ICT, URBAN GOVERNANCE & YOUTH
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ICT, Urban Governance & Youth
Global Youth-led development Report Series No. 04

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The paper was presented at the World Urban Forum 2012 in Naples, Italy and at the Africities Summit 2012 in Dakar, Senegal for feedback and consultation among youth and local authorities. In addition, the paper was shared with youth councils, youth activists, local authorities and other stakeholders in a consultative process. Select case examples have been further developed into in-depth case studies as a follow up to this paper. The concepts and principles outlined in the paper will guide the development and implementation of a series of pilot projects to test the approach.

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The authors express their appreciation for the time and insight of those that contributed to the development of this document (see appendix III).

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Training course on Mobile Maintenance for 9 male youths, Taiz, Republic of Yemen
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The authors express their appreciation for the time and insight of those that contributed to the development of this document.

List of Interviewees

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1* denotes recipient organization of UN-Habitat Youth Fund
Youth participate in Mapping Mukuru slum project, Nairobi, Kenya © UN-Habitat

INTRODUCTION AND OVERVIEW
INTRODUCTION AND OVERVIEW

This paper aims to develop a conceptual framework to accommodate rapidly changing dynamics in three areas of urban development: the demographics of the fastest growing segment of urban populations, youth (ages 15 to 24); information and communications technology (ICT) and particularly mobile phones; and governance, particularly local government in the developing world.

With its advanced draft on ICT-enabled governance, UN-Habitat has laid the groundwork by addressing issues of urbanization and ICT-based government. The present paper seeks to add the youth dimension in a way that builds upon the advanced draft and takes into account the special characteristics of young, tech-savvy citizens.

The present review covers published and unpublished literature, internet searches and direct interviews with youth activists who are moving quickly to exploit the opportunities offered by ICT with respect to local governance and the interests of the young. In all, data was gathered on 50 cases, of which seven were obtained through direct personal interviews or by Skype. More detail on the cases and methods of data collection are discussed later.

Perhaps the most striking observation from the case data gathered for this review is that young citizens introduce an entirely new dimension to ICT and governance. ICT in the hands of youth has become a rapidly evolving tool that reaches beyond ICT-enabled conventional governance, defined in the advanced draft as covering four pillars:

1. adopting technology to improve outcomes,
2. balancing inclusiveness and responsiveness when using technology,
3. public openness through technology and
4. engaging citizens as partners in urban governance.

The findings caution that ICT is not the answer to developing democratic institutions for youth in the developing world, but represent an entire new channel of communication that may contribute to this broader goal.

Nor is the subject matter any longer merely governance of youth. Rather, the scope of concerns crosses into new and uncharted territory as governance itself is transformed by fast-moving changes of ICT in the hands of the young. For one thing, dynamic boundaries of ICT are being pushed forward on a daily basis because of the pervasive presence of mobile platforms and the inventiveness of young people in adapting technological devices to meet their needs. Young people are developing mobile phone applications in large numbers.

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1. “ICT-Enabled Urban Governance in the Developing World”, UN-HABITAT 2012. This document serves as the key reference for the research conducted.

2. The 4 pillars are described in “ICT-Enabled Urban Governance in the Developing World”, UN-Habitat, 2012.
that affect many areas of local governance and community life, such as leadership and inter-governmental relations. Moreover, the impact of creative energies by young people goes beyond just governance of youth. It extends also into governance for all, as this report will show.

Accordingly, we shall suggest that the present four pillars of ICT-enabled governance be considered in relation to three cross-cutting elements. These include capacity and leadership, level of government and technology. Each of these three dimensions reflects additional depth and content to the relationship brought to governance by ICT in the hands of youth.

Other specific highlights include:

- Mobile platforms, by far the most important ICT tool affecting youth, are used primarily by and for youth to enhance participatory engagement in local government affairs and also to foster inclusiveness and responsiveness. Less youth-focused activity has been found in other pillars, namely outcomes and public openness.

- Young citizens have moved very quickly to carve out new applications in relation to local governance, opening a gap in capacity between young citizens and their local governments, which are often staffed by individuals with far less digital experience than their youthful constituents, who are quick to adopt new technologies.

- The sharp asymmetry between youthful, digitally-active citizens and lagging practice of local governments leads to disruptions in subsidiarity, for instance, central governments cutting into local affairs, and to the growing importance of fostering leadership at the local level.

- Youth initiatives such as crowd-sourcing and opinion sampling turn conventional ideas of participation on its head: rather than following the prerogatives of local government in matters of participation, youth are leading the way toward closer examination of, and greater accountability from, local governments.
• Geo-referencing capabilities are increasingly available in mobile platforms, and these lead to added dimensions in young peoples’ relationship with their communities and local governments, as evidenced in programs such as community mapping (Map Kibera) and “see click fix.” Such programs draw the attention of authorities and wider constituencies to problems or circumstances that are overlooked or ignored by officials of local government in urban communities.

• Governments begin to see youth differently, not as passive recipients of government services, but as participants in solutions, even leaders in governmental reform in such activities as “sousveillance” (turning the monitoring functions of cell phone cameras onto public officials).

• Mobile platforms have a leveling influence in the rural-urban divide: many applications are making it easier to engage in communication, education, health care, and businesses from rural settings, even though these services have not been the focus of youth-related initiatives in urban areas.

It should be noted that the distinction about youth as a separate category in relation to ICT tools of modern democracy is almost irrelevant in many cities, for example in India and some special cases in Africa. In the first place, a large fraction of the population falls into the youth definition anyway, and these are the people who are driving change by using ICT simply because they are digitally literate and well-practiced with mobile platforms. Still, the specific consideration of youth needs is an important dimension that can enhance the outcomes of governance not just for the young, but for wider populations. Greater attention to this issue is needed in policy, academic literature and in practice.

ICT is a tool, and its effective application is highly conditioned on the age old challenges of youth engagement: the need for youth-oriented policies, structures and programs that view youth as assets in development and shape budgets for youth-focused implementation.

This underscores a critical overriding principle in the ICT, youth and governance debate. ICT is a tool, and its effective application is highly conditioned on the age old challenges of youth engagement: the need for youth-oriented policies, structures and programs that view youth as assets in development and shape budgets for youth-focused implementation. Without structured channels and “offline” frameworks for genuine youth engagement, the large potential benefits of ICT may fall short both for young people as well as for local government.

In sum, this fast-moving field is to an important extent in the hands of youth, and the development of new applications poses a challenge for local governments unlike any of the major trends in the past 40 years, including environment, gender, sustainability and indeed, good governance itself. Local governments will need to add basic operational aspects of ICT to curriculum in training (if not in crash courses) to get up to speed with the growing digital literacy of youthful constituents. Local officials may also need special skills to promote youth engagement, to keep a level playing field for females and the poor, and to safeguard against the moral and ethical downsides of open access societies.
BACKGROUND

- Youth: Champions of ICT
- The Mobile Revolution
- Narrowband Social Networking for Mobile Participation
The population of the developing world is increasingly young and urban. Today, the young (ages 15 to 24) number more than 1.2 billion, and an estimated 87% of them live in developing countries. They comprise the largest youth cohort in history, known as the “youth bulge.” The majority lives in cities, with cities of the developing world accounting for over 90% of urban growth worldwide. An estimated 60% of all urban dwellers will be under the age of 18 by 2030.

Despite their growing number, youth are largely excluded from participation in the decision-making which affects their present and future, leaving them socially and politically marginalized. Moreover, they are often viewed as part of the problem, rather than part of the solution. For example, while young people in the Arab States comprise approximately one-third of the region’s population, they are often excluded from decision-making on issues that directly affect their lives, such as lack of education, high unemployment and poverty.

While events in the Arab Spring gained wide media attention, the UNFPA predicts that deeper, more fundamental changes may be in the offing. “The power of young people not in the spotlight, using their numerical strength and their vision of the societies they want, may in the long run change the world in even more fundamental ways.” The demand for political participation matching youth’s proportion of the population has been repeatedly articulated in various international forums and conferences. This has prompted many governments and organizations to begin rethinking their engagement with youth.

Indeed, a growing recognition is evident among policy makers and practitioners that youth are a major human resource for development as well as for positive social change and technological innovation. However, few governments have been effective in mustering the necessary resources and capacity to harness this potential. One of the most

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4 “The Role of Youth in the Urban Future”, Concept Note for the World Urban Youth Assembly, WUF6, 02 September 2012, UN-Habitat.
6 Ibid
difficult barriers has been to devise clear strategies and proven mechanisms for effective engagement of youth in governance processes. Only a handful of international agencies and NGOs have piloted project models. In short, now that awareness has been raised regarding the “what” and “why” of youth participation, more work is now needed to address the “how.”

India: Future Impact of the “Youth Bulge”
With a total population of 1.2 billion, India has more than 600 million people who are 24 years old or younger. While Indian government officials have expressed confidence that this large cohort of young people will have a positive impact on the future economy, others are skeptical, asking how many young people will be ready to lead productive lives in an ever more complex and sophisticated economy when more than 48 per cent of India’s children are malnourished, only 66 per cent complete primary school and half or fewer attend secondary school, according to UNICEF’s State of the World’s Children 2011. C. Chandramouli, Registrar General and Census Commissioner of India, is optimistic for the future, but also throws in a word of caution that can be applied to developing countries across the board: “Now the question is how the ‘youth bulge’ is handled. What kind of skills do you give them? How do you make them into assets?”

Youth: Champions of ICT

Youth are at the center of the ICT revolution, both as drivers and consumers of technological innovation. They are almost twice as networked as the global population as a whole, with the ICT age gap more pronounced in least developed countries where young people are often three times more likely to be online than the general population. See graph below.

The most recent data on ICT usage clearly illustrated the high rate of engagement among youth (see graph below).

Source: Measuring the Information Society 2013, ITU

Note: *Minimum and maximum age varies across countries, see Annex Table 3.1
Source: Measuring the Information Society 2011, ITU

Ratio of youth (15-24) Internet usage to overall Internet usage, by region and level of development (top), and by income group (bottom), 2012
A 2008 report by ITU was explicit in its conclusions: youth aged 15-24 are much more likely to use computers, Internet and mobile phones than the general population in nearly all countries. Indeed, data indicated that “for most countries, peak use of these technologies occurs in the 15-24 year age group, with high use also for the younger group, 5-14.” Among the factors attributed to this relationship between ITU usage and young people are the following:

- Enthusiasm demonstrated by young people for technology and their capacity to learn to use it quickly
- Higher literacy of young people in most economies
- Leisure time available to young people not yet in the full-time workforce compared with older people and leisure opportunities offered by ICT
- “Critical mass effect of communication media” whereby one needs to adopt the methods of communication being used by one’s social group
- Presence of computers and/or Internet access in schools and educational facilities predominantly used by young people.

While literature on youth and ICTs has received significant attention, not much scrutiny has been directed toward urban youth with mobile devices in the developing world. The first significant study of this issue was published by ITU in 2013, presenting a model to measure the “digital native” population worldwide, analyzed by region, development level, income grouping and educational enrolment levels (ITU 2013).

“Digital natives” are defined as the population of networked youth, aged 15-24 years, with five or more years of online experience. The overriding finding of the ITU study was clear: youth in developing countries are the early adopters leading their countries in Internet use. As such, it is these countries that are liable to be the most impacted by their digital natives. The findings highlighted a need for research into how growing up in a digital age is impacting the way young citizens in developing countries think, learn and engage in civic activity (ITU, 2013).

While groundbreaking in nature, the ITU study limited its definition of online experience to internet usage, thereby leaving out the mass numbers of young mobile phone users and the momentous impact that these simple devices are having in their daily lives. Where in-depth attention is given to how mobile phones are impacting developing countries in general, and governance in particular, these analyses have not applied a specific focus on youth issues and youth engagement in this context (World Bank, 2012). Indeed, the literature has taken a siloed approach, addressing trends of ICT, local governance and youth engagement separately.

The Mobile Revolution

The logic that drives internet use among the young is accelerated by the economic incentive of low cost cell phone devices. Mobile phones have become the most ubiquitous form of modern ICTs. According to a recent ITU report, three-quarters of the world’s population has access to a mobile phone. Dubbed the “mobile miracle,” the developing world now is “more mobile” than the developed world. Of the nearly seven billion mobile-cellular subscriptions, penetration will reach 96% worldwide and 90% in the developing world by the end of 2014. Developing countries are home to more than three quarters of all mobile-cellular subscriptions (78%), where penetration continues to grow at twice the rate as in developed countries (3.1% compared with 1.5%, respectively). See chart

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11 Ibid, p. 41.
12 Ibid, p 42.
below. Combined with a young population, increasing income and decreasing mobile prices, the mobile revolution is contributing to social, economic and political transformation.

<table>
<thead>
<tr>
<th>Year</th>
<th>Mobile Subscriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>719 million</td>
</tr>
<tr>
<td>2005</td>
<td>2.2 billion</td>
</tr>
<tr>
<td>2014*</td>
<td>6.9 billion</td>
</tr>
</tbody>
</table>

Note: *Estimate
Source: ITU World Telecommunication/ICT Indicators database

The question now is not so much the issue of access—one of the dominant themes of the past decade—but of usage. Mobile phones are rapidly gaining new capabilities, evolving from a simple voice device to a full-fledged multimedia tool for social networking, banking, news consumption, organizing, entertainment, and in the public domain, public services. The shift in usage runs parallel to the emergence of “mobile-government” or “mGovernment” from the “e-government” topic of only a decade ago. See accompanying chart.

