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LEARNING STUDY ON 'THE USERS' IN TECHNOLOGY FOR TRANSPARENCY AND **ACCOUNTABILITY INITIATIVES: ASSUMPTIONS AND REALITIES**



Colophon

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Research by Rosemary McGee (Institute of Development Studies, UK) and Ruth Carlitz (University of California, USA)

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LEARNING STUDY ON 'THE USERS' IN TECHNOLOGY FOR TRANSPARENCY AND ACCOUNTABILITY INITIATIVES: ASSUMPTIONS AND REALITIES

1. Introduction

This report presents the background, process and findings of a learning study carried out in 2012 on the people who, it is assumed, take up and use Technology for Transparency and Accountability Initiatives¹ (T4TAIs).

The use of information and communication technologies (ICTs) has risen dramatically since the turn of the millennium, in particular among people in countries of the global South. Mobile phone use has increased most dramatically. The figure below, from a recent World Bank/African Development Bank publication (eTransform AFRICA, 2012) illustrates these points. These developments have fuelled great enthusiasm among the aid, development and tech communities over the past decade to apply technology in transparency and accountability initiatives.

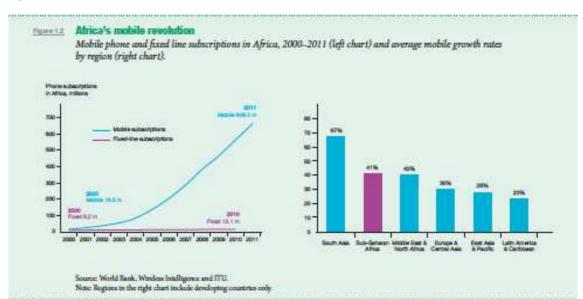


Figure 1: Africa's mobile revolution (eTransform AFRICA, 2012)

If T4TAIs are to contribute to their stated goals of deepening democracy or improving developmental outcomes, then ordinary people's take-up and use of them are essential links in the theories of change which underpin them. Given this, one might expect these people and their assumed and actual behaviour to be an important focus of attention in the processes of designing, implementing and evaluating T4TAIs.

This report presents the findings of a learning study which arose from the growing sense that not enough attention was being paid to the people expected to take up and use T4TAIs. Conducted in partnership by IDS (Dr Rosie McGee and Ruth Carlitz), Hivos's Knowledge Programme (Fieke Jansen, Merit Hindriks and Amis Boersma) and ATTI (Africa Technology for Transparency Initiative² - Mendi Njonjo) between July 2012 and December 2012, the study addressed the core **question**:

Are the realities of these assumed users, and constraints that may stop them taking the action expected of them in response to T4TAIs, investigated and taken into account systematically enough, in respect of technology-based initiatives, or in the TAI field as a whole?

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¹ In this report the abbreviation T4T&A is used for 'technology for transparency and accountability'. The more used term is T4T, but since one weakness in TAIs tends to be the failure to follow through on ensuring that T actually contributes to greater A, there is merit in explicitly include A in the abbreviation, not only T. The abbreviation T4TAIs is used to refer to 'technology for transparency and accountability initiatives'.

² ATTI (Africa Technology for Transparency Initiative) is a joint initiative of <u>Omidyar Network</u> and <u>Hivos</u>. It seeks to support organizations in Africa that use technology and media platforms to empower citizens in their countries to hold their leaders accountable, by providing access to credible public information, influence and stewardship of resources.

The question matters. If it cannot be answered positively, the T4T&A community – practitioners, implementing agencies, funders, researchers and knowledge-brokers – has work to do, and evidence on which to found this work. If the study unearths knowledge gaps, currently bridged by optimistic assumptions, these gaps are probably limiting both the 'developmental' and the 'democratic' gains³ that will be attained by many otherwise well-conceived TAIs. Filling these knowledge gaps will increase the possibility of T4TAIs producing socially equitable impacts of a developmental, democratic and empowering nature. The learning study therefore aims to identify **lessons** that can improve programme design and chances of success of T4TAIs by narrowing gaps between expectations and realities in terms of uptake and users.

The report is structured as follows. Section 2 provides the background to the study. Section 3 presents the methodology and process and the research questions which guided the gathering and analysis of secondary and primary data. Section 4 summarises findings from the initial literature review we conducted to explore the current state of knowledge on user and uptake issues. Section 5 first gives brief outlines of two T4TAIs in Uganda supported by ATTI that were case studies in the field-based part of our research, and then summarises findings from the fieldwork. Section 6 draws together implications for development agents active in the field of T4TAIs and concludes.

2. Background to this study

Transparency and accountability initiatives (TAIs) have proliferated over the past decade. They have gained momentum in the field of international development, and been boosted by the worldwide technological revolution. Various actors with stakes in these initiatives – from funding agencies to engaged activists to scholars of governance – are now asking questions about their impact and effectiveness, in response to various pressures affecting them, such as the drive for results-based development management. In the past few years some headway has been made in two directions. First, specific implementing agencies have started improving their ways of assessing the impact of their own governance, accountability or transparency programmes by innovating with indicators, methodological approaches or theories of change. Secondly, scholars and practitioners have begun grappling with the general question of what we do and do not know about the impact of TAIs, most directly and visibly in a review of the contemporary state of knowledge conducted in 2010-11 (McGee & Gaventa, 2010).

That review makes several mentions of the expectations that underpin TAIs - in general and in specific fields - about how citizens will engage with these initiatives as 'users' of them. The need for further work on 'the user' is highlighted, specifically, on the gap between TAIs' operational assumptions about when the user will become an 'active citizen' and what actually drives 'the user' to participate in TAIs. Participatory approaches, involving users in assessing TAIs' impact, can shed new light on what they are achieving⁵. The review also suggests that the many TAIs which include southern citizens or social actors among their intended users could increase their effectiveness if they were grounded much more firmly in empirically based understandings of these 'users' and their experiences and outlooks, and less in suppositions, from the very conception of the initiative onwards' (McGee, 2010). While these points are made in relation to initiatives located specifically in the areas of service delivery and aid delivery respectively, they raise questions across all the fields in which TAIs are being used. They draw our attention to the distances and differences that often separate the designers, funders and implementers of TAIs from those who are presumed to use them and benefit from them.

Work on 'New Technologies' (ICT) conducted in parallel to that review found that to the Technology for Transparency community the existence and nature of a user base 'was not a key part of the rhetoric used to talk up the open data idea' (Hogge, 2010 p. 17). Enquiring into the assumed widespread

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³ Malena, Forster, & Singh (2004) summarise the three main arguments in favour of social accountability as being about improved governance, increased development effectiveness, and empowerment (p 4). Elsewhere (McGee & Gaventa, 2011) we have paraphrased and adapted this to the 'developmental outcomes', 'democratic outcomes', and 'empowerment' cases for social accountability initiatives (p. 16).

⁴ Review of the Impact and Effectiveness of Transparency and Accountability Initiatives. Outputs consist of a synthesis report and five sector-specific background papers on TAIs in service delivery, public budgets, freedom of information, natural resource governance and international aid. All available at http://www.transparency-initiative.org/workstream/impact-learning

⁵ Articulated by Anu Joshi in the background paper on service delivery (Joshi, 2010); these points are cited (McGee & Gaventa, 2010 p. 29 and 34).

existence of end-users for applications derived by civil society or other actors from Government data, the research found 'mixed reports', and the report offers a check-list of questions about potential end-users in an effort to improve the design of open government-related T4T initiatives. Another way of putting this might be in terms of the 'supply' and 'demand' for enhanced transparency and accountability. The recent raft of TAIs has increased the supply of transparency, and mechanisms meant to facilitate accountability, without fully exploring the existence of sufficient demand to ensure uptake.

One issue arising from the Review discussed above and other related work, then, is the need to understand better how citizens make use (or do not make use of) the enhanced possibilities that TAIs offer them, and what encourages them to take action (or not) via these TAIs to hold governments or private sector actors to account. Whatever the nature of the TAI in question – be it citizen monitoring of local schools, budget literacy training, establishment of aid information portals or mobile phone systems to notify service providers of deficient provision – citizen-led social accountability is premised on certain expectations about the will and ability of citizens (who are often marginalised) to act in certain ways.

The core proposition that this study addresses is that the realities of these assumed users, and the constraints on them taking action, tend not to be systematically investigated, either in the course of designing specific initiatives, or for the TAI field as a whole. The resulting knowledge gaps, currently bridged by optimistic assumptions, are probably limiting both the developmental gains and the democratic gains that will be attained by many otherwise well-conceived TAIs. Filling them will increase the possibility of making socially equitable impacts of a developmental, democratic and empowering nature.

The field of T4T&A is of particular interest in this regard, or perhaps of particular concern. ICT-based TAIs often explicitly or implicitly purport to reduce the costs (financial and other) to the citizen of taking action, by making the means of action readily accessible and cheap. Their theories of change, therefore, rely even more heavily than those of non-tech-enabled TAIs on assumptions about users and uptake. T4TAIs have burgeoned in the past 5 years, a period in which the internet, mobile telephony and social media have also developed rapidly. It is time to ask whether the assumptions made or research conducted at the outset about users, uptake and usage of T4T&A actually apply, and how they need to be modified to enhance these initiatives' impact and effectiveness.

3. Methodology

The study consisted of two components. First, a short desk-based review was conducted of the state of knowledge on this issue in relation to T4TAIs specifically and transparency and accountability initiatives more broadly (i.e. beyond those dependent on technology). This desk-based component was carried out almost entirely in advance of the fieldwork, so that it would shed light on the issue of users of TAIs and T4T&A in general and help sharpen and refine questions for exploration in fieldwork. Insights on what is assumed and what is known about those who are expected to take up TAIs were sought in the published governance and accountability literature and in unpublished 'grey' literature (institutional and organizational literature and the programme documentation of implementers of TAIs), insofar as access could be gained to these often internal documents.

