

Failed yet successful: Learning from discontinued civic tech initiatives

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ABSTRACT

The design of civic tech is often confronted with impediments, barriers, and a lack of resources. These and other causes may lead to the discontinuation and even abandonment of initiatives. Since seemingly failed projects are much more difficult to publish as articles, this workshop will provide academics and practitioners with a rare opportunity to exchange experiences and insights on discontinued civic tech initiatives. The goal of the workshop is to develop a better understanding of why some civic tech initiatives fail and ask whether discontinued initiatives may still somehow contribute to social change and the growth of digital civics. A variety of sub-questions around discontinued civic tech will be addressed in the workshop, including matters of participation, citizen science, public management, power structures and biases, and communication.

CCS CONCEPTS

• **Human-centered computing** → **Collaborative and social computing**.

KEYWORDS

Civic Tech, Digital Civics, Civic Design, Bottom-up, Engaged Communities

1 BACKGROUND

Civic tech (short for civic technologies) are a variety of technologies developed and applied by communities for diverse civic purposes.

Civic tech initiatives, i.e., the organizational ecosystem around civic tech, are a worldwide phenomenon that makes invaluable contributions in terms of data, community building, policy debates, and outreach [6, 8, 22, 24, 25]. Such initiatives are dedicated to, for example, fostering participation, collecting environmental data, and raising awareness of issues of common concern with the help of technologies [15, 17]. Civic tech initiatives have accomplished new views on the world by producing digital resources, e.g., data and maps, which can be used by others [25]. For instance, civic data has the potential to accelerate public discourse on matters of common concern and open spaces for democratic participatory structures [21]. Through communication of the initiatives' outputs, new public knowledge and capacities are built. Civic tech initiatives contribute to a decentralization of action and join transformative processes around topics like the future city, climate change, and peace.

HCI research on civic tech usually focuses on the impacts and scale: studies about the design, development, trust, and public use of civic technologies (e.g., [7, 13]), studies on the potentials and difficulties of citizen science initiatives (e.g., [9, 18]) and studies investigating the evolution of civic tech initiatives [11, 23] like studies on the scaling of community engagement [3, 4].

Despite contributing to multiple societal issues and being part of ongoing transformative processes, many civic tech initiatives and projects are short-lived. Only a few initiatives manage to sustain over time. This workshop will complement existing current scholarly discussions in HCI around sustainability, citizen participation, and digital civics, by asking: What happened to discontinued civic

tech initiatives? And what can we learn from their seeming failures or endings? Why do some civic tech initiatives not scale up? What are the specific problems of civic tech initiatives growing from bottom-up collaborative arrangements to scaled networks and cooperatives? These questions provide an open discussion space for workshop participants to share experiences and knowledge, as well as lessons learned from discontinued civic tech cases that may have been overlooked elsewhere.

2 WORKSHOP DESCRIPTION

The workshop's goal is to provide an open space where researchers and practitioners can exchange experiences and insights on discontinued civic tech initiatives. This exchange shall be the basis for generating new knowledge for research and design on why civic tech initiatives have stopped. Workshops are a rare opportunity for academics to share their experiences of failure because seemingly failed projects are much more difficult to publish. Practitioners are also less inclined to share experiences of stopped initiatives in order to obtain further funding. We would like to better understand what constitutes 'failure' in the domain of civic tech. Was the envisioned technology erroneous and did the development not work? Was it a matter of funding or limited time or knowledge? The institutional settings? Trust? We want to learn about the circumstances in which civic technologies lost support, community engagement, or became too contested to continue. The answers to such questions are key to generating design knowledge about the role of failure in design practices oriented to civil society in the HCI community.

We would like to suggest that failure and discontinuation should not be seen as necessarily negative outputs but as learning opportunities in a complex design space. Some initiatives may seem to stop but exert influence in other ways, e.g., inspire other initiatives or create forms of agency that extend to other arenas. Other discontinued projects have actually shifted into other forms, such as networks of people, new public tasks, and academic research projects. These cases point to a need to rethink how we evaluate civic tech.