16 This is a key point made in the “Maximizing Mobile” World Bank report, p. 4. It is also discussed widely by the ITU.

17 For a full overview and typology of mGovernment, see Siddhartha Raja and Samia Melhem, Chapter 6 “Making Government Mobile” of the “Maximizing Mobile” Report, World Bank, 2012.

### Mobile Devices and Their Capabilities

<table>
<thead>
<tr>
<th>Device</th>
<th>Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic mobile phone</td>
<td>Network services, including: Voice telephony and voice mail, SMS (Short Message Service), USSD (Unstructured Supplementary Service Data), SMS-based services, such as mobile money, USSD services, such as instant messaging</td>
</tr>
<tr>
<td>Featurephone</td>
<td>As basic mobile phone plus: Multimedia Messaging Services (MMS), Still picture camera, MP3 music player, 2.5G data access</td>
</tr>
<tr>
<td>Smartphone</td>
<td>As featurephone plus: Video camera, Web browser, GPS (Global Positioning System), 3G+ internet access, Mobile operating “platform” (such as iOS, Android, blackberry), Ability to download and manage applications, VOIP (voice Over Internet Protocol), Mobile TV (if available), Removable memory card</td>
</tr>
<tr>
<td>Tablet</td>
<td>As smartphone plus: Front and rear-facing video cameras (for video calls), Larger screen and memory capability, Faster processor, enabling video playback, Touchscreen with virtual keyboard, USB (universal serial bus) port</td>
</tr>
</tbody>
</table>

Note: The list of capabilities is not exhaustive, and not all devices have all features
Source: ICT4D 2012: Maximizing Mobile, World Bank
Recognizing the role that technology can play in improving people’s lives, the United Nations has declared access to information and communication as a basic human need and right. This counters the view that technology access is a luxury, underscoring its capacity to help overcome the most fundamental development challenges in society today. An ITU analyst observes: “We often get asked: why deal with technology when people are starving? However, we now see that people are prepared to pay for communications over food and water.”

The authors recognize that the emergence of mobile broadband networks—already underway, but still incipient—will radically advance the impact of the mobile revolution and open up enormous opportunities for development. According to ITU, mobile broadband is the most dynamic market segment, growing fastest in developing countries where 2013/2014 growth rates expected to be twice as high as in developed countries (26% compared with 11.5%). However, mobile broadband gaps remain high, with 84% penetration in developed countries and only 21% penetration in developing countries.

Prices for smartphones will continue to fall, and new, inexpensive versions developed specifically for developing markets are reaching below the $100 threshold that is described as a condition for connecting the next billion people to the internet over mobile devices. For example, 350,000 Kenyans purchased an $80 smart phone launched in 2011 by the Chinese firm Huwei – a notable development given that 40% of the Kenyan population lives on less than two dollars a day. This is only the beginning of a trend that is expected to flourish in coming years. Indeed, the percentage of the population covered by 2G mobile cellular networks (90%) today is considerably higher than the population covered by 3G networks (50%). Although mobile broadband subscriptions are growing quickly (double-digit growth rates in 2014), mobile broadband is out of reach for the majority of developing country users, with advanced mobile devices and broadband services still prohibitively expensive, but rapidly decreasing in price. Indeed, the ITU notes that mobile broadband is six times more affordable in developed countries than in developing countries, remaining unaffordable to large segments of the population.

The research and cases reviewed for the present report reveal the upsurge of countless applications and innovations that overcome the challenges of affordability and limited access to broadband. In particular, youth together with mobile operators and industry developers are continuously finding ways to utilize even simple mobile devices to meet the needs and interests of technology users, young and old. Accordingly, the fast moving pace of mobile telephony is providing new avenues through which to bridge the Internet Divide.

25 Ibid.
Narrowband Social Networking for Mobile Participation

The limitations of broadband have led to the development of innovative "narrowband" mobile communications applications tailored for users in developing countries. Low-end phone capabilities such as text messaging and simple internet access is facilitating scaled-down versions of social networking, pay-as-you go mobile data access and web searching. In essence, mobile phones are now providing new avenues for increasing numbers of citizens in the developing world to access the benefits of broadband internet. In many ways, the development of narrowband functionalities and mobile platforms can be seen as a commercial response to the growing youth mobile market. A summary of some of the most popular narrowband applications mentioned in the literature as well as by interviewees is provided in the table below.

---

**Active mobile-broadband subscription by region, 2014* and growth rates, 2011-2014***

<table>
<thead>
<tr>
<th>Region</th>
<th>2011/2012</th>
<th>2012/2013</th>
<th>2013/2014*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed</td>
<td>84</td>
<td>64</td>
<td>49</td>
</tr>
<tr>
<td>Europe</td>
<td>64</td>
<td>59</td>
<td>32</td>
</tr>
<tr>
<td>The Americas</td>
<td>59</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>Asia &amp; Pacific</td>
<td>32</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Arab States</td>
<td>25</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Europe</td>
<td>23</td>
<td>21</td>
<td>19</td>
</tr>
</tbody>
</table>

*Note: Estimates
Source: ITU World Telecommunication/ICT Indicators database

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27 This table is in no way an exhaustive list of the many narrowband technologies and functions in operation, but provides demonstrative highlights and reflects insights from interviewees. It is important to note that some narrowband technologies are regionally or country based.
As these ‘stripped down technologies’ have shown, text messaging (SMS) is one of the most popular types of mobile phone usage in developing countries. Nearly five trillion text messages were sent worldwide in 2010, with mobile owners reporting a much higher percentage of usage for text messaging then other mobile functions (see chart below). SMS can be an affordable alternative to more costly voice services and can serve users who do not have mobile internet access. It is important to note that text messaging has been a key function for applications in the mobile-for-development context. Popular examples include agricultural pricing and health programs for rural residents, citizen alerts sent by governments and various crowd sourcing applications.28 One implication is that new ICT services for youth should be largely based on SMS usage in one of its many forms.

28 See the “SMS in Action” website for a useful resource to locate established and on-going pilot SMS-based solutions designed to support development or provide the social good: https://smsinaction.crowdmap.com/main

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As these ‘stripped down technologies’ have shown, text messaging (SMS) is one of the most popular types of mobile phone usage in developing countries. Nearly five trillion text messages were sent worldwide in 2010, with mobile owners reporting a much higher percentage of usage for text messaging then other mobile functions (see chart below). SMS can be an affordable alternative to more costly voice services and can serve users who do not have mobile internet access. It is important to note that text messaging has been a key function for applications in the mobile-for-development context. Popular examples include agricultural pricing and health programs for rural residents, citizen alerts sent by governments and various crowd sourcing applications.28 One implication is that new ICT services for youth should be largely based on SMS usage in one of its many forms.

28 See the “SMS in Action” website for a useful resource to locate established and on-going pilot SMS-based solutions designed to support development or provide the social good: https://smsinaction.crowdmap.com/main
The widespread use of mobile phones together with innovative forms of social networking is creating new spaces for citizens to engage in civic activity and governance. The call for change is often initiated from the bottom-up and includes efforts for social and political change, transparency and inclusion. In some cases, change is being implemented from the top-down, with ICT tools being employed to enhance citizen participation and service delivery. Either way, the role of youth is a crucial element not carefully examined until now. The young are not only forging new tools, but also they stand to benefit from the improvements in governance offered by ICTs.
METHODS AND CASES

▸ Key Characteristics of Cases
▸ Towards a Typology of the Youth Dimension of ICT-Enabled Governance – Directionality of Impact
▸ Governance and Pillars
METHODS AND CASES

The rapid conversion of mobile devices from merely telephonic uses to a communications device for wider engagement in governance is illustrated richly in numerous cases reviewed for this paper. A body of empirical data of 50 cases was developed for the present review. The data provide many examples and promising guides to answer the question of “how” to engage youth in governance. This section describes the data gathering methods and provides a brief overview of cases covered in this study.

The review covers numerous sources. Literature and web searches gave specific attention to the youth dimension in applications of ICT that affect local governance. A starting point was a list of grantees from UN-Habitat’s Urban Youth Fund to 26 NGOs from different parts of the world covering a wide variety of activities for youth including jobs, theater, journalism, participation in local affairs, and the like. Eleven of the cases touched directly or indirectly on governance, and efforts were made to contact this subset by phone, email, and Skype. We were successful in interviewing seven organizations from this group, which are written up in descriptive narratives in Appendix I.

Additional cases were uncovered in the course of experience review, some were found through previous or present work with the World Bank, UN, NGOs or other sources. This resulted in another ten cases, some of which were subject of more cursory interviews for fact finding and verification. To these were added 25 more cases discovered by internet search. In total, descriptive data for 50 cases were compiled.

We can make no claim that the cases considered in this analysis are in any way representative of the myriad of applications that might be found of youth-related ICT on governance. At the same time, there is no obvious bias in the method by which this data was collected, although geographical representation is uneven.

Key Characteristics of Cases

The cases cut across a wide range of geographical representation and level of governmental involvement (i.e., global, national, or local). In terms of geographic distribution, Africa was most strongly represented, but we are confident from anecdotal information and the literature that all regions are seeing high levels of youth/ICT activity. Future research should give more attention to regions such as Latin America and the Middle East where significant developments are occurring in the areas of youth, ICT and governance. It is also notable that many cases have a global scope of action, i.e., many cases represent programs, tools, or activities—for instance, web-based applications—that are not confined to a single city, country or region. See Table One.
Table One – Cases by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many / Global</td>
<td>8</td>
</tr>
<tr>
<td>N. America / Europe</td>
<td>5</td>
</tr>
<tr>
<td>Africa</td>
<td>19</td>
</tr>
<tr>
<td>E Europe</td>
<td>2</td>
</tr>
<tr>
<td>LAC</td>
<td>4</td>
</tr>
<tr>
<td>MENA</td>
<td>3</td>
</tr>
<tr>
<td>E. Asia</td>
<td>7</td>
</tr>
<tr>
<td>S. Asia</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Some case applications are implemented in several countries, so the total figure exceeds number of cases recorded.

Table Two classifies the cases in terms of level of government at which the case is intended to have impact. Again, most of the applications reviewed here were developed at the national or local level, but a significant number were born as global efforts.

Table Two - Level of Application

<table>
<thead>
<tr>
<th>Application</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local/City</td>
<td>22</td>
</tr>
<tr>
<td>Country</td>
<td>23</td>
</tr>
<tr>
<td>Global</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Some case applications are implemented in several countries, so the total figure exceeds number of cases recorded.

Towards a Typology of the Youth Dimension of ICT-Enabled Governance—Directionality of Impact

Since youth are (a large) part of the overall population, they naturally stand to benefit from ICT initiatives implemented for the general public. At the same time, young people have specific characteristics, needs and interests that require distinct consideration, particularly in planning, policy making and implementation.

A youth dimension of ICT-enabled governance recognizes that general approaches in this field have not been sufficient to effectively address the youth agenda. It also recognizes the urgency of the task, given the enormity of opportunities and challenges related to an exploding youth population in developing cities.

Accordingly, the cases were also classified according to the “directionality” of impact each kind of project (case) was intended to have, for instance, whether it was a youth for youth program, for instance, or youth for community, or indeed, local government for youth. In fact, the cases are protean in nature, and require many categories, ten in all (see table three). The results show that almost half of the total involves programs or projects where youth are developing ICT initiatives for all citizens and NGOs are designing ICT programs for youth. Many of those cases classified as NGO programs can be seen as originated by youth, but complete data on this score was not available. Only a handful of cases were youth only for youth. These observations reflect the creative and dynamic nature of ICT in the hands of youth as they explore ways to connect with others in relationship to community and local government. They also lend credence to the notion that youth are in many ways the leaders of ICT governance initiatives for all citizens – innovating technology, generating content and developing applications.

Table Three - Directionality of Impact

<table>
<thead>
<tr>
<th>Classification</th>
<th>Code</th>
<th>No of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>business-to-youth</td>
<td>b&gt;y</td>
<td>2</td>
</tr>
<tr>
<td>Business-to-citizen</td>
<td>b&gt;c</td>
<td>1</td>
</tr>
<tr>
<td>Government-to-citizen</td>
<td>g&gt;c</td>
<td>7</td>
</tr>
<tr>
<td>Government-to-youth</td>
<td>g&gt;y</td>
<td>7</td>
</tr>
<tr>
<td>NGO-to-citizen</td>
<td>n&gt;c</td>
<td>4</td>
</tr>
<tr>
<td>NGO-to-government</td>
<td>n&gt;g</td>
<td>1</td>
</tr>
<tr>
<td>NGO-to-youth</td>
<td>n&gt;y</td>
<td>10</td>
</tr>
<tr>
<td>youth-to-citizen</td>
<td>y&gt;c</td>
<td>12</td>
</tr>
<tr>
<td>youth-to-government</td>
<td>y&gt;g</td>
<td>2</td>
</tr>
<tr>
<td>youth-to-youth</td>
<td>y&gt;y</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>
Governance and Pillars

We turn now to examine how each of the cases would relate to the governance pillars identified in the UN-Habitat document “ICT-Enabled Urban Governance in the Developing World.” The reader should note that often the cases are multi-dimensional in nature and can easily represent more than one of the four pillars. Notwithstanding this possible methodological “noise,” the cases indicate that applications of ICT and youth cluster primarily in two key areas, inclusiveness and engagement. See Table Four, below.

