Who benefits from civic technology?

Demographic and public attitudes research into the users of civic technologies

Rebecca Rumbul, Head of Research, mySociety

**This report, and accompanying material, can be downloaded
at http://mysociety.org/demographics**

About mySociety

mySociety is an international not-for-profit social enterprise based in the UK, where we run a number of projects designed to give people the power to get things changed. We invent and popularise digital tools that enable citizens to exert power over institutions and decision makers, and work internationally to support partners who deploy our technology in countries around the world. As one of the first civic technology organisations in the world, we are committed to building the civic technology community and undertaking rigorous research that tests our actions, assumptions and impacts.

Contents

Executive Summary

Online and digital technologies that enable citizens to hold governments to account, known as civic technologies, are proliferating at a steady rate around the world. The potential for these platforms to invigorate citizen engagement, increase transparency, and broaden public debate has been recognised not only by those in civil society, but by governments, by development agencies, and by philanthropists. There is, however, frustratingly little evidence to demonstrate the real-world impact of such platforms. Indeed, there is a paucity of robust research on any aspect of civic technology.

This report seeks to take a first step towards illuminating the world of civic technology. Whilst answering important, but complex questions concerning the impacts of civic technology is mySociety's ultimate research goal, this research sought to begin at the beginning, asking the most basic questions about who actually uses it and why. Only by knowing who is using civic technology can we begin to understand what, where and how significant the impact of civic technology can possibly be.

This report is based on original research, funded by the William and Flora Hewlett Foundation, conducted by mySociety, and in partnership with civic technology groups from around the world. It shows the variations in usage of civic tech across four core countries (US, UK, Kenya and South Africa), and records the attitudes of users towards the platforms they are using. The report identifies a number of areas for further research based on the data collected, and concludes with a discussion on the implications of the findings that should provide much food for thought to civic technologists, governments and philanthropic organisations.

1. Introduction

The rise of civic technology in this new millennium has been organic and profound. It has not been led by politicians or corporations, nor by powerful knowledge-rich institutions or NGOs, but by individuals and loosely constituted groups with specific digital expertise and an interest in getting things done. Such individuals are not normally considered to be on the cutting edge of political and practical behaviour change. Across the world, small pockets of coders and developers have independently, and occasionally with a little peer support, created a range of online platforms to help citizens like themselves get government working for them in one small way or another.

The digital seeds of this civic technology have now grown and begun to cross-pollinate. Isolated pockets of digital civic innovation are now connected to each other and to a range of organisations that can support and champion their efforts. Large foundations and trusts have provided funding to this emerging sector where more traditional NGO funders previously did not dare to tread, and many governments and supranational initiatives are now recognising the value of digital civic engagement. There is now wide recognition that such civic technology innovations are 'a good thing'.

And it is easy to be evangelical about the virtues of digital tools.

The connectivity of the internet has the potential to democratise a whole spectrum of previously complex or oblique processes through increased access, functionality and relative anonymity. People who would never dream of asking a politician a direct question in a local meeting are able to ask directly from their armchairs without fear of public judgement or ridicule. Citizens that want information about government housing policies, but don't have the mobility to visit a council office or library, can request electronic copies to their homes. And people just trying to go about their daily business that are inconvenienced by issues with their local area are able to report them efficiently and effectively without getting tied up in the kind of bureaucracy that has historically characterised public services.

Yes. It is indeed easy to be evangelical about such things.

But believing that something is good, and encouraging its use and replication without evidence to demonstrate its strengths and weaknesses, is arguably a 'fool's errand'. Human history is littered with absurd solutions that were embraced tightly by their creators and taken on faith by their users, only for those interventions to result at best in mild benefit or at worst, severe harm. Civic technology is now far beyond the 'hunch' stage of its life, and as powerful as anecdotal evidence can be, it is not enough to make sweeping global generalisations. Evidence of positive impact is required to move civic technology beyond belief and into evidenced-based reality.

With the support of the William and Flora Hewlett Foundation, and the partnership of several civic technology groups around the world, mySociety is now attempting to bridge the divide between belief in the benefits of civic technology and evidence of real-world impact.

2. Research Aims

This is the first of a number of papers in which mySociety will explore the impacts of civic technology. It attempts to begin at the beginning, asking the most fundamental questions about civic technology and its users: Who are these users? Where are they? And what do they think about the technology that they are using?

The necessity to begin at this most basic level is driven by the paucity of good quality information on the users of civic technology. Whilst a number of studies have been conducted on the fringes of civic technology, and a limited number have examined specific intellectual questions focusing on user behaviour, very few have looked in detail at the composition and character of the users themselves. Knowing who uses civic technology will enable practitioners to better consider their audience and their potential impact upon the civic environment. The aim of this research is therefore to provide a comprehensive picture of civic technology users and their attitudes to civic technology, which will be of practical use to implementers, and of intellectual use to researchers.

3. Methodology

This study initially included civic technology sites in the UK, US, Italy, Malaysia, Kenya, South Africa, Hungary and the EU. It draws on 3,705 survey responses of civic technology users, and focuses on examining basic demographic information and public attitudes data.

While many civic technology groups around the world use mySociety's open source software, the research mySociety conducts is intended to examine the sector as a whole, and therefore a variety of different platforms, as well as those running on mySociety software, were included in the study. The participating sites were:

- FixMyStreet (UK)
- TheyWorkForYou (UK)
- GovTrack (US)
- SeeClickFix (US)
- AskTheEU (EU-wide)
- Atlatszo (Hungary)
- OpenPolis (Italy)
- Aduanku (Malaysia)
- Mzalendo (Kenya)
- People's Assembly (South Africa)
- OpenAustralia (Australia)

Site users were invited to take part in surveys, either following a transaction (if the site was a transactional one such as FixMyStreet), or following a minimum period of time spent on the participating site (such as Govtrack). Sites with a high volume of users (UK & US sites) invited a sample of visitors to take the survey, in the UK this was 1 in 2 site users, and this was 1 in 4 in the US, whereas 100% of users of low-volume sites (outside the UK & US) were invited to take the survey to ensure a sufficient sample.

The survey was conducted online, consisted of approximately 19 questions (certain questions were added or subtracted in some of the territories for cultural purposes) and no personally identifying information was requested. The first 9 questions concerned personal information such as age, educational attainment, employment status and employment sector. The remaining questions concerned individual user attitudes to civic technology and government. These questions focused on how users perceived the benefit of the tool they were using above other methods of reporting or receiving information from government, and their perceptions of the effect of such tools upon government behaviour.

A full schedule of the core survey questions can be found in Appendix A.

4. Research Challenges

This research project was not without its challenges and limitations. The seemingly simple act of collecting basic demographic data on users of civic technology proved challenging in a number of ways:

1. The first challenge was identifying sites that attracted sufficient site traffic to measure and to draw an adequate sample from. Whilst very many civic technology sites are operational around the world, very few command sufficient traffic volume to provide a healthy sample size from which to generalise. And while expectations of sample size were initially lowered in order to deepen the potential research pool, the absolute floor in the sample size was set at 100 participants. Unfortunately, this remained too high a target for the vast majority of sites that could not reasonably expect to attract high enough volumes to provide 100 respondents or higher within a 4-5 month period. This also meant that certain sites included within this study did not reach the minimum sample size, and therefore the information gathered is not sufficient for country-level analysis or comparison. The sites that did not reach the minimum responses were: Atlatszo (Hungary), AskTheEU, Aduanku (Malaysia)

2. Site operation and maintenance presented a different challenge to the progress of the research. Sites maintained and operated by mySociety, or hosted on mySociety servers for partner organisations, were relatively simple to implement the survey software onto. Such sites also generally benefitted from the ongoing maintenance and development provided by mySociety, and therefore were unlikely to be offline or experiencing difficulties for any great period of time. The majority of civic technology sites run by partner organisations do not have a relatively large team of staff to provide constant maintenance, and it is not unusual for groups of volunteers or very small professional teams to experience technical difficulties that last for significant lengths of time. In this case, several sites that had reasonable potential to provide adequate sample sizes experienced limitations and disruptions to the service, meaning that the survey could not be live for sufficient periods of time to achieve the minimum sample size within the research time-period, and were therefore not included in the study.

   Fundamentally, participation in this, or indeed any other research project, requires a time commitment on the part of partner organisations that in some cases is unworkable. Many civic technology implementers work in very small teams, some of whom operate in a completely voluntary capacity. Even small amounts of time participating in research is time that could arguably be put to better use elsewhere in the maintenance and improvement of core site functions or in the pursuit of core organisational goals. Limited capacity within many civic tech organisations meant that several organisations were unable to take part.