The workshop is designed to create a network and gather cases for future studies and collaboration. Examples of civic tech initiatives that have stopped are usually hard to collect because participants and materials are often not available anymore. We see the workshop as an opportunity to assemble a variety of insightful cases of failed yet successful civic tech initiatives. This collection of cases will provide us with a starting point for new studies in HCI in the aftermath of the workshop, and possibly inform new civic tech initiatives in the future.

We are aware that some civic tech initiatives have ended without an evaluation of the causes for their discontinuation, and it might not always be obvious why an initiative ended. We assume that there can be no general answer to this question, as each case depends on numerous issues, contexts, instruments, and organizational forms. Therefore, the workshop will be guided by several discussion points backed by an interdisciplinary team of researchers and designers to approach the overarching question, 'What happened to civic tech initiatives that have failed, unsustainable, or discontinued?' from various angles. "Failed" can mean that the project was completed but did not achieve its goals, but it can also

mean that it was not completed at all. "Unsustainable" can mean that it is short-lived but still successful. "Discontinued" can mean that it was not completed, but also that it was not extended beyond its original duration. During the workshop, we will work on further unpacking these and other related terms.

3 WORKSHOP TOPICS OF INTEREST

The workshop is in dialogue with several ongoing discussions in Human-Computer-Interaction (HCI), Computer-supported Collaborative Work (CSCW), and Designing Interactive Systems (DIS), where scholars have elaborated on (un)scaling computing [14, 19] and making civic (tech) initiatives last [11, 12] as well as situating dead and dying platforms [16]. In this workshop, we will take an even broader perspective because we believe that the respective contexts urgently need to be well understood when generating knowledge on failures or discontinuation of civic tech. As spheres of contexts, we will look at civic tech initiatives in the context of "smart cities" [2, 20], urban informatics [5], and local civic-tech-supported journalism [10].

We suggest the following non-exclusive list of topics that may help to reflect on the failure or discontinuation of a civic tech initiative:

- Theoretical perspectives on failure and success in civic tech/media design practices
- Anatomies of failures and gained insights for civic design
- Learning from mistakes and misreading the civic/political terrain while connecting technology and politics
- Terminology (metaphors, concepts) used to characterize civic tech initiatives/projects (and failures) in HCI
- Assumptions when evaluating civic tech in terms of future cities, participation, and democracy
- Understanding the use of civic tech in and for media and journalism
- Stories about how civic tech platforms "grapple with absence, invisibility, and disappearance" (cf. McCammon and Lingel [16])
- Lessons learned from designing for civic tech in the Global South

4 ORGANIZERS

This workshop is organized by an interdisciplinary, international group of scholars engaged in research and activities related to civic tech. Shared common interests bring us together to create a rare venue that promotes knowledge sharing and honest discussion of discontinued civic technology cases. The organizer team consists of the following members.

- ◊ **Andrea Hamm** is a researcher in the group "Digitalization, Sustainability, and Participation" at the Weizenbaum Institute for the Networked Society. Her work focuses on the socio-political dimensions of digitalization, sustainability transitions, and the role of digital technologies among civic actor groups in transformation and innovation processes.
- ◊ **Yuya Shibuya** is an Associate Professor at the Center for Spatial Information Science at The University of Tokyo (Japan). Her interests lie in how the virtual and real worlds interact with one another. She has investigated how democratic participatory

structures have changed in the digital era and the impacts on people's behavior change.