<table>
<thead>
<tr>
<th>Table Four - Case Impact by Pillar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillar</td>
</tr>
<tr>
<td>1 – outcomes</td>
</tr>
<tr>
<td>2 – inclusiveness &amp; responsiveness</td>
</tr>
<tr>
<td>3 – public openness</td>
</tr>
<tr>
<td>4 – engaging citizens</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

On the other hand, pillars 1 and 3 (outcomes of government services and public openness and transparency) refer to somewhat more internal aspects of local government, ones that require deeper engagement—by both citizens and government—to develop and share knowledge about internal processes and to improve government services like water, health, jobs or facilities that citizens care about.

These preliminary observations should be tested further, both to verify the extent to which they are true or that some other explanation or indeed outcome might emerge with a larger, more carefully controlled sample. For the time being, the preliminary findings indicate that the four pillars are valid, but that more attention may need to be given to enhancing outcomes of governance for young populations and in the area of openness and transparency.

Looking beyond the four pillars, the diagnostic analysis of the 50 cases shows that youth activism using ICTs involves a mix of agents interwoven with institutional capacity (youth leaders, community groups, municipal and national officials), utilizes a wide range of technological arrangements, and cuts across many levels of government. As we shall show in the Findings section, below, the impact of youth activism via ICTs may be directed at the local level, but in part because they are effective, often draws the attention and involvement of national political players. The agents of change—leaders among youth as well as in community groups and local government—add up to institutional capacity, which plays a decisive role in both launching and responding to new ideas promulgated by youth and ICT. For these reasons, additional contextual factors need to be kept in mind in order to interpret, if not to gauge, the impact of youth and ICTs in governance.
FINDINGS IN EIGHT AREAS

- ICT Impact on Outcomes for Youth
- Balancing Inclusiveness & Responsiveness when Using Technology
- Public Openness through Technology
- Engaging Young Citizens as Partners in Urban Governance
- Capacity & Leadership
- Level of Government
- Technology
- Additional Considerations
Turning to more detailed, qualitative analysis, our principal findings are organized in eight categories. The first four of these apply a youth lens to the four pillars of ICT-enabled governance. The four pillars provide a solid approach for exploring how information and communication technologies are impacting urban governance on a general level. The succeeding set of (three) findings correspond to additional cross-cutting contextual factors we have identified as important to round out the pillars. A final set of complementary considerations emerged from the youth-focused analysis, bringing the total number of findings to eight main points. These are:

1. **ICT Impact on Outcomes for Youth**

As a large part of the population, youth benefit from general ICT-enabled services implemented by local governments such as administrative measures, transportation and safety. Platforms such as Huduma in Kenya offer mobile-based communication avenues for citizens to voice, SMS or email service needs or comments directly to authorities and service providers. Similar platforms and services exist in Peru and Mexico. However, the research shows a dearth of youth-focused services. Youth face unique challenges that are specific to their stage in the life cycle—a premium might be placed on education and employment, for example—and they can benefit from ICT services to enhance their opportunities in these areas. Examples might include ICT services for job placement, job readiness, entrepreneurship and e-learning. Municipal health services can take on a youth dimension, focusing on awareness-raising and prevention. For example, in Indonesia the Municipality of Surabaya provides internships for high school and university students, offering an opportunity to gain experience with ICT while at the same time enabling participants to help the municipality.

Local government ICT programs for youth are heavily focused on ICT training. Increasingly, youth require ICT skills as part of their preparation for entering the workforce and...
participating in the global knowledge economy. Training programs often work through community institutions or schools. Good examples are provided again by Surabaya and Kigali. In Surabaya, “Broadband Centers” are located in strategic locations across the city. “Business Development Centers” equipped with high speed internet and ICT equipment are being set up in each of Kigali’s three districts as part of a national initiative to cultivate ICT usage.33

The outcomes for youth in ICT-enabled governance both in processes and services depend on improved sensitization and capacity for youth engagement at the local level. In processes—participation, deliberation, priority setting, and monitoring—the cases have shown that ICT has potential to be a powerful enabler to engage youth in governance decisions. ICT can be utilized to measure and quantify the results of youth-focused urban initiatives for services, thereby helping to demonstrate impact and break through barriers to increase resources for such programs. Important questions of how to best use these tools towards youth engagement goals are still being explored.

In a similar way, ICT has the potential to serve as a youth mainstreaming device that helps to coordinate youth services across ministries and levels of government. The cases have offered some clues about what is possible, and they all point to the importance of sensitization and increased capacity of local governments towards the specific needs and aspirations of their younger urban citizens. This is a critical requirement of any governance initiative designed to impact youth, including but not limited to ICT. Therefore, capacity building among local government officials must be twofold: ICT skill-building and youth sensitization. This observation was illustrated best by the ICT Manager of the City of Kigali. When discussing upcoming plans to develop social media and interactive components to the municipal website and service offerings, he noted that they had not considered the specific dimension of youth (which, as in most municipalities, is not currently mainstreamed but siloed off to a specific department), but when presented with the idea it was clear to him that this is a crucial element to be taken into account: “Currently, we are not focusing on young people, but this is important. We have not considered that with the help of young people we can achieve more, this is something that we can discuss with the department dealing with youth.”34

2. Balancing Inclusiveness & Responsiveness when Using Technology

A defining feature of many cases is the way in which young people are reshaping civic discourse by means of ICTs, particularly mobile platforms. The communication cycle is being quickened. Instant communication and rapid flow of information are leading to increased “voice” on the part of youth, increased consideration of youth viewpoints, and in some cases new or more responsive services.

This speed in turn leads to a rupture in the traditional codes between youth and government. Cheap and ubiquitous cell phones and social media create a daily bond among young citizens and between youth groups and leaders. This phenomenon was not only non-existent as recently as a decade ago; it also represents a potentially momentous change in government-youth relationships. As a veteran youth leader from Kigali noted “A few years ago, a leader would usually go down to the field one day and go back to the same place only one year later. And in between there would be no way to reach him or make him accountable. Now the bond with social media is reaffirmed on a daily basis. Leaders can’t just promise things and disappear.”35 The increased volume of traffic

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33 Interview with Cedric Umuhire, ICT Manager of the Municipality of Kigali, July 2012 and Interview with Surabaya Municipality, July 2012.
34 Interview with ICT Manager of the City of Kigali, July 2012.
35 Interview with Sangwa Rwabhuhi, July 2012.
puts pressure on governments that is increasingly difficult to ignore. Instant communication and social networking trends offer young people unique and unprecedented tools to leverage opinion and political influence. As interaction between youth and government increases, old perceptions begin to be replaced with a new perspective on both sides. On the one hand, there is a new respect and willingness to listen and respond. On the other hand, ICT tools also allow for anonymous expression by youth who can now dare say what they have on their minds.

Increased responsiveness on the part of early adopters in government (local and national) gives young people new access to leaders and leadership positions. In many cases, electronic communications shortcut conventional modalities of citizen-municipal communication, obviating the slow and cumbersome personal appointments and official meetings in municipal offices. Today an ordinary young person can interact with government offices, see rapid results of appeals and even communicate directly with the president of a country and get a response. This is something that was unthinkable just a few years ago.

While these transformations are significant, some question the impact of ICT-based interactions. Increased communication and access may or may not be a first step to a more meaningful participatory dialogue. As a young leader from Sweden asked “what does engagement mean in terms of social media? Does a ‘like’ on Facebook make a difference? What is its weight vs. physical actions?”

We are again reminded of the importance of structured, offline youth engagement channels in order to capture the potential benefits of the new opportunities ICT has introduced.

Speedy turnaround is not the only feature of ICT and youth. ICTs can also improve the quality and quantity of user-generated information in a way that transforms understanding of the status and needs of youth by public officials and local government bureaucrats. Conversely, youth groups are more aware of the limitations and possibilities of local governments in providing services. User-generated content among youth is a key ingredient to this process. In Uganda, a UNICEF supported program run by local youth organizations entitled Ureport has created a platform for strengthening communication and dialogue around core development issues through SMS and the radio. With over 89,000 Ugandans signed up and participating as of March 2012, young “social monitors” are sent regular polls, gather data on community services and issues, and receive useful facts for action and advocacy - providing the “pulse” of Ugandan youth.

The sharing of information is empowering youth to civic action. Social media and mobile phones are key drivers here. The spread of ICTs in societies where access to information has been limited is making ICT an even more critical...
tool. At the same time, closed regimes can still effectively limit or close communications if they choose to do so.

ICT allows for the effective scaling up of youth participation efforts and their increased inclusion. Young leaders can reach unprecedented numbers of youth with their projects and programs, including the previously unengaged and disadvantaged, giving a voice to people who feel they have yet to be heard. For instance, ICT opens new channels for youth with disabilities, whether it is employment, education or governance.\footnote{Roxana Widmer-Iliescu, Senior Programme Officer ITU, Consultation, November 2012.}

ICT-based participatory mechanisms can also help those from younger age groups express themselves more easily than in face-to-face meetings in which they often feel intimidated or insecure.\footnote{Chris Muthuri, YouthAlive! Kenya, Consultation November 2012.} For example, several community mapping exercises illustrate the power of ICT tools to draw in a wider circle of activists. Young and old residents alike quickly perceive the effectiveness of putting their community on the map. These applications then spread to new and sometimes unforeseen impacts in health, security and community cohesion.

Radio still remains the most effective tool for reaching citizens en masse, particularly when it comes to disadvantaged and poorer communities. In Nepal, the Voices of Youth project enables teens to use text messages (SMS via toll free mobile phone number) for self expression and peer-to-peer support broadcast on radio programs that are listened to by some 6.3 million youth. Youth are invited to speak or text on a range of topics. The station has received over 33,000 messages since the launch, which comes from approximately 4,000 listeners. The toll free initiative is a pyramid-like linkage that connects the website, mobile and the radio network.\footnote{This is a UNICEF initiative implemented with local NGOs, for more information see: https://smsinaction.crowdmap.com/reports/view/137} In another example, an innovative youth-led mobile radio program in South Africa supported by UN-Habitat’s Urban Youth Fund demonstrates the dramatic increase in impact and reach through a radio station connected to social media and mobile phones.

### ICT Scales Up Youth Participation in South Africa

Young leaders from Khanyisa Youth Network (KYN) in South Africa have set up a mobile local radio station to give the youth of the Philippi Township (49% of the population) a platform through which to discuss and voice their opinions about the struggles and dreams of their local community. The radio station reaches over 300,000 people - allowing KYN to impact youth on a larger scale than ever before.

The initiative involves over 30 local youth groups including nearly 1,000 activists, the majority of which are disadvantaged and live in informal settlements. A core group of youth is being trained in journalism, community engagement and ICTs in order to generate the content for the broadcasts and run the station. Youth access Facebook and SMS-based applications such as “Mxit” through their mobile phones to facilitate consultation, discussion and planning among the youth prior to live broadcasts.

While these voices are still dwarfed by larger national radio programs, local government is starting to listen – and respond. A radio discussion on job opportunities revealed that many young people are unable to find work because they drop out of school and do not have sufficient funds to continue their studies. The Municipality of Capetown responded by issuing 50 scholarships to young people who would like to continue with their studies but lack the necessary funds. This first response has encouraged the youth of KYN to heighten their voices and augment efforts to engage local government in finding solutions to the core challenges of the young citizens in the communities they serve.

Refer to South Africa Case Write Up in Appendix I for details and reference.
The extent to which the voices raised and opinions expressed reaches the inner workings of local government in examples like these requires further investigation and assessment. The authors recognize the significance first and foremost of youth having a new medium through which their needs and views can be expressed on a mass scale. The linkage to policy and municipal process moves us towards the next level of investigation and is a key ingredient to take into consideration when designing youth, ICT and governance initiatives.

3. Public Openness through Technology

The negative impacts of corruption affect young people today, as well as their outlook for the future. The cases offer several striking examples of the need for youth to channel their creativity and innovation in the fight against corruption. ICT can empower young citizens to engage constructively in the development of new mechanisms to increase accountability and transparency, thereby contributing to good governance.

The majority of ICT applications and tools developed to follow public officials, monitor governance processes and increase public access to information is not necessarily youth-focused, but appears to be youth-driven. It seems that young technology entrepreneurs and software developers are those that are coming up with these tools and bringing them to the wider public. Young Kenyans have developed successful applications geared toward making open data information more understandable, user-friendly, and usable, including edWeb, Virtual City, and Mzalendo. In the Kyrgyz Republic, the Poltimer website is being used to track the promises made by politicians during elections once they are in office. Citizens can submit promises online that they heard elected officials make in public, and these commitments are then verified, categorized and monitored by the Poltimer team through the site.41 This and other evidence (for instance from India) is strongly suggestive that the majority of activity relating to public openness fits the youth-to-citizen and youth-to-government directionality.

