

Digital Civics and Community Engagement with Technology

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Digital civics as a research field bridges the gap between political science and computer science. Much technology in this space supports *community* or *civic engagement* both between community members and researchers, or among community members themselves. Where much work exists in this field, we wish to define a set of simple design guidelines for community engagement technology – rooted in literature. As such, our DRP project involved exploring social computing research in digital civics and community engagement to then propose a set of 3 broad design guidelines (D1-D3) to create effective technological systems for community engagement:

D1: The system should encourage and enforce collaboration with community members whenever possible. Platforms to support community engagement should focus on collaboration rather than only contribution [4]. Thus, these platforms should support involvement through question formation, co-design, data analysis, prototyping, and evaluation with respect to the problem at hand.

D2: The system should support community members by enabling accessible, sustainable, and accountable civic engagement avenues. Platforms should offer various mediums for communication by community members, keeping in mind what digital tools are already in use and complement them [2]. Barriers to participation, such as accessi-

bility concerns, should be managed by the platform itself [1].

D3: This system should empower community members by upholding their values and encouraging diverse perspectives and beliefs. Technological systems are not neutral by design [3]. As such, platforms created for community engagement should recognize this non-neutrality or *bias*, and prioritize civic values and trust.

References

- [1] Ashley Boone, Annabel Rothschild, Xander Koo, Grace Pfohl, Alyssa Sheehan, Betsy DiSalvo, Christopher A Le Dantec, and Carl DiSalvo. *Reimagining Meaningful Data Work through Citizen Science*. Proc. ACM Hum.-Comput. Interact. **8**, CSCW2 (November 2024), 1 – 26.
- [2] Federico Caprotti, I.-Chun Catherine Chang, and Simon Joss. *Beyond the smart city: a typology of platform urbanism*. Urban Transform **4**, **1** (December 2022), 4.
- [3] Eric Corbett and Christopher Le Dantec. *Towards a Design Framework for Trust in Digital Civics*. In Proceedings of the 2019 on Designing Interactive Systems Conference (DIS '19), June 18, 2019. Association for Computing Machinery, New York, NY, USA, 1145 – 1156.
- [4] Gillian R. Hayes. *Knowing by Doing: Action Research as an Approach to HCI*. In Ways of Knowing in HCI, Judith S. Olson and Wendy A. Kellogg (eds.). Springer, New York, NY, 49 – 68.