3. Finally, it is prudent to acknowledge the difficulty in measuring public attitudes, the variation in perception likely between country-specific contexts and the way in which the survey was presented. Public attitudes are often measured by polling companies and academics alike, however research has warned strongly against taking findings from such studies at face value. There is always a risk that individuals indulge the human tendency to give positive answers, and such fundamental biases are compounded by the issue of self-selection into the survey. The language used in the survey also presents another point of potential incoherence. The survey was professionally translated for countries that did not use English as a first language,

and whilst the translations were checked by participating partners, it is possible that the intended phraseology of the translated question may have been lost. Whilst mySociety is confident of the solidity of the survey results, the public attitudes data presented here form the results of only one experiment, and the conclusions drawn from this will benefit from future scrutiny and comparative studies.

5. Findings

The findings relating to demographic information in this study vary significantly across territories. As such, the majority of the data are broken down by country to provide a clearer picture of user composition.

Who uses civic technology?

Who actually uses civic technology? It is surprising how difficult it is to get accurate answers to this question. Civic technologists generally operate with the belief that you should collect as little data about users as possible. The collection of personal information through digital means is a contentious issue, and many online groups support the right to privacy online. As such, few organisations in this sector actively collect personal information about their users. Data protection laws, organisational principles concerning privacy and the cumbersome nature of collecting information from users mean that many groups have only a vague idea of who their users are. Whilst privacy is a vital consideration, and collecting personal information can impact negatively on user experience, it is nonetheless important to understand who is using civic technology in order to begin to understand what kind of impacts these platforms might be having on the world around us. Anecdotal evidence tells us that some of the impacts of our civic technologies are completely unexpected. Gut feelings tell us that our users may be mostly of a similar age or affluence. Google Analytics gives us an idea of user locations. But these constitute shaky ground from which to make decisions or provide evidence of positive change.

Our first research questions centred on finding out basic information about the users of civic technology. The survey results demonstrate that users originate from across the age, education and employment spectrum, and whilst clear majorities emerge, they do so at very different points on the spectrum in different countries of implementation. Importantly, these findings highlight the potential universality of civic technology, and the importance of cultural context in implementation.

5.1 Age

Why ask about user ages? Does it matter if all users are from a certain age group? We think it does. If all users of a platform fall into a certain age bracket, then one of several things could be happening:

(a) The platform could be using keywords, marketing or be configured in a way that positively attracts, or unknowingly excludes, certain age groups.

(b) Platforms used overwhelmingly by one age group could inadvertently give that group a stronger, but non-representative voice

(c) The platform could be skewing how government or public authorities respond to, or prioritise, policy development or delivery as a result of mass use by an age group with common (but not universal) concerns

(d) Certain groups using platforms more than others can distort the nature of feedback to civic technologists

These things may not actually be happening, but the potential exists, and it is important for civic technologists to understand if and how an imbalance in user ages may affect the work that they undertake, and may affect broader government policy and practice.

Looking at the data we collected, it is clear that individuals of all ages are using civic technology. In the US and UK, the majority of users are older, with 48% of users of FixMyStreet in the UK over the

age of 55, and another 22.6% of users falling into the 46-55 category, meaning that over 70% of users of FixMyStreet in the UK are over the age of 45. Similarly in the US, 55% of users of GovTrack register as over 55, with another 19% in the 46-55 category, so 74% of users are over 45.

Figure 1: Comparative charts for age breakdown for the UK (FixMyStreet) and US (GovTrack)
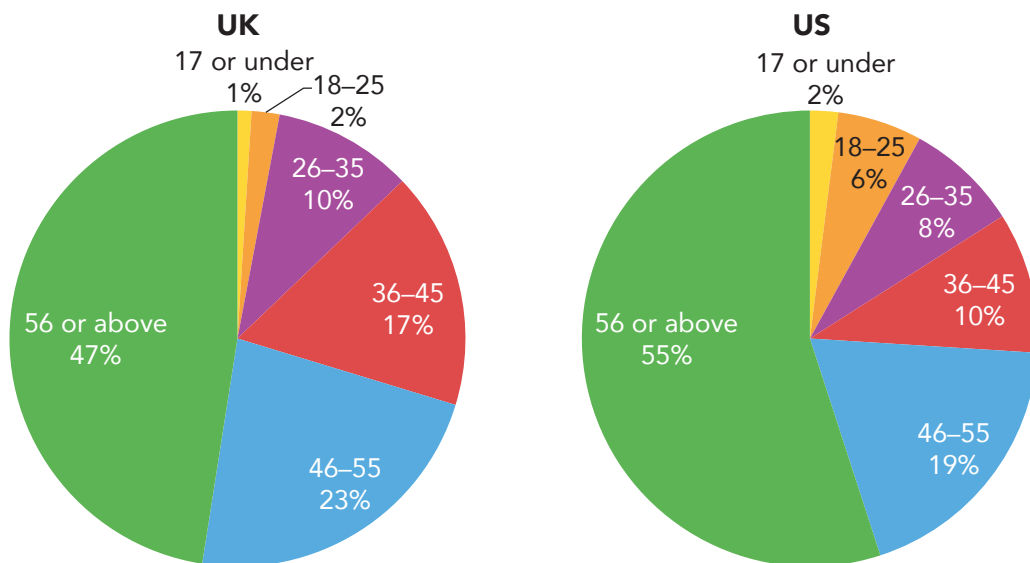
These results contrast significantly with the results from Kenya and South Africa, where only 14% and 34% respectively are over the age of 45.

Figure 2: Comparative charts for age breakdown for Kenya and South Africa
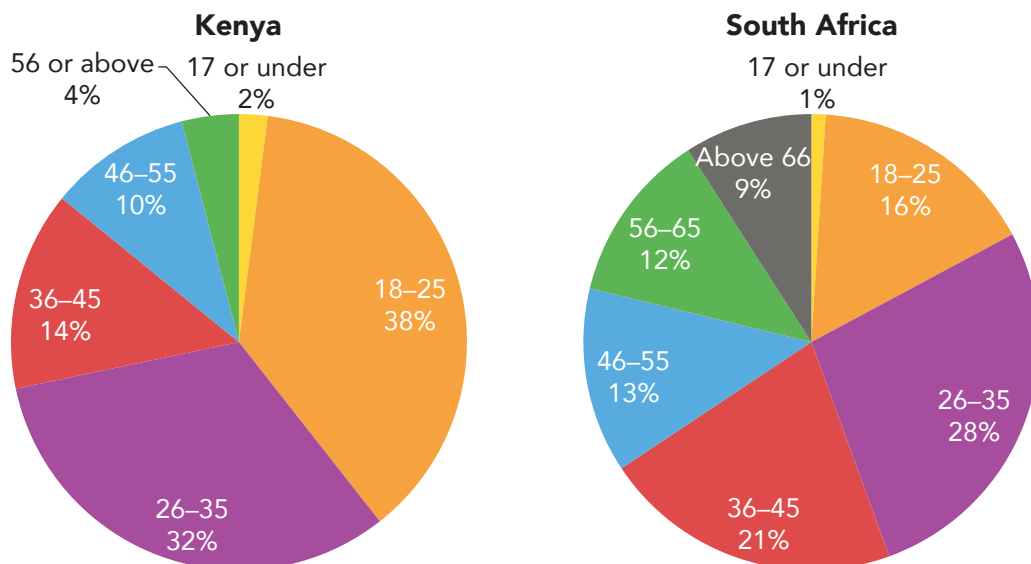
These results raise interesting questions about the differences between civic tech use between more and less developed countries. Often assumptions are made about younger people using technology in greater numbers and with greater proficiency than older individuals, and the US and UK data demonstrate that this is not the case. It is, in fact, older people in these territories that are embracing civic technology. However, the difference in age-group usage in Kenya and South Africa suggests a greater tendency in the younger constituencies in these countries to see the potential of civic technology in conducting civil activity in a different way.

An important point to note from these age-related findings is that civic technology has the potential to be used by all age groups, but that dependent upon social, educational, capital and cultural factors, different age groups may dominate usage of civic technology platforms from country to country.

5.2 Gender

Why ask about gender? In the same way that dominant discrete age groups may cause imbalance, an imbalance in usage between genders may also affect the work of civic technologists and the officials that users seek to engage with.

