FROM INFORMATION TO ENGAGEMENT: EXPLORING COMMUNICATION PLATFORMS FOR THE GOVERNMENT-CITIZEN INTERFACE IN SOUTH AFRICA

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ABSTRACT
An effective communication interface between government and citizens can strengthen government responsiveness and deepen citizen engagement. Such communication and information exchange takes many formats, especially given the various platforms and technologies available. This article situates communication options and strategies in the context of: reported challenges around engagement practices; expressed public preferences for particular communication platforms; and existing barriers to ICTs and other infrastructures in South Africa. Using both qualitative and quantitative data, the research reported here explores two questions: What are the most suitable platforms to improve government-citizen communication in South Africa? How could ICTs and other platforms be better used to promote improved communication and more meaningful citizen engagement around public services? We argue for a differentiated approach to communicating with citizens that acknowledges social realities and preferences if technology is to benefit socio-economic processes in a democratic South Africa.

KEYWORDS
ICT-mediated communication, government-citizen interface, public engagement, smart cities

INTRODUCTION

Local government in South Africa is mandated to deliver services and infrastructure, as well as to engage the public in its various governance processes. This requires government to communicate to residents on key matters, from broader planning and policy decisions to where and how they can resolve basic service issues (e.g., where to pay, how to report faults, etc.). Mechanisms that enable the exchange of information play a critical role in strengthening deeper community engagement. While the sharing of information is not in itself a sufficient method of engagement, such mechanisms are often seen as the "foundation" thereof (Svara & Denhardt, 2010: p. 11). The South African National Department of Communications has, for instance, described communication as "the main driving force to [sic] which a relationship between the citizens and local government can be fostered" (Muthambi, 2014). It is also often through information exchange that citizens[1] express their "voice" (preferences and opinions) against which government responsiveness and accountability can be measured (UN-Habitat, 2009: p. 93).

Currently there appears to be a dearth of sufficient information exchange between local municipalities and residents in South Africa. The diverse composition of communities, and particularly high levels of poverty and inequality, makes it difficult for local government to understand and meet the needs of all residents. Such differences in experience and resources require different information-gathering, communication and engagement approaches. Conventional participation mechanisms are also plagued by numerous constraints that have been widely acknowledged across the literature. Some scholars, for example, highlight the exclusion of certain groups, especially the poor (Masiko-Kambala, Gorgens & Van Donk, 2012). This is problematic given the country's history of marginalisation, as well as the importance of inclusiveness for strengthening governance and accountability (World Bank, 2004). Furthermore, citizens and communities often lack knowledge about government policies, budgets and operations, mechanisms for engagement, or even their own rights and responsibilities (Malabela & Ally, 2011).

The aim here is to answer two questions: What are the most suitable platforms to improve government-citizen communication in the country? How could ICTs and other platforms be better used to promote substantive engagement around public services? Understanding which are the most suitable channels to reach particular segments of the population can help to overcome existing knowledge gaps through better, targeted approaches. The emergence of information communication technologies (ICTs) and the future potential of the so-called smart city agenda, which mobilises ICT infrastructure for sustainable development and human well-being (Deloitte 2014: p. 3), also raises the question whether these provide adequate tools for communication and engagement.

This article examines qualitative data from in-depth interviews with municipal officials, academics and civil society stakeholders on current engagement processes. It also looks at national quantitative data on public preferences

1 We use the terms "citizen", "resident", and "community" interchangeably to refer to any individuals residing in the country who make use of services and who could participate in some shape or form in the exchange of information with government.

for the use of different media to receive communications from government. The Human Sciences Research Council (HSRC) conducted the research in 2013-2014 as part of the Cities Support Programme (CSP) led by National Treasury. The quantitative data were collected under the 2013 South African Social Attitudes Survey (SASAS), and examined a range of platforms, from television and radio to print media, electronic media, and face-to-face interaction. Although it is beyond the scope of this article to examine the diversity of media within each of these platforms, the article sheds light on the overall role and potential of the various platforms, and of ICTs in general vis-à-vis older communication tools. It is also in relation to the concerns and challenges with the government-citizen interface, as identified in the qualitative interviews, that the role and potential of communication platforms must be understood.

The article begins by setting out the conceptual framework of "participation". It then reviews communication and engagement mechanisms in South Africa, which includes a growing use of ICTs. The emerging discourse of smart cities is then discussed, particularly in relation to the future potential of this development path for strengthening citizen engagement and overcoming the digital divide. Thereafter the results from the qualitative research reveal key challenges with existing processes of interaction. These form the basis for understanding public preferences for different communication platforms (as expressed through the quantitative data), as well as the potential of these platforms to strengthen the government-citizen interface.

FROM COMMUNICATION TO ENGAGEMENT: A CONCEPTUAL FRAMEWORK

In South Africa, public participation is a widely recognised aspect of democracy and governance. It is entrenched in the 1996 Constitution and is captured in various institutional, policy, and law-making processes, as well as in the establishment of statutory bodies, structures and programmes (Booysen, 2009). The term encompasses a range of objectives and mechanisms, including communication as information exchange, on the one hand, and participation as substantive engagement in service delivery and development on the other. The former includes one-way communication channels where a municipality either provides or obtains information (e.g., billboards, newspapers, road shows, websites, surveys, petitions, public dialogues, etc.). The latter refers to the involvement of citizens in actual decision-making, the co-production of services, or oversight of service delivery and government performance. In this view, "engagement" is distinct from participation insofar as it refers to a kind of "co-governance" that views citizens as active, empowered partners rather than passive recipients of services (National Planning Commission, 2011). It is often described by scholars as "meaningful" or "transformative" engagement (Chenwi & Tissington, 2010), and is called for in the wake of generally ineffective efforts to bring citizens directly into governance processes.