NGOs focusing on issues of transparency are also joining the move to ICT-based tools, which tend to reach youth by virtue of their greater online participation. For example, a number of websites have been developed to collect information on public officials, monitor their behavior and provide online platforms for decision-makers to interact with citizens. Excelencias in Brazil is a well-known example, developed by Transparency International Brazil and widely used by journalists to increase accountability through reporting. The site provides open access to public information at various levels of government—from parliament to state legislatures and municipalities. Available information includes budgets, costs, spending, campaign donations to elected officials, absences of decision-makers from assemblies, linkages of officials with the private sector and more.42 There is no specific reference to youth or publicized data of usage according to age, but it can be assumed that youth are among the more active participants in this initiative, given their greater presence online.

The spread of mobile phones has also empowered youth to mobilize against corruption taking the form of SMS campaigns. For example, Transparency International Zimbabwe launched a program through which people report on bribery and corruption by sending an SMS that reaches a center that processes the information and “takes appropriate steps to assist clients.”43 This type of SMS platform is demonstrative of the power of basic mobile phones in governance processes in a country where Internet

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41 http://poltimer.kg/ru
42 http://www.excelencias.org.br/
penetration is less than 12 percent but mobile phones are accessible to most.

**Youth Agenda: Youth-Led Anti-Corruption Programs Powered by SMS**

A leading youth organization in Kenya, Youth Agenda, is successfully utilizing the benefits of SMS to fight corruption in schools. An SMS-based system was set up enabling youth and parents to report on instances when they are asked to pay bribes in return for receiving education services. Understanding the importance of engaging the full ecosystem of actors, Youth Agenda worked through community-based organizations in each program location which facilitated the signing of MOUs with local Chiefs and District Education Officers in order to implement the program.

Another critical component of the program was an initial awareness campaign informing youth about the free SMS service and mobilizing large numbers of people to join. Youth Agenda analyzed the reports received, with findings regarding high rates of corruption among specific officials and offices. These were forwarded to the District Education Officers to investigate and take action.

In one instance, a teacher widely reported through the program as requesting bribes was fired by the local authority. Youth Agenda has mainstreamed mobile technology across all of its programs as a powerful tool for mobilization, engagement and scaled impact.

*Source: Interview, Geoffrey Njenga, Communications Officer, Youth Agenda, http://www.youthagenda.org*

Young people are also harnessing the internet to share ideas and experiences across borders in their common fight for accountability. One of the most well-known platforms is the Global Youth Anti-Corruption Network (GYAC), bringing together youth organizations, journalists and musicians from over 45 countries to fight corruption through an online social network, video conferences and face-to-face events.44

As with other ICT-enabled governance applications, it is clear that online anti-corruption programs cannot replace traditional safeguards of good governance. Rather, they serve as a tool for increasing public participation and awareness in the fight for accountability and transparency and offer new opportunities for enhancing progress in these areas.

**4. Engaging Young Citizens as Partners in Urban Governance**

The upsurge in ICT usage has had a direct impact on increasing civic engagement among youth, giving them new avenues through which to become informed, shape opinions, get organized, collaborate and take action. The usage of mobile phones has significantly increased political awareness and activism among young users. As one youth leader in Tanzania noted, “There is a huge difference since 2005, when young people were not very aware of their rights or their opinions regarding what should be done in their country. Recently, the spread of mobile phones has made youth more politically aware and active; most youth have social media enabled mobile phones and are using these platforms to access information and voice their opinions.”45

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44 http://voices-against-corruption.org
45 Interview with Thomas Mtwamve, July 2012.
Y2Y ICT Platforms as Catalysts for Civic Engagement - Tanzania

Young people are not waiting for governments to create ICT-enabled tools for them. They are leading the way in utilizing technology for both the sharing of information and generation of content relevant to their lives. Young leaders in Tanzania have established an online forum, vijanaforum.org (translated as “youth forum.org”), as a one stop information center for youth, as well as an interactive discussion forum. Information necessary for the positive development of young people is posted including documents, reports, news, audio files – largely accessible through mobile phones. In addition, youth are interacting with one another by posting their own content, including photos, videos and discussion topics. The forum is enabling young people to take a proactive role in building awareness regarding issues affecting their lives, make informed decisions and catalyze others to take action. Discussions are under way to possibly merge this portal with the information center run by the municipality, offering an opportunity to leverage this effort for enhanced urban governance.

Refer to Tanzania Case Write Up in Appendix I for details and reference.

Youth participate in Map Kibera - security project, Nairobi, Kenya © UN-Habitat
The combination of digital media and mobile phones has proven particularly effective for creating awareness and mobilizing youth towards taking “offline” actions and participating in face-to-face activities such as meetings or demonstrations. This is particularly true for rural communities and many youth in general, that are more informed in the past but still prefer physical modes of engagement and discussion over solely ICT-based participation.46 This underscores a broader perspective which views ICT as a complementary tool that can enhance but not replace physical forms of participation. There are signs that ICTs are beginning to provide new, constructive ways for youth to be involved in governance, going beyond protests to actually engaging with government leaders to make change.

In some cases, the engagement is direct and immediate. Striking examples from Rwanda, Kenya and India feature authorities reacting quickly, sometimes from the highest office, to complaints or requests posted by young activists who, in turn, were energized by the attention and the responses they received. As a youth leader from Kenya noted, “social media is a highway to the politicians, taking them down from their high position and bringing them nearer to us…especially when you get an answer.”47

Youth are also empowered through election monitoring and watchdog roles. The Ersod Project in Yemen trained over 1,000 youth to monitor the February 2012 elections and provided a means for reporting election violations, irregularities or suspicious activity using SMS text messaging. A committee was formed to investigate reported problems and incidents were posted on an interactive map that allowed individuals to track the election online from the website.48

ICTs can engage and motivate youth to get involved in developing and learning about their communities and thus forge increased commitment and empowerment. For instance, citizen journalism, user-generated content, reporting, and neighborhood videos and music are attractive and constructive ways to get youth engaged in positive local development processes. Young leaders in Kenya have attributed the access of information as an empowering agent allowing youth to “hold their head high and walk into a meeting with government officials. Knowledge is power, power is self-esteem.”50

Current ICT-enabled communication between government and citizens is already having an impact on youth, making them feel more

48 http://ersod.org
50 Interview with Kepha Ngito, MAP Kibera, July 2012.
connected, engaged and heard. Even when ICT-based government initiatives are not youth-focused, young people perceive such communication as being directed primarily to their age group. As social media is considered “youth territory”, they feel that the very use of ICT channels demonstrates the government’s intention of reaching out to young people. There are also those that doubt the serious impact of such communication which currently lacks any structured approach and is largely based on the individual interests of the politicians themselves. For example, some youth councils note the increase in social media use by political leaders around election time. Either way, such activity is still largely restricted to the national level, with great possibilities and promising beginnings on the local level.

When examining the pillar of youth engagement, one should also consider the wider context of citizen participation and engagement in urban governance in a given city. It can be assumed that youth engagement initiatives may be more successful when couched in a broader culture of meaningful citizen engagement. Alternatively, where such general participatory activities are in initial stages, youth and ICTs could be a strategic entry point for igniting this process. This point was raised by the Mayor of Kampala, Uganda, Mr. Sulaiman Kidandala, when considering the implementation of ICT-based participatory mechanisms in his city. “Citizens do not see it as their right or duty to express their needs and interests, but wait for the leadership to come and provide whatever it is that is deemed important. As the mayor, I am missing this important information from the residents.” He noted that ICT tools based on simple mobile phone technology could be useful in addressing this need, but emphasized the importance of moving from a passive to active citizenship as a critical condition to this process.

Most ICT-enabled governance initiatives currently do not adopt a youth-focused approach, but view youth as part of the general population. As youth are the majority of the population online, they benefit from the impact of general ICT initiatives. However, there is a need and great potential for dedicated ICT youth platforms that allow young people to make their voices heard and have them seriously considered by local governments. Youth seek these channels to address their specific needs and aspirations. They stress that ICT channels must be combined with strong youth engagement policies and governance structures as a condition for the effective impact of ICTs in advancing this mission.

City of Reykjavík, Iceland: The Need for a Youth-Focused Approach

While rooted in a very different context from developing cities, the case of Reykjavík, Iceland demonstrates these principles. The municipality is very advanced in utilizing ICTs as part of a formal strategy to enhance participatory democracy. They have established a website entitled “Better Reykjavík” where citizens can put forward ideas for projects and vote on ideas promoted by others. The city is obligated to formally address at least 13 of the top-voted ideas on the website; from 2010 to June 2012, exactly 75 ideas from citizens through this website had been fully reviewed and 48 of them approved. However, youth voting rates on such initiatives have been relatively low. According to a member of the Icelandic Youth Council, Viktor Orri Valgarðsson, this may stem from an overall lack of trust and political activism among youth in the political process in Iceland, despite the existence of formal youth structures. He alludes to the impact that such ICT tools could have if developed together with the youth to address issues they care about and that would have a tangible impact on their lives. For example, he refers to high rates of youth participation in social media campaigns when it is on their terms and addressing their needs, citing a case of a youth-led Facebook campaign in the city mobilizing hundreds of youth over the span of 24 hours to change a transportation policy by a subway company. “In the course of just one day, Icelandic youth got their way and changed the decision of a large company, using only a Facebook page as their democratic weapon of choice.”

Sources: http://betrireykjavik.is/ Consultative document by Viktor Orri Valgarðsson, Icelandic Youth Council

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51 Discussion with Sulaiman Kidandala, Mayor of Kampala City at Wikicities Training Session, World Urban Forum 6, September 2012.
5. Capacity & Leadership

Local governments are beginning to listen to youth via ICTs, but most are still slow to act. Current interaction between youth and local government via ICTs is confined to youth raising their voices and being creative in development of applications. At best, local governments are listening, but from listening to taking action, much remains to be done. The limited digital literacy of most local governments severely impedes further ability to respond in kind. A handful of local governments reviewed in these cases show promise (Municipalities of Capetown and Kigali), but most fall far short of providing tangible support (funding, policies) to encourage overtures of youth groups. Young leaders from Sri Lanka are taking effective action to address this need.

Sri Lanka: Youth-Led ICT Training for Municipal Officials

Young leaders in Sri Lanka are training municipal officials in ICT skills and creating new ICT platforms for citizen-government local interaction. This is part of a broader UN-Habitat supported youth-led training and education program in Kandy City entitled YES - City of Youth. Through the course of project implementation, the ICT capacity gap among local officials emerged as a major barrier to overall progress that needed to be addressed: “One major barrier we have is communicating with city officials who like paper and face-to-face interactions. To change this situation, we started training City Council staff on Internet, email, local language ICT and Facebook. We plan to connect city officials to citizens on a Facebook Page.”

-Poomima Meegammana, UN-Habitat Project Coordinator

The relative advantage of young people who have grown up with modern devices has created a “youth-local government ICT gap” that is growing steadily. Experience with eGovernment services in the past has demonstrated that factors such as technological and human capacity, financial sustainability and bureaucratic resistance can limit the adoption of ICT programs and reduce their long-term impact.52 The Executive Director of MAP Kibera, Kepha Ngito, a young leader from Kenya, observed, “the reality is that most people in government are not very strong ICT users, this is something youth do better. We encourage them to blog in and respond, but a lot of them still believe in the traditional form of governance, setting meetings and sitting down together. We are trying to change this.”53

As with other emerging economies like India, there are now more Africans with access to a cell phone than to a clean toilet or even shoes. Thus the mobile hype needs to be tempered with other socio-economic development trajectories as well. Africa’s globally plugged-in generation expects more of its leadership, and has access to instant information; older African leaders ignore this political dynamic at their own risk, many observers warn. Sixty percent of Africa’s population is under 24. Urbanised youth populations are tech-savvy – and demanding.

Mobile Africa Report 2011

However, there is still a need for ICT skill-building among youth, particularly to enable them to move beyond simpler mobile phone platforms and into more robust systems based on the internet. Fostering these skills needs to go in tandem with infrastructure to support broadband capacity everywhere. The inevitable concomitant of educational and employment benefits of these tools is the deeper and more pervasive impact on local government.54

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53 Interview with Kepha Ngito, July 2012.
54 This shift from advantage to necessity of technology skills to ensure youth livelihoods is dealt with in detail across countries in a Microsoft commissioned report by the International Youth Foundation, Opportunity for Action: Preparing Youth for 21st Century Livelihoods, March 2012.
The interviews provided clear evidence of disconnect between young activists and older people found in most posts of confidence in local government. Bridging this gap will require sensitizing local officials and encouraging them to see the advantages of “listening” to youth ICT platforms, to bring them to the where the majority of youth are voicing their opinions, and to enable them to take responsive actions.