If platforms are experienced differently by those identifying as male compared to those identifying as female, then this may reduce the likelihood of one gender engaging with the platform. If platforms have disproportionate usage by one gender, there is potential for the gender associated with lower usage to be marginalised, or at the very least, have issues relevant or important to their gender marginalised. This could manifest in a number of ways.

If one were to hypothesise that women use buggies or wheeled shopping trolleys more than men, and therefore were more likely to be inconvenienced by broken pavements, whereas men were more likely to be concerned with damage to their vehicles by potholes, a dominance of male usage of FixMyStreet could create a bias towards councils fixing more potholes and fewer pavements, thus disadvantaging women.

This is just one rather crude example of how gender imbalance in users may have the potential to cause eventual skew. Civic technologists rightly promote the popularity of their platforms and analyse the most popular items and themes on these platforms; however there is a risk that without understanding the gender split in users, the analysis of usage data could be fundamentally biased.

This research demonstrates that the users of civic technology generally tend towards identifying as male. Whilst there is less of a gender imbalance in the US, the UK demonstrates a fairly high user gender imbalance, with 64% of users of FixMyStreet in the UK compared to 52% in the US (GovTrack) identifying as male. Previous studies by Tobias Esher (2011) and Gibson, Cantijoch and Galandini (2014) on mySociety's UK deployments reinforce this finding, with their studies finding a male user dominance of 66% and 64% respectively.

Figure 3: Comparative charts for gender breakdown in the US and UK
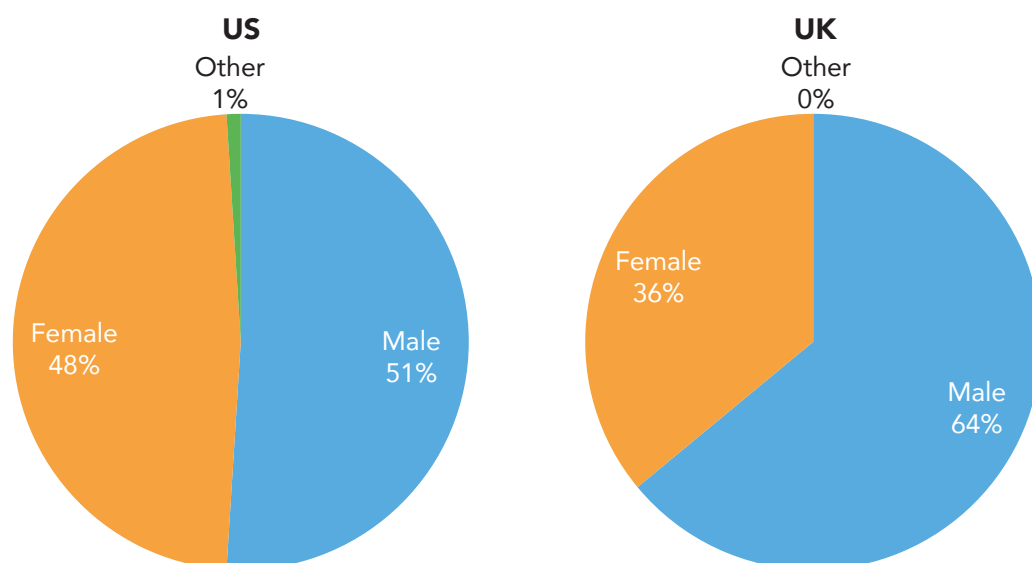
This gender imbalance is also evident in Kenya and South Africa, with Kenya evidencing 72% of users identifying as male, and South Africa 68%.

Figure 4: Comparative charts for gender breakdown in Kenya and South Africa
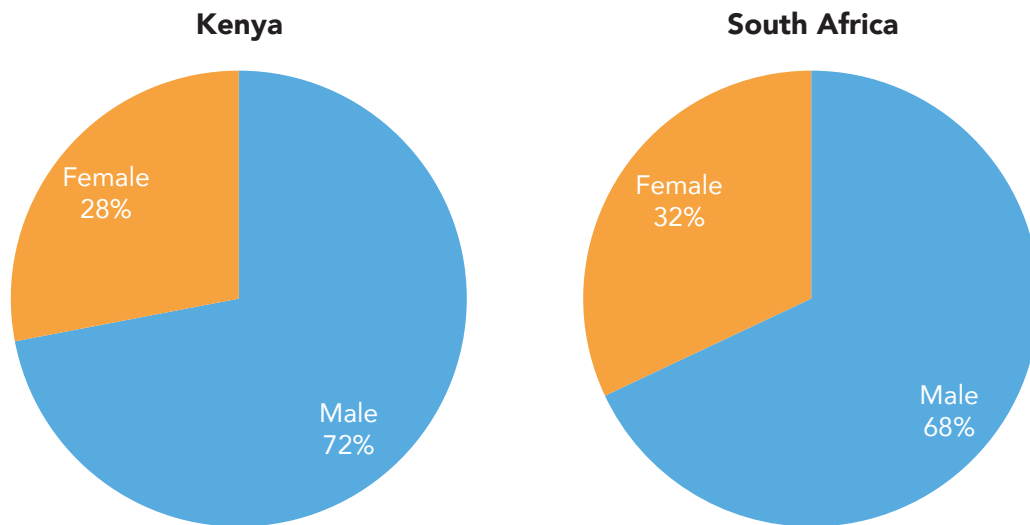
With the exception of the US, it appears that the majority of civic tech users identify as male. It is outside the scope of this paper to hypothesise why this is; however a number of considerations may emerge in future research as contributing factors. It is possible that self-selection bias may be in play here, although it is unlikely to bias the sample to the extent evident in the gender imbalance over the course of the three UK studies and across the territories surveyed for this research.

5.3 Ethnicity

Why ask about ethnicity? Questions surrounding ethnicity are precarious, and subject to ongoing debate amongst scholars and policy experts concerning the most effective way in which to ask these questions. Individuals often hold multiple identities, with national identity and ethnicity often interwoven, and self-perception and classification is subject to wide variation dependent upon personal experience, cultural context and familial history.

It is, more often than not, futile to ask such questions, as standardised categories often fail to encompass multiple identities, and therefore individuals must resort to over-simplification in their responses.

Avoiding such questions completely, however, is not conducive to operating an accessible and democratising civic technology. Lack of measurement and monitoring of such demographic information can result in the same user imbalance and biased analysis of data that can occur in uneven gender or age user groups.

Populations in the majority of countries include a plurality of minority ethnic communities, each with potentially different experiences as citizens. Civic technologies, in their role as 'democratising tools for all' should therefore be aiming to mirror the general population to enable individuals belonging to ethnic groups to participate equally and to provide proportionality to debate.

This research asked about ethnicity in the majority of surveys; however our partners in the US and Kenya declined to include this question in their surveys.

In every country surveyed, user composition was dominated by the majority territorial ethnicity. Whilst this was not a surprise, civic technologists may be disappointed to find that no site managed to demonstrate a breakdown of user ethnicity proportional to the respective population.

In South Africa, the 'Rainbow Nation', 21% of users of the People's Assembly website identified as White South African, whereas only 9% of the population as a whole currently identifies as White South African.

60% of users identified as Black South African, which is fewer that the 76% in the population as a whole. The term 'Coloured' remains in use in South Africa and is used by those identifying as of mixed ethnic origin who possess ancestry from Europe, Asia, and various Khoisan and Bantu ethnic groups of southern Africa. Not all Coloured people share the same ethnic background.

The number of individuals identifying as Coloured using the People's Assembly website mirrored that of the population, with Coloured site users representing 9% and population figures recorded as 8.9%. Whilst 2.5% of the population of South Africa identifies as Asian, there were no respondents to the survey selecting this option.

Figure 5: Ethnicity breakdown for People's Assembly user survey (South Africa)
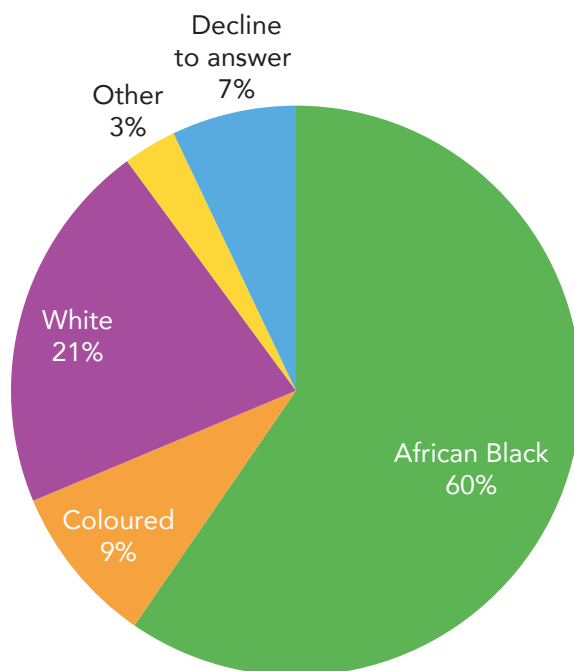
While the user breakdown of the People's Assembly site in South Africa does not accurately reflect the resident population, it is however a positive sign for civic technologists here that a reasonable degree of diversity in ethnicity is evident. This acts as a guard against monopoly by individual dominant groups.