This framework resonates with that of the Global Report on Human Settlements (UN-Habitat, 2009: p. 94), which distinguishes forms of participation along a continuum from so-called nominal participation to consultative, instrumental, representative and transformative engagement. Each form is associated with a different intended purpose that requires particular methods of implementation. These purposes include window-dressing, acquiring or giving information, enhancing effectiveness, providing a space for the expression of preferences, empowering citizens, or fostering engagement as an end in itself. This framework is also similar to participation categories applied in South Africa (see for example DPLG, 2007; CMRA, 2011).

There is value in each of these levels or typologies of participation, from consultation "upwards". Despite their different objectives, each remains within the broader framework of participation and should ideally support the realisation of transformative engagement. In this way, "consultation" may comprise exchange of information relevant to the provision and maintenance of services. But it should also contribute towards strengthening the relationship between government and citizens, and support opportunities for more substantive interactions and decision-making. The outcomes of transformative engagement furthermore feed back into other mechanisms: through strengthened relationships based on trust and good will, citizens become more likely to use and value other platforms such as complaints systems or satisfaction surveys. The full potential of engagement is therefore realised not simply at the transformative level, but throughout the system of diverse yet complementary interactions.

In light of this conceptual framework, it is necessary to consider experiences and barriers of the broader engagement context when examining communication options. Likewise, in order to strengthen engagement, it is important also to examine communication approaches in so far as these provide an important base for further dialogue and decision-making. One could thus ask how processes of information exchange may be designed and used in such a way that they carry one "upwards" along the participation continuum. In the next section, we look at common participation and communication mechanisms, especially ICTs, in South Africa.

GOVERNMENT-CITIZEN COMMUNICATION CHANNELS IN SOUTH AFRICA

The South African government uses a variety of platforms nationally and locally to provide information to, as well as receive information from, individual residents and communities. These include mass communications through television, newspapers and radio, which are the most popular means of passing information to people due to their wide reach (Andani & Naidu, 2013). Government also makes use of several platforms that enable direct communication, intended rather as forms of engagement. Such face-to-face processes often take the form of public meetings (for example, imbizos, "Exco meets the people" and citizen forums), and/or operate through particular structures (for example, ward committees, budget fora and community development workers).

Ward committees in particular are the key participatory structures for local government. In practice, these have not proved as functional and effective as expected. Challenges range from lack of appropriate skills and resources of committee members to party politicisation, limited decision-making power of councillors, and limited community knowledge of ward committee functions and responsibilities. These issues have received considerable treatment in the scholarship and therefore will not be replicated here (Piper & Deacon, 2008; Malabela & Ally, 2011; Cowell, Downe, Martin & Chen, 2012). Suffice it to say that direct engagement through ward committees generally does not provide a sufficient channel for either providing information on government services or fostering relationships between government and citizens.

With the advent of information technologies,[1] new opportunities for communication are also emerging. These range from municipal websites to mobile applications and social media platforms like Facebook and Twitter. Citizens and government have both increasingly started to use these tools to communicate and interact with one another. Government efforts to expand access to ICTs, and to market government services through ICTs, especially into rural areas, have largely taken the form of community centres called Thusong Service Centres (TSC) or Digital Community Hubs (DCHs) (Kariuki, 2009). These provide computers for people to access information related to business, government, education, banking, etc.; they are also expected to "enhance the capacity of communities in utilizing ICTs" (Kariuki, 2010).

In the urban areas, some of the metros are exploring the potential of mobile applications (or "apps") for a range of matters, including reporting road-related problems (e.g., Johannesburg Road Agency), calling for police support in case of emergency (e.g., City of Tshwane), or using a single portal to access municipal accounts, receive alerts, lodge complaints, and report problems (e.g., eThekwini municipality). Various non-governmental apps and platforms have also been released (e.g., GridWatch, which keeps citizens informed about load shedding schedules). Despite the proliferation of such tools, it is the extent of their usage that signals their importance and impact. Although beyond the scope of this article, a comparison of the use of government versus non-government apps may be indicative of government strategy and the potential of such tools to impact government-citizen relations.

These developments may also be seen as part of a broader global trend towards the creation of smart cities: local governance systems where technology is the cornerstone for providing and operating services. Cities like Shanghai, Singapore, Brisbane and Ottawa are, among others, at the forefront of this development. While the smart city is not yet a reality in South Africa, most of the major urban centres (e.g., eThekwini, Tshwane, Johannesburg and Cape Town) have indicated interest in the potential thereof. Some have even undertaken a variety of initiatives to upgrade IT infrastructure and expand into e-governance services. Since such ideas are still evolving in South Africa, it is opportune to reflect on the potential, within this broader trajectory, to enhance the government-citizen interface.

SMART CITIES AND THE GOVERNMENT-CITIZEN INTERFACE

There is no agreement on a specific definition or criteria for a "smart city" (Sha & Son, 2015). Benton (2014: p. 6) for instance describes it in terms of "the so-called 'Internet of things' where everything from trains to streetlights is connected". Das and Emuse (2014: p. 932), on the other hand, believe the concept has to be understood holistically and inclusive of innovative transport and infrastructure networks, green and efficient energy systems, and smart governance. In a similar vein, Sha and Son (2015: p. 29) conclude that "the ultimate test of a city's 'smartness' is in how its technologies and organisational structures respond to the needs of its citizens". This coheres with Deloitte's (2014: p. 4) view that "the ultimate goal of a smart city is transformational". Thus it is seen as a form of governance that "uses digital technologies to enhance performance and well-being, to reduce costs and resource consumption, and to engage more effectively and actively with its citizens" (SALGA, 2015: p. 5).