Subsequently, two empirical qualitative case studies were carried out through fieldwork on two 'technology for transparency' initiatives supported by ATTI. These were SNV Uganda's 'Mobile Phones for Improved Access to Safe Water' (M4W) and the Kampala-based Foundation Track FM International's TRAC FM initiative.⁷ Through a combination of semi-structured interviews, focus-group discussions and participatory mapping and ranking methods, we explored the following questions⁸:

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⁶ See pages 17, 32 and 37, available at http://www.transparency-initiative.org/wp-content/uploads/2011/05/open_data_study_final1.pdf. The checklist asks: 'How free is the press? How wired?; Is there a user base of traditional civil society groups that may make use of targeted data?; Are there specific examples of those groups using data in their advocacy/monitoring or other civic engagement activities?; Are there specific examples of take-up of data by end users that may inform open data initiatives?; In what ways did that data need to be made accessible in order for it to be used?; What level of internet penetration is there across the country?; What level of mobile penetration is there and how are people accessing mobile data services (SMS, 3G etc.)?'

TRAC FM began as an initiative of the Kampala-based organization Text to Change, but registered as in

independent foundation in the Netherlands in 2012.

Since this study has an explanatory purpose, it is not considered necessary or appropriate to include any 'control' or counterfactual element. We are not checking whether these interventions have made a difference and if so

- 1) What did/do ATTI and the implementing actors know at the outset of the initiatives about the initiatives' likely users, uptake and possible constraints on uptake, and how do they know this?
- 2) What is known about the *actual uptake* in well-advanced initiatives, and the composition of actual users? How does this compare with expectations and assumptions?
- 3) What are the *expectations and motivations* of users themselves, and of ATTI and its funders, and are there gaps between the users' perspectives and ATTI and funders' understandings of user expectations and motivations?
- 4) What is known about the reasons why non-users do not participate? What are the reasons?
- 5) How were/are *dimensions* of *social exclusion* that may affect uptake and the composition of users (e.g. gender, age or disability) addressed in the design and implementation of these initiatives? What is known about these dimensions in actual uptake and user composition?
- 6) What could be done to *narrow any apparent gaps* between initial expectations and actual uptake, use, users and beneficiaries of ATTI-supported programmes?

These questions were used indirectly in deriving semi-structured interview checklists and focus group discussion guides for the field research, and directly to analyse data from both primary and secondary sources.

The fieldwork to inform the case studies was conducted over a two-week period (12-25 August 2012), and involved interviews and focus group discussions with people involved in the design and implementation of M4W and TRAC FM, as well as with users and 'potential' (but non-) users of each initiative.

It is important to note that the two case study initiatives were designed in response to different challenges, and as a result are being carried out in different ways. Since M4W was designed to improve rural water access, it has been piloted in rural districts only, targeting water users and local officials dealing with water. TRAC FM on the other hand does not endeavour to improve service delivery in a particular sector but rather aims at broader engagement by citizens in monitoring and debating a range of public services. As a result TRAC FM targets both rural and urban populations. The differences between the two initiatives influenced the choice of two field sites: Uganda's capital city Kampala and the rural Lira District in Northern Uganda.

The two field sites exhibit significant demographic differences: Kampala has a population of over 1.7 million people, an average literacy rate of 92 percent, and monthly per capita income of \$419 USD according to the most recent government statistics. Lira is a primarily rural district in Uganda's Northern region, which has an average literacy rate of 64 percent and per capita income of \$62 USD.⁹

In Kampala M4W and TRAC FM staff and partners were interviewed, as well as other key informants at the Ministry of Water and Environment and in the broader civil society community. Also interviewed were eight randomly selected TRAC FM 'active participants' about their radio-listening habits, opinions about the delivery of public services, motivation to participate in TRAC FM, and expectations about what would happen as a result of their participation. With the help of a local research assistant, a semi-random sample of 21 Kampala residents was also interviewed, in order to gather views of people who were not actively participating in the TRAC FM initiative, as representative 'potential' (non-) users. This group was asked similar questions to those asked of the active participants. They were not primed to discuss TRAC FM, but asked more generally what radio stations they preferred and whether they had

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measuring on what scale; we are exploring some of the mechanisms underlying the programme theory of change and theory of action.

⁹ Population, literacy and per capita income figures from the Uganda Bureau of Statistics (n.d.)

¹⁰ These interviewees were people who had agreed to participate in follow-up surveys after texting their initial responses to a TRAC FM survey broadcast on the Kampala-based radio station Sanyu FM. We obtained their phone numbers from the TRAC FM database and selected people to interview at random, using a random number generator in Excel. These interviews were conducted over the phone.

¹¹ We use the term "semi-random" to indicate that these interviewees were not selected using a random number generator or through a random walk method, but rather by approaching them on the street and at their workplaces in various parts of town in Kampala over the course of one day. We aimed for a balance sample of "potential" Sanyu FM listeners, and hence oversampled relatively young and affluent residents, given that Sanyu FM identifies itself as "Kampala's leading youth station targeting the 18 and 35 year age group in the… middle to upper class socioeconomic group." (http://sanyufm.net/welcome/about)

participated in any interactive polls. Since M4W does not target urban residents, interviews with M4W users were conducted in Lira only.

In Lira town, key actors involved in the implementation of M4W and TRAC FM in that district were interviewed. These included the district learning coordinator of Triple-S (M4W's implementing partner in Lira), the assistant district water officer, hand pump mechanics and extension workers overseen by the district water office, and staff of Radio Wa (TRAC FM's implementing partner in Lira). In order to gather the views of M4W and TRAC FM users and potential users, semi-structured interviews and focus group discussions were conducted in two rural sub-counties¹², assisted by a local translator. In each sub-county, we first met with the sub-country chairperson and then, once granted permission to proceed with the visit, went to examine a total of eight communal water points serving the two sub-counties, accompanied by the hand-pump mechanic responsible for their maintenance.¹³ At the water points and in nearby areas we spoke with people who had reported problems to M4W as well as people who were either unaware of the reporting mechanism or who had opted not to use it. Four 'non-users' residing in the Lira Town suburbs were also interviewed. Interviews with these 'non-users' also covered issues relevant to TRAC FM, soliciting information about people's radio-listening habits and their opinions about the delivery of public services in their communities.

Finally, to make maximum use of the fieldwork opportunity, the TRAC FM database was used to identify 'active participants' based in Lira, and these were interviewed in a manner similar to that described above for the Kampala-based active participants.¹⁴

Table 1 shows the gender and age characteristics of the various samples interviewed

Table 1 Sample characteristics								
Kampala randomly selected 'active participants' in TRAC FM-based radio show (i						w (n = 8)		
Sex	Age group							
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Male	3		2	2				
Female	1 (age not disclosed)							
Lira randomly selected 'active participants' in TRAC FM-based radio				show $(n = 9)$				
Sex	Age group							
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Male	1	5	2					
Female			1					
Kampala semi-random sample (n = 21)								
Sex	Age group							
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59
Male	5	3	3				1	
Female	5	3						1

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¹² Lira District (one of 11 districts in Uganda) is divided into 28 sub-counties, which is an administrative unit above that of the village and parish.

¹³ We visited three water points in Barr sub-county and five in Ngetta sub-county.

¹⁴ Our translator conducted these interviews over the phone.

4. Findings from literature review

This section provides an account of our secondary desk review. Between July and November 2012 we gathered and reviewed relevant literature. This included a range of kinds of literature: research reports, academic journal articles, conference papers, book chapters, programme documents (including evaluation reports) and blog posts. We used our research questions (listed above) as our analytical framework for reviewing them. Here we present our literature review findings, illustrative of the state of contemporary knowledge on issues of users and uptake in T4TAIs, distinguishing those related to initiative *design* from those emerging in implementation or *practice*. It should be noted that the speed of developments in the T4T&A field is such that the pool of knowledge will have expanded in the intervening six months.

Exclusion and non-uptake are shaped by both 'supply-side' and 'demand-side' factors. Major supply-side factors are mobile coverage, quality of mobile networks, and internet penetration. Related to geography, these factors (explored by (Hellström, 2008) may well constitute a broadly urban bias, but they are not our main concern here because they affect all potential users in a given region alike, and are structural 'givens' rather than relating to human agency.

4.1 Great Expectations: Preconceptions and assumptions driving the spread of T4TAIs

Over the past 5 years a number of researchers have made scholarly attempts to assess the implications of ICTs for development and ICTs for T&A in developing countries. Here we summarise emerging consensuses and questions arising in key research studies and reviews of experience in that period, with an emphasis on the issue of users and uptake.

The potential of ICTs for good governance and T&A is variously affirmed and reaffirmed (CIPESA, 2012; Hellström, 2008; Hellström & Karefelt, 2012; Susanto & Goodwin, 2010; Wasserman, 2011). Some authors theorise or hypothesize this potential by unpacking ways in which ICTs can address some of the shortcomings or limitations of collective action (Hellström and Karefelt 2010) or social networking (Wasserman, 2011) some distinguish particular technologies, for example mobile telephony, as having more potential in developing country contexts than other, less widely diffused, forms of ICT (Olorunnisola & Martin, 2012).

Outstanding concerns and questions are also raised, from a 'techno-realism' perspective. Hellström (2008) asks why East African citizens would want to engage with government at all, via ICTs or any other way, when most of them survive through the informal sector. He points out that ICTs may empower the state as well as or more than citizens, for the bad as well as for the good. The Association for Progressive Communications has long been promoting awareness of both intended and unintended negative impacts of ICTs, including the scope for their use in ways that 'replicate or perpetuate gender stereotypes and biases' (APC, n.d.). Wasserman (2011) and Etzo & Collender (2010) counterbalance the promise of class mobility that mobiles offer, by noting that in reality they can also contribute to stasis in terms of gender identity and social mobility prospects.

From a frankly 'techno-sceptic' perspective, Manji (2008) explores the question 'Mobile activism or mobile hype?'. While recognizing that technology offers opportunities, he lays bare the mythical status that mobile technology has reached among 'those obsessed about the role of technologies' (p. 130). He points to the negative use of SMS technology, for instance for sending electorally motivated hate-mail in Kenya; and emphasises that 'the push to bridging the digital divide and harnessing the power of information and communication technology often neglects the very resource that is most central to development – people' (p. 125). Similarly concerned to rein in the hype over the power of ICTs, Bachan & Raftree (2011) recommend that the aim of ICTs in the governance and empowerment context be framed as 'promot[ing] a communication process which encourages social transformation and ultimately creates equality of distribution of social benefits, which may help sustain positive social change' (p. 37) – a considerably more cautious or realist framing than some of the earliest, highly optimistic claims made for ICTS for Development (ICTs4D). Hellström (2008), taking stock of how far mobile phones seem to have empowered citizens and deepened democracy, concludes 'Maybe we must be more realistic about the true extent of ICT transformational potential' (p. 10).