The percentage of individuals identifying as belonging to an ethnic minority in the UK is 19.5% according to the last census, with 9% of those respondents identifying as a non-white ethnic minority.

Ethnically white users of FixMyStreet accounted for 94% of users, slightly higher than the general population, but allowing for 6% of users from minorities, a minor increase (within the margin of error) of 2.2% from the previous research of Gibson, Cantijoch and Galandini (2014). Whilst an increase is positive, against population, this remains low. Almost 7% of the UK population identifies as Asian or Asian British, however only 1.5% of users of FixMyStreet and 1.9% of TheyWorkForYou users selected this option.

Figure 6: Ethnicity breakdown for FixMyStreet users survey (UK)
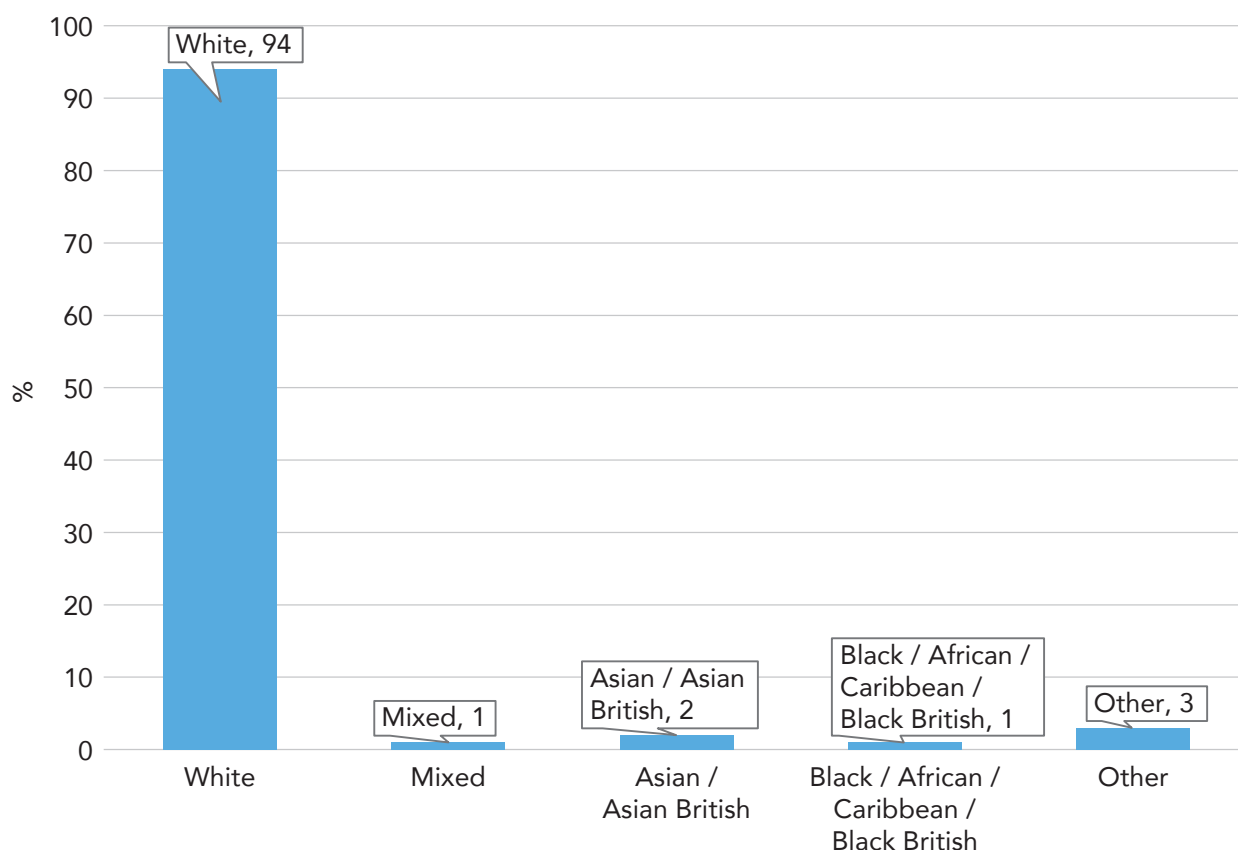
5.4 Education

Why ask about educational achievement? It is important to many civic technologists that their platforms are accessible, easy to use, and that they are able to be used by individuals who may not have much knowledge of, or experience in, politics or public administration. There is an expectation that the higher the level of education one has, the more natural participation in civic activities will be and the easier information on political or public administration related websites will be to understand. A dominance of users educated to degree level or above may therefore indicate that users with a lower level of academic achievement may not be able to understand the site, or to benefit from it.

The level of educational attainment amongst civic technology users varied across the spectrum, from those with very little formal education, to those holding advanced degrees. Whilst many users were educated to degree level or above across countries, many had only completed secondary education or lower. This is encouraging for civic technologists hoping to break down traditional barriers to information and engagement to the wider public, and to enable those outside of the political or educated classes to become and stay informed.

Figure 7: UK, US, Kenya and South Africa user educational achievement compared

Legend:
- Doctorate degree
- Master's degree
- Bachelor's degree
- Diploma / Associate degree
- Trade / technical / vocational training
- Schooling to age 18
- Less than high school / secondary education completed
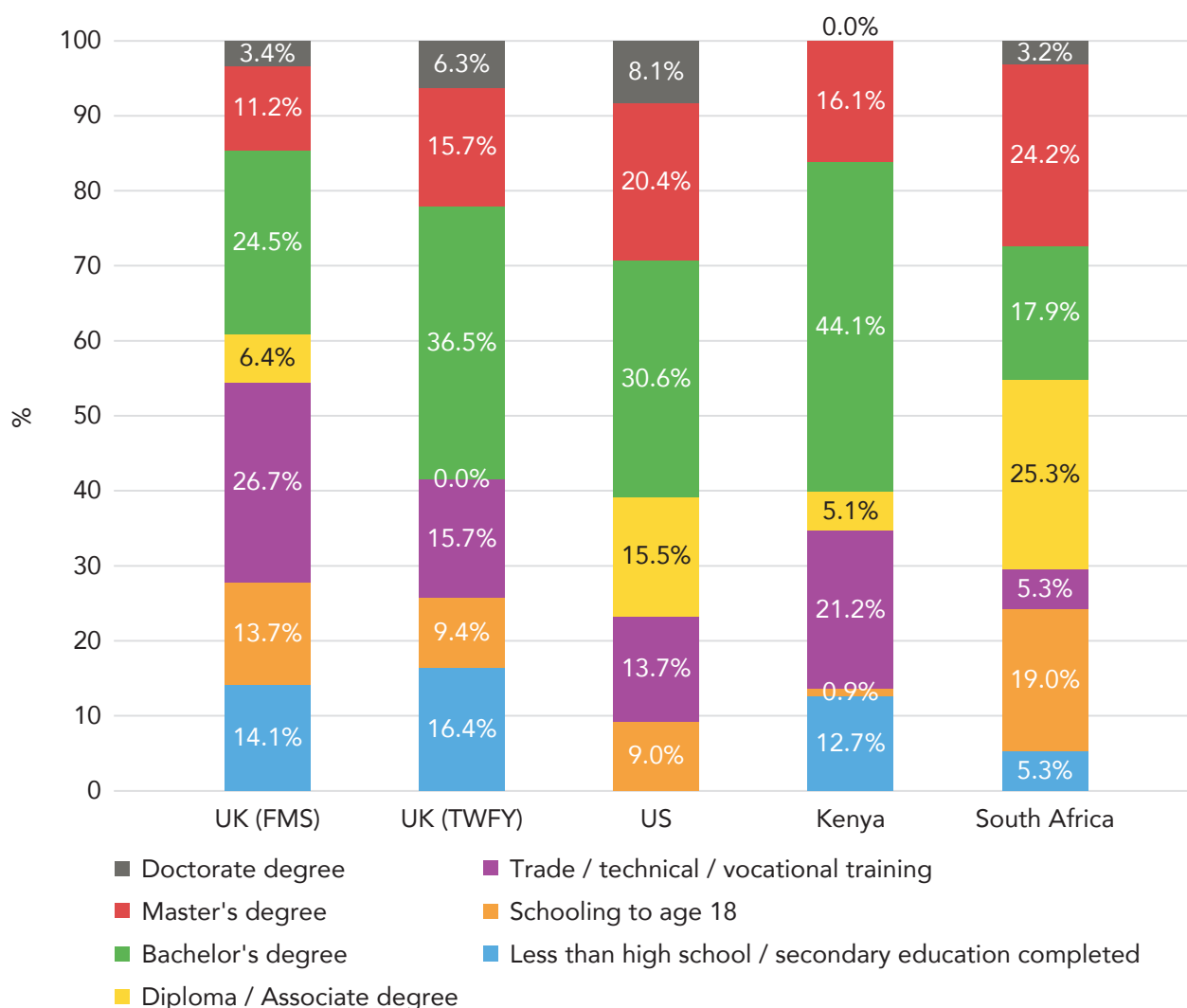
There is a clear educated majority, in particular in the US and Kenya; however these figures are not necessarily proportionate to population averages. According to the 2014 census data in the US, only 39% of individuals across the general population were educated to degree level or above, whereas 59% of GovTrack users surveyed were educated to degree level or above. South African census data from 2011 shows that only 12.1% of the population hold a degree-level qualification or above, while users of People's Assembly with at least a first degree account for 45.3% of users.