While there are many facets and varying technologies associated with smart cities, one notable trend expected to contribute to this transformational element is the use of ICTs as the primary communication channel between government and citizens. This is expected to alter the exchange of information between government and citizens through the mediation of big data and technology-driven processes. It includes, for example, the kind of mobile applications and "one-stop" portals through which residents can receive or provide information (Benton, 2014: p. 3). As discussed above, these kinds of tools are also fast emerging in South Africa, and may be indicative of the focus and scope of government communication strategy into the future.

What role can such communication technologies begin to play in South Africa's participation processes? According to Benton (2014: p. 1), such tools can broaden the reach of and access to information, as well as inspire more "active citizenship". For instance, ICTs can help those "with limited English proficiency, those who prefer to avoid interaction with city officials, and those who lack institutional knowledge about which agency to contact". Previously "hard-to-reach communities", it is argued, would also be more likely to participate in public engagements due to reduced costs of doing so (Benton, 2014). This would be especially relevant to those for whom access to the state is made difficult by call costs, fixed hours and insufficient resources (Van Belle & Cupido, 2013). Furthermore, specific "civic apps" can inspire and assist people to participate in online public forums, volunteer, give feedback on planning processes, or register to vote.

Many scholars interrogate this developmental path, however, in particular whether it will help to overcome or instead intensify the "digital divide" that characterises many countries, including South Africa. Some worry that this trend will reinforce a top-down approach to development and worsen existing inequalities and urban asymmetries (Watson, 2013).

1 In this article, we follow Mdlongwa's (2012: p.1) understanding of information communication technologies as "a global network in which ideas are exchanged, or information and knowledge is shared, through using communication like cell phones, and technology like computers, to connect people".

Data on the digital divide in South Africa for instance indicate that, while progress has been made to expand access to various technologies, much remains to be done.

FIGURE 1: PERCENTAGE OF HOUSEHOLDS WITH ACCESS TO TECHNOLOGICAL GOODS

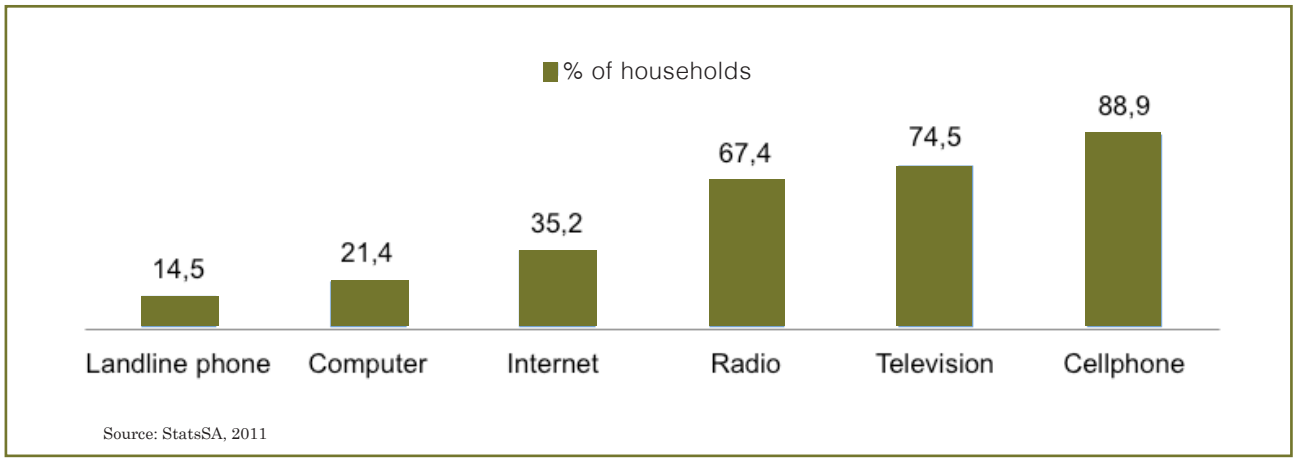


Figure 1 above illustrates the differential access households have to various resources. Despite limited access to computers and Internet, many scholars believe cell phones hold the potential to overcome common access hurdles (such as limited resources and mobility), and thus enhance "digital democracy" (Brown & Czerniewicz, 2010; Van der Merwe & Bohler-Muller, 2013). But addressing access to ICTs does not necessarily resolve other inequalities and backlogs, such as in basic services, education and skills development. While technology uptake offers empowering benefits, it is critical, as Odendaal (2006: p. 45) argues, that ICT strategies take into account the social difficulties and inequalities that they aim to solve and that already influences their uptake and impact. In other words, overcoming the digital divide means understanding that better technology does not by itself solve social problems and improve cities, nor can it simply transcend them (Hollands, 2008: p. 315). Importantly, it requires the participation of communities in order to result in actual, sustainable socio-economic change (Kariuki, 2010). There is a kind of circular relation, then, between the involvement of communities to ensure that technological innovations and applications address existing challenges on the one hand, and the use of technology to support and strengthen the involvement of communities on the other.

