveillance or repression.

• Improving Digital Literacy:

Citizen technology can contribute to digital literacy programs that educate citizens about their rights, the importance of online freedom, and how to navigate the digital space safely.

• Collaboration for Policy Advocacy:

The civic tech community can work with governments and civil society organizations to develop policies and regulations that protect digital rights and guard against authoritarian tendencies. By actively participating in political debates and advocating for democratic principles, civic tech can influence government policies and policies in favor of an open and free digital environment.

• Monitoring and Accountability:

Civic Tech can develop tools and platforms to monitor and hold government actions accountable. Civic Tech helps expose and challenge digital authoritarian practices by fostering transparency and citizen participation. This includes overseeing the use of surveillance technology, promoting open data initiatives, and promoting public participation in decision-making processes.

Reference

- "About Startup Act," Startup Tunisia, last modified July 22, 2023, https://startup.gov.tn/fr/startup_act/discover
- "Apps for Democracy," <https://www.facebook.com/appsfordemocracy/>
- "Billkamcha.tn," <https://saha.billkamcha.tn/>
- "Chnowa Barnamejk," last modified June 8, 2023, https://www.chnowabarnemjek.tn/?fbclid=IwAR33s1qR-ZyGNaOUnL9uNnN6OG2rZlk1di1lvv2RkFwtc_TH3n-Q6lXGAcBNA
- "Digital Tunisia," Tokyo International Conference on African Development (TICAD), <https://www.ticad8.tn/content/11/digital-tunisia>
- "Ektbelhom," last modified June 8, 2023, <https://ektbelhom.tn/en>
- "IWatch Organization," <https://www.iwatch.tn/ar/>
- Katrin Sold, "The Tunisian Startup Act," Carnegie Endowment for International Peace, June 26, 2018, <https://carnegieendowment.org/sada/76685>
- "La Fondation Africaine de la Gouvernance Numérique pour le Développement Inclusif," <http://www.aegid-foundation.org/home>
- "Mourakiboun," <http://www.mourakiboun.org/>
- "Open Government Partnership Tunisia," <http://www.ogptunisie.gov.tn/fr/>
- "Organisation du Hackathon national "OpenGovDataHack2023" sur la réutilisation des données publiques ouvertes (2ème édition)," Data.gov.tn, <https://www.data.gov.tn/fr/evenements/organisation-du-hackathon-national-opengovdatahack2023-sur-la-r%C3%A9utilisation-des-donn%C3%A9es-publiques-ouvertes-2%C3%A8me-edition/>
- "Plateforme Nationale des Données Ouvertes," Data.gov.tn, <https://www.data.gov.tn/fr/>
- "Portail Mizaniatouna Du Ministère Des Finances De La Tunisie," last modified March 1, 2017, <http://www.mizaniatouna.gov.tn/>
- "Rapports d'observation électorale," Mourakiboun, <http://www.mourakiboun.org/elections>
- The Tunisian e-Governance Society, "The Tunisian E-Governance Society," 2023, <https://www.linkedin.com/company/the-tunisian-e-governance-society>
- "Tunisia Digital 2020," Republic of Tunisia Ministry of communication Technologies, <https://www.mtc.gov.tn/index.php?id=14&L=2>
- "Zriba Citizen GIS," The Tunisian e-Governance Society, last modified November 20, 2021, https://geoportail.commune-zriba.com.tn/?fbclid=IwAR2n-a2B2XBw4L_P0w97T9JVghc-YIJnYaPQ4-xT3wMSGtykg0kkpFjFoDk

9. About the Authors

Authors are listed in the order of this publication's table of contents.



Ya-wei Chou

Program Manager, FNF Global Innovation Hub

Ya-wei serves as the Program Manager of FNF Global Innovation Hub, and her work in the Hub focuses on innovation for democracy. She enjoys exploring how people can use technology and innovation to foster democracy, freedom, and human rights. For example, she initiates the Innovation for Democracy Café projects and manages the Hub's collaboration with its partner organizations on projects about open source, digital democracy, civic tech, and youth participation. Before joining FNF, she has worked for democracy and digital rights NGOs and a political party. She holds a master degree in International Relations from National Taiwan University.



Meichun Lee

Assistant Research Fellow,
Institute of Ethnology, Academia Sinica

Meichun Lee is an anthropologist with research interests in civic tech, digital activism, data politics, and mis/disinformation in Taiwan and East Asian. She holds a PhD from the University of California-Davis and an MPhil from the University of Cambridge. Currently, she is the assistant research fellow at the Institute of Ethnology, Academia Sinica, Taiwan. Her dissertation investigated how civic tech activists in Taiwan translate openness from digital technologies to politics, and create an ambivalent space that makes activism possible regardless of the changing political landscape. Lee's works have been published in *PoLAR: Political and Legal Anthropology Review and Anthropology Now*. She also writes for *GUAVA Anthropology* and *The Reporter*. Lee is also the co-author of Taiwan Open Government Report 2014-2016.