Some youth doubt that the older generation of politicians unfamiliar with ICTs and social media will be able to effectively embrace or understand digital modalities of participation. They refer to some existing social media tools employed by government, described as unappealing, boring and technologically out-of-date. Moreover, politicians must first be convinced that youth engagement is a priority, still a sizable challenge among many.55

National government leaders are setting the example for engaging directly with citizens (especially youth) through ICTs, although this trend has not been institutionalized and its impact is still not clear. Several case interviews (Kigali, Tanzania, Gaza, Kenya, South Africa) illustrate ICT activity at the national level where leaders are using Twitter accounts, blogs, SMSs and websites to engage with their citizens, who by default end up being mostly youth. These instances come to light partly from frustration of young people whose voices are ignored or unheard by elder leaders at the local level (a sentiment echoed by all youth interviewed to date).

At the same time, the evidence suggests great potential for fostering youth leadership at the local level, partly through the use of ICT. Many cases point to an emerging trend of young leadership in developing countries that offers an opportunity for the increased use of ICTs for governance and positive engagement with youth. Young leaders in government are the lowest hanging fruit in terms of adopting ICTs to improve local governance for youth. For instance, in Rwanda and Tanzania, it is the younger leaders and city officials that are using ICT tools to reach out and speak directly to youthful constituents using their own vernacular language. They can be identified as key champions in taking forward ICT-enabled urban governance for youth.

The increase in younger people occupying positions of power has contributed to a change in mindsets. The cases suggest that youth are encouraged toward civic action by the presence of strong role models. Also, informants feel that the wider community has begun to view youth differently, seeing them as leaders and change-makers. Young people are increasingly regarded as innovative, fast, and result-oriented. This is a key barrier that can advance broader youth-focused change. Furthermore, as the majority segment of the population, avid users of mobile platforms and innovators of new technology, it seems evident that youth will be at the forefront of the move to ICT-enabled governance.56

As such, inquiries into this issue must go beyond the basic question “how can ICTs improve urban governance for youth?”, and ask “how can youth help harness ICTs to improve urban governance for all?” 57


56 This conclusion is confirmed by Secretariat of the, Global Alliance for ICT and Development, UNDESA in its issue paper Youth and ICT as Agents for Change. See: http://unpan1.un.org/intradoc/groups/public/documents/gaid/unpan035691.pdf

57 The ITU identifies youth as major drivers of Internet adoption with enormous potential for increasing Internet usage in developing countries in the future. See “Measuring the Information Society 2011”, ITU p. 127.
Sisi ni Amani: Using SMS to Enhance Local Governance in Kenya

Sisi ni Amani, a youth-led NGO in Kenya, works with communities to promote civic education and engagement, both through personal dialogue and through mobile technology tools. SMS is being used effectively to harness community-driven data and foster constructive relationships between citizens and local government. Following recent elections of county government officials in the context of a new devolved governance structure, Sisi ni Amani is organizing community meetings with newly-elected county representatives. These meetings provide a platform through which representatives can explain their roles to constituents and elicit constructive input on policies and programs. Sisi ni Amani enhances this effort by using SMS tools for both community mobilization and needs assessment. In addition to getting the word out about the meetings themselves, SMS is used to conduct surveys regarding community issues. The results provide valuable information to county representatives, helping them to identify key priorities for action. As a next step, these priority issues are being mapped by Sisi ni Amani’s partner organization, Spatial Collective, using digital mapping techniques. This will enable county representatives to take informed action, as well as help stakeholders to visualize changes as progress is made.


6. Level of Government

In many cases, ICT-enabled governance in connection with youth and youth affairs has a greater impact at the national level than at the local level. The cases revealed several instances—in Kenya, Tanzania, Rwanda and Gaza—where national political figures showed themselves to be more attuned and responsive to youth messages on Twitter and other social media outlets than local officials. President Kagame of Rwanda is a stark example. Several instances were cited describing how the president directly interacted with young people via Twitter and addressed concerns relating to many issues, from police violence towards youth to business ideas for urban tourism. No such possibilities currently exist for these same youth to approach the local authority with these locally-based needs. The irony in these findings is that modern mobile tools of communication are serving to strengthen direct communications with the center instead of buttressing connections to decentralized governance. It is difficult to engage local government through ICT; they still prefer traditional means.
The Need for Decentralizing ICT-enabled Governance - Rwanda

Under the leadership of President Paul Kagame, Rwanda has made ICT a national priority, having made significant investments designed to make ICTs accessible and affordable on a massive scale. Kagame has set a powerful personal example of how leaders can utilize ICT tools to engage with their citizens, listening and responding to their needs. National ministers are following suit, opening up their ICT channels to these avid technology users to express their views and ideas online. Even more significant, Kagame merged the national ministries of Youth and ICT in April 2012 and appointed a new Minister of Youth and ICT. This is a groundbreaking move both in terms of ICT and youth, with youth ministries commonly grouped with sports or culture.

It is puzzling to note that these extraordinary national developments are not reflected in the policy and practice of local government in Rwanda. The Municipality of Kigali is only beginning to plan for developing ICT tools for government-citizen interaction, with no specific consideration or strategy regarding youth in the context of governance. Why is this so? The research points to two main factors: 1) limited ICT capacity on the local level and 2) greater public interest in national political issues and processes than local ones. The need for the "decentralization" of national ICT policy should also be examined as a possible key explanatory factor.

Youth are also using ICTs to affect national issues, focusing on political change. They are utilizing social media to organize, mobilize and lead action as well as to "bear witness" in order to garner international support for political change in a country. Witness bearing was most dramatically demonstrated in the Arab Spring, but is also true for countries where national issues are perceived by youth as critical, often taking precedence over local issues (Gaza, Tanzania). ICT can provide a voice for youth that have no voice in a closed political regime.

Conversely, ICT is also used by governments to monitor the public and as an instrument of social control, with notable examples including China and Syria.

7. Technology

The UN-Habitat framework document for ICT-enabled urban governance points out the importance of technology choice when designing specific services or applications. Our research has revealed the need to go further in developing this point as a key cross-cutting factor relating to youth and ICTs. Communications technologies differ greatly in the opportunities and limitations they pose for youth and local government.

Mobile broadband has the most promise to increase internet use in developing countries. While currently only available to a small percentage of people, smartphones are going down in price with steady movement towards inexpensive models that will increase affordable, mobile internet access with concomitant prospects for magnified impact on governance. For example, in South Africa, mobile internet users are dominated by young people with 94% aged between 13 and 34. Dubbed the "Mobile Only Internet Generation", a survey revealed that

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Youth are a dynamic force for ICTs, while local governments remain largely static. As long as they remain outside the ICT revolution, local governments are vulnerable to national government intrusions. Youth are not only far ahead of local governments in the usage of ICTs and their application to socio-political issues, they are now and could be an even greater force to push local government toward ICT reform.

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59 Low-cost semiconductor technology has pushed down the price of a basic smartphone to below $100 in emerging markets over the past year.
Mobile internet access is the only access method for many users across Africa.\(^{60}\)

Low rates of broadband internet access in developing countries limits the possibilities for advanced, data-intensive forms of ICT-enabled governance. ITU concludes that limited bandwidth and low internet speeds might be one explanatory factor for low degree of e-government service usage among African Internet users, as this type of application requires a minimum capacity and speed to offer a good user experience.\(^{61}\) However, when it comes to ICT-enabled governance, current practice reveals that youth, industry and service providers have found creative, low-cost, low-bandwidth solutions (as discussed above, i.e., Facebook Zero, SMS tools)\(^{62}\) to overcome access barriers and allow wide participation.

According to current trends (as reported by ITU), the best opportunities for effective impact of ICT-based governance initiatives among youth are through mobile phones and social media. Low-end, youth-friendly mobile phone technologies are the most accessible to youth. Mobile phone operators are contributing to high levels of youth participation in social media through special youth-targeted marketing offerings (i.e., Facebook access as part of cellular package). Industry is also pushing this trend. Competition for low-end users has spurred design of low-cost options heavily adopted by youth.

One preliminary conclusion on this score is that initiatives on ICT-based governance should weigh the benefits and costs of high end, versus low end systems. For instance, lower-cost 2G mobile phones offer the widest reach, while more expensive smartphone based applications offer the most flexibility and features. The extent to which broadband internet access is a decisive factor in enabling meaningful engagement of youth in urban governance requires further exploration. A spectrum of ICT-enabled governance practices needs to be outlined, ranged according to data-intensity and corresponding technology requirements and assessed for efficacy. Further research is needed on such questions as the extent to which current solutions based on simple mobile phone technology are effective for urban governance and what the potential is for broadband-based initiatives.

Two final points on technology are worth noting. Social networking and user generated content are key online activities for youth, and these are logical entry points for developing effective ICT-enabled governance mechanisms for youth.\(^{63}\) The proportion of Internet users engaging in these activities has reached very high levels, with over 70% of users in Colombia, Brazil and the Russian Federation reporting using the Internet for these purposes.\(^{64}\) The challenge here will be to understand how to use these platforms effectively for meaningful youth engagement and what conditions are necessary to ensure successful implementation.

Second, technology is not enough. In order to be effective, ICT-enabled governance for youth must be relevant, attractive and exciting. These are factors that mobile operators have discovered. In order to really reach a wide group of youth (beyond the motivated leaders), single, vanilla-flavored platforms are unlikely to be effective.\(^{65}\) The mobile industry knows

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\(^{62}\) Some social networks have launched specific platforms to optimize user experience where internet speed and connection are limited and to adapt to 2G mobile access. Facebook launched Facebook Zero in 2010 allowing users to access a mobile version of Facebook, with data-intensive features placed a click away. See Measuring the Information Society 2011, ITU, Geneva Switzerland, p. 126. Most youth interviewed mentioned these services as key drivers to widespread social media usage among youth.

\(^{63}\) “Social networking and user-created content are now among the main online activities in which young people especially (who constitute the majority of the population in developing countries) are actively engaging…” Measuring the Information Society 2011, ITU, Geneva Switzerland, p.3.

\(^{64}\) Ibid.

\(^{65}\) This point was emphasized by all youth councils and organizations engaged in the consultative review of this document.
that young customers value quality service, attractive features and applications that are fun and engaging. A senior manager at Orange suggested the consideration of "gamifying" mobile governance programs for youth in order to keep them engaged. "It is not enough just to use the phone, you need to constantly give young people good reasons to take an action or do what you want them to do, there needs to be something in it for them."\(^{66}\) A successful example is the “Block by Block” project that creates real-world environments in Minecraft, a popular online game, and lets the young people that live in these environments step in and show urban planners what they would like see changed. Implemented as a partnership between UN-Habitat and Mojang (software company that developed the Minecraft game), the first pilot project is already under way in the Kibera slum of Nairobi.\(^{67}\)

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**Shujazz FM: Hybrid Media for Youth Empowerment**

Combinations of mobile telephony and ICT together with traditional media such as radio and print offer effective ways to reach wide audiences while converting one-way communication paths into two-way conversations. An innovative media platform aiming to affect positive social change among youth in Kenya, Shujaaz FM is a cartoon series delivered through comic books and integrated with FM radio, social media and SMS. Every month, a different story is told through the cartoon characters, each with a specifically-designed social change message. Shujaaz has partnered with over a dozen stations around Kenya to broadcast Shujaaz FM audio stories. Young listeners are encouraged to send SMS-texts with opinions and reactions and each of the characters in Shujaaz has a Facebook fan page, with a dedicated staff person responding to youth comments, questions and concerns.

The comic book has a circulation of 650,000 distributed through a national newspaper and Safaricom kiosks. Partnerships have been forged with government agencies and international organizations to develop campaigns encouraging positive youth engagement in government, among other issues. For example, Shujaaz is currently developing a game through Facebook to encourage participatory youth budgeting in cooperation with the World Bank. It has also partnered with USAID to raise awareness and mobilize youth to be proactive in shaping effective spaces for youth engagement in county government following the implementation of Kenya’s new devolved governance structure.

Source: Interview, Everlyn Kemunto, Head of Knowledge & Learning, Well Told Story. http://www.wts.co.ke

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\(^{66}\) Interview with Giuliano Stiglitz, July 2012.

ICT-based participation tools also need to be user-friendly, customized to the specific nature of youth-municipal interaction in a given context. For example, in locations such as Oslo, Norway where youth engagement structures are in place, current ICT tools for youth to review municipal council policies and discussions are difficult to use and therefore ineffective. Sigri Stokke Nilsen, Coordinator of the Oslo Youth Council, notes: "We do not have the capacity or resources to search through the complex online database of municipal deliberations in order to provide youth input or feedback – a simplified, institutionalized youth consultation web page that is easy and interesting for youth could really make the difference."68 This calls attention to the importance of involving youth in the design and promotion of such tools as a key ingredient to successful outcomes.