RESEARCH METHODS AND RESULTS

The qualitative and quantitative data used in this article emerged out of an HSRC research project aimed to support urban local governments to communicate and engage with communities. The qualitative component comprised 32 semi-structured, in-depth interviews with selected stakeholders across the country, including municipal officials (10), representatives from civil society organisations (17), and academics (5). Interviews were recorded and transcribed, and all respondents signed consent forms and were assured confidentiality. The interviews focused on: how engagement is understood and practised; how existing mechanisms operate; the relationships between municipalities and local communities; and any particular challenges to or opportunities for improvement.

The quantitative component of the study used the South African Social Attitudes Survey (SASAS), an annual survey of a nationally representative sample of adults aged 16 years and older, conducted by the HSRC. The survey aims to understand public perceptions on issues related to the country's social, political, and economic institutions. The 2013 leg of SASAS consisted of a representative sample of 2,885 respondents across all nine provinces. This article draws on a set of questions specifically designed and included as part of the HSRC research on engagement. It examined, among other things, citizen preferences for receiving information from local government, where options included television, radio, print media such as newspapers or municipal newsletters, face-to-face engagements, and ICT media such as computers, cell phones and the Internet. The grouping of some different platforms under a single category (e.g., computers and cell phones under ICTs) is one of the limitations of the survey. Also, there may be some communication tools that were not included. However, as a preliminary study of broader preferences, the data are indicative of general trends and sufficient to draw some conclusions.

QUALITATIVE RESULTS: KEY ISSUES IN COMMUNICATION AND ENGAGEMENT

The key issues that emerged from the interviews with stakeholders illuminate the complexity of, and existing challenges to, engagement. Some of these are particularly relevant for understanding the roles and potential of various communication platforms. These issues, summarised in Table 1 below, relate to three broad themes: communication and information dissemination; existing engagement mechanisms; and government and community relations.

TABLE 1: PERCEPTIONS OF KEY PUBLIC PARTICIPATION ISSUES IN SOUTH AFRICA

Communication and information dissemination	1. Limited and difficult access to relevant information
	2. Insufficient feedback loops
Existing engagement mechanisms	3. Diverse communities mean diverse needs and opportunities
	4. Lack of relevant knowledge and skills
	5. Insufficient allocation of resources
	6. Exclusionary structures and processes
Government and community relations	7. Perceived paternalistic attitudes
	8. Lack of trust and willingness to cooperate

COMMUNICATION AND INFORMATION DISSEMINATION

Most civil society respondents identified insufficient information exchange between municipalities and residents as a "key failing" (Vivier, Sanchez, Seabe & Wentzel, 2014: p. 15). Three notable issues emerged on this point: limited and differentiated access to information and to communication platforms; the incomplete or inaccessible nature of the information available; and the inadequacy of the types of platforms used. Citizens' lack of civic knowledge, including knowledge on how to engage government, was attributed to poor access to relevant information on government processes and functions. Thus many respondents criticised municipalities for failing to provide sufficiently comprehensive information, even where such information is formally requested or legally required to be available. This was seen as especially important insofar as citizens' ability to make meaningful inputs during engagement processes depends on the usefulness of information provided. One of the government respondents also believed poor communities in particular "do not have reliable forms of information compared to the middle class who have televisions" (Vivier et al., 2014.).

The types of platforms used by government to communicate and engage with communities were also perceived to be largely inadequate. Some identified specific platforms such as roadshows or large public meetings as inappropriate for discussing complex issues and decisions around development planning (Vivier et al., 2014: p.15). Other interviewees described communication between local municipalities and communities as haphazard and reactive, with information exchange reduced to "a one way conversation". Consultative meetings were perceived as ineffective due to poor timing in relation to actual planning processes. The result is often a limited chance for citizens to review necessary documents before meetings are held, and failure by the government to take citizen inputs into account (Vivier et al., 2014: pp. 13-14). Similar concerns were raised with regard to so-called feedback loops between citizen inputs and government decisions. Mechanisms for citizen inputs, from ward committee and IDP meetings to petitions and satisfaction surveys, lack adequate mechanisms to inform citizens of how their inputs have influenced decision-making. This is believed to hamper trust and interest in participation processes or government activities in general (Vivier et al., 2014: p. 15).

It is useful at this point to note the implications of these issues for government communication strategies, and the potential of using varied platforms and ICTs in particular. On the one hand, identified issues and barriers suggest that communication and information exchange platforms have a critical and constructive role to play in supporting more substantive forms of engagement. On the other hand, it suggests that, in order to have positive impact, government must pay attention to what information is and should be made available, and how it is presented. This also indicates the importance of linking information exchange to other engagement processes in order to "close the feedback loop".

EXISTING ENGAGEMENT MECHANISMS

Several issues that obstruct the effectiveness of existing participation mechanisms were also highlighted. Firstly, the diverse composition of communities makes it difficult for local governments to understand and meet the needs of all residents (Vivier, et al., 2014: p. 10). Socio-economic inequalities and differential access to infrastructure and services mean preferences and "burning issues" can vary drastically, as well as require different communication and engagement approaches. Currently, this reality is perceived to result in exclusionary participation and decision-making, in terms of not only access to information (as discussed above), but also the exercise of citizen voice. All respondents, including government officials, highlighted exclusionary tendencies within public meetings or ward committee and IDP meetings. Overly technical content and presentations, combined with tight time constraints, and even the use of English, can undermine the quality and inclusivity of engagement (Vivier et al., 2014: p. 10; see also Masiko-Kambala et al., 2012: p. 19).