It is also interesting to note the educational differences between users that were surveyed on the two mySociety UK sites – FixMyStreet and TheyWorkForYou. FixMyStreet evidences a broader spread of educational attainment, whereas the majority of users of TheyWorkForYou record a level of educational attainment of degree level or above. Again, these figures differ from national census data, which show that 27.2% of the UK population surveyed for the 2011 census hold a first degree or higher, and at the other end of the spectrum, 22.7% did not complete secondary education qualifications.

5.5 Employment

Why ask about employment? The levels and types of economic activity or inactivity civic technology users undertake can provide a better picture of the types of people that find civic technology useful.

While it is easy to assume that all people over a certain age are retired or that people under a certain age are in full-time education, often this is not the case.

The sectors of employment can also provide clues to whether civic technology is penetrating normal society outside of a government or public administration bubble. If only individuals in the public sector are using civic technology, then this may point to a failure of promotion of the sites, or may point to the sites being too complicated or technocratic for individuals with no public administration or political knowledge. Detecting an imbalance in the employment sectors of users may signify a failure in the platform, or could present the opportunity to demonstrate the value of such sites to the public sector itself.

This research shows that individuals in full-time employment in the UK, US and South Africa comprised the largest user groups for FixMyStreet, TheyWorkForYou, GovTrack and People's Assembly.

Figure 8: UK, US, Kenya and South Africa user employment compared

The data demonstrate usage across the spectrum of economic activity. Interestingly, in the UK, US and Kenya, the number of unemployed individuals using civic technology is comparable to, or higher than, the national population rate. The unemployment rate in the UK is 5.4%, in the US it is 5.5%, in Kenya it is 40% and in South Africa it is 25.2%, and users that are unemployed and either looking for work or not looking for work is 5.7% on FixMyStreet (UK), 11.8% on TheyWorkForYou (UK), 10.5% on GovTrack (US) and 44.5% on Mzalendo (Kenya).

The variance in the volumes of users in each group from each country prompts several further potential research questions:

The data show significant numbers in Kenya selecting 'Not employed – looking for work'. Whilst this is consistent with 2014 records of unemployment rates in Kenya (40%), it is interesting that such a volume of individuals are using a parliamentary monitoring site. Are unemployed individuals in Kenya using Mzalendo to become more informed about government to broaden their employability? Are they using Mzalendo to find their representatives and petition them to improve economic opportunities? Or are users simply visiting Mzalendo because of personal interest unrelated to their employment status?

There is a notable difference in the volume of users selecting the 'Disabled – not able to work' category between UK site TheyWorkForYou and its sister UK site FixMyStreet. The UK government figure for disability in the UK is 10.2% of the population, and this figure includes individuals with a disability that are active in the labour market. It is encouraging to civic technologists in the UK that TheyWorkForYou is accessible and well-used by individuals selecting this category; however the significant difference in usage between the two UK sites is intriguing and merits further research.

The number of individuals that are retired and using civic technology is high in the UK and US. The reason for their usage is, however, unclear, specifically in the case of TheyWorkForYou and GovTrack, as these sites are informational rather than transactional. Further research into why such large numbers of individuals are using parliamentary monitoring sites could enable civic technologists to enhance their features and usability and provide content tailored to users' age or economic circumstances.

The sector breakdown, where available, also provides interesting results. Those individuals in employment are based across the three traditionally defined Public, Private and NGO sectors, but comparatively, surprisingly few in the UK originate in the NGO or non-profit sector.

Figure 9: Employed site users by sector in the UK, US, Kenya and South Africa compared
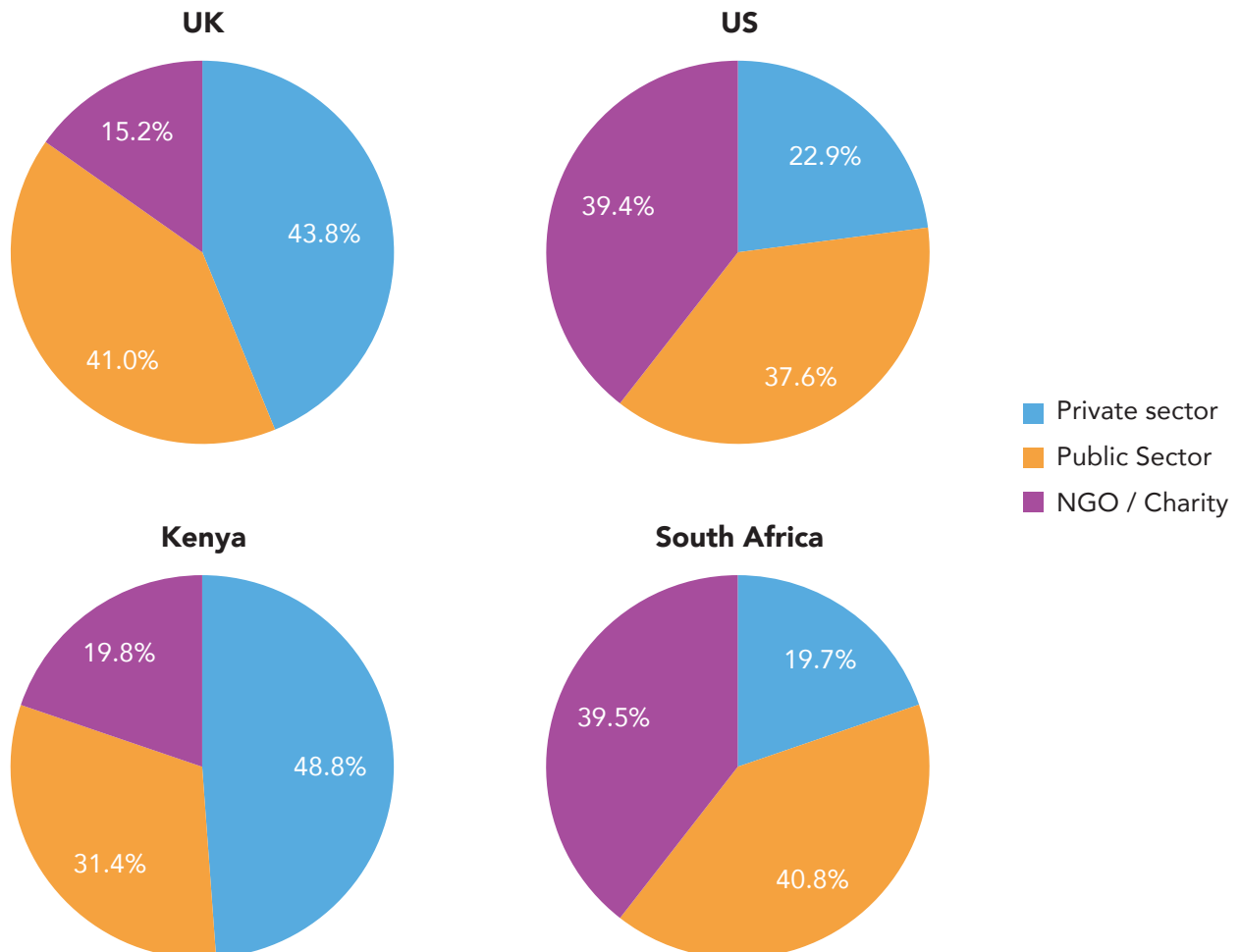
Also interesting are the lower levels of private sector usage recorded in the US and South Africa. This survey was not extensive enough to provide an explanation for this, however further inquiry into how and why all three sectors use these civic technology resources could produce interesting cross-country comparison.