8. Additional Considerations

An ethical component enters into this debate. Reports in the literature as well as anecdotal evidence from the cases show the need to protect youth interests when designing ICT programs for governance. ICT services designed to enhance the knowledge and development of young citizens also open opportunities, both legitimate and excessive, for commercial interests. Some attention must be given to regulatory considerations to minimize moral hazard that may arise as local governments become more aware of commercial opportunities involving youth and ICT. The ITU is focusing on this issue as a priority in its programs, as remarked by a Senior Program Officer leading youth programs. "ITU has recently introduced this ethical component in its ICT work. ICTs can be very positive for youth, but also very negative."69

It has been reported that the gender gap in ICT usage for the general population is largely diminished when it comes to young populations. 2008 data on ICT use by age and gender show little difference between the proportions of young male and female users for most countries. Male and female rates of Internet use in the 15-24 age group are very similar, with a few exceptions. A significantly higher proportion of males used the Internet in Azerbaijan, Occupied Palestinian Territory and Serbia, while more females were online than males in Cyprus. The gender difference for computers and mobile use follows the same pattern, with similar levels of use for young females and males, with only one country demonstrating a significant gender gap for mobile phone use (Occupied Palestinian Territory).70 This data is based on the latest available statistics disaggregated by both age and gender by the ITU in its 2008 report. It would be instructive to conduct an updated examination of gender and ICT use among youth across a variety of geographical settings and functional areas to assess whether these conclusions are still valid and where gaps may exist.71

Despite the lack of gender-based data, there is a general consensus within ITU that ICT remains a male-dominated domain, particularly when it comes to career development. As a result, they have launched ‘Girls in ICT’ portal designed to encourage girls and young women to prepare themselves for a career in ICT as a means to economic empowerment. Education has been cited as one of the key factors determining capacity and knowledge of ICTs for girls.72
Beneficiaries during a training held on the 18th January 2011 in Bulunkutu Maiduguri, Borno State of Nigeria © UN-Habitat
CONCLUSIONS AND POLICY RECOMMENDATIONS

- Youth: Champions of ICT
- The Mobile Revolution
- Narrowband Social Networking for Mobile Participation
CONCLUSIONS AND POLICY RECOMMENDATIONS

Framework: Youth, ICT and Urban Governance

The chief aim of this paper is to identify elements of a framework that begins to capture important dimensions of youth and ICT-enabled urban governance. The analysis has concluded that the four pillars of ICT-enabled governance identified by an earlier advanced UN-Habitat draft paper represent a solid basis for work. But the cases reviewed in this analysis suggest that the dynamic creativity of youth and ICT requires additional elements to be taken into account. Three cross-cutting dimensions are noted: 1) capacity and leadership among local governments, and especially their ability to respond to youth-initiated contributions that deepens the ability of youth to relate to local government, their communities and each other; 2) inter-governmental relations, and particularly the importance of connecting levels of government with each other in relation to ICT-enabled creations by youthful citizens, i.e., aligning policy, supporting local efforts to catch up with youthful citizens, and taking care not to undercut such principles of subsidiarity in local government affairs; 3) technological dimension, particularly the rapidly changing devices such as hand-held platforms, smartphones and their eventual integration with broadband, all of which portend an even more rapidly evolving set of tools with the power to change the nature of relationships between young citizens and government.

It is important to remember that ICT is a tool, not a full-fledged solution to the challenge of youth engagement. In order for the potential of ICT to be leveraged, the necessary processes and structures for youth engagement in the “physical world” must be present. In the words of one ITU analyst, “If young people are mobilized on social media but there are no official channels to absorb this energy, then it runs the risk of becoming a bunch of noise.”73 The opportunities for capturing the youthful activism via ICTs appear to be vast, but careful analysis needs to be carried out to understand the conditions and proper governance frameworks that are conducive to successful youth engagement.

The research conducted to date informs the following key policy recommendations for consideration:

Sea change: Putting youth and ICT in governance on the agenda

Viewing youth in connection with ICT and local government underscores an ineluctable fact about modern and future urban populations: they are youthful, and although other, older populations also represent distinct and important concerns, cities are increasingly peopled by the young. ICT happens to be a correlative factor in this picture, and even without it, governments everywhere should be compelled to address the youthful elephant in the room. Governance needs to be infused with a much stronger sense of the young: to account for their needs, be responsive to their concerns, and to harness their energies. But because ICT is an increasingly

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powerful tool that helps to leverage their presence, governments everywhere are opening their eyes to a new reality of youth armed with ICT tools, particularly mobile phones.

In effect, youthful citizens with mobile phones are governance game changers, authors of a generational-technological revolution. The dramatic events of the Arab spring are a sharp illustration of this new reality, but they may only be the bellwethers of much more quiet and far-reaching change playing out on a global stage. Billions of young people are interacting every day, accounting for a significant fraction of all internet traffic, up to 10 percent in India, for example. Gauging the stakes for governance, not to mention opportunities to refreshing democratic participation, is not easy, but they are almost certainly large. For these reasons, national and international policy makers will want to begin to plumb the present and prospective impact of these changes. How impactful is the change likely to be in the short run on governments at all levels? What kinds of offline governance structures can be put in place to absorb the youth-driven ICT activity and facilitate impact? And what about the longer term consequences, as young people and their devices move through the life cycle, marrying, forming families, and looking for the basic expectations of life in shelter, security, employment and well-being?

**Extend the impact of social media on local government**

The cases reviewed in this report suggest that young citizens naturally adopt tools most meaningful to them, and mobile phones with social media allow young people to engage local government on their own terms, mostly in expressing voice and exclaiming their presence in community life. A logical policy step would be to build on the inroads created by means of social networks to extend into areas of government that have so far been impacted less by ICTs and youth, such as improving local services and transparency and fighting of corruption. In terms of practical application, it would be useful to either add a youth and ICT component to existing offline programs or alternatively, to add a youth component to existing ICT-based initiatives focused on local services and transparency. In these areas, with proper policy and creative incentives, young citizens could represent a new front in the battle against corruption and the campaign to promote democratic public choice-making.

**Capacity building for local governments**

The capacity gaps that have been laid bare in this research makes a compelling case for training and capacity building in local governments in digital communications. And because digital exchange comes so naturally to young people, and is so alien to older personnel who form the backbone of local government bureaucracy, a peculiar tension is created that needs to be addressed. Governments have been encouraged to support decentralization policies by offering incentives to retain experienced personnel at the local level in the interests of efficiency in local government, continuity in programs and maintaining of service delivery. Yet the most dynamic segment of citizen taxpayers are creating a tsunami of change in communications that older generations of municipal personnel are simply not equipped to handle. The dilemma then is to offer remedial training for senior staff, or to buttress support in ICT, or both, in order to catch the wave of change and make the most of youthful energies pushing forward in many areas of reform. Such training should go beyond basic ICT skills and focus on how ICTs can be harnessed not just for good governance, but also for youth-focused policy outcomes. Input from youth would be needed in order to develop, discuss and assess ideas for ICT applications and programs that can be implemented at the local level.

It may be worth exploring the possibility that municipalities which have already successfully implemented some form of e-governance...
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possess greater capacity to implement youth-focused ICT governance than municipalities that have yet to begin any type of ICT-enabled processes. In other words, are municipalities with experience in e-government more ready to take on mobile government (m-government)? Likewise, municipalities that already have fairly well-developed policies and structures for youth engagement might have better chances to effectively leverage ICTs for enhancing performance in terms of youth participation. Is the existence of youth engagement policies and governance frameworks a pre-condition for applying successful youth-focused ICT-enabled governance programs? Can this be something that is developed simultaneously (offline & online youth engagement initiatives)? And what about the other way around – can the lure of ICT and its popularity among youth help ignite the establishment of youth engagement practices?

Another dimension of youth-local government relations related to capacity concerns the volume of traffic that mobile platforms in particular have brought to the citizen-government relationship. Contacts that were once annual or monthly are now daily in frequency, and the pace and volume of exchange will expand with the increased access to ICT devices. Accordingly, there is a need for greater municipal capacity in terms of staff time, skills and attention to measure, manage and take advantage of the increased flow of communications.

Level the playing field between national and local governments in ICT

A particular area of concern is the ironic outcome that national levels of government are in specific cases more prepared and better equipped to respond to youthful concerns voiced at the local level. The instances of national intervention in local affairs, however commendable in terms of clearing away bureaucratic obstacles or remediating kinks in policy or practice, nevertheless suggest a troubling prospect of undercutting local sovereignty or worse, technological evisceration of subsidiarity. The policy implications are protean. One immediate policy step would be to redouble efforts to encourage national governments to re-balance an uneven playing field by helping local governments to be better equipped and better prepared to address youthful concerns at the local level on their own. This should be supported by integrating local ICT components in national ICT plans, or increased “decentralization” of youthICT strategies, bolstered by budgetary allocations and devolution of authority. Another route to safeguard local sovereignty is to redouble policy efforts to foster new young leaders in local government and encourage emerging leadership among youth.

Support crowd-sourced data for public goods

Local, national, and international agencies should join in a coordinated effort to harvest the best of youthful contributions to local government by such means as social media, crowd-sourcing and coordinated use of mobile platforms as a way to revitalize local democracy. User-generated data through social media and data-gathering apps provides many new opportunities to develop data that helps local governments understand preferences of citizens, as well as to monitor service delivery and provide feedback from users to government. Many good examples have emerged in the 50 cases examined, and even though these are a very small number, they provide ample evidence on which to mount pilot projects to develop more systematic and replicable tools for wider use.

Youth and ICT in international assistance

International agencies should move beyond the fixation on the mobile platform explosion and engage more fully in the obvious users of these devices: whether they are young, female or disadvantaged. International support should aim to foster increasingly productive applications and to promote tried and true forms for wider adoption. National governments can play a similar role by supporting early reformer local
governments and by celebrating private and individual contributions to the public good by means of ICTs.

**Public-Private Partnerships**

Public-private partnerships can be a strategic mechanism for developing and implementing ICT-enabled youth governance programs at the local level. International agencies, together with national and local governments, should engage the private sector in partnerships to develop new tools and help local governments get up to speed. Possible roles of the private sector could include helping to develop applications and promoting existing or new applications. For example, joint marketing campaigns and promotional packages targeting young people can be developed that include mobile devices bundled with governance related applications or programs with payment incentives that will attract youth and facilitate engagement.

**Research on youth**

In research as well as in policy, the specific needs of youth, as the largest, but distinct, segment of the adult population, deserve more attention. Policy makers at all levels should look to support research that explores the concerns of youth, digs deeper into the ways youthful citizens connect to each other, and understands how they view their communities and their government. There is a need to more fully understand the gender picture concerning youth and ICT with respect to parity of use, differential impacts and possible opportunities for gender-specific issues.

**Beyond mobile platforms**

Because broadband internet access seems to be a decisive factor in enabling meaningful engagement of youth in urban governance, policy makers should review the spectrum of ICT-enabled governance practices and explore several avenues. One is to rank them according to data-intensity and corresponding technology requirements. Another is to assess their respective levels of efficacy and to weigh the costs and benefits of broadband investments they entail. The broader policy questions are to what extent are current solutions based on simple mobile phone technology effective for urban governance? What is the potential for broadband-based initiatives?

**Wider sample needed**

More comprehensive data coverage by region and technology needs to be developed in the future. Major global reports on ICT usage do not provide a systematic youth dimension or focus, particularly when it comes to data. This can be viewed as part of the longstanding need for increased awareness regarding the broader issue of youth participation in development, still often overlooked or sidelined. This data is necessary in order to design effective programs and draw informed conclusions. The youth dimension needs to come to the forefront of these discussions in order to ensure effective, serious policy relating to youth participation through ICTs.

**Moral hazards of commercial ICT**

Finally, policy makers should review the moral hazards of government, local and national, pursuing the advantages of ICT when strong commercial interests are pushing expansion and vitally interested in the outcomes of wider use.
1. **Khanyisa Youth Network, South Africa**

*Project: Drive Out Philippi Radio (Recipient organization of UN-Habitat Youth Fund)*

ICTs allow for the effective scaling up of youth participation efforts and their increased inclusion. Young leaders from Khanyisa Youth Network (KYN) in South Africa have set up a mobile local radio station to give the youth of Philippi Township (49% of the population) a platform through which to discuss and voice their opinions about the struggles and dreams of their local community. While these voices are still dwarfed by larger national radio programs, local government is starting to listen – and respond.

The initiative involves over 30 local youth groups including nearly 1,000 activists, the majority of which are disadvantaged and live in informal settlements. In operation since 2008, the KYN has had been limited in its ability to impact youth on a large scale. The establishment of a radio station responded to this need, reaching over 300,000 people who listen to the program’s partner local radio stations every day, including the poor and unengaged. A core group of youth is being trained in journalism, community engagement and ICTs in order to generate the content for the broadcasts and run the station. Mediums such as music and videos are employed in order to attract listeners. Youth access Facebook and SMS-based applications such as “Mxit” (free instant messaging application developed in South Africa that runs on multiple mobile and computing platforms) through their mobile phones to facilitate consultation, discussion and planning among the youth prior to live broadcasts.

Through the broadcasts, youth are being given a unique opportunity to learn about local issues and express their views. Is local government listening? They are mostly tuned into national radio stations and a focused effort is therefore being made to encourage them to listen to this grassroots platform. The more critical challenge is to go beyond listening and encourage local government to take responsive action to the needs and concerns voiced.