While there was a general sense by all respondents that municipalities need to think more strategically around how to engage specific interest groups, the youth in particular were identified as a misunderstood and unengaged cohort (Vivier et al., 2014: p. 18). Furthermore, according to some respondents, more resourced or well-organised communities usually better understand how local government works and are thus better able to push their agendas (Vivier et al., 2014: p. 18). This may serve to exclude other groups, especially the poor. The issue of resources is thus integral to participation. An oft-cited challenge to effective engagement is insufficient resources and competencies to undertake intensive and lengthy processes, on the part of both citizens and municipalities. In this regard it is notable that it is usually under-resourced communities (i.e., the most poor and vulnerable) who need greater "voice" to ensure their needs are met, yet it is also they who tend to lack political power. Engaging such communities may also be more resource-intensive, as these are usually direct interactions that require provision of transport and catering.

Citizens' limited understanding of government operations or the implications of government proposals and decisions, as well as of their own rights and responsibilities, were identified as factors affecting capacities and willingness to engage (Vivier et al., 2014: p. 13). Knowledge gaps among local government actors were also identified, including knowledge of key government functions on the one hand, and the "softer skills" necessary to build relationships of trust and understanding on the other. Both CSOs and public officials acknowledged a lack of, yet significant need for, "social sensitivity" in how communities are engaged (Vivier et al., 2014: p. 13). Considering these expressed challenges with existing participation mechanisms, it becomes clear that, in order to improve information exchange and support meaningful engagement, strategic use of communication platforms should take into account issues of knowledge and resources, as well as existing patterns of exclusion.

GOVERNMENT AND COMMUNITY RELATIONS

There is a common perception among civil society representatives that local governments have paternalistic attitudes about their role in service delivery (Vivier et al., 2014: p. 10). Combined with a lack of trust between government officials and citizens, this has resulted in high levels of frustration that affect the willingness to cooperate. Accordingly, officials assume that communities (and especially informal settlement residents) do not always know what is best for them, and are not able to engage on important issues or contribute to development planning (Vivier et al., 2014; see also Fieuw, 2013: p. 67). From the perspective of the government respondents, however, where communities act in self-interested ways and fail to acknowledge or understand broader development challenges and implications, it becomes the state's responsibility to make decisions for the greater good (Vivier et al., 2014: p. 11).

These perceptions and experiences of government-community relations are an important indicator of levels of trust, which are necessary for effective engagement and building mutually beneficial relationships. High levels of frustration on the part of all stakeholders currently undermine participation processes and delay service delivery. Views from the different respondents reveal how stakeholders may experience the decisions and actions of the other in antagonistic and dismissive ways. According to some interviewees, frustrations emanate from broken promises and a failure to manage expectations, ultimately resulting in fraught relations and lack of trust and goodwill (Vivier et al., 2014: p. 12).

While issues related to information dissemination and existing participation mechanisms indicate great potential for improved communication and more strategic use of particular platforms, the context of government and community relations poses considerable challenges. Insofar as any form of communication is embedded in this context, government efforts and strategies to share, gather or discuss information must take into account low levels of trust and deep frustrations and citizen disillusionment with the state. In the next section we present key findings from the quantitative survey that indicate how citizens value different communication channels. Do these preferences reflect the challenges and frustrations expressed in the interviews? And what are the possibilities for new and emerging technologies to address these issues?

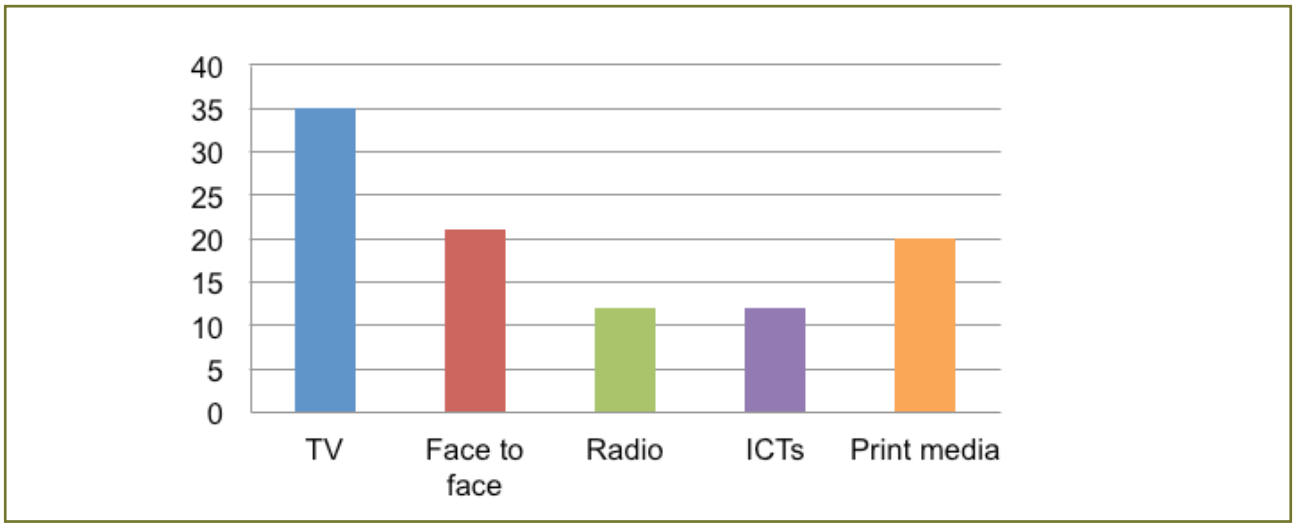
QUANTITATIVE RESULTS: CITIZENS' PREFERRED CHANNELS TO RECEIVE GOVERNMENT INFORMATION

Within this context, and in an effort to better understand information channels and flows between citizens and the state, descriptive analysis was applied to the 2013 SASAS findings. The aim of the analysis is to identify the most preferred channels to receive government information for different population groups. To broaden our understanding of the differences and nuances that do not fit the national pattern, factors that influence preferences were also examined.