5.6 Political engagement

Perhaps unsurprisingly, the majority of users of parliamentary monitoring civic technology sites identify as being very interested in politics. For each site surveyed, over 70% of users confirm they consume political news at least once per day.

More variability was evident in the volume of users who had in the past, contacted a politician, government agency or public body. In the US, only 14% of GovTrack users had never contacted one of these outlets, with slightly higher numbers from the UK (21% of TheyWorkForYou users) and almost double that rate in Kenya, where 33% of individual users had never contacted one of these services or individuals before. Interestingly, a number of users of these civic technology sites had contacted public bodies or political representatives in the past to request information.

Figure 10: Users that previously asked public bodies or representatives for information compared
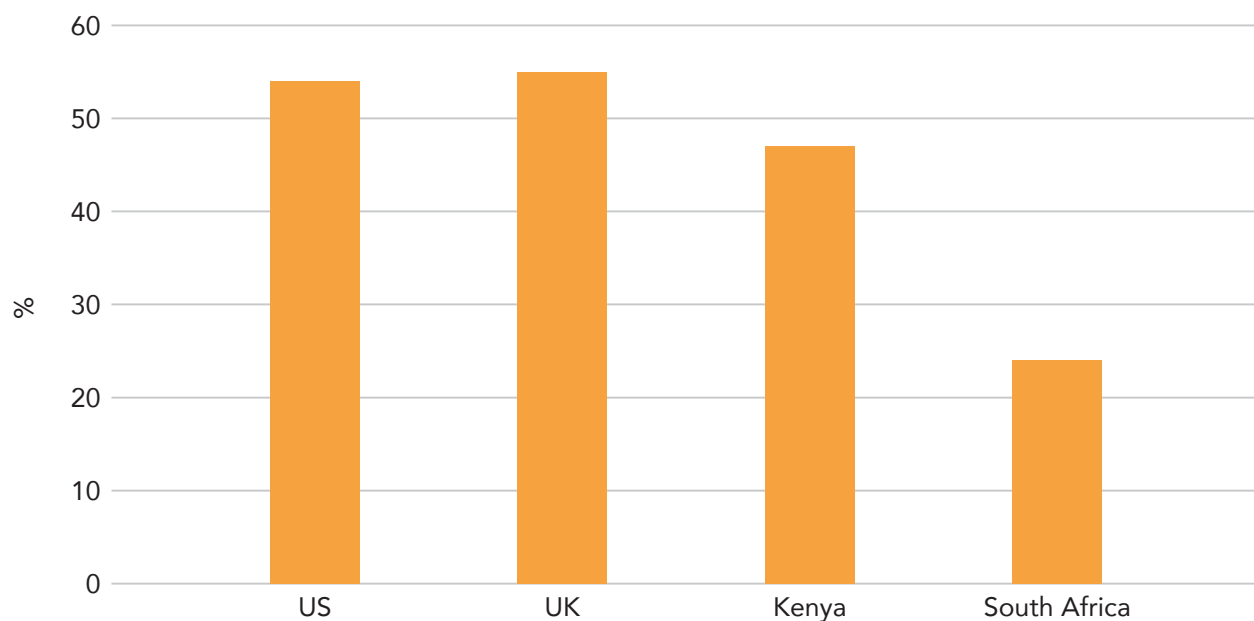
In the US, UK and Kenya there is a significant number of individuals that are politically engaged and have the confidence to approach public services and representatives to request information. It is interesting that fewer users in South Africa have undertaken this kind of activity in the past, given that there is a Freedom of Information law in place.

5.7 How do users feel about civic technology?

The results of the attitudes-based questions should provide significant encouragement to civic technology implementers. The majority of users across countries generally achieved what they set out to do on the websites during their visit, and most said they would use the sites again.

Users of transactional sites reported feeling more confident that their issue would be addressed because they were raising it via the platform they were using, rather than contacting government directly. Users also felt that being able to see or report information through civic technology sites enabled them, at least in part, to hold the government account.

Figure 11: Responses to the question 'Do you believe that being able to see/report this information enables you to hold government/politicians to account?' compared

US

No 4%
Yes, in full 42%
In part 54%

UK

No 9%
In part 34%
Yes 57%

Kenya

No 7%
In part 29%
Yes 64%

South Africa

No 8%
In part 48%
Yes, in full 44%
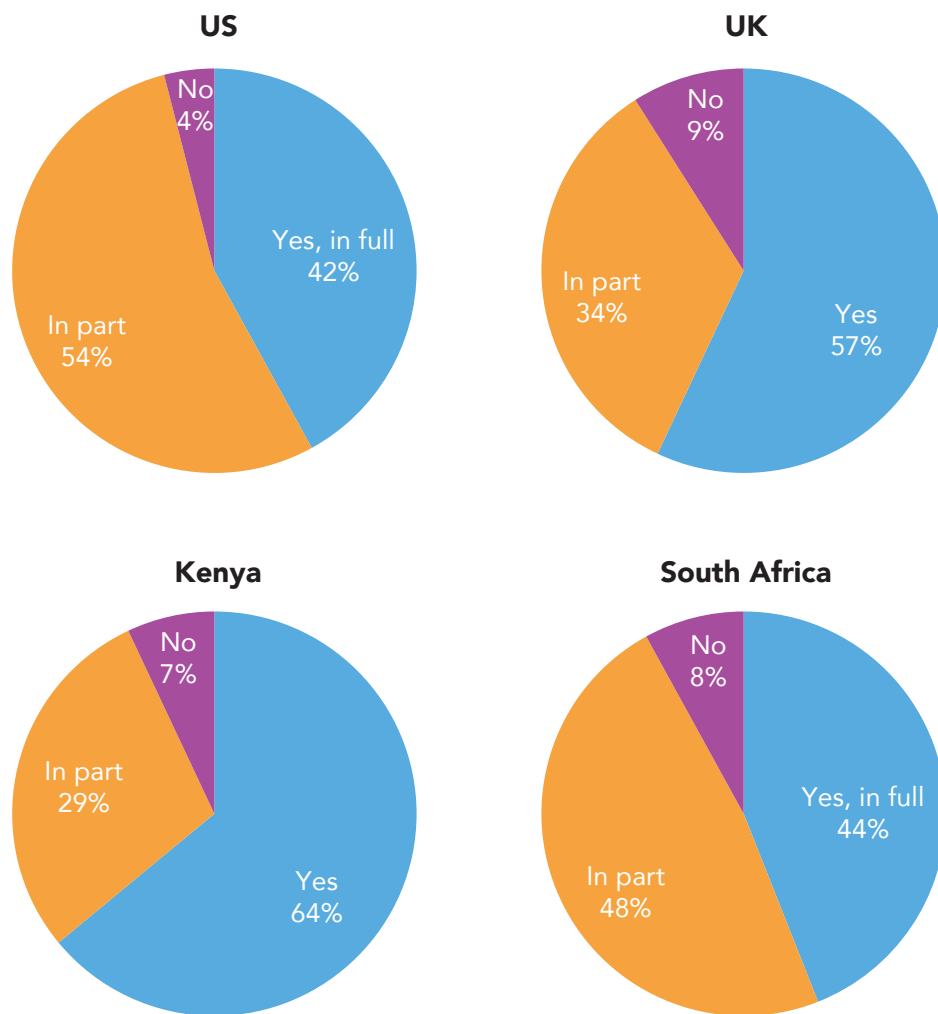
Whilst varying subjective definitions of the terms 'hold to account' and 'in full' will have been employed by surveyed users, it should be of significant encouragement to civic technologists, that the users of such platforms overwhelmingly find them of use in supporting citizen engagement in democratic activities.