A recent positive response by the local government to one of the radio discussions offers hope for the impact of this initiative and others like it. A discussion was held on the topic of job opportunities where it became apparent that many young people are unable to work because they drop out of school and do not have sufficient funds to continue their studies. After the radio discussion, the Municipality of Capetown responded by issuing 50 scholarships to young people who would like to continue their studies and lack the necessary funds. This first response has encouraged the youth of KYN to heighten their voices and augment efforts to engage local government in finding solutions to the core challenges of the young citizens in the communities they serve.
2. Tanzania Development Forum for Youth, Tanzania

Project: Y2Y Information & Discussion Platform - vijanaforum.org (Recipient organization of UN-Habitat Youth Fund)

Young people are not waiting for governments to create ICT-enabled tools for them. They are leading the way in utilizing technology for both the sharing of information and generation of content relevant to their lives. Young leaders in Tanzania have established an online forum, vijanaforum.org (translated as “youth forum.org”), as a one stop information center for youth, as well as an interactive discussion forum. Information necessary for the positive development of young people is posted including documents, reports, news, and audio files—largely accessible through mobile phones. In addition, youth are interacting with one another by posting their own content, including photos, videos and discussion topics. The forum is enabling young people to take a proactive role in building awareness regarding issues affecting their lives, make informed decisions and catalyze others to take action. Discussions are under way to possibly merge this portal with the information center run by the municipality, offering an opportunity to leverage this effort for enhanced urban governance.

Portals like vijanaforum.org are part of the change that has taken place in the past few years where the rapid spread of information coupled with the surge in mobile phone usage is markedly increasing political awareness and civic engagement among youth. Project organizers are looking to take the portal to the next level by integrating content and interactivity more closely with simple mobile phones. Software services such as ‘freedom fone’ can be customized for youth needs and interests. For example, the software can be utilized to create an interactive voice response system where young people can share views, receive legal assistance and more.

Open Governance Partnership – Youth Impact Policy through ICT-based Campaign

Tanzania is a member of the Open Governance Partnership, launched by President Obama and Brazilian President Dilma Rousseff to promote openness, fight corruption and energize civic engagement. The Government of Tanzania set up a website, SMS number and post box to elicit ideas from citizens to be integrated into the national strategy paper to be submitted at the 2012 Rio+20 Conference in Brazil. Youth were excited by the willingness of the government to adopt new ways of engagement, and led a campaign for to enact a Freedom of Information bill in the country. Portals like vijanaforum.org were used to spread the word and encourage youth to participate. The government responded positively and included this issue in the country plan. This type of ICT-enabled governance initiative, adapting to the language and digital communication platforms of youth, are demonstrative of the potential for replication on the local level.

3. Map Kibera, Kenya

(Recipient organization of UN-Habitat YounF Fund)

Youth capacity for innovation through ICTs is bringing new value to government, demonstrating the potential of younger populations to serve as key assets in local development. Young people from the large informal settlement of Kibera, Nairobi, produced the first comprehensive map of their community in 2009 using digital open mapping techniques through the ‘Map Kibera’ initiative. Since then, this effort has expanded to media and local news reporting groups through the Kibera News Network and Voice Kibera where local youth generate their own content through handheld video cameras, SMS tools and Ushahidi software to map local stories and reports. This is facilitating youth access to information that concerns their
lives, providing them with an informed basis from which to take effective social action.

MAP Kibera is engaging and empowering local youth, many of whom had been idle members of society unable to find meaningful employment or avenues for civic action. A strong community engagement strategy is adopted, mobilizing citizen groups, stakeholders and government representatives in a way that fosters community ownership of the map. This has energized community based organizations that are using the new information to develop their own projects across a wide range of issues – education, health, water, sanitation, security and more. Fresh insights into spatial priorities and needs have facilitated effective planning and resource allocation in addition to new opportunities for cross-sector cooperation.

Moreover, Map Kibera has provided the government with instrumental tools for informed policymaking, service provision and security – helping them overcome challenges. For example, a district committee of the national Ministry of Internal Security is using the organization’s security map to carry out their peace keeping activities in Kibera and throughout the region. Equipped with an in-depth understanding of the social and geographical landscape of the slum, they are now able to patrol locations that they previously could not. Going a step further, the government committee also involves Map Kibera youth leaders in their security meetings, perceiving youth to be at the center of all issues in the community.

“Our maps provided first glimpses into the reality on the ground. Most slum areas are considered inaccessible and risky, but suddenly we opened this space up to the government and enabled them to see the community structures, the people, the challenges and opportunities – it was no longer just a forest, but a place where hundreds of thousands of people live. This helps them to plan for services and resource distribution.” – Kepha Ngito, Executive Director, MAP Kibera

Interest from the local government administration is growing, but youth describe a slow process of any type of actual engagement. The County Government of Nairobi can identify the value of MAP Kibera networks and tools, but limited capacity for ICTs and adherence to traditional governance mechanisms have been cited as barriers to progress.

4.  Palestinian Friendship Center for Development, Gaza

Project: “Young Reporters for Citizenship” (Recipient organization of UN-Habitat Youth Fund)

ICT is a powerful and increasingly essential tool for active citizenship among youth. Students from four universities across the Gaza Strip gained civic and media skills through the “Young Reporters for Citizenship Project” implemented by the Palestinian Friendship Center for Development. Participants engaged in nearly 100 hours of training on issues such as democracy, human rights, citizenship and gender coupled with ICT skill-building focusing on internet usage, social media, blogging and online journalism. The program is empowering young Palestinians to express their views, communicate with other youth and enhance their role as active citizens.

The project has created a Facebook Page, through which participants and their peers utilize their digital media skills to advocate both local and national issues, ranging from unemployment and education to prisoners and the Arab-Israeli conflict. Mobile phones serve as a widespread vehicle for advocacy among the broader youth population in Gaza. Basic handsets are utilized to send SMS messages that are then transferred to Facebook or other social media platforms without the need for an internet connection.
Training and awareness raising among youth on how to use these tools for civic action and governance can scale up the impact of these efforts. The power of social media to reach the international community regarding national issues has been clearly demonstrated in the Palestinian case, but the impact on local issues has been limited. Local government in Gaza has yet to adopt ICT tools which remain an almost exclusive youth arena. This points to the need for ICT training and capacity building among municipal staff in order to ensure the efficacy of ICT-enabled active citizenship on the local level.

**Social Media to affect National Change**

Inspired by their peers across the Arab world, youth from the West Bank and Gaza effectively used social media to pressure their leaders to achieve reconciliation. ICT provided a neutral platform to cross physical and political borders in order to advance Palestinian unity. Social media was utilized to organize youth-led protests dubbed the “March 15 movement” which brought thousands of young people into the streets of Ramallah and Gaza to advocate for national unity. Immediately following, the Fatah-led Palestinian Authority and Hamas-which have been divided since 2007- rapidly entered into a renewed process of reconciliation commencing in an agreement signed in Cairo in April 2011.

5. **ICT Media Center and Internship Program, Surabaya, Indonesia**

ICT has come to represent a must for the internal workings of the Municipality of Surabaya. ICT initiatives have been created on the initiative of the former mayor and enjoy continued support from the present mayor. The internal system links 20 city departments together and has smoothed operations and communication. The Ministry of Commerce awarded the city with a prize for the best ICT of any municipality in Indonesia. For instance, anyone going to a hospital or clinic will have medical records on-line and linked to an ID number. The same goes for police, who can track criminal records, citizenship status, welfare programs and special needs of the poor.

**Media Center**

The heart of the system vis-a-vis citizens and youth is a central clearing house for public complaints, suggestions, comments and other communications from the public. These reach a central point whether by fax, phone, SMS, facebook, Twitter or email. A standard operating procedure has been put in place to handle complaints and requests. A response must be issued within 24 hours. Integration is achieved between IT supporting systems, the 3 to 5 human resources in Media Center, and the 45 people of Provision of Information Center and Customer Complaint Handling Team members, whose are the civil servants from all the Municipality of Surabaya's agencies. In addition, all the human resources in Media Center are youth, and the Provision of Information Center and Customer Complaint Handling Team members are mostly youth. Their memberships are also strengthened by the legal regulation of Mayoral Decree. In this way, the assurance of the response, which must be issued within 24 hours as the standard procedure can be fulfilled.

The idea arose from the quick call response offered by McDonalds in which phone delivery reaches the customer within an hour. The system has won recognition from National Public Service Award in 2011 (made a final list but was not selected as top). In spite of the budget limitation, Media Center managed to attain positive response. It strengthened the bonding between government and citizen. It affects in the growth of citizen trust and participation especially youth by using online media such as Facebook and Twitter, indeed the sense of belonging of citizen toward the city and the government. Eventually the good government can be created toward the transparency of information.74

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Youth Specific Programs

Two kinds of youth specific programs have been developed by the Municipality – one internal and one external to the city.

Internal - Internship Program.
The city maintains an internship program on ICT related issues in the city for youth from high schools and universities. Internships last one to three months. 70 interns are engaged at any given time, 20 to 30 of them university students working on a final year project. Interns learn how to do programming, web design, networking and project implementation from within the ICT department. The internship program has a facebook page, with applications available online and some of the internship work itself conducted online. This program is in strong demand not just from Surabaya high schools, but from all of East Java.

Internship tasks include problem solving for equipment and other aspects of internal communications of the city departments, such as fiber optic connections, networks, modems, and other equipment troubleshooting. For instance, inspecting and fixing connections to wifi modems, routers and PCs that operate in public spaces. The Communications Department also teaches students how to conduct news and PR.

In short, the internship program works both to offer students a hands-on experience with ICT and helps the ICT department do its work.

External - Broadband Learning Center.
Though not specifically designed for youth, this initiative helps youth and other citizens become digitally literate. The center is a partnership between the telecom provider in Java and the city. The telecom company finances the program for the first two years, after which the city will operate and maintain activity. Five centers are operational, two in public parks and three in flats on a regular and walk-in schedule. The centers offer structured classes and access to equipment for self-guided exploration using PCs and internet. Classes cover the basics of internet, email, websites, blogging, and other courses related to youth interests, home makers and businesses.

The centers are open to all citizens every day from 8:00AM to 4:00PM, including weekends. They get instruction on web pages, blogging, internet searching, club and group chats (skateboarders, BMX) related to their needs. An urban farming group makes use of centers to help with planting techniques and to identify suppliers of seed and markets for their fruits and vegetables, shipping costs, etc. Visits are in the 1000’s per month.

Other ICT Programs
The city also maintains government and business services online. For instance, business licensing and other routine transactions are processed online and integrated within the city departments. Any citizen can type in his or her unique identification (NIK) number which will then link to all public documentation including the business license, medical records, welfare requirements and the like. ID cards are available for anyone in the city over the age of 17. Job seekers also over the age of 17 can access a municipal data base system for assistance in job searches.

For business licenses, the program has recorded a 200 percent increase (from 100 to 300 per year) between 2009 and 2011. There was no evaluation of applicants by age.

Other External Programs

In addition, the city offers free wifi in the parks. Parks and open space in the city are a major part of the current mayor’s program that doubled the area for parks. All parks and 640 schools have free wifi.
6. **Kigali, Rwanda**

ICT-enabled governance is having a greater impact on youth at the national level than at the local level. New modes of youth participation and communication between youth and national leaders have not effectively taken root with local government. Rwanda, a recognized leader in ICT for development, provides a stark example of this trend.

Under the leadership of President Paul Kagame, Rwanda has made ICT a national priority, having made significant investments designed to make ICTs accessible and affordable on a massive scale. Aspiring to build an ICT-driven economy, the government completed a rollout of a 2,300 kilometer fiber optic telecommunications network across the country and has distributed free laptops to thousands of school children as part of the One Laptop per Child project. Government incentives allow citizens to purchase mobile phones tax-free and even give out mobile phones free of charge in rural settings.

Beyond these initiatives, Kagame has set a powerful personal example of how leaders can utilize ICT tools to engage with their citizens, listening and responding to their needs. Young Rwandans are amazed to see the President himself tweeting on their blogs, responding to their SMS messages and inviting them to take part in issues that concern them. Such interaction was unthinkable just a few years ago. National ministers are following suit, opening up their ICT channels to these avid technology users to express their views and ideas online. Any citizen can send an SMS to a minister and it translates into a tweet so that they can read it, making this type of social media accessible to wide audiences, particularly youth.

The case of Rwanda gains increased significance due the explicit focus of its ICT strategy on youth. This compares with many countries where youth benefit from ICTs simply because they are the majority of those using online tools, without consideration of youth-specific issues. Illustrating this point, Kagame merged the national ministries of Youth and ICT in April 2012 and appointed a new Minister of Youth and ICT. This is a groundbreaking move both in terms of ICT and youth, with youth ministries commonly grouped with sports or culture. As stated by the new youthful minister, Jean Philbert Nsengimana, “The merging of the ministries gives youth a better platform to embrace innovations, in terms of applying ICT tools, techniques across different sectors, both social and economic.”

It is puzzling to note that these extraordinary national developments are not reflected in the policy and practice of local government in Rwanda. The Municipality of Kigali is only beginning to plan for developing ICT tools for government-citizen interaction, with no specific consideration or strategy regarding youth in the context of governance. Youth issues still remain in the confines of a specific department (in this case, good governance), with ICT programs focusing on skill development mostly in schools.