While it is impossible to do justice to all variables that might influence preferences for particular media, Figure 3 below highlights some of these. In the context of government reach and citizen access to information, geographical areas and urban/rural differences are potentially important determinants. Race has, of course, also played a significant role historically in class formation (expressed here in terms of Living Standard Measure or LSM), and both race and LSM can be expected to have a bearing on preferences for certain technologies. Age is also a potential determinant, especially with respect to emerging new media. Gender has not been included given high similarity of results.

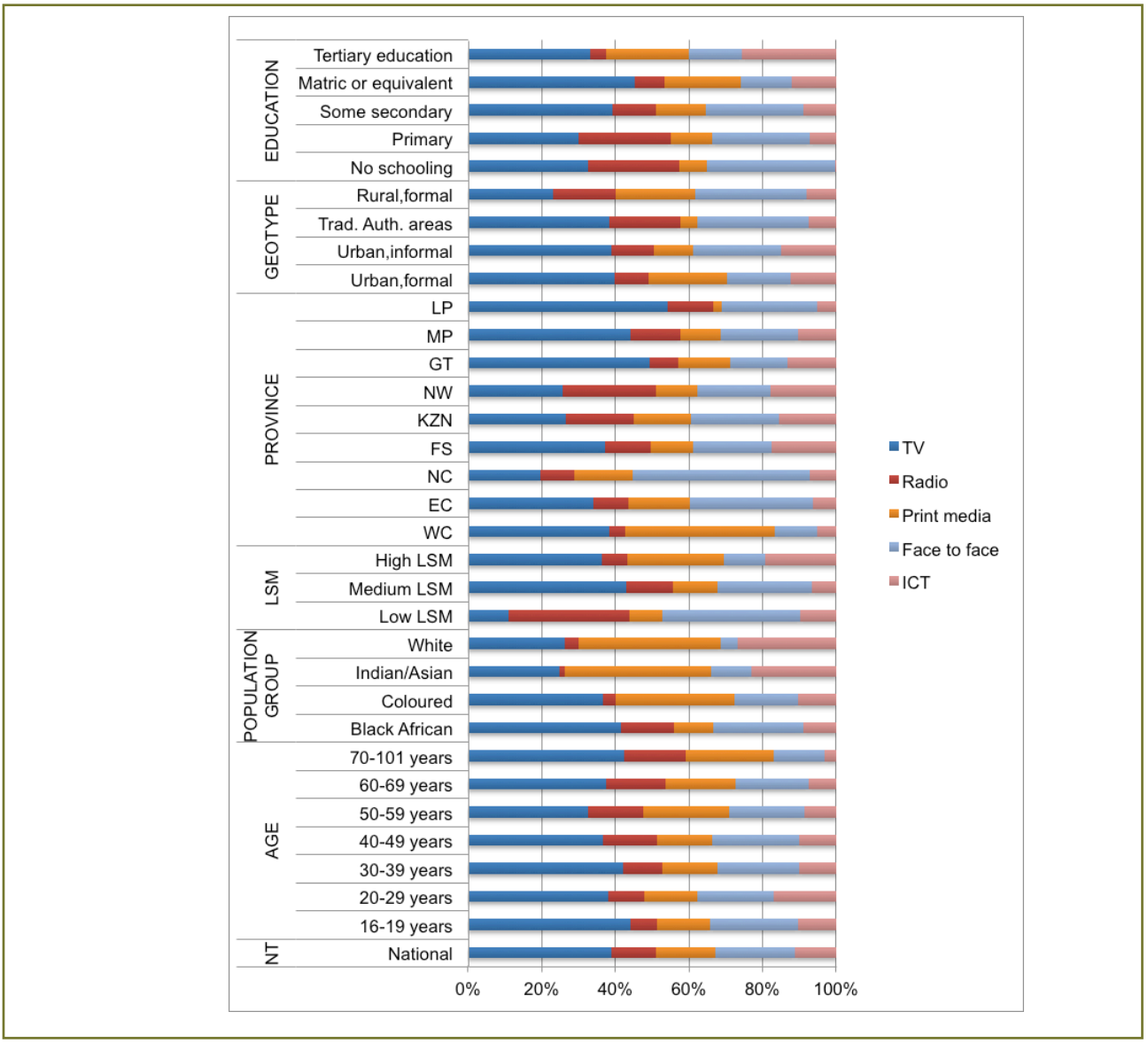
The findings from the survey indicate national interest in particular platforms to receive information from government (see Figure 2).

FIGURE 2: MOST PREFERRED MEDIUM TO RECEIVE INFORMATION (NATIONAL AVERAGE)



As shown, television stands out as the most popular choice to receive information from government, while low levels of interest in ICTs largely confirm the current digital divide. Noteworthy is the relatively high interest in face-to-face engagement, especially given the vast challenges that plague such processes. A closer disaggregated examination of the data (Figure 3) reveals that preferences for particular communication channels are not uniform for all subsections of the sample.

FIGURE 3: MOST PREFERRED MEDIUM TO RECEIVE INFORMATION, ACCORDING TO SELECT VARIABLES



Examining the disaggregated data in Figure 3, some interesting nuances become apparent. For instance, differences in television, radio and print media may reflect varied education and literacy levels, or obstacles such as distance that affect physical access. The relatively high interest in television and print media in rural areas may, however, discount this latter possibility. It is also noteworthy that 16 to 19-year-olds reported a high level of interest in direct engagement with government, higher than all the other age groups. This should be considered in terms of how government can and/or should engage youth voices and the needs and interests of younger citizens.