All in all, the literature shows that notwithstanding undeniable advances in opening up access to ICTs and with a few noteworthy exceptions¹⁵, earlier 'great expectations' - the initial wave of apparently unbounded optimism about the promise of ICTs for delivering accountability and transparency - is now giving way to more moderate and realistic expectations, with the benefit of critical hindsight on the first wave of T4TAIs.

4.2 User and uptake issues in design

A comprehensive 2010 overview of T4T&A initiatives differentiates carefully between the actors *targeted* by the initiative in question and the implications for design and effectiveness. It disaggregates various kinds of relevant actors into the following three categories: 'creators and managers of the project, ... third-party change agents or organisations, and/or ... more collective public stakeholders' (Avila, Feigenblatt, Heacock, & Hellter, 2010 p. 5). According to this helpful classification, the 'users' who represent the focus of our study are public stakeholders rather than creators and managers or third-party change agents or organisations. At the same time, uptake by managers and third-party change-agents is often a necessary condition for or correlate of uptake by public stakeholders, so our interest extends to them as well.

Despite making observations about how 'the users' need to be borne in mind in various design aspects, Avila et al do not unpack the notion of 'the users' or differentiate between different kinds of user that might give rise to differentiated user expectations, motivations or behaviours.

Differentiations which others have drawn, which need to be considered at the design stage, are by gender, rural/urban location, language and degree of socioeconomic marginality. Bachan & Raftree (2011) summarise key findings of a study by the Cherie Blair Foundation and GSMA Development Fund on women and mobiles which surveyed over 2000 women in fourteen countries. Growing numbers of women and girls are using mobiles. 61% of females aged 14-20 own a mobile phone, and almost 90 per cent of girls in these countries can access a mobile phone either because they own one or can borrow one or by some other means. 335 of the women homemakers aged 21-27 surveyed said that a family member would object to their owning one. Noting that because of limitations of the global representativity of the survey sample, access for marginalised girls is actually likely to be much lower in many countries than these figures suggest, Bachan and Raftree conclude: 'This finding exposes the cultural and social barriers that women and girls face in terms of access and control over communication devices and channels' (p 9).

On the use of mobiles in advocating for women's rights Bachan and Raftree find signs of a 'divided female class based on those who had access to phones and the income to support them, and those who did not', with low-income women 'losing their voice' over time (p. 13). Since as long ago as 2002 the Association for Progressive Communications has been raising awareness of both the potential and the risks of ICTs for gender equality objectives, and developed an evaluation methodology designed to determine whether ICTs are improving women's and girls' lives or not, seeking to enhance the prospective progressive effects of ICT use and reduce the regressive effects. Many initiatives developed since 2002 appear not to have drawn on the APC's forward-thinking ideas and outputs.

CIPESA found that disabled citizens' access was not contemplated in the design of any of the websites of initiatives they reviewed, English was the main language used in all 24 initiatives leaving out a large proportion of Ugandans, and gender aspects seemed to be 'grossly ignored' in the deployment of e-participation tools (CIPESA, 2012 p. 21).

Some of the case studies and some of the broader reviews of experience demonstrate a fairly widespread prior awareness that urban populations are likely to have different ICT and mobile access and habits to rural populations, and will be easier to engage in tech-based TAIs (Daraja, 2012c; UNDP, 2012). A UNDP review (2012) is one of those to recognise these rural/urban differences among a host of other inaccurate or overly optimistic starting assumptions that have underpinned T4TAIs to date. It points out that marginalised citizens, by dint of their marginalised condition, are those most in need of government accountability and responsiveness and also generally those facing the highest usage costs

¹⁶ The Cherie Blair Foundation and GSMA Development Fund study can be found at http://www.cherieblairfoundation.org/uploads/pdf/women_and_mobile_a_global_opportunity.pdf

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¹⁵ A notable exception is eTransform AFRICA (2012), published by the World Bank and African Development Bank, which despite being recent and based on case studies among other sources, shows unbridled optimism.

¹⁶ The Charles Blair Foundation and CSMA Development Fund at the complex foundation and CSMA Development Fund at the complex foundation.

and worst connectivity. (Daraja, 2012a) notes that, marginalised citizens being those with the lowest expectations of 'satisfactory government response' to their demands, they have low incentives for engaging with TAIs, which need to be overcome by concerted promotional efforts and suitable counterincentives. Collectively, these insights might be summed up by saying that the 'techno-optimism' that has obscured these facts of life from view needs to be tempered, and all the more so when the 'responsiveness-pessimism' of putative users is taken into account.

Poverty limits uptake and sustained use. Wasserman (2011) discusses how in Africa mobile handset and running costs are too high to permit full use of the potential offered by for mobile technology. Unless addressed at design stage, the costs lead to 'passive use': users wait to be called or beeped. Wasserman cites a study by Duncan (2009) which showed that informal urban settlement dwellers in South Africa spent 27.5% of their income on communications costs, diverting it from essential items like food. Research by Movirtu reveals that some shared mobile users (those who cannot afford or access their own mobile) 'end up spending between 5 and 30 per cent of a day's income on accessing mobiles, usually paying a premium for convenience or for the good will of a reluctant lender' (Movirtu (2011) cited by Bachan and Raftree 2011: 120). While these figures illustrate the high priority that marginalised people can attach to being connected, they also reveal the very real constraints to uptake and sustainability of ICT4D initiatives when connectedness comes at the cost of food. Hellström (2008) discussing e-governance initiatives points out the possible irrelevance of engaging with formal government spaces and actors given the prominence of the informal sector in marginalised people's livelihood strategies, and also the disincentive to do anything that might invoke the displeasure of government or a local service provider, or bring about repressive responses.

Age affects uptake and use of technology. The self-evidence of this fact is one impetus behind the rapid development of electronic and ICT-based approaches to governance and political participation, in an attempt to counter widespread youth disaffection and political alienation. Sources we reviewed (Olorunnisola and Martin 2012; Susanto and Goodwin 2010; Bachan and Raftree 2011) confirm that the youth and young adult age-group dominate in the uptake of technology-based initiatives, suggesting that if T4TAIs seek to avoid this 'natural' technology bias, special measures are needed at design stage, and even so, the bias may prove hard to counter.

To avoid unrealistic expectations and unfounded assumptions, some sources advocate a much finer-grained initial context analysis (Daraja 2012a,2012b, 2012c; Naidoo 2010) and close ongoing monitoring that deliberately harvests lessons from experience (DANIDA 2012). An example of the former is the survey carried out prior to the umYango project to assess rural people's attitudes to SMS and podcasting (Naidoo 2010). Expanding on the latter point, funders, designers and implementers of some initiatives reviewed are explicit about the imperfect knowledge on which their programme design was based, and about their aim to learn from this first incursion into the world of T4TAI. This aim has been pursued in some cases by building in moments (e.g. the end of a pilot phase) or formats (e.g. learning evaluations) for structured reflection, learning and application of lessons (Daraja, 2012a, 2012b, 2012c; CIPESA, UNDP 2012).

If relatively few sources discuss explicitly the expectations of T4TAI designers about putative users, fewer still have looked into the actual expectations of the putative users. Hellström and Karefelt (2012)'s review of participation through mobiles in Ugandan election monitoring captured what had made participants participate, top among which were the reasons 'to help my country', and 'to get help'. Daraja's careful reflection on user expectations came only after the Maji Matone initiative had failed, when a fatal gap was revealed between Daraja's own starting expectations on the one hand, and those of users and non-users on the other: users and non-users had no expectations of effectiveness, having no trust in Government responsiveness (Daraja, 2012a, 2012b, 2012c).

4.3 User and uptake issues in practice

Moving beyond design issues to what happens when T4TAIs play out in practice, as T4TAIs unfold, usage is quickly affected by the extent to which initial users' expectations are fulfilled or frustrated. Hellström (2008) refers to the contradictions between users' expectations of feedback and responsiveness when they communicate views and demands, and 'black hole' initiatives in which the actors or institutions targeted by the TAIs make no commitment to respond. (DANIDA, 2012) points out

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¹⁷ Submission to the South African Parliament's Portfolio Committee on Communications on the cost of communications. Cape Town, South Africa.

that users expect resolution of the issues they raise, and intermediary organisations brokering their demands have limited or no power to resolve them, this being the domain of governments or service providers. For sustaining the engagement of users, clearly swift evidence of expectations fulfilled is key and swift evidence of expectations frustrated is fatal.

Daraja, having anticipated that low literacy and poor access to electricity (to charge mobiles) would obstruct uptake in the Maji Matone initiative, found that in practice uptake was also obstructed by apparent apathy and low expectations of responsiveness: 'It soon became clear that there were several technological options that would serve the programme's needs and that [the] main challenge would be the human challenge of persuading people to engage with our technology, rather than either a hardware or a software issue' (Daraja, 2012b). This finding is corroborated by Hutchings, Dev, Palaniappan, Srinivasan, & Ramanathan (2012). 'High-tech', Daraja concludes, is a relative term; and mobiles and SMS are high-tech for rural Tanzanians; and 'high-tech' solutions can run aground on low-tech obstacles (Daraja, 2012a).

Usage patterns reflect existing differences, biases and inequalities in society. Bachan and Raftree (2011) list as barriers to uptake the factors of age, gender, disability, literacy, capacity, cost and connectivity, some of which are of course inter-related. Citing Movirtu's study (2011) about life at the bottom of the pyramid, they point out that some of these factors make for variance between mobile or internet ownership and mobile or internet access, a points often missed in programme design and appraisal.

Sustainability, a key challenge in T4TAIs, is closely related to costs. As found by CIPESA's review of ICT tools applied to promote citizen participation in Uganda, when the costs to the accountability seeker are mitigated by donor funding rather than by the nature of the ICT and the way it intersects with its human users, uptake will fall when the donor funding drops.