Kes Tuturoong

Officer of Knowledge Management Division,
Indonesia Corruption Watch

Kes Tuturoong is a Researcher in the Knowledge Management Division of Indonesia Corruption Watch, a national watchdog working on anti-corruption and democracy. Kes develops red flag analysis and implements them in an online platform developed by ICW, *Opentender*, to arm the public in scrutinizing government procurement data. Kes also develops platforms and administer systems using open source tools.



Wana Alamsyah

Head of Knowledge Management Division,
Indonesia Corruption Watch

Wana Alamsyah is a Head of Knowledge Management Division in an NGO called Indonesia Corruption Watch (ICW) with eight-year experience working on anti-corruption and democracy. Wana specializes in conducting investigations on the public procurement sector using open source intelligence (OSINT). Wana is also a trainer to provide training regarding access to information, investigation, and cyber security.



Daniela Ramirez

Communications Coordinator, Visor Urbano

Daniela is a graduate law student from the University of Guadalajara. She attended the University of Malaga, Spain, where she was certified in Digital Transformation Law. Later, she obtained a certification in Alternate Conflict Resolution from the Institute of Alternative Justice in Jalisco. Additionally, she holds a post-graduate Communications and Political Marketing degree from the Panamerican University. Daniela is currently the communications coordinator at Visor Urbano, where she is committed to implementing digital transformation and transparency tools resulting in less government waste and corruption.



David Bates

Outreach Coordinator, Visor Urbano

David is a Govtech, Social Innovation, and Tech for Good advocate. He promotes the use of exponential technologies to develop creative and scalable solutions for global challenges. He majored in Communication and later specialized in Impact Measurement for Social Development and Human-Centered Design for Social Innovation. With his experience in ecosystems development, project management, strategic alliances development, and by harnessing multisectoral collaboration, he seeks to create desirable futures in which no one is left behind.



© OKF

Henriette Litta

Managing Director,
Open Knowledge Foundation Germany

Henriette Litta is Managing Director of the Open Knowledge Foundation Germany (OKF DE). Our goal is to strengthen digital sovereignty of citizens, to enable democratic participation and to support an ethical approach to technology for the common good. Before joining OKF DE, Henriette held leadership positions at the Berlin-based Expert Council on Migration and at the Hertie School of Governance. She studied political science in Berlin, Philadelphia and Singapore. In her doctoral dissertation, Henriette analyzed state cooperation on environmental issues. During her academic education, she received scholarships from Fulbright, the Heinrich Böll Foundation and the Studienstiftung des deutschen Volkes.



Matt Stempeck

Curator, Civic Tech Field Guide

Matt Stempeck (he / him) is a writer, researcher, technologist, and activist. He's been building the field of what we call civic technology since 2005. Matt's experience spans tiny non-profits, big tech platforms, academia, journalism, and history-shaping campaigns. Matt curates the Civic Tech Field Guide, the most comprehensive collection of democracy tech projects in the world. And he's Technologist in Residence at Cornell Tech, where he organizes the Siegel PiTech Impact Fellowship, embedding highly technical PhD students with public interest organizations across sectors. Matt served as Director of Civic Technology at Microsoft in New York City, establishing strategic partnerships and re-orienting the company's public sector efforts for the participatory era. Education-wise, Matt became / earned a Master of Science at the MIT Media Lab's Center for Civic Media. While at the Media Lab, he quantified global media attention to stories like Trayvon Martin's, designed a peer-to-peer humanitarian aid marketplace, and built LazyTruth, an award-winning product to fight misinformation online way back in 2013. Matt also holds a Bachelor of Arts with high honors from the University of Maryland College Park, where he wrote his undergraduate thesis on the disruption participatory media brought to political journalism. Originally from Boston, Matt's now based in Lisbon, Portugal and works on engagement projects with a creative collective appropriately known as the Bad Idea Factory.

**Oussama Abdelah Benhmida**

Civic Tech and Digital Transformation Expert

Oussama Abdelah Benhmida is an IT professional committed to addressing societal issues through innovative tech solutions. As co-founder and Product Manager of Lab4Net, he has led user-centric tech projects for education and community governance, demonstrating his leadership in an agile environment. His work has spanned Africa and the MENA region, equipping him with an in-depth understanding of the unique challenges these areas face. A polyglot fluent in Darija, Arabic, French, and English, Oussama is skilled in managing diverse stakeholder relations. In addition to his technical expertise, he has played an active role in Tanmia.ma, a Moroccan NGO advocating for open-source solutions to community challenges. His key contributions include leading Tanmia's restructuring for optimized open-source solutions delivery, co-designing programs promoting open-source philosophy, and fostering collaborations to tackle pressing societal issues.

**Nourhane Ben Thabet**

President,
Tunisian e-Governance Society

Nourhane Ben Thabet is an experienced Telecom Consultant, supporting telecom operators in the work of deploying the fiber and 5G network in France and recommending the best optimal solutions for fiber connectivity. She graduated in GIS and Remote Sensing from the Science University of Tunis. Besides her following to the democratic transition in Tunisia, she is more focusing on citizen engagement, access to information and open governance issues. She was a member of "The Tunisian e-Governance Society" and has become, since December 2021, the President of the society, which is a non-governmental and non-profit organization engaged in promoting Open Governance and citizen participation and in supporting the implementation of evidence-based policies to transform the public.