Why is this so? The research points to two main factors: capacity and local citizenship. The issue of policy is another key factor that needs to be considered.

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77 Plans include the integration of social media in the city website enabled with SMS service as well as a live telephone line to express views and opinions to overcome literacy limitations.
Capacity
According to Kigali's ICT Manager, there has been limited capacity at the local level to integrate ICTs in governance, with only one person handling all ICT issues in the municipality. Demand from lower levels of governance – the districts – will begin to change this, with plans for training new ICT staff on the district level to integrate ICTs more heavily into local governance. However, there is still a long way to go for this overall shift to greater ICT-enabled local governance to take on a youth focus. Such a shift will require similar efforts of capacity building – this time for youth issues and youth engagement.

Local citizenship
Online media and civic interest in national politics is another factor that has led to this local-national ICT dichotomy. Citizens generally take a greater interest in national political issues and elections to which they respond on national media and online outlets. Therefore, there seems to be less of a demand for more local ICT platforms. Several youth (Rwanda, Gaza, South Africa, Tanzania) noted that both citizens (young and old) are mobilizing less for community level issues, but all pointed to the critical importance of this trend and asserted their expectation that this will develop in the future.

"You don’t see debates or ways to elect local leaders on the local level, people relate more to policies and issues on a national level. I think in the coming years this will develop naturally. Once people get used to communicating about bigger national issues, they will say ‘there are things happening in my neighborhood and I want to address them.’ " - Sangwa Rwabuhili, Youth Leader, Kigali

Decentralized ICT Policy
One question that needs to be addressed is why national ICT governance plans and policies – particularly relating to participation – are not being integrated in local political and administrative governing frameworks. Is this a larger issue of less ICT capacity in general at the local municipal level than at national level? Or does it have to do more with policy? Limited budgets and staffing?? Or perhaps a matter of leadership?

National and local policymakers, community leaders and youth must ask themselves what conditions are necessary to help facilitate this move from a greater national focus on youth engagement to a more local one, as in the case of Rwanda. National ICT strategies relating to participation and inclusiveness should outline specific measures to integrate ICT-enabled governance in local political and administrative governing frameworks. This should include resources for capacity building of municipal employees, localized initiatives relating directly to local issues of municipal governance, youth-focused programs and more.

"The national government has an aggressive ICT policy, with all major government agencies using social media. There is a Q&A session with the President on You Tube. This is very much missing on the local level – there is much room to develop such tools beyond the ministries on the local government level. There is still a great need for local government to communicate with youth, this is not happening right now."

-Sangwa Rwabuhili, Youth Activist, Kigali
7. Democratic Youth Foundation, Yemen

**Project: Digital Expression (Recipient organization of UN-Habitat Youth Fund)**

The Democratic Youth Foundation is utilizing mediums such as film and online journalism to help generate awareness of the critical challenges, needs and issues facing young people in Yemen today. 20 youth were trained in film production, including scriptwriting, lighting, editing and directing. These activities enabled participants to produce four documentaries focusing on key social issues facing youth. Two of the films were selected for screening in the Dubai Short Film Festival, with one of the films receiving third place for the best short film.

Training was also provided in news reporting, including writing, investigating and online media outlets. Participants were then able to prepare and publish news reports raising awareness on issues including conditions of local hospitals, impact of municipal waste on the local environment and the impact of Yemeni politics in the region. The reports were also published on the organization’s website. The project culminated in the establishment of a “Youth Media Center.” The Center provides equipment necessary for continued film and journalism training and activity, including video cameras, computers, lap top computer and furniture.

Participants are currently continuing program activities by producing two new films addressing the current political crisis facing Yemen and how it is impacting young people.

“African youth possess the energy, passion and dedication to use these technologies to address global challenges and truly benefit from ICT. Our duty as leaders is to build the right environment and promote the necessary investments to allow them to fulfill their potential. Let us not wait another century to recognise that broadband was another missed opportunity for Africa”.

# Appendix II: Case Example Database

<table>
<thead>
<tr>
<th>No.</th>
<th>Area of Governance</th>
<th>Country</th>
<th>Type</th>
<th>Case</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>UK</td>
<td>b&gt;y</td>
<td>Apps for Good - offers unemployed youth a free training course on how to design, code and build social apps.</td>
<td><a href="http://mashable.com/2012/04/18/facebook-apps-for-good/">http://mashable.com/2012/04/18/facebook-apps-for-good/</a></td>
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<tr>
<td>2</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>West Bank</td>
<td>n&gt;y</td>
<td>Ruwwad ICT youth programs provide ICT instruction, social networking and engagement via ICTs. Developed online Palestinian Youth Portal</td>
<td><a href="http://www.ruwwad.org/index.php?rt=SitePages/ICTYouthProgramming">http://www.ruwwad.org/index.php?rt=SitePages/ICTYouthProgramming</a></td>
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<td>3</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>India</td>
<td>y&gt;g</td>
<td>Smart Vote - (Bangalore Political Action Committee) Using IT and mobile phones for voting registration participation, driven by and focusing on youth.</td>
<td><a href="http://www.smartvote.in/">http://www.smartvote.in/</a></td>
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<td>5</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Nepal</td>
<td>n&gt;y</td>
<td>Voices of Youth teens using Text messages (SMS via toll free mobile number) for self-expression and peer support on a radio show heard by 6.3 million youth.</td>
<td><a href="https://smsinaction.crowdmap.com/reports/view/137">https://smsinaction.crowdmap.com/reports/view/137</a></td>
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<td>6</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Rwanda</td>
<td>g&gt;c</td>
<td>City of Kigali has a toll free number citizens can use to send an SMS to report or express views</td>
<td>Interview with Olivier Mugame, Former Vice Mayor, Kigali</td>
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<td>7</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Mexico</td>
<td>g&gt;c</td>
<td>Vigilante Taxi Driver program taxi drivers use their mobile phones to alert Citizen Monitoring System about accidents, potholes, crimes in progress. Integrates 46 municipal departments and agencies at two levels of government.</td>
<td><a href="http://www.intelligentcommunity.org/index.php?src=ne">http://www.intelligentcommunity.org/index.php?src=ne</a> ws&amp;refno=709&amp;categ ory=Partner+News&amp;pr id=709</td>
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<td>8</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Uganda</td>
<td>n&gt;y</td>
<td>Ureport - through SMS and radio young “social monitors” are sent regular polls, gather data on community services and issues, and receive useful facts for action and advocacy.</td>
<td><a href="http://www.unicef.org/infobycountry/uganda_62001.html">http://www.unicef.org/infobycountry/uganda_62001.html</a></td>
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<td>9</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Global</td>
<td>g&gt;y</td>
<td>Girls &amp; ICT Program - portal to create awareness for young girls of opportunities that ICT education and career development can offer.</td>
<td>Interview with Roxana Widmer-Illiescu, ITU <a href="http://girlsinict.org">http://girlsinict.org</a></td>
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<td>10</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>19 countries</td>
<td>y&gt;c</td>
<td>Participation 3.0 - Fosters development of internet based technologies to improve local participation and transparency in government-community affairs.</td>
<td><a href="http://pages.e-democracy.org/Participation_3.0">http://pages.e-democracy.org/Participation_3.0</a></td>
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<td>11</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Ghana, Sierra Leon</td>
<td>y&gt;c</td>
<td>Sousveillance - public space and public official surveillance by mobile phone camera and video, effective tools in elections in Ghana and Sierra Leon.</td>
<td>Mann 2002</td>
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<tr>
<td>12</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Philippines</td>
<td>g&gt;y</td>
<td>Checkmyschool.org – students use social media (Facebook and Twitter) and SMS to comment, monitor and evaluate their schools and inform the public.</td>
<td><a href="http://www.checkmyschool.org">www.checkmyschool.org</a></td>
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<tr>
<td>13</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>USA</td>
<td>y&gt;c</td>
<td>“Cityforward.org” and “seeclickfix.org” - allow citizens a means to access local authorities share information, and communicate service deficiencies</td>
<td>Cityforward.org, seeclick.fix.org</td>
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<td>14</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Africa</td>
<td>n&gt;y</td>
<td>Epi-surveyor - start with basic $40 mobile phone, making use of SMS based systems to gather and analyze real-time data on health and other services</td>
<td><a href="http://www.episurveyor.org/user/index">http://www.episurveyor.org/user/index</a></td>
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<td>15</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Philippines</td>
<td>n&gt;y</td>
<td>eSkwela Project - provide ICT-enhanced educational opportunities for Filipino out-of-school-youth and adults.</td>
<td><a href="http://eskwela-apc-nstp.wikispaces.com/about+the+project">http://eskwela-apc-nstp.wikispaces.com/about+the+project</a>.</td>
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<td>16</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Cambodia, Uganda, Denmark</td>
<td>b&gt;c</td>
<td>ViewWorld - small private company offering smartphone/mobile data collection for development projects.</td>
<td>viewworld.net</td>
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<tr>
<td>17</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Canada</td>
<td>g&gt;y</td>
<td>Youth Vital Signs - youth vital signs report makes use of questions pushed a cell phone. Has worked well. City checks data.</td>
<td>Youthvitalsigns.ca</td>
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<td>No.</td>
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<td>18</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Gaza</td>
<td>y&gt;c</td>
<td>Young Reporters for Citizenship – trains youth on issues of citizenship and media to impact key local and national issues</td>
<td>Interview with Palestinian Friendship Center for Development. <a href="http://tinyurl.com/d373puu">http://tinyurl.com/d373puu</a></td>
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<tr>
<td>19</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Ghana</td>
<td>n&gt;y</td>
<td>Ghana Decides - foster a better-informed electorate for free, fair and safe 2012 Elections using online social media tools, focusing on youth</td>
<td><a href="http://ghanadecides.com/">http://ghanadecides.com/</a></td>
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<tr>
<td>20</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Kenya</td>
<td>n&gt;c</td>
<td>Huduma - mobile-based communication avenues for citizens to voice, SMS or email service needs or comments directly to authorities and service providers</td>
<td><a href="http://www.huduma.info/">http://www.huduma.info/</a></td>
</tr>
<tr>
<td>21</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Latvia</td>
<td>y&gt;c</td>
<td>Latvian E-Petition - two 23-year-olds built an e-petition system where Latvians could submit and support proposals for new laws and other political changes.</td>
<td><a href="http://mashable.com/2012/05/24/youth-change-world-technology/">http://mashable.com/2012/05/24/youth-change-world-technology/</a></td>
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<td>22</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Peru</td>
<td>g&gt;y</td>
<td>Todos Somos Dateros (we are all information providers) On-line and cell enabled system for citizens to voice their concerns aggregating these concerns and channeling them to city-level decision-makers</td>
<td><a href="http://techpresident.com/news/wegov/23520/peruvian-ngo-discovers-fatal-weakness-civic-participation-platforms">http://techpresident.com/news/wegov/23520/peruvian-ngo-discovers-fatal-weakness-civic-participation-platforms</a></td>
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<tr>
<td>24</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Madagascar</td>
<td>g&gt;y</td>
<td>M-Governance Platform for Youth - supports youth participation in discussions about development in Madagascar using mobile tools based on SMS.</td>
<td><a href="http://www.undpegov.org/sites/undpegov.org/files/undp_mobile_technology_primer.pdf">http://www.undpegov.org/sites/undpegov.org/files/undp_mobile_technology_primer.pdf</a></td>
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<tr>
<td>25</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Many countries</td>
<td>n&gt;g</td>
<td>Open Data Kit - Free and open-source set of tools which help organizations author, field, and manage mobile data collection solutions.</td>
<td>opendatakit.org</td>
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<td>Area of Governance</td>
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<td>26</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Rwanda</td>
<td>g&gt;c</td>
<td>#MinisterMondays Twitter chats - Rwanda’s health minister responds to every tweet received during chats held every other Monday; SMS channel integrated for those with simple phones</td>
<td><a href="http://tinyurl.com/blc4ntb">http://tinyurl.com/blc4ntb</a></td>
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<td>28</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Rwanda</td>
<td>y&gt;c</td>
<td>IGIHE.COM - Youth-created national online news portal - provide news, people posting feedback and twitter with comments on current events</td>
<td>Interview with Olivier Mugame, Former Vice Mayor, Kigali, <a href="http://igihe.com/">http://igihe.com/</a></td>
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<td>29</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Rwanda</td>
<td>y&gt;y</td>
<td>Nibyiza Group - Initiates projects to create new opportunities for thousands of youth in Rwanda through ICT.</td>
<td>Interview with Sangwa Rwabuhiri, Interview with Cedric Umuhire, ICT, Manager, City of Kigali <a href="http://www.youthrwanda.org">http://www.youthrwanda.org</a></td>
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<tr>
<td>30</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>South Africa</td>
<td>y&gt;y</td>
<td>Drive Out Philippi Radio - using radio to communicate with youth through a local radio station connected to social media and mobile phones</td>
<td>Interview with Khanyisa Youth Network</td>
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<td>31</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Tanzania</td>