As for gender disparities in use, even T4TAIs designed with the intention of providing girls with access to new technologies found this difficult to achieve, finding that training relevant actors in gender equality was insufficient (Groupe Stratégies et Leadership, 2011)

But beyond these ways in which socioeconomic differentiation gives rise to patterns of uptake and sustained use, lies a deeper set of factors. In their book *Full Disclosure: The Perils and Promise of Transparency,* Fung, Graham, & Weil (2007) analyse the effectiveness of targeted transparency policies, and conclude that 'effective [transparency] policies were those that succeeded in embedding new information in users' and disclosers' existing decision-making routines' (xiv) – not those that introduced routines that were new to the people they were targeting, and expected people to adopt these. Our literature review points to the same conclusion for T4TAIs. Hellström and Karefelt (2012) found that survey respondents' two main reasons for not having used UgandaWatch (a crowd-sourcing mechanism to report election irregularities) were (i) not having heard of the service, and (ii) not having anything to report. Hellström's review of mobiles for good governance highlights how 'Too often a mobile "solution" is designed for a problem that never existed in the first place (and "too many solutions looking for problems"). Applications should be developed having the end users point of view, not the application as such' (Hellström 2008: 10). End-users' points of view and users' existing routines are, of course, differentiated by all those factors listed by Bachan and Raftree (2011) as shaping uptake: age, gender, disability, literacy, capacity cost and connectivity.

4.4 What can we conclude from the literature?

This literature review shows that great strides have been made in the past 3-5 years in analysing nascent T4T&A experience and deriving useful lessons to inform and improve practice. But it also shows that even obstacles that were already recognised to affect use and uptake have proved to be pitfalls in the design, implementation and practice of some recent T4TAIs. This could be because although scholars were researching and writing about them, programme designers were not aware of their work; or it could be that even awareness of them could not curb a headlong drive for innovation and an unbounded optimism about the promise of technological solutions to resolve the social and political problem of accountability.

This conclusion, although it is derived from work produced as recently as 2012, reaffirms a major conclusion of research led by the Transparency and Accountability Initiative in 2010. The TAlcommissioned 'Review of Impact of Transparency and Accountability Initiatives' (McGee and Gaventa 2010) concluded that TAIs in general – not only technology-based ones - were being designed without

due attention to their underpinning theories of change, leading to dependence on unrealistic and unsurfaced assumptions which were not borne out in practice, thereby limiting effectiveness and impact. The TAI-commissioned 'Global Mapping of Technology for Accountability and Transparency' (Avila et al 2010) concluded:

'Some projects have been launched without sufficient knowledge or expertise to design an effective methodology or conceive of and execute a feasible strategy. Terms and labels such as 'demanding accountability' or 'exposing corruption' tend to be very loosely thrown about. Combined with a significant amount of unverified data in some projects, particularly crowd-sourced efforts, these conditions have the dangerous potential to diminish technology for transparency and accountability as an approach without greater rigor'

In development initiatives promoting accountability, the accountability-giver is called to account across a power differential and at a cost (of various kinds - financial, time, reputation) to the accountability-seeker —and the theoretical 'accountability-seeker' is an individual or collective actor with a set of intersecting identities and a multiple positions in a complex of power relationships. A medium which can reduce the costs and cancel out the negative effects of the power differential (from the particular accountability-seeker's perspective) will achieve good uptake and be effective. What this literature review has shown is that, just like all other approaches to seeking T&A, a technology for T&A which fails to sustainably reduce the costs or to take account of the power differential problem risks leaving accountability-seekers liable for costs they will not sustain, vulnerable to perceptions of 'trouble-maker', and/or wielding insufficient leverage vis-a-vis the accountability-giver to yield the desired accountability outcome.

As well as providing partial answers to our research questions, the literature review confirmed them as relevant and important questions to explore empirically via primary research. We now turn to the primary research component of the learning study.

5. Findings from fieldwork

This section gives an account of our primary research: document review and fieldwork on the two selected case study initiatives that are part of ATTI. In light of our core research question, the findings highlight the extent to which these initiatives have accounted for the realities of their assumed users, and addressed constraints on uptake. Our aim is not to evaluate either initiative as a 'success' or 'failure,' but rather to provide lessons for practitioners and scholars engaged in the design, implementation and evaluation of T4TAIs. It is important to note that both M4W and TRAC FM are actively reflecting on and responding to many of the challenges we identify.

The section proceeds as follows. First we provide a description of each of the case study initiatives in turn, drawn from programme documentation and from interviews and focus group discussions held during fieldwork (subsections 5.1 and 5.2). Each description is followed by a diagram representing as comprehensively as possible the initiative's theory of change, compiled by us on the basis of analysis of the same sources.

In compiling the theories of change we found that there were a number of implicit assumptions built into them, many of which, despite being crucial to the achievement of expected outcomes and impacts, were not articulated in the initiatives' own descriptions of their pathways to impact in their proposal documents. (Lest we appear to be singling out these two initiatives for unfair criticism on this count, we hasten to add that this is a common observation about accountability and transparency projects and programmes, as evinced by McGee and Gaventa (2010), and indeed common in aid and social change projects and programmes overall.) These assumptions include, but are not limited to, assumptions relating to users and uptake. We started our data analysis by tabulating starting assumptions as fully as we could - both those stated, and those unstated but inferable from programme documentation. For each, we then noted what our document review and primary fieldwork suggested about the extent to which the respective assumption was being borne out in practice. Our analysis is based on these detailed tables. At the close of the description of each case study initiative, we sum up briefly what needs to be noted about the key assumptions underlying the theory of change. In sub-section 5.3, 'Analysis of case study findings', we restate our research questions and draw on our fieldwork findings and analysis to respond to them.

5.1 Case study - M4W: improving the functionality of rural water points through actionable and timely information

M4W (Mobile phones for Improved Access to Safe Water) is an initiative with two main components. Component (i) consists of water point mapping by Hand Pump Mechanics, Community Development Officers and Community Health Assistants using Java-enabled telephone handsets. Component (ii) is a citizen monitoring initiative through which water users report on functionality by sending text messages with any type of mobile phone. Component (ii) is of greater interest to this study because it is a transparency and accountability initiative strictly speaking, unlike component (i), which is more of a performance monitoring tool.

The M4W pilot project started in September 2011 in three districts of Uganda with the aims of:

- Improving efficiency in reporting faults; i.
- Triggering action for response to non-functional sources ii.
- iii. Improving efficiency in updating district and national information systems (IRC, Triple-S and SNV 2012: 2).

Initiated by SNV Uganda and carried out in partnership with IRC/Triple-S, Makerere University and WaterAid, M4W represents an innovation of prior water point mapping initiatives.¹⁸ Such efforts faced "numerous challenges related to the capacity of Hand Pump Mechanics (HPMs) and the informal nature of HPM structure, security of data (virus, power surges software malfunction) and inadequate number of HPMs in some sub-counties" (M4W, 2011). M4W's mobile, web-based platform aimed at addressing these challenges and others. M4W also represents a relatively low-cost solutions, at USD 61,500 according to the March 2011 proposal (hardware plus implementation costs)¹⁹. In the districts where it has been piloted, M4W also serves to supplement and update the Ugandan government's Water Atlas 2010, a Ministry of Water and Environment initiative that mapped coverage and functionality of the country's point and piped water supplies.²⁰

In describing how the system is meant to work, M4W project documentation states that: 'The system has a short message (SMS) based information exchange system that transmits messages on breakdown or interruption in water services to hand pump mechanics and to a central database managed by the District Water Officer (DWO), which will be linked to the Ministry Water Supply Database' (M4W, 2012), p2). We note that an SMS system does not transmit messages - phone users use SMSs to transmit messages (or do not).

In addition, we note that M4W did not expressly seek to network the relevant actors in the sector. Prior to M4W, extension workers had the role of mapping for the Water Atlas. When M4W began, HPMs were supposed to gather the data for water point mapping and, at the same time, sensitise water users about M4W's'second component.

M4W's documentation is also ambiguous over the role and degree of centrality of Water and Sanitation Committees: 'Depending on the nature of fault, the Water and Sanitation Committee (WSC) responsible for the water point will agree with the HPM on the needed repair if it is a minor breakdown' (M4W, 2012), (p3). The stakeholder roles diagram in the same briefing note (p3) and in a May 2012 report (SNV, 2012 p. 5) show M4W bypassing Water User Committees (also referred to as Water and Sanitation Committees), conveying information to the district government and HPMs directly. This 'short route to accountability'21 is perhaps based on the common knowledge that many Committees were not very functional when M4W was launched, but the ambiguity appears to exist in practice as well as in the documentation, which may be a source of confusion and diminished effectiveness.

A proposal document (M4W, 2012) lists under 'Key Stakeholder Information Needs, 'water user groups; and their need for identification details of water pumps'. 'Water user committees and community

http://www.mwe.go.ug/index.php?option=com_docman&task=cat_view&gid=12&Itemid=223
The phrase is borrowed from the World Development Report 2004.

¹⁸ M4W also builds on SNV's experience piloting a similar mobile phone based platform to monitor teacher absenteeism, which it piloted in 4 districts in Uganda.

¹⁹ We understand from personal communications that in fact it involved costly outlay for hardware, but do not have details on whether this refers to the projected USD 61,500 or whether the actual cost turned out to be much higher than that projected.