Finally, information communication technologies (ICTs) were rated the lowest of all the choices and were not chosen as the primary channel by any demographic category. While ICTs were most popular among 20 to 29-year-olds (16%), this figure was still outweighed by interest in television and face-to-face as the preferred media for information within this group. These findings align with those of an earlier 2003 survey, which also found that "access to digital technologies is informed by similar socio-economic, demographic and geographic cleavages to those characteristic of many other, older information and communication media and technologies" (e.g., radio and television) (Langa, Conradie & Roberts, 2006: p. 142). The authors also identified in particular income and social status, urban-rural differences, race and age, as well as basic literacy and education, as factors that influence exposure to and usage of computers and Internet (Langa, Conradie & Roberts, 2006: p. 134).

It would be worthwhile to further explore public attitudes and use of these different typologies. ICTs alone could be unpacked into a much broader range of tools and forms of access (e.g., own computer versus shared or publicly/privately provided computer; cell phone versus smart phone; which platforms on the Internet are most preferred; etc.). For the purpose of this article, we are interested in the implications of the quantitative and qualitative results for understanding the potential of various communication platforms. In the next section we explore these preferences in relation to the reported barriers to meaningful engagement.

DISCUSSION

In this section we approach the two key research questions in the context of the three thematic areas identified from the qualitative findings. Thus, assessing the most suitable platforms to improve government-citizen communication can be situated within the discussion of issues related to communication and information exchange. Determining whether and how ICTs and other platforms could promote substantive engagement involves understanding challenges with existing engagement mechanisms, as well as government and community relations.

MOST SUITABLE PLATFORMS FOR IMPROVING COMMUNICATION: TAKING A DIFFERENTIATED APPROACH

There is high potential for various mass media and ICTs to better address issues around access to information and feedback loops. First, the findings from the quantitative and qualitative research suggest the need for government to make use of a broad range of platforms. Such a differentiated approach should address, at least to some extent, access and exclusion barriers. While the quantitative data do not allow us to distinguish between access to and mere lack of interest in particular media, it is reasonable to believe these are closely linked. Strategies to communicate with residents should therefore take into account both access to particular channels and infrastructure (as shown in the census data), but also expressed preferences. Furthermore, low interest in specific media could indicate a need for greater education and awareness-raising around those platforms, as well as improving the value of and citizen trust therein.

Taking a differentiated approach would also mean taking into account both what the most appropriate media are for a particular area and cohort, and acknowledging what groups may be excluded. For example, given the generally limited reach of print media and ICTs, government's communication strategies could take cognisance of which cohorts would most likely not use these channels and what approaches would be appropriate to reach them. Specific efforts to engage the most poor and marginalised, for instance, could make better use of radio (even more so than television), but not at the cost of direct interactions. Province-specific strategies may, for instance, call for a greater emphasis on print media in the Western Cape, as this was the most preferred channel. Or it may signal a need to enhance the use of radio and face-to-face engagements to reach other cohorts who may currently be excluded.

The suitability of the various platforms must also be assessed according to the quality, relevance and accessibility of the content. For instance, given the popularity of television across all cohorts, strategic reflection on the use of this technology to provide relevant and useful information to residents across the country is necessary. Key questions to ask may include: what content is currently being provided? Is the content relevant for enhancing understanding and interest in government functions and engagement opportunities? Is the content accessible in terms of language, clarity, simplicity, etc.? And are there opportunities for deeper civic education around key government processes and citizen rights and responsibilities through television? By being cognisant of these kinds of matters, government can become more pro-active in the provision of relevant information.

It is also at this level that ICT platforms (and strategies reflecting smart city thinking) could be harnessed to fill significant gaps. The low levels of interest in ICTs, alongside the increased access to mobile phones and the Internet, may be indicative of a still slow emergence of relevant websites and apps, rather than some kind of opposition. The growing use of a wide range of applications and websites may thus gain more traction as these become more relevant and available. And as the qualitative research has shown, one avenue is for such tools to help link the timing and content of communication to other service delivery and engagement processes. A kind of "before and after" approach could close important feedback loops, which could serve to acknowledge and thus motivate citizen inputs in government processes, as well as strengthen government accountability to actually respond to such inputs.

PROMOTING SUBSTANTIVE ENGAGEMENT THROUGH ICTs

While the qualitative data emphasise challenges and severe limits to existing participation mechanisms, the quantitative results show the importance of strengthening these approaches. It is indicative that, across LSMs, geographic spaces, and even levels of schooling, people desired direct interaction with government representatives. It should be encouraging that citizens value democratic processes that build personal relationships with their local governments. Any communication strategy or process should therefore support and strengthen direct engagements rather than being seen as an end in itself.

A key role for ICTs in supporting substantive engagement is to address patterns of exclusion, as well as reduce costs and facilitate knowledge and skills sharing. These were noted as key limitations on the part of both citizen and state actors. By enabling more direct access to the state for individuals, such platforms may counter the dominance of particular community interest groups and contestations. At least with regard to basic infrastructure services, for example, ICTs and other such platforms allow a person to report and access information individually and directly, with the same reporting system and procedures applied to all residents regardless of geographic location. Such platforms could also help to overcome exclusionary tendencies within engagement processes if they provide materials under discussion in different or simplified language, for instance. Finally, such tools can provide channels for greater knowledge and skills sharing, which may support and improve the quality and effectiveness of more resource-intensive activities (like public meetings) by ensuring participants receive and understand important information beforehand. Importantly, interactive platforms may turn individual access to information into a social process of mutual sharing and learning. Many scholars believe ICTs can, in this way, enable broader and more effective social networks and thus strengthen social capital (Mandarano, Meenar & Steins, 2010: pp. 131-132).