Perhaps demonstrating current high levels of mistrust in government, 80% of users in the UK, 84% of users in the US and 83% in Kenya all thought that the government would behave differently if citizens weren't able to see or report information via civic technology websites such as those surveyed.

Interestingly, a majority of users of TheyWorkForYou (UK), GovTrack (US) and Mzalendo (Kenya) reported feeling more confident about approaching politicians or government directly in future as a result of using the civic tech platform.

Figure 12: Users reporting likelihood of directly approaching public officials in future as a result of the greater confidence gained using a civic tech platform

US

Don't know 32%
Unlikely 12%
Likely 56%

UK

Don't know 23%
Unlikely 21%
Likely 56%

Kenya

Don't know 18%
Unlikely 16%
Likely 66%
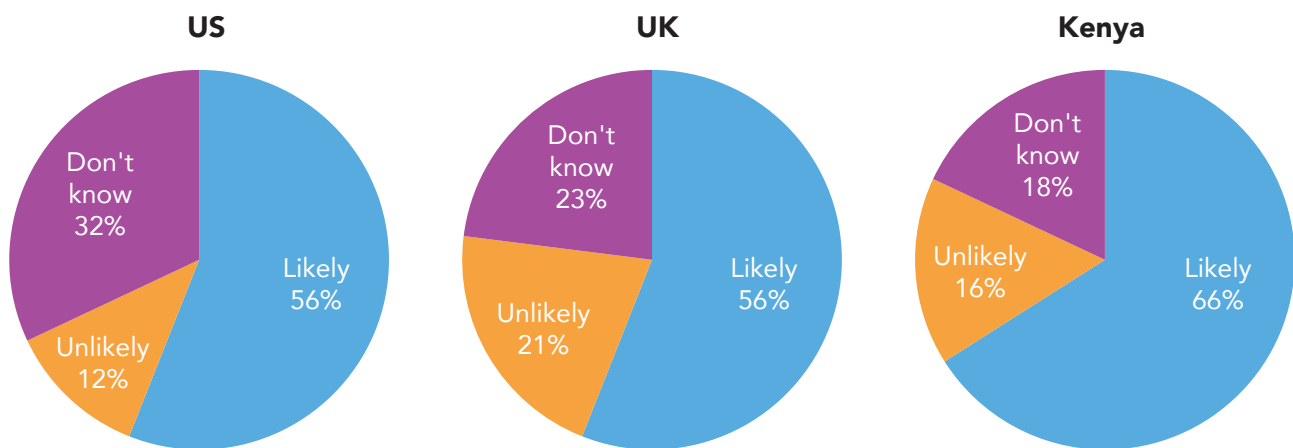
This is not to say that these users would definitely take this course of action, as over 95% of users from each participating platform also said they would use these sites again. However, the positive impact of civic technology should not be overlooked in this case.

Individuals are citing civic technology as the cause of an increase in confidence in approaching public officials. This form of empowerment has numerous potential positive outcomes for individuals, for politics and communities. If civic technology is helping to increase citizens' confidence in engaging with civic life, even if that is only in a small way such as reporting issues, questioning politicians or officials, or asking for information, this is likely to be contributing to a greater plurality and quality of discourse in the public sphere.

6. The Importance of Context

The data gathered for this preliminary piece of research demonstrate the significant variability in trends between countries, and highlights clearly the dangers of generalisation in analysing demographic data across borders. Viewed as a whole, the data betrays a very rounded and healthy picture of the users of civic technology. However broken down by country, the data evidences clear divisions in the use of, and access to, civic technology.

6.1 Affluent countries: the US & UK

In the richer and more developed countries, and in particular in the UK, we see a clear bias in users towards the group that has often been referred to as the 'male, pale and stale'. This group tends to be composed of older, educated and affluent white males, who are generally considered to have high political and personal efficacy in both an offline and online capacity.

While civic technology is at no point designed to exclude such groups, the hoped-for democratising effect of civic technology in engaging other groups within society is not manifesting in the user data.

Those individuals that are already effective and able to engage with governance mechanisms are facilitated by civic technology to engage more efficiently. Those individuals without such efficacy remain outside the system, either choosing not to engage digitally, or unaware that such engagement is even possible or desirable.

This effect is stark in the data from the US, where 74% of users are over the age of 45, and 74% are educated to degree level or higher. The UK performs poorly in male-bias, with 65% male users, of whom 72% are over the age of 45, and 57% hold a first degree or higher.

The imbalance in users in the US and UK, as proportions of their respective populations, in some cases mirrors the imbalances in the political classes in these countries. In the UK, 71% of the House of Commons is male. Proportional to population, we would expect 9% of users in the UK to be from a non-white ethnic minority, however ethnic minority civic technology users from the UK only represent 6.7%, mirroring the 6.6% of MP's in the UK parliament from an ethnic minority.

Essentially, this data tells us that in the UK and US, civic technology users at least in some ways resemble the existing dominant class, and that this class has recognised the potential of civic technology to facilitate and amplify effective civic interaction, whether that be in tracking political information on welfare, researching legislative progress for professional purposes or maintaining the local community environment.

This has significant implications for civic technology implementers. Many groups conceive of civic technology as a tool for effective and accessible democratic action. The digital environment is thought to reduce traditional barriers to engagement and access experienced by the less engaged groups within society.

If, however, digital democracy tools are predominantly being used by a homogenous group already dominant in society, this has the potential to skew policy and practical interventions in favour of this dominant group, at the same time compounding disadvantage amongst less dominant groups in society.

Example scenario:

Websites such as SeeClickFix in the US and FixMyStreet in the UK provide quick and accessible means to register problems such as potholes, broken street lights and litter. The user logs in, drops a pin onto a map, writes a quick description of the problem, and submits the report to the local authority.

If it is primarily older, affluent white males submitting reports in this way, then it is the issues affecting this distinct group that are potentially monopolising public authority resource.

Affluent individuals generally live in affluent areas, and the maintenance of such areas plays a significant role in preserving their value. Based on the data collected in this research, it is possible that issues arising in areas without a resident community of older, affluent white males could be proportionally under-reported, and therefore, local issues are potentially not fixed as quickly as those in more affluent areas, if at all.

Potholes left unreported and unfixed get bigger, broken street lights facilitate increases in petty crime, and unreported litter and dog-fouling reduces the 'kerb appeal' of areas. These factors have a significant impact upon property prices, community cohesion and aspiration.

This imbalance in users, therefore, in at least a small way, has the potential to reinforce disadvantage and preserve inequality. Those with dominant characteristics in affluent areas potentially have one aspect of their dominance reinforced through the maintenance of their locality, whilst those in less affluent and more diverse communities potentially have one aspect of their disadvantage locked in, in part through disproportionately low engagement with civic technology tools.

6.2 Developing nations: Kenya & South Africa

In sharp contrast to the figures from the US and the UK, the basic demographic data of civic technology users in developing countries points to a younger and less educated group dominating online engagement platforms.

While the majority of users in Kenya and South Africa are male, other demographic indicators point to a greater diversity. In Kenya and South Africa the majority of individuals using civic technology platforms are typically under the age of 46 — 86% in Kenya and 66% in South Africa — and fewer than 45% of users in South Africa hold a first degree or higher.

This over-representation of younger people amongst users is symptomatic of the digital divide that exists in such countries, in which younger people have embraced digital and mobile technologies much faster than older generations who prefer to retain 'dumb' phones and use computers often with very poor connectivity. In Kenya, 60% of survey responses came from users on a mobile device. This also indicates that there is a willingness amongst younger people in these countries to conduct politics in a new and more transparent way.

The imbalance in the users of civic technology in Kenya and South Africa proportional to the general population presents its own risks to policy-making and service delivery.

There is a significant risk of digital exclusion of citizens belonging to the older generations, and of individuals resident in areas of limited connectivity. 78% of responders in Kenya were from urban areas, predominantly Nairobi and Mombasa. Similarly, responders in South Africa from urban areas such as Johannesburg, Cape Town, Pretoria and Durban represented 79% of the sample. Such exclusion can render certain groups within society voiceless, and policy can therefore fail to accommodate their unique or specific needs.

The use of digital tools in campaigning and mobilising support for specific interventions is becoming more established in many African countries, and if online support can influence the drafting, passage and implementation of legislation and policy, it risks shaping policy in favour of a specific demographic. If governance in these countries is increasingly conducted digitally, a fundamental democratic deficit may well emerge.

Example scenario:

Sites such as Mzalendo in Kenya and The People's Assembly in South Africa allow citizens to monitor parliamentary business and the votes and activities of individual parliamentarians.