For more information on the Water Supply Atlas, see

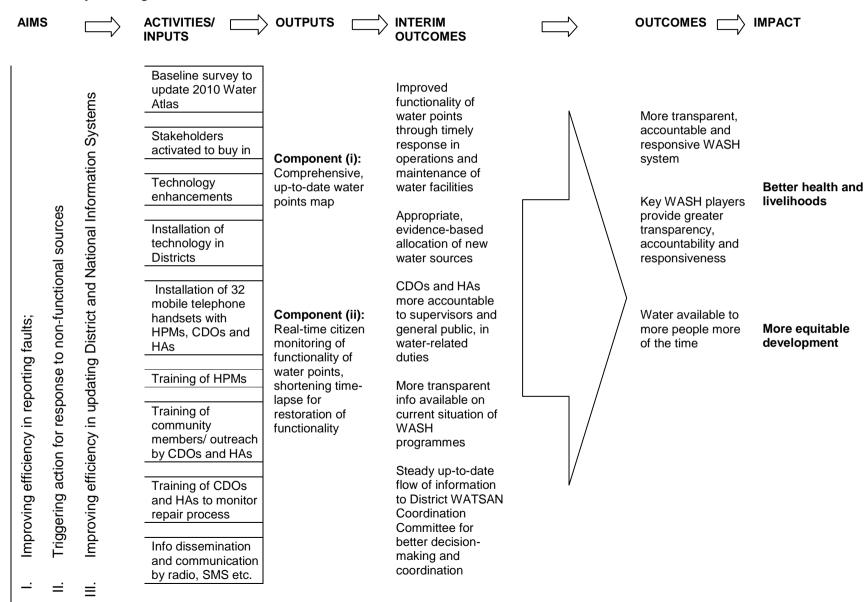
members' are listed in it as those who have to send information on malfunctioning water points to the system. In delineating water users' role, the documentation states:

'From the diagram [...] it is clear that water users have a more direct possibility to report a problem with their water source [than pre-M4W, when the Water User Committees were expected to always intermediate] and that the M4W system provides better accountability lines between the stakeholders responsible for [operations and management] of the drinking water service' (M4W, 2012 p. 4).

The likelihood of users smoothly assuming this new, more direct responsibility seems not to have been tested in advance. Widely inclusive consultative meetings held at the outset of the project seem to have involved all stakeholders *except for* the water/mobile-users whose action would be necessary to make the project function as envisaged. Obviously everyone cannot be consulted on everything, and there is always the risk that if a users' consultative group had been specially constituted it may have proven more informative on what users understand as their official roles than on the roles they actually play in real life, but ordinary water users seem to have been little-researched in advance.

We have pieced together an approximation of M4W's theory of change, as we understand it, from project documentation and verified its accuracy with M4W staff. Visually it can be represented approximately as follows:

M4W Theory of Change



Certain assumptions underlie component (ii) of M4W, although few are explicitly spelt out. Whereas the ultimate desired impact is stated clearly, some indistinctness in the treatment of desired impact, outcomes (intermediate or final), outputs and inputs makes it hard to tell exactly how the component has been pursued – for instance, whether there is *training* provided to community members, or just the *outreach* that CDOs and HAs do, which basically consists of telling them about M4W ('sensitization'). Some implicit starting assumptions get identified explicitly in later programme documentation as 'problems' and 'ways forward' (May 2012 report).

5.2 Case Study - TRAC FM²²

Following extensive ethnographic fieldwork and literature studies, TRAC FM was designed to offer a means of public involvement in the monitoring of service delivery. ²³ Its aim is to strengthen public debate and mechanisms of accountability by analysing data gathered from a wide range of people and feeding this data back into the public debate. It is centred on the development and roll-out of an innovative software platform and its use in interactive radio programmes. Every week radio stations employing the TRAC FM platform transmit an opinion poll question, which listeners can respond to by SMS. The data generated from their responses are processed and visualized in real time, and broadcast in a variety of ways, particularly through interactive radio talk-shows. TRAC FM also provides a channel of communication between politicians, who are often invited onto talk-shows to react to the poll results, and people who have feedback to give them. Poll participants effectively become citizen monitors of a wide range of services and the radio stations become hubs of debate and information circulation on the services, the monitoring process and the responses of government actors.

After sending an initial SMS, users automatically receive an SMS response from TRAC FM confirming the uptake of respondent's accounts in the TRAC database. The response SMS also asks whether the respondent would like to join TRAC FM's database of 'active respondents'. If the respondent replies affirmatively, SMS messages with survey questions will then be sent to him/her in the future. In this way respondents can choose to become more involved in tracking service delivery, allowing TRAC FM to build up a pool of active respondents and valuable data based on profiling of respondents. This information is compiled by a call centre which conducts telephone interviews with them and logs information on their demographic characteristics.

TRAC FM operates in a context where government accountability to citizens is low, and leakage, waste and inefficiency in the use of public funds high. In this context and in other countries exhibiting similar characteristics, social accountability initiatives have proliferated in recent years to remedy the weaknesses and biases of formal political accountability systems. The media are involved in some of these. The Ugandan media sector contains little in the way of truly independent media; the sector is driven by financial survival imperatives and co-optation is a constant risk. In this context, TRAC FM's approach is not based on naming and shaming, but on providing a platform for informed debate. One of the radio stations that uses TRAC FM (Radio Wa, Lira), sets out to celebrate good practice in local governance rather than denounce perceived poor practice, a strategy which affords it protection in this sensitive media environment and helps to protect its listeners while still informing them.

At the time of our fieldwork, TRAC FM was working with five radio stations, in Kampala and four other districts. The two covered in our fieldwork were Sanyu FM in Kampala, which was using TRAC FM on its English-language 'Sanyu Breakfast' programme, and Radio Wa in Lira district, broadcast in Luo, which was using it for two of programmes, 'Moment of truth' and 'Common Ground'.

Broadly speaking, the themes addressed in poll questions ranged from service delivery and development, through accountability and gender equality to peace-building. Public opinion polls on Facebook and Twitter address similar issues and topics; the difference with TRAC FM is that it is accessible to all listeners who have mobile phones, not just those with access to the Internet; and also that the findings are not only made public but are followed up in various ways. TRAC FM's polls have

²² This section draws on TRAC FM (n.d.)

²³ TRAC FM emanates from academic research conducted as part of its founder-director's master's degree in New Media at the University of Amsterdam, under the supervision of Dr. Geert Lovink. The research that inspired the development of the TRAC FM method was published by the Institute of Network Cultures as part of the 2011 book Beyond ICT4D: New Media Research in Uganda. Chapter 7 – ICT4Accountability

also been designed with the explicit goal of generating data that can be quickly processed into comprehensible and attractive info-graphics, or used in background stories in print media. Providing such substantive data in a context where it is often lacking is intended to strengthen public debate and encourage informed dialogue between citizens and government officials (Dijkstra, 2011b: 145).

The profiles of 'active participants'/'active respondents' and their suggestions for future poll themes and views on governance and accountability issues, are regarded as a valuable resource. They both serve both TRAC FM's own purposes of programming, campaigning and research and analysis, and can be shared with other actors including NGOs, the media and government bodies, within the restrictions imposed by privacy considerations. The database is growing all the time and is recognised to have as yet untapped potential as an information resource.

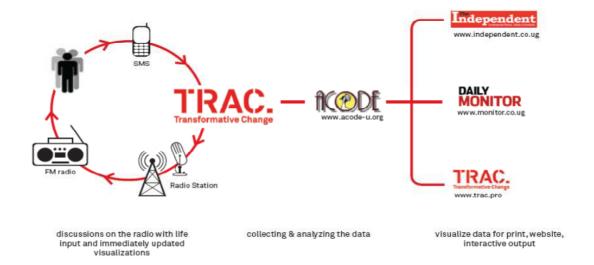
TRAC FM works to develop partnerships with interested parties and integrate TRAC FM software in their programs. This enables the partners to receive feedback from their beneficiaries or stakeholders among the radio-listener public and engage them in more structured, personal and data-driven ways than they could without TRAC FM.

TRAC FM has been designed explicitly as a learning pilot, destined to provide experience and lessons to inform the design and rollout of a fully-fledged project. The project proposal (Dijkstra, 2010) states:

'This pilot project will allow for the development of the basic working processes of the TRAC FM platform. The pilot phase will be used for research on the proposed method of monitoring and campaigning. If this pilot proves successful the platform and software can be used in many different ways. Constant learning will be the main intention for TRAC management and the documenting and sharing of our experience is a top priority. This pilot project has a potential to develop into a multipurpose tool for citizens to use in sharing and gathering accounts to form a solid base for objective assessment of public issues, especially in regions where internet connectivity is less common. This pilot project can prove the proposed method works and can spark the development of new methodology in using ICTs for Accountability' (p. 15).

Numerous other references in the proposal explicitly state the learning purpose of this first pilot year and later project reports and documents mention adjustments made to ongoing practice in the light of lessons emerging. For instance, Annual narrative report 1 Jan - 31 Nov 2011 includes a 'List of lessons learnt based on experience in the pilot year 2011'. It demonstrates the ongoing harvesting of lessons from the experience of developing and rolling out the software and building the relationships necessary for ensuring its use.

The TRAC FM project proposal offers this schematic overview of the project (Dijkstra, 2010) p. 4):



We have pieced together an approximation of TRAC FM's theory of change, as we understand it, from project documentation and our own observation in Kampala and in Lira district. Visually it can be represented approximately as follows:

TRAC FM Theory of Change

AIMS	$\qquad \qquad \Longrightarrow \qquad \qquad$	ACTIVITIES/ INPUTS		JTCOMES	
Promote informed public debate and collect and campaign with crowd-sourced data gathered through locally viable high-tech software solution deployed at FM radio stations Build and test platform to be rolled out nationally in second year	Create critical mass of informed citizens with policy knowledge, able to engage their leaders in rational debate concerning local service delivery Provide high-tech software tool that provides added value to (media) partners	Software developed, with all needed functionalities Infrastructure set up Radio format designed and set up, tested and fine-tuned Advertising campaign Radio surveys done (inc broadcasting, populating database, selected campaigns) Call centre functional and used for thematic follow-up surveys Continuous development of analysed and visualised data, made available Infographics designed and published in print media	Talk shows on poll themes Print media publications of poll results Large rich database of local participants ('Active user group'), profiled (Radio Wa only) Research by radio journalists into the focal issue of the poll (Radio Wa only) Luolanguage conversations on air between guests (generally local authority officials responsible for regulating or conducting service delivery) and poll participants about their poll responses Regular publication in monthly magazine of infographics, written context and additional statistics on a monthly theme Impact evaluation study designed for later application	Pool of active respondents and database of factual knowledge on service delivery in Uganda built Public debate and citizens' objective assessment facilitated Strengthened capacity of radio stations to engage in independent and objective reporting on service delivery Increased public participation, transparency and cost-effectiveness in accountability process by actively involving citizens in data collection.	Increased transparency and awareness More structured the public debate and dialogue between citizens and government Strengthened accountability mechanisms Public engagement in public sphere

As for the assumptions informing TRAC FM's design, from the outset the difficulty of making realistic estimates as to numbers of listeners and 'active participants' is stated, although estimates are attempted for listeners and one-time poll participants (though not for 'active participants'). In fact, starting assumptions about one-time participant numbers proved to be modest and at the time of fieldwork 'active participant' numbers were outstripping the capacity of the call centre to profile them for the database. The staff were surprised at the higher-than-expected interest in (rural) Lira and relatively lower interest in (urban) Kampala. No explicit assumptions were made or explicit targets set with regard to gender equality in use and the staff noted that a *laissez faire* attitude to this issue had resulted in much higher usage among men.