- ◊ **Teresa Cerratto Pargman** is a Professor of HCI at the Department of Computer and Systems Sciences at Stockholm University. She works with technological mediation theories and is interested in the impact of emerging technologies on everyday practices in education and beyond. She has been involved in the design of civic observatories via the EU-funded project Ground Truth. She is currently the PI for a research project studying ethical issues and values associated with AI in the public sector, from a post phenomenological perspective of technologies. Teresa is also an associate director for outreach at Digital Futures in Sweden.
- ◊ **Roy Bendor** is an Assistant Professor of Critical Design in the Department of Human-Centered Design at Delft University of Technology, the Netherlands. His research explores the relations between design, culture and politics, and more recently, the ways in which urban imaginaries and different conceptions of the future influence the design and deployment of smart city technologies. Roy is also a Fellow of the Urban Futures Studio at Utrecht University, and former editor of the sustainability forum in ACM's Interactions magazine. His book, *Interactive Media for Sustainability* (2018), was published as part of the Palgrave Studies in Media and Environmental Communication series.
- ◊ **Nicolai Brodersen Hansen** is an Assistant Professor at Aalborg University. His research is situated within HCI and Participatory Design. He focuses on understanding, modeling, and improving digital tools and activities that support design-based collaboration in a range of domains, primarily with a civic bent. He has been organizing workshops at DIS, NordiCHI and OZCHI, and is an expert on organizing participatory sessions.
- ◊ **Christoph Raetzsch** is an Associate Professor at the Department of Media and Journalism Studies of Aarhus University (Denmark). He works in journalism studies and researches history and theory of media development and practice in journalism, public spheres and urban spaces. Previously, he was a postdoctoral researcher in the project OrganiCity at Aarhus University. His recent research deals with interpretations of smartness to animate civic innovation in cities, the interfaces and infrastructures of publics besides journalism, and the emergent potential of quotidian media practices to shape public discourses. In 2022 he is chair of the local committee to host the ECREA "Rethink Impact" conference in Aarhus.
- ◊ **Masahiko Shoji** is a Professor at Musashi University (Japan). His research focuses on how the shift to an information society will affect society and individuals. He is particularly interested in local informatization, or how information and communication technology can be used to manage local communities and develop the lifestyles, economies, and cultural activities of local communities. He is the founder and representative of Open Knowledge Japan, an organization that promotes the dissemination and utilization of Open Data that can be freely used by anyone.
- ◊ **Christoph Bieber** is a Professor of Political Science at the NRW School of Governance, University of Duisburg-Essen (Germany). Since 2018 he has been delegated to the Center for Advanced Internet Studies (CAIS) in Bochum, where as a research professor

he directs the program "Digital Democratic Innovations" that runs from 2021 until 2026. The empirical focus of the research program is on Smart City-politics and digital decision-making.

- ◊ **Mennatullah Hendawy** is an interdisciplinary urban planner working on the intersection of cities and technology towards equity and sustainability. She is one of the founders of Cairo Urban AI, a project working on exploring the potential of using artificial intelligence to develop just and sustainable cities. She is affiliated with the Center for Advanced Internet Studies (CAIS) in Bochum, Impact circles Berlin, and Ain Shams University in Cairo.
- ◊ **Gwen Klerks** is a PhD candidate at Eindhoven University of Technology and University of Technology Sydney. Throughout her research, she investigates how designers can collaborate with civic communities to promote sustainable urban futures. Specifically, she investigates how designers can support communities to take collective action by exploring how to navigate the complexities of the community context.
- ◊ **Ben Schouten** is professor of Playful Interaction at Eindhoven University of Technology, Department of Industrial Design as well as lector Play & Civic Media at the Amsterdam University of Applied Sciences. He founded the Master Digital Design in Amsterdam and until 2020 worked as its scientific director. His group focuses on play and design for social innovations, citizen empowerment and culture. He (co) authored 5 books and 100-plus publications at the intersection of play, games, participatory design and citizen empowerment. His latest book, *The Civic Empowerment Toolbox, Action Design for Urban Futures* has recently been published. His design includes, multiple games within the domain of health care, education, urban planning, focusing on playful empowerment.

5 PRE-WORKSHOP PLANS

The call for the workshop will be distributed in HCI and civic tech related communities (email list, slack, Facebook groups, etc) and on our webpage. The co-organizers will distribute and share the "Call for Participation" through HCI email lists and their professional and personal networks. We will also send out direct email invitations to researchers and practitioners working on topics related to the workshop. We aim for a diverse representation of participants across disciplinary and geographical contexts. Participants will be selected based on the relevance of their submission to the workshop's theme. We aim to accept up to 24 participants.

Several members of the organizing team have good connections to civic tech communities in multiple countries. We will invite a wider range of participants, both from academia and practitioners.

5.1 Workshop Format and Structure

This one-day workshop will be held in person, and we will provide virtual participation for participants who cannot be on-site. The workshop will consist of a sharing circle, organizers' position statements, group exercises, and discussions.