Despite this positive potential of using ICTs and other communication platforms, the fact that socio-economic disparities across South Africa continue to influence access to, as well as experience and knowledge of such technologies, must be heeded. These divisions are reflected in the expressed levels of interest in these platforms, which the SASAS data have shown remain notably low. For those with little or no education, from the low LSM or less urban areas, access to these communication technologies may be the critical factor. But addressing ICT access does not necessarily guarantee uptake and effective impact. In fact, the concept of the "digital divide" itself has attracted criticism for a predominant emphasis on socio-economic factors impacting on people's access to ICTs, at the exclusion of socio-personal factors such as low levels of awareness, interest, understanding and acceptance thereof (Macintosh, 2004: pp. 60-61). Thus, mobile apps that allow one to report on water shortages or vandalism of communal toilets, for instance, will only be as effective as the "reporting agency" of users combined with the capacity and responsiveness of service providers. In this regard, the value of substantive engagement and the nature of the relationship between government and citizens become all the more apparent and relevant.

GOVERNMENT AND COMMUNITY RELATIONS: LIMITS TO ICT POTENTIAL

So far, we've discussed how standard forms of communication and participation could support if not generate more fruitful and sustained forms of engagement. This could open further opportunities for residents to support municipal functions, and thereby improve local relations and efficiency. However, rolling out ICTs as the preferred mode of the government-citizen interface in areas where the presence of the state is weak and the relationship between residents and government problematic (or confrontational as it is in many cities) could have a negative impact.

It is therefore important to be aware of perceptions of, and tendencies towards, a paternalistic approach by government, and the ways this might manifest in government communication preferences with citizens. A possible limitation of most communication platforms in the context of contemporary urban South Africa is that they primarily work as one-way channels. When information is transferred either from government to citizens or from citizens to government, a platform for conversation is not realised. This kind of exchange can only go so far in addressing citizens' frustrations around service delivery and overall relations with government. Many scholars therefore warn against the replacement of direct engagements with virtual relations, arguing that "the unique characteristics of face-to-face communications in building consensus, communicating complex information, or creating new ideas mean it cannot be totally replaced by online communications" (Goodspeed, 2008: p. 33). The kind of "governing at a distance" (Odendaal, 2003: p. 588) that emerges through the greater use of ICTs may provide an efficient form of communication and information provision, but it does not necessarily provide a meaningful form of interaction with citizens to build relationships of trust and good will.

The demand for direct engagement from the South African public also seems to cohere with scholarly arguments for conceptualising approaches to the smart city in a way that puts citizens and communities, as well as existing civic knowledge and engagement processes, at the centre of development. Odendaal (2006: p. 45), looking specifically at the South African context, observes how many of the benefits of ICTs (for example as a means of learning and networking) will fail to materialise if ICT uptake in governance is driven only by the desire to promote economic growth and bureaucratic efficiency. Ochara (2012) makes a similar point with regard to citizen participation in e-governance projects. He goes further to argue against current approaches that characterise citizens as consumers and "the relationship between government and citizens as a passive commercial transaction" (Ochara, 2012: p. 40). What is thus needed is to embrace the potential of information technologies in combination with two-way communication channels and more substantive direct interactions.

CONCLUSION

This research investigated South African public preferences for different government communication platforms, in light of reflections from a variety of stakeholders on the challenges to existing participation practices. Understanding such preferences could assist government to strengthen its communication strategies and broaden the reach and impact of its communication tools. This research has shown that a differentiated approach, utilising the full range of media options, is important for reaching such a diverse populace, and for addressing issues and patterns of exclusion. Understanding the nuances of such differences enables more targeted campaigns tailored to the specific needs, interests and capacities of particular cohorts (e.g., youth, urban or rural dwellers).

It is ultimately not merely access to, but the use and value of communication tools that translate into meaningful engagement. Thus the state should reflect upon, and improve the quality of, relevance and accessibility of the content of information, as well as remain cognisant of new forms of exclusion that might emerge. In this regard, research into citizens' information needs vis-à-vis the current content of government-provided information may enhance the relevance of particular efforts. Specific socio-economic factors such as education may also impact on citizens' perceptions of the reliability and value of particular platforms. Effective communication and information exchange therefore hinges on the nature and quality of governance as a whole (e.g., education and skills training, basic service delivery, local economic development, perceived reliability and trustworthiness).

With regard to strengthening engagement, ICTs and other communication platforms hold great potential to address the concerns raised around existing participation mechanisms. Perhaps a first step is to include ICT tools to improve efficiency within existing communication platforms or as part of new engagement methodologies. More research, thinking, and efforts are needed to ensure that language, social and geographical barriers are properly acknowledged in order to make ICT-based platforms more inclusive and accessible. However, issues related to government and community relations warn of the limits of one-way communication channels, and the need for earnest relationship building that information-exchange processes may not be able to provide. It is significant that all population groups preferred direct engagement over ICT-mediated communication. Rather than signal an out-dated attitude and approach, this should be embraced as an opportunity for meaningful engagement between a responsive government and an informed citizenry to pave a way for technological advances that serve rather than define democratic processes and urban development.

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