At the 'higher levels' of the programme's theory of change - the point where theoretically outputs generate outcomes which contribute to impacts - we identified some underlying assumptions, whose accuracy in practice had not yet been tested. In particular, these include the notion that for citizen voice to lead to government responsiveness, a missing ingredient is citizens' knowledge of policy-related issues. Next, TRAC FM users are assumed to be representative of Ugandan citizens more broadly; the anonymity of SMS compared to other ways of expressing voice is expected make them freer in what they say. The TRAC FM model also assumes that a major explanation for poor service delivery is a non-functional feedback loop between citizens and service providers, and politicians. In this context, TRAC FM poll data is thought to fuel public debate and stimulate responsiveness. Politicians will then be motivated by the potential electoral implications of failing to respond.

We highlight these untested assumptions not in a spirit of 'naming and shaming' but because firstly, they are actually key assumptions in a vast array of TAIs and T4TAIs, and secondly, are very hard to test in an initiative of this scale and nature. A thorough evaluation of TRAC FM was to be completed by June 2013 (not in time for this study); it remains to be seen how far the evaluation sheds light on these, but it must be observed that if ways to track their validity were not built into programme set-up and implementation, it is unlikely that they can be very accurately assessed *ex post*.

5.3 Analysis of case study findings

Despite being conceived in response to different challenges, addressing different core user groups and being implemented in different settings, both M4W and TRAC FM provide useful insights in response to the six core questions this study was designed to address (see p. 5 of this report). In the pages that follow we discuss these insights in further detail for the first five of the six questions. Findings related to the sixth question ("What could be done to narrow any apparent gaps between initial expectations and actual uptake, use, users and beneficiaries of ATTI-supported programmes?") are presented in the concluding section of this report.

5.3.1 What did/do ATTI and the implementing actors know at the outset of the initiatives about the initiatives' likely users, uptake and possible constraints on uptake, and how do they know this?

In the case of M4W, starting assumptions about access to and capacity to use information and communication technologies (ICTs) were clearly optimistic and unrealistic. They appear to have been based largely on pervasiveness of non-functional water points, and the notion that water users would easily embrace a potential solution to this challenge. In addition, Ministry official acknowledged that M4W had intended to roll the database out to Districts for Districts to do their own updating but then discovered that many Districts did not have computers.

In the case of TRAC FM, starting assumptions about user numbers were grounded in fact-finding and exploration of the sector and proved largely realistic. However, the issue of differentiated uptake or biases affecting uptake seems not to have been prioritised at the design stage.

5.3.2 What is known about the actual uptake in well-advanced initiatives, and the composition of actual users? How does this compare with expectations and assumptions?

While the mapping component of M4W was a success, the citizen monitoring component had low uptake, particularly in contrast with initial expectations. Despite a large number of non-functional water points in the districts where M4W was piloted (19-20% of the 3,681 water points serving these communities, or over 700 non-functional water points), M4W had received only 65 SMS messages after more than 8 months of programme implementation the 7 districts covered (M4W, 2012). In Lira district, considered to be one of the better-

performing pilot districts with respect to implementation, only 14 people had sent text messages using the M4W system after 9 months. Uptake of M4W overall was higher among technical and local government stakeholders than among the ordinary water-using public. In addition, many people were not using the system as intended but were calling the HPMs directly. This is a very rational practice from their perspective since it gets them quicker responses than going through the system, yet a route which effectively bypasses the potential accountability-enhancing parts of the M4W process.

Low uptake of the citizen monitoring component seems to have stemmed from limited awareness of the programme, resulting from insufficient efforts by HPMs to 'sensitize' communities. When HPMs did the mapping (component (i) of M4W), they went around and put stickers onto water points with the directions for reporting to the M4W system, but a lot of these stickers fell off, got stolen, or were not understood. That was the extent of 'sensitization', and clearly even this did not leave its mark. M4W recognized that sensitization had been very limited and acknowledged that much less attention had been paid to it in this phase, whereas a lot of attention was paid to building HPMs' capacity to respond. HPMs themselves attribute low uptake to people's traditional dependency on NGOs to solve problems; complacency when an alternative water source is within reach; diminishing collective action and rising individualism and apathy; Government's failure to support water user committees; and committees' voluntary and non-enforceable nature. These attributions raise the question of whether M4W's unique contribution - the use of mobile-based technology that shortens response time - is actually relevant: if water user committees - the most basic part of the traditional water management system - were working well, shortening the HPM's response time might be fairly irrelevant. In short, SNV and its collaborators expected that a technology-dependent remedy would work where an organizational form was breaking down through lack of support and servicing. There is room to speculate that functional water-user committees could make M4W work; dysfunctional ones would not; and some functional ones have easier ways than M4W of solving their water problems.

TRAC FM monitors users as closely as possible within the constraints of privacy laws and the anonymity of SMSs. With regard to 'active' and one-off participants, numbers in at least one poll far outstripped expectations. In terms of composition of users, uptake by urban listeners was lower than expected whereas uptake by rural listeners was higher than expected. (It is worth noting that no rural 'site' had been initially envisaged; this was an opportune design adaptation made during implementation). Of 'active participants' profiled in the database, 475 were rural listeners responding to polls on Radio Wa and 252 were urban listeners responding to polls on Sanyu FM. At district level, Radio Wa staff said they were not sure why some districts show a higher response than others. TRAC FM's 'active participants' database and a reflective approach have enabled TRAC FM staff to investigate and explain these unexpected use patterns to some extent, for instance to identify that in Kampala, mobile users receive many marketing and polling texts from all sides; radio listeners are more interested in the day's news stories than in pre-set poll topics; Kampalabased radio stations operate in an environment of stiff competition for both listeners and poll participants; capital city residents engage less because they are generally less activist on social problems than rural residents.

Ten percent of TRAC FM participants are women, in all regions of Uganda, reflecting mobile ownership patterns and 'women's reluctance' to participate on some of 'these issues', or in 'politics'. The 25 – 35 age group dominates. In addition, data in the TRAC FM database suggests that Muslim participation as 'active users' seems to be very low ²⁴. Mobile ownership and access appear heavily gendered, with fewer women owning and accessing them. Of the random sample of 17 'active participants' of the two radio programmes using TRAC FM whom we called to interview, only two were women.

For M4W, it is very hard to quantify numbers of proportions of men or women actively using the service because SMS senders are anonymous and no long-term engagement with them is sought nor profiling done. Anecdotally, of the 10 people we met when visiting a damaged water point in Lira, only two of them (both men) owned phones. At another water point near a trading post, 3 of the 4 women we met (two businesswomen and a nurse) owned phones. This corroborated the view expressed by some respondents that 'deep in villages', where there are fewer water points per head of population and most malfunctioning water points, that people do not have phones, and at relatively 'urban' places such as trading centres,

²⁴ Data from (Dijkstra, 2011a)

where water points are more abundant and tend to break down less, where they do have phones. The same respondents talked about the likelihood that women, who fetch the water and will know when the pump breaks down, would not have access to a mobile to alert the HPM or, if they did, they might lack the necessary literacy skills to use it for texting.

With regard to TRAC FM 'active participants' (those willing to be profiled in the TRAC FM database), no numerical predictions were made because there was no basis for sound prediction, but at the time of fieldwork numbers were exceeding the call centre's capacity to keep up to date with profiling. In short, TRAC FM knows a great deal about its actual users and in practice their dilemma is how to make the best use of the valuable information on their database in an ethical way.

What is not known from TRAC FM data is whether this over-achievement of objectives in terms of user numbers has any effect on the initiative's effectiveness and impact. This cannot be demonstrated at present, because efforts have focused on tracking activities and outputs rather than on assessing outcomes or impacts. Further, the failure to 'design in' ways to trace outputs to outcomes and outcomes to impacts makes it unlikely that even the June 2013 evaluation will be able to show whether large numbers of users matters to actual or prospective outcomes or impact. For instance, the outcome of 'Strengthened capacity of radio stations to engage in independent and objective reporting on service delivery' would have been straightforward to assess had a baseline level of capacity been established through a prior analysis of how the stations were reporting on service delivery at the outset, followed up subsequently. Apart from that one, the outcomes and impacts in TRAC FM's theory of change are framed in ways that make them hard to monitor and assess in a way that establishes plausible evidence of the initiative's contribution to the desired impact.

5.3.3 What are the expectations and motivations of users themselves, and of ATTI and its funders, and are there gaps between the users' perspectives and ATTI and funders' understandings of users' expectations and motivations?

Presumably, one major incentive for users to participate in T4TAIs is that by giving voice to a service delivery problem, they expect some action to be taken as a result, or at least expect some acknowledgement of their participation. These expectations are likely higher in the case of T4TAIs aimed at resolving particular problems with service delivery, such as M4W. However, these expectations often went unmet for M4W users. Indeed, some M4W actors are keenly aware that lack of feedback to users limits the programme's credibility and popularity, and recognise that direct feedback has not been given to M4W users among the general public and that no local-level feedback mechanism has been set in place. In practice, the mapping information is only registered on online maps that are only accessible in local government offices with Internet connectivity. Whereas users likely expected their reporting of faults to lead to repairs, and M4W intended this to be so, in practice some reported faulty water points have been non-functional for years and have not been repaired since being reported to M4W.

