The haves and the have nots: is civic tech impacting the people who need it most?

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Digital civic engagement and inequality

- Digital divide
- Empowering the empowered

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<tr>
<th>Participant Profile</th>
<th>Nature of Demand</th>
<th>Impact on citizens</th>
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Translation of participation into demands
Government response
Research questions

- How representative are citizens who engage with civic tech compared to:
  - offline participants
  - the general population
- How do participant profiles translate into the types of demands made through these platforms?
- How do the demands made through these platforms translate into impact on citizens? Does government response translate, exacerbate or ameliorate inequalities in demands?
Four Case Studies

- Fix My Street (UK)
- Participatory budgeting (Brazil)
- U-Report (Uganda)
- Change.org (worldwide)

- Each of these takes individual acts of participation and turns them into requests to the government
- Nature of these requests varies greatly as does the design of the platforms
- Ongoing research (we indicate where findings are still preliminary)
Case study 1: Participatory budgeting

- Brazilian state of Rio Grande do Sul assigns a section of its budget to be distributed according to the results of a participatory budgeting process.
- The final step of this process is a vote on the proposals for each district.
- This vote is conducted both online and offline.
- We conducted online (n=33,758) and offline (n=4947) exit polls of voters and were given access to the raw voter data for both voting modes.
Participatory budgeting: Participant profile
Participatory budgeting Nature of demand

- Obtained complete individual vote data from PB online vote (1.3m votes)
- Complete district level returns offline (5.8m votes)
- Compared % of the vote that each proposal received in each district among online and offline voters
- No significant difference in voting behaviour of online and offline voters
- Possible explanation: Proposals are pre-vetted by the participatory process
Participatory budgeting: Impact on citizens

- No direct data on implementation of proposals
- Spending has to be distributed according to the distribution matrix that systematically favours poorer areas of Rio Grande do Sul
Participatory budgeting

Participant Profile

Online voters are from traditionally privileged groups

Nature of Demand

No difference between online and offline

Impact on citizens

Favours the poor

No systematic difference in the voting behaviour of online and offline voters

Government Implementation systematically favours the disadvantaged
Case study 2: Fix My Street

- UK platform for reporting street problems to local authorities run by MySociety
- Allows a user to submit a problem report that is automatically routed to the correct authority
Fix My Street: Participant profile

- Two studies of FMS participants: a URL intercept survey where around 5% of respondents were FMS users and a survey of FMS users (Cantijoch, Galandini and Gibson, 2014)
- Both studies find that
  - Older
  - More educated
  - More likely to be male
  - Less likely to be from an ethnic minority
Fix My Street: Nature of demand

- 71,493 Fix My Street user reports from 2012 merged into ward level data
- Are requests for help with problems coming from more privileged areas?
- We find:
  - Strong positive relationship with education levels
  - Strong relationship with number of young people
  - No relationship to ethnicity
  - Weak positive relationship with AB class
  - Negative relationship with home ownership
Fix My Street: Impact on citizens

- No strong evidence that government counteracts biases in reporting
- Probability of government fixing a problem within 35 days is not related to:
  - Education of the area
  - Social class of the area
  - Proportion of 18-24 year olds in area
  - Number of students in area
- Government response mostly replicates inequalities at the demand level
Fix My Street

Participant Profile
Highly unequal

Nature of Demand
Less unequal than participant profile

Impact on citizens
Reflects inequalities in demands

Platforms demands are less unequal than the users who submit the reports

Government response replicates unequal demands
Case study 3: U-Report

- SMS platform run by UNICEF in Uganda
- Users can report problems
- Platform is also used to poll users to gather data on need for NGOs and government
U-Report: Participant profile

- Face-to-face survey of Ugandans (n=1,185)
- SMS survey of U-Report users (n=5,693)
U-Report: Nature of demand

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Regional correlations between problems reported through U-Report and problems reported in face-to-face survey.

Average problems reported through U-Report and in the face-to-face survey.
U-Report: Impact on citizens

- Unclear whether there is much impact on citizens as the result of U-Report
- U-Report users mostly unsure about the impact it has
- 4/27 MPs said that it influenced their decisions or actions in some way
- Not systematically integrated into government or NGO’s decision making or resource allocation
U-Report

- **Participant Profile**: Highly unequal
- **Nature of Demand**: Varies in representativeness
- **Impact on citizens**: Unclear whether it has any impact

The effect of composition on responses varies across questions. Not clear that demands translate into action.
Case study 4: Change.org

- Largest online petition platform: 92 million users
- Users can create a petition on any topic
- 4716 petitions currently categorized as “victory”
Change.org: Participant profile I

- Downloaded 3.9 million change.org users’ data using open API
- Used automated gender coding to assign a probable gender to each user
- We have complete data on what petitions each user signs, creates and what the content of those petitions are and whether the petition is categorised as successful
Change.org: Participant profile II
Change.org: Participant profile III
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### Change.org: Impact on citizens I

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Preliminary findings
Change.org: Impact on citizens II

- There is gender inequality in terms of who creates petitions
- This does change the issue agenda of created petitions
- But not that much in terms of who signs them
- The signers push the agenda back towards gender parity
- And government response seems to generally follow the categories that get the most signatures
Participant Profile

- Inclusive users but exclusive creators

Nature of Demand

- Reflects inequalities in the user base

Impact on citizens

- Reflects inequalities in the user base

The demographics of creators has a strong impact on the agenda, but signers have power over which petitions gain traction.

Unclear, but signatures certainly increase the probability of success.
The importance of institutional design

- Platforms differ in how much control the participants have over the policy choices they are trying to influence.
- The only platform that followed the assumed route of simple links between inequality in participants, demands and impact was change.org.
The participation literature (online and off) has often assumed a straightforward link profile → demand → impact (Lijphart 1997, Schlozman et al. 2010)

Our findings show that citizens who engage online are systematically more privileged than the population or offline participants.

However, the consequences of this vary depending on the linkage between participant profile and the demands that are made through the platform.

Government response also has the potential to change how unequal participation will affect outcomes, but there generally appears to be a tighter linkage between the demands made on a platform and the actions taken by government.

Our findings thus suggest the need of a new methodological approach that look beyond the profile of users and also to the institutional design and the government's response.
References


Bonus slides
Other case studies

- I Paid A Bribe (India)
- Fix My Street (Georgia)
- Brazilian Freedom of Information Portal
- Majivoice (Kenya)
- LAPOR (Indonesia)
- See Click Fix (US)
GOTV experiments in participatory budgeting

![Bar chart showing the percentage of people who voted in different groups.](chart1)

![Graph showing the proportion of people choosing different issues.](chart2)
Change.org Gender coding accuracy I
Randomly simulate error into coding dictionary

Assume that name is more likely to have large deviation across countries if it is closer to 50% in US

Mean expected error: 1.9 percentage points
Change.org Signatures predict success
Effect of responsiveness in change.org

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