These sites provide contact information for politicians, and citizens are actively encouraged to contact relevant politicians with concerns or to express support or opposition to current parliamentary business. If politicians receive a certain volume of correspondence expressing a general level of support or opposition to a particular issue, it is likely to shape their attitudes to certain areas of policy.

Whilst politicians are expected to act in the fundamental interests of society as a whole and to consider its diversity in the act of policy-making, it is difficult to measure opinion that is absent against that which is presented with overwhelming support. Digital exclusion would be compounded by the absence of individuals that were affected by it, in the very act of practising governance online.

7. Implications for Civic Technologists, Citizens and Public Bodies

The data included in this report demonstrates that, while civic technology is being embraced by a wide variety of citizens, groups formed of dominant characteristics exist within the user base. These are non-organising groups of individuals that are completely unconnected and not acting in concert in any way. There is clearly no conscious or organised effort by individuals with common characteristics to monopolise civic technologies.

It is likely, however, that an incidental bias in homogenous users may distort not only specific research findings associated with civic technologies, but may cause wider ripples at two or three degrees of separation from the platforms themselves in policy and practice.

This data raises very interesting questions on the legitimacy and moral obligations of civic technology sites:

1. **Trust:** The high level of citizen trust in civic technology platforms endows a certain level of perceived legitimacy on these innovations. Perceived legitimacy is not established or mandated legitimacy; however, a certain volume of perceived legitimacy can provide sufficient power to bring about change.

2. **Legitimacy:** Studies have shown that perceived legitimacy can over time lead to a more solid level of legitimacy, and there are two main causes of this progression. The first is referred to in the previous point, and concerns the power to bring about change. If site usage reaches a critical mass that coalesces around one point, the weight of public opinion may sway public policy. If the site exposes harmful behaviours and catalyses changes in regulation or law, this can also solidify legitimacy.

   The second route to more established legitimacy often requires institutional engagement: this can manifest in the form of institutional 'buy-in' or support from government, or conversely, direct objection to the site by government. It can also take the form of support from trusted intermediaries such as media outlets, international governments or NGOs, or through favourable rulings by the judiciary. The autonomy of civic technologies and their perceived proximity to government will affect the progress of legitimacy from perceived to established levels.

3. **Integrity:** Citizens place a high level of trust in civic technology to make government more accountable and transparent, and this places obligations on civic technologists to be honest about their successes and their limitations in achieving these outcomes. Bold but unsubstantiated claims on effectiveness and impact could potentially be more harmful than beneficial in the medium-long term, not only in the context of public opinion, but in the wider sector's perceived reliability by governments and philanthropists. Similarly, low-quality research or evaluation into the impacts of civic technology based upon unreliable data or poor methodology has the potential to distort the real-world impacts and lower the quality of information available for public and policy debate.

4. **Managing expectation:** Just because users believe that these sites are making government more 'honest', does not necessarily make that so. If sites are believed to be having an effect on government behaviour, and are in fact, not doing so, the risk of disillusionment in such platforms is very high once this fact is established. Far from improving government

accountability, there is a strong possibility that this eventuality would 'poison the well' of civic technology in certain territories in the short to medium term and cause a long term reduction in confidence in similar innovations. Civic technologists may wish to exercise caution in presenting information on their platforms to demonstrate how their interventions are working, and be mindful of how such information could be interpreted.

These points only briefly illustrate the various considerations that civic technologists should begin to factor into their work, but should provide a starting point for rigorous research, organisational self-reflection and wider discussion within the civic technology sector. It is clear only from this preliminary research into the impacts of civic technology, that such impacts can be unintended and far reaching.

The data suggest that it is not enough for civic technologists to simply give birth to their creations and present them to the world in the hope that these digital tools will cure some of society's woes. If such individuals and organisations want to make a tangible and positive difference in their respective nations, care and consideration must go into understanding users and understanding the policy environment that the platforms exist within. That is not to belittle the positive impacts that such civic technologies have already made (the sites participating in this research are clear examples that people find such sites very useful), but these findings should assist developers of such platforms to question their actions and assumptions.

Civic technologies are tools to effect change. Like any other tools, they need to be put into the hands of the many, tested, honed and perfected. It is important for the sector to remember that it is at the early stages of this process, and that there is much work yet to do to unlock the potential of civic technology.

Appendix A. Core interview questions

The below questions represent the core survey, and the example given is for the UK. Certain questions were removed at the request of partner sites, and country-specific information concerning ethnicity, education and employment was altered for each implementation to ensure questions were appropriate and understandable.

Q1. What is your age?

17 or under .. .. ☐

18 – 25 .. .. ☐

26 – 35 .. .. ☐

36 – 45 .. .. ☐

46 – 55 .. .. ☐

56 or above

Q2. Do you identify as:

Male .. .. ☐

Female .. .. ☐

Other .. .. ☐

Q3. Choose one option that best describes your ethnic group or background?

White .. .. ☐

Mixed .. .. ☐

Asian / Asian British .. .. ☐

Black / African / Caribbean / African British .. .. ☐

Other .. .. ☐

Q4. What is the highest degree or level of school you have completed?

If currently enrolled, highest degree received.

Less than high school / secondary education completed .. .. ☐

Schooling to age 18 .. .. ☐

Trade / technical / vocational training .. .. ☐

Bachelor's degree .. .. ☐

Master's degree .. .. ☐

Doctorate degree .. .. ☐

Q5. Which of the following categories best describes your employment status?

Employed, working full-time .. .. ☐

Employed, working part-time .. .. ☐

Not employed – looking for work .. .. ☐

Not employed – NOT looking for work .. .. ☐

Retired .. .. ☐

Disabled / not able to work . .. . ☐

Q6. Which Sector do you work in?

Private Sector / For-profit organisation .. .. ☐

Public Sector / (Government / Education / Health etc) . .. . ☐

NGO / Non-profit Sector .. .. ☐

N/A – Not working .. .. ☐

Q7. Do you read/listen to news about government, politics or local public services:

Frequently (at least once per day) .. .. ☐

Regularly (at least once per week) .. .. ☐

Occasionally (at least once per month) .. .. ☐

Rarely (at least once per year) .. .. ☐

Never .. .. ☐

Q8. Before today, have you ever contacted a politician, a government department or a publicly run service *(Please select all that apply)*:

To ask for information .. .. ☐

To make a complaint .. .. ☐

To perform routine tasks relating to public services .. .. ☐

For another reason .. .. ☐

N/A I have not contacted a politician, a government department
   or a publicly run service before today .. .. ☐

Q9. Do you believe that being able to see this information enables you to hold government/politicians to account?

Yes, in full . .. . ☐

In part .. .. ☐

No .. .. ☐

Q10. Do you believe that your ability to see this information affects how government/politicians do business?'

Yes, in full . .. . ☐

In part .. .. ☐

No .. .. ☐

Q11. Do you believe that the government/politicians would behave differently if citizens were unable to see this information?'

Yes, in full . .. . ☐

In part .. .. ☐

No .. .. ☐

Q12. Do you know of any other way you could see this information?

Yes .. .. ☐

No .. .. ☐

Q13. If you answered 'Yes' to the following question, is that method:

More effective .. .. ☐

Less effective .. .. ☐

About the same .. .. ☐

Q14. Will you use TheyWorkForYou again in future?'

Yes .. .. ☐

No .. .. ☐

Q15. If your experience of TheyWorkForYou has been positive, how likely is it that you will approach decision-makers directly in the future (without coming via TheyWorkForYou)?'

Likely . .. . ☐

Unlikely .. .. ☐

Don't Know .. .. ☐

Q16. Has using TheyWorkForYou made you more confident about approaching public / political individuals and organisations directly for information, to make a complaint or for any other reason?'

More confident .. .. ☐

Less Confident .. .. ☐

No Difference . .. . ☐

Q17. Have you achieved what you set out to do on this website today?

Yes, in full.. .. .. ☐

Yes, partially .. .. ☐

No .. .. ☐

Q18. After leaving TheyWorkForYou, will you *(Please select all that apply)***:**

Talk to friends / family about TheyWorkForYou offline .. .. ☐

Discuss TheyWorkForYou via social media .. .. ☐

Contact a politician, government department or local public service .. .. ☐
    regarding the issue that brought you to TheyWorkForYou today .. .. ☐

Search for further information online regarding the issue that brought
    you to TheyWorkForYou today .. .. ☐

None of these options .. .. ☐

myS:ciety