District officials - one class of user, but also actors whose compliant engagement is crucial for M4W's success — appear somewhat sceptical about integrating M4W into their monitoring systems. Respondents suggested that this could be because M4W makes data flow transparently from grassroots to the Ministry of Water and Environment, which reduces the scope for diverting funds destined for water repairs. Here appears a political problem that trumps the technical solution M4W offers: the malpractice that causes the problem in the first place makes certain key actors reluctant to take up the proffered solution.

Another class of user/key actor in M4W is HPMs. These are private sector operators who were fairly unregulated and on whom M4W imposes a degree of regulation. Some respondents affirmed that it had been common for HPMs to overcharge for their services and as such a degree of regulation was welcome. M4W represents increased oversight of their activities and reduces their scope for overcharging. Therefore, while they may have the capacity to engage with the system as envisaged, they may lack the incentives. Fieldwork, and a M4W report (April 2012: 4) suggests that in fact they do not all have the capacity to engage as envisaged, due to lack of literacy, or lack of familiarity with texting or English. Extension workers, users/key actors who are supposed to play a necessary role in raising awareness of M4W, are recognised to be underfunded and under-supported and therefore also lack incentives to take on the new role M4W ascribes to them.

TRAC FM participants were less likely to have specific expectations about the impact of their participation in the radio polls. Quotes from our interviews with a random sample of 'active participants' illustrate that those who participate see the TRAC FM-connected radio programme as a useful platform for informing the wider society about problems and applying pressure for change:

"The topics are very exciting, the fact that they engage the public, a good way of finding out better as opposed to having radio minds doing something that is meant for the public. Presenters do their thing while the public also participates. I signed up because I was excited, topics dealing with our country will [make people] participate, though international issues are also helpful, but we need to know what the local community believes" (Male participant in Sanyu FM, aged 33, Kampala)

"I had views and thought this was the best forum to share them, maybe they could make a change [...] My hope is to change, help effect positive change They could be taken into consideration" (Male student participant, aged 23, Kampala)

"It helps me to contribute my idea [...] it helps me to build the community" (Male community mobiliser participant in Radio Wa, aged 28, Lira district

"It makes me a concerned Ugandan by telling out problems affecting our society" (Male teacher participant in Radio Wa, aged 23, Lira district)

5.3.4 What is known about the reasons why non-users do not participate? What are the reasons?

Background knowledge of the M4W population has it that many do not voice their basic needs even when invited to. In particular, those who have lived in displacement camps during conflict, have been socialised into a 'camp mentality' in which residents wait and expect basic services to arrive, requiring no agency on their part²⁵.

Our fieldwork showed that for many potential users, a fundamental lack of awareness about the initiative is the more likely culprit for failure to participate. Indeed, many potential users were still unaware of the programme nine months into implementation of M4W, likely due to the fact that the system used for labelling water points and announcing M4W was deficient and short-lived. No resources were allocated specifically for communication of the initiative, though SNV staff acknowledged that greater sensitization of potential users was critical for scaling up the program.

M4W actors provided a variety of explanations for limited uptake, including the cost to water users of sending a text, a lack of familiarity with texting, the defective water point labelling system (compounded by the fact that the Ministry of Water and Environment has not developed a consistent system for labelling water points), hasty or non-existent awareness-raising on the part of HPMs, and generally a widespread lack of knowledge about M4W. The above factors led people to either do nothing, or to call the HPM directly instead of reporting faults by text to M4W. In some cases, other aspects of the water management system were dysfunctional and M4W could not work well without them. A key NGO stakeholder recognised that M4W needed to better embed its ways of working into other initiatives, such as radio programmes and community activities.

Some non-users we spoke to live far from the water point so do not concern themselves with water collection or water point upkeep; others reported that the community had lost the HPM's phone number so did not contact him, or that they contacted HPM directly (rather than going through M4W). While people's contacting HPMs directly can rightly be construed as a 'failure' to fully implement M4W as planned, it may also be understood as a success in terms of linking water users with people who can solve their problems. Some water users were previously unaware of the HPM responsible for repairs in their community and had no means of identifying him before the M4W intervention dispatched HPMs to map water points for the mapping component of the initiative.

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²⁵ Over 90% of the population of northern Uganda (constituted by 30 of the country's approximately 111 districts and around a sixth of the Ugandan population) was displaced to internally-displaced people's camps from 2003 onwards due to the violent conflict between the Lord's Resistance Army and the regular army (Uganda People's Defence Forces).

From both fieldwork and some M4W documentation, it appears that those most likely to fetch water - women - tend to be those who do not have access to the family's mobile phone if it possesses one, nor the required levels of literacy and texting proficiency for reporting faults. In one of our focus group discussions, a local health assistant articulated this challenge clearly:

"Here, it is women who collect the water. You might find among a hundred men using the water point only five who know about these stickers. These are the people with the phones, not women. You can't expect a miracle there [...]. There is a big gap: [M4W] thought that by putting a sticker here people would know. But they don't have phones. It's not a surprise to hear that only fourteen people have sent SMSs. That is good luck, really. Those are a few men that could have allowed their women. If we listen properly, they are probably the elite." (Fieldnotes from Focus group discussion, Barr sub-country, 20 August 2012).

At the time of fieldwork SNV was exploring the addition of a voice (rather than text) option for fault-reporting (it cannot be assumed that this would overcome women's reticence to use the service).

In a one-to-many technology like TRAC FM, tracking the non-users and understanding their position is not of as much interest or use as in M4W. The availability of a variety of alternative urban radio stations and opinion-polling programmes and platforms and the fact that users exercise choice between these, makes non-user status more understandable and less telling about the T4TAI itself.

At a more general level, interviewees in Kampala commented that the relatively rich urban radio-listener population shows 'apathy' when invited to engage with social problems, happy to make a noise about problems such as corruption but not to take any action against it. They observed that urban people listen to the radio for discussion of the day's headlines, not to engage with issues identified by the radio station as topical and socially important.

Another factor that has been associated with low uptake in other cases (including some of those written up in the sources we reviewed in Section 4) is the lack of a steady supply of electricity for charging phones. This was mentioned by two M4W respondents, and may have also limited participation in TRAC FM for some rural users.

5.3.5 How were/are dimensions of social exclusion that may affect uptake and the composition of users (e.g. gender, age or disability) addressed in the design and implementation of these initiatives? What is known about these dimensions in actual uptake and user composition?

A general challenge in eliciting information about social exclusion in T4TAIs is that unless users of mobile-based platforms and initiatives explicitly agree to be 'profiled', their sex, age and disability status generally remain unknown because of the anonymous nature of SMS and privacy norms which rule out profiling without explicit consent. TRAC FM is exemplary in tackling this challenge, striving to gain insights into the demographic composition of their user base while also maintaining privacy. However, it is not fully clear if and how TRAC FM is addressing the evidence of social exclusion that their extensive profiling has revealed. According to TRAC FM's founder-director, the initiative's aim is not "to drag people out," if they are not participating. He explained that, "... in the end if you want to make this kind of change, put pressure on politicians... you will end up with these people who care, want to be involved in conversation" (Interview at TRAC FM, August 2012).

The *laissez faire* attitude taken by TRAC FM to its catchment population has meant that participation in TRAC FM reflects many 'naturalised' biases that exist in society, particularly gender bias. Here too, little can be explored within the broad evidence of strong gender bias, because of privacy law and the self-fulfilling prophecy that if few women are listeners and poll participants, fewer still are likely to be 'active participants' profiled on the database.

The question then arises of the import of this gender bias. What does it mean for TRAC FM's effectiveness and impact? For the attainment of increased transparency and awareness, more structured public debate and dialogue between citizens and government, and strengthened accountability mechanisms? The 'developmental' and 'democratization' outcomes of TRAC FM would quite likely benefit men and women alike, directly and albeit indirectly; but given this gender bias, the same may not be true for 'empowerment' outcomes, insofar as TRAC FM produces these.

Unlike TRAC FM, M4W does not make an explicit effort to gather information on the composition of their user base. Youth and vulnerable groups (e.g. people with disabilities) were thought by M4W staff to be less positioned to benefit from M4W than older and those without disabilities, although no data is available either from programme documentation or our fieldwork on age or disability as dimensions of exclusion.

M4W did not explicitly address gender issues in design or implementation of the water point monitoring (second) component, but did in the (first) mapping component, when staff collected gender-disaggregated data on Water User Committees. However, possessing gender-disaggregated data does not equate to a gender-differentiated understanding of water management roles or technology access. There is an assumption by SNV that a breakdown of a water source will trigger action by water users. This neglects the fact that the people most likely to collect water (women and children) are perhaps least likely to be able to make such reports, given cultural norms about communication with public officials and differential access to mobile phones. HPMs reported that outside of trading centre, deep in the villages where water points tend to break down, mobile ownership and access are low, especially among women; and our 'quick and dirty' questioning of people at water points matched this picture.

The anonymity of texting means that the sex of those reporting faults cannot be detected. What is known in general and by M4W actors about gender-differentiated mobile ownership and access in Uganda, and gender-differentiated roles in domestic management including water-fetching, suggest that despite strong social norms ascribing to them the role of water-providers, women do not have the same access to M4W as men, because of its dependence on mobiles and texting.

6. Conclusions, Implications and Recommendations: What does this learning study tell us?

This learning study set out to explore by means of a literature review and two case studies in Uganda whether the realities of the assumed users of TAIs and particularly T4TAIs are investigated and taken into account systematically enough. It was motivated by a concern that knowledge gaps existed which were currently bridged only by optimistic assumptions, and that this situation might be constraining the effectiveness and impact of T4TAIs. We sought to identify lessons that can improve programme design and chances of success by narrowing gaps between expectations and realities in terms of uptake and users.