The group exercises will consist of a "past-facing" [1] workshop which will allow participants to "go back" to the point in time in which their discontinued civic tech projects have started, and then consider what could have been done to make different outputs,

outcomes, and impacts. In the group discussion, we will connect the discussion of failure with a speculative approach that helps participants learn for future initiatives and cases. Discussion will be organized by a team of co-organizers who have experience in speculative methods and working with civic tech practitioners. In this way, we can contribute insights from the field, novel concepts to speak of failure as a part of a learning trajectory in HCI, and assumptions about the present, past, and future of design for civic tech in HCI.

Exercises may be organized in smaller thematic groups, in this case, participants are divided into groups based on their submitted “failure” stories, e.g., regarding stakeholders, goals, funding, and evaluation criteria. According to the participants’ plans to participate in person or online, we may move some groups to the virtual space. Please find more information about the workshop schedule on our website.

5.2 Website

On our website, participants will find workshop details, important dates, and the workshop schedule. With the help of the content, we invite participants to reflect on discontinued civic technology before the workshop. Accepted contributions from participants will be posted on the website if participants agree. Disseminating the submissions helps participants get to know each other and start the conversation leading up to the workshop.

Website link: discontinued-civictech.github.io

5.3 Post-Workshop Plans and Expected Outcomes

The key objectives of the workshop are that we will build a community to exchange ideas and knowledge on discontinued civic tech around the world. Based on the results of this workshop and the interests of the participants, we will summarize the key insights and submit them to Interactions. We also intend to organize similar future events, and we also remain open to different outputs that align with participants’ needs and interests.

5.4 Accessibility

When submitting your proposal, please let us know if there is anything we can do to ensure the workshop is accessible and barrier-free for you. We strive to be an inclusive and accessible workshop. However, please be aware that some accommodations may be difficult to provide at short notice, and we may not be able to accommodate every request. Please feel free to contact discontinued.civictech@gmail.com if you have any needs or questions. The organizers will follow up with you. It helps if you request in advance so that we can meet your needs as soon as possible.

6 CALL FOR PARTICIPATION

To better understand and learn from discontinued civic tech, we invite submissions from researchers, designers, educators, and activists interested in sharing their experiences and knowledge about failed or discontinued civic tech initiatives. We do not see failure and discontinuation as necessarily negative outputs but as learning instances in design practices driving civic tech projects. Some initiatives may seem to stop but exert influence in other ways, e.g.,

inspire other initiatives and create forms of agency that then spill over to other arenas. We would like to better understand what constitutes ‘failure’ in the domain of civic tech. Was the envisioned technology erroneous and did the development not work? Was it a missed momentum or lack of continued interest by the volunteers? We want to learn about the circumstances in which civic technologies lost support, community engagement, or became too contested to continue. The answers to such questions are key to generating design knowledge about the role of failure in design practices oriented to the civil society in the CHI community.

Our workshop has two goals: (1) to provide an open and inclusive space where researchers, designers, and practitioners can exchange on “failed” or discontinued civic tech initiatives which usually have scarce opportunity to be presented in academic conferences, and (2) to connect people and networks in this domain while gathering people and cases for future studies. Submissions should address and will be selected based on relevance to the workshop topic. We ask applicants to include in their submission the following items:

- Your civic tech “failure” story/ies: for example on unanticipated challenges, pleasant and unpleasant surprises, mistakes, gaps between intentions and outcomes, ‘drift’ in goals, lack of criteria for success, the relation between cultural contexts and admitting failure, but also stories on cases when longevity is not desirable;
- If applicable, introducing your case(s): name, size (e.g., estimated number of community members, data points, and/or local groups), geolocation, web link (if existing), addressed issue(s), civic tech tools developed by the initiative (if possible add a screenshot of available web apps), and other details which you may find important to mention.

We welcome submissions in various formats, including video/audio recordings (max. 5 min), visual artifacts such as collage, photography, graphic stories, and illustrations, as well as position papers (max. 3 pages) including a brief bio of the applicant(s). Submissions should be sent to discontinued.civictech@gmail.com

Please include in your submission if you would like or would not like to have your submission published on the workshop website. Please also indicate in your submission if you plan to participate in person or online. Please note that at least one author of each accepted submission must attend the workshop and that all participants must register for both the workshop and for at least one day of the conference.

Please find more information on our website: <https://discontinued-civictech.github.io>

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