We find that we can draw out several lessons which will be of use to ATTI, the Omidyar Network, Hivos, and the broader community of those involved in designing, implementing, funding and evaluating T&A initiatives. We conclude, then, by drawing together what this learning study tells us:

... About the effectiveness and impact of T4TAIs in general

- Among the thousands of T4TAIs going on, few are demonstrably transforming governance and accountability. This may be not because they lack any transformative impact, but because they are presently not demonstrating it well.
- The small scale of most T4TAIs limits the potential for outreach to the broader population. Moreover, while some are deliberately short-term because they focus on a time-bound event (e.g. election monitoring T4TAIs), others start up with great hopes and intentions of long-term relevance and sustainability and then lose their lustre after their initial rallying event or once the 'hype' dies down. This cautions against a universal assumption that all innovations that 'work' should or could be scaled up and work just as well at larger scale, and points towards a more case-by-case approach with an eye on the user issues this report has highlighted to selecting which innovations should be given scope and resources for going to scale.
- There is no reliable data on what proportion of T4TAI pilots or innovations get scaled up, but it is fair to assume that the great majority fall by the wayside. This might be natural in a field currently characterised by much more deliberately risk-taking, entrepreneurial and creative behaviour than most aid-and development-related fields. But it might also be a sign of a mismatch between the suppliers of T4TAIs and their putative 'users', which might help to explain why uptake is not always as hoped, nor impact as readily proven, and help to narrow these gaps between expected and actual usage.
- Some of our findings suggest that Daraja's blogger (Daraja 2012a, 2012b, 2012c) and Hellström (in his 2008 paper) have a point when they question the wisdom of the biggest and most central starting assumption of all: that marginalized people actually *want* more direct means of engaging with their governments. While people need solutions to their problems, they may not see tech-based systems or systems linked to government as the most efficacious or easy way to get them. In the case of M4W, people tend to engage with their local community member who is the hand pump mechanic, rather than report the fault by sending a text off through the M4W system. In the case of TRAC FM, people want their individual complaints, issues and opinions mediated for them by a radio station rather than taking them forward through the official channels themselves²⁶. The people who are meant to be 'sensitized' and thereby induced to participate in T4TAIs are often time-poor especially if they are women and also may have historic reasons to expect little responsiveness from their governments.
- T4TAI funders and practitioners need to take note that impact may be difficult to quantify or assess reliably in qualitative terms in the short term. This sub-field needs room to fail, to learn from mistakes, to roll out pilots and then build on them. Some of the latest

²⁶ This finding is corroborated by a recent PhD thesis on interactive radio in Ghana (Selormey 2013).

- programming and research in the field demonstrates creative responses to this problem, with designs based on principles of contingency and adaptive management²⁷.
- TRAC FM's and M4W's outcomes and desired impacts are not simple to assess reliably, nor do they lend themselves easily to plausible claims about a given actor's attribution or contribution. They are also very expensive and demanding to assess in relation to the scale of these programmes. This points to the need for the T4TAI community to bear in mind 'assessability' and 'evaluability' and the costs of demonstrating impact, when designing programmes that will need to be evaluated²⁸.

Factors shaping uptake and use of T4TAIs

- T4TAls' active participants tend to be the 'usual suspects' men, urban dwellers, and people with higher levels of education and/or access to information. To reach out to other demographic groups, special efforts are needed to broaden the reach of the initiatives or channel them towards other demographic groups. Even when making special efforts, careful monitoring is needed of who is engaging with the initiative, and possibly corrective measures throughout implementation.
- To work well, T4TAIs need to be integrated into people's existing ways of doing things. Case after case and study after study show that significant behaviour change cannot be expected to ensue from telling potential users what is good for them (The example of people in M4W areas calling the hand pump mechanic directly instead of using the system, cited above, returns to mind). It is commonly assumed that people will be motivated to take action when the need is great enough (for instance, no clean water supply available) even when the action is unfamiliar and new, takes up time, or conflicts with their usual routine. This seems a fair assumption, yet one which does not seem to be borne out in a number of citizen monitoring initiatives. Uptake and use of unfamiliar activities and technologies may be best brokered using financial incentives - but that raises concerns about sustainability, and sustainability cannot be very well researched yet given the recent vintage of most T4TAI initiatives. This gives rise to the recommendation that funders and practitioners adjust to more realistic levels their expectations about the behaviour change implied in T4T&AI uptake.
- Many organisations put either insufficient resources into publicizing their initiatives, or insufficient thought into how to do it most effectively (e.g. Daraja, M4W). This limits uptake. Targeted outreach to particular user groups is an element of particular importance in the theories of change of many T4TAIs.
- The gender bias in uptake of both M4W and TRAC FM draws attention to the risks of T4TAls unwittingly selectively 'empowering' some citizens, which could further entrench discrimination and social exclusion rather than increase equity and accountability for all.
- Response, feedback and interactivity are important determinants of uptake and sustained use. Among users there is a desire to see that the information they contribute (for example, by texting) is being used in some way. This could explain low uptake in M4W compared with high participation in TRAC FM. This factor pertains not only to public stakeholders; lack of feedback is cited as a frustration by hand pump mechanics in the M4W case. As time passes and some of today's T4TAI innovations bed down and become established approaches, it may transpire that the initiatives that provide feedback are better at achieving financial and practical sustainability, live longer and have more impact.

How the design of T4T&AIs could be improved

In both design and implementation phases, actors involved in T4TAIs need to gather more information about potential and actual users. Such monitoring can help to ensure that T4TAIs are achieving their goals, and can also help to address various dimensions of social exclusion (gender, age, disability) which may otherwise be ignored, addressed in a

²⁷ For instance, a major research programme on the impact of TAIs commissioned by the Transparency and Accountability Initiative, being undertaken by researchers at the Ash Center (Harvard University) and Results4Development.

28 See Shutt & McGee (2012)

superficial way, or worsened. TRAC FM is exemplary in this regard with respect to closely monitoring its user base, though has yet to address some of the biases this monitoring revealed.

- There is a need for T4TAIs to develop at the outset more clearly articulated theories of change. These need to draw on research about likely users and their realities to clearly identify what types of users will be crucial to the initiative achieving its aims; set out what roles these users are expected to play and check that these are realistic; and 'design in' ways to trace links between outputs and outcomes, and between outcomes and impacts. Tools like the Gender Evaluation Methodology for Internet and ICTs (Association for Progressive Communications, n.d.) can assist in this.
- o In addressing the above recommendations, actors involved in T4TAIs also need to address the trade-off between the goals of on the one hand amassing detailed information on uptake and participation (disaggregated by gender, age, etc.) that can use to better target programs to their needs, and on the other, **protecting users' privacy**.
- The above-mentioned recommendations, and ever-present concern about sustainability, signal a need for T4TAI practitioners to improve their own capacity to conduct applied research and action research within the context of their own practice. **T4T&A practitioners and designers can be reasonably be expected to conduct better project/programme appraisals** than they have been doing hitherto to conduct their own 'user' research as inputs to better programme design and monitoring and evaluation. Existing organisational project and programme appraisal systems which have much to offer here have been rather left by the wayside in the headlong rush towards technology. Rather than wait for people to 'sober up'²⁹ in relation to tech-based initiatives and hope that more thorough and reflective approaches to appraisal and monitoring and evaluation will then develop, the T4T&A community accelerate this 'sobering-up' process by instituting more rigorous appraisals.
- The benefits to be reaped from **joining up T4TAI designers with T4T&A and T&A researchers** are clear. We are witnessing some very positive steps in this direction in current research and programme funding strategies. Key examples are the Transparency/Accountability Initiative and programmes such as the *Global Programme for Social Accountability* and *Making All Voices Count*³⁰. At least part of the research portfolios supported by these initiatives is rooted in T&A programmes and projects. By implication, their funders will need to take a broad view of what constitutes research validity, widening their criteria beyond standard academic ones to include aspects such as the research's utility to practitioners and applied research impact in terms of more effective programmes.
- To support this learning collaboration between practitioners and researchers, funders need to take learning seriously enough to actually fund it, funding not only research programmes but also spaces for practitioner learning within the practitioner-led initiatives that they fund. While collaborative initiatives such as those mentioned above are a promising indication that the value of learning is recognised in the T4T&A field, it will be a challenge for donors to act in consequence with this recognition given the current stress on results-based management affecting many of them.

We close the report with a reflection on the **sustainability** of the entire endeavour of increasing the accountability of government and private service providers to citizens and service users. The issue arose tangentially in our literature review and primary fieldwork, and while not a central focus, is relevant to some of the questions we have posed and explored about users. When we asked well-informed commentators at CIPESA (ICT Policy Centre for East and Southern Africa) whether these initiatives were changing the nature of governance in Uganda, they responded:

'Amazingly they do, even with limited participation! Especially in Uganda, we have seen the political landscape evolve with tech: activists with blogs, people mobilizing protestors. So much of an impact that government told the regulator to block access to Facebook and Twitter!' (interview notes).

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²⁹ The phrase is borrowed from a Ugandan government official whose sector is the scene of much T4T&AI innovation and experimentation at present.

³⁰ See

http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/CSO/0,,contentMDK:23017716~pagePK:220503~piPK:220476~theSitePK:228717,00.html and http://makingallvoicescount.org/

All the above caveats notwithstanding, the endeavour does still seem to be worthwhile, so the T4T&A community needs to work on sustainability at the same time as making today's initiatives more demonstrably effective and transformative. In the longer term, sustainability will consist of donorfunded T4T&A work getting integrated into government systems, rather than allowing the initiatives to be used as 'workarounds' to circumvent government systems that are deficient. Some of the platforms, processes and relationships currently being set up for T4TAIs are to a degree interchangeable in terms of which particular T&A issue they are applied to. Those that fit this description could be established as 'legacy systems/processes'31, installed in such a way that they remain available and functional after the initial project is over and can be transferred to government management for future applications. Thus, even as the aid community gets better at researching putative users and designing and appraising T4TAIs with a sharp eye to user and uptake issues, the rationale for focusing more on users and uptake needs to become embedded in governments at central and local levels, as do the relevant skills and capacities.

This 'post-aid' scenario favours an approach to TAIs as elements in democratization processes, aimed at changing the behaviours of citizens and government actors, rather than TAIs as 'short routes to accountability' (to use the World Bank's phrase) working around governments so as to get quicker satisfaction for the service user. T4TAIs will have limited effect unless aid donors and practitioners come to see them less as 'widgets'³² requiring compliant users, and more as one strand of broader, deeper, more complex democratization processes that also entail the construction of active citizens, and of spaces for citizen-state contestation to happen.

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³¹ The term was used by Ashnah Kalemera of CIPESA, Uganda

³² The term is borrowed from Joshi & Houtzager (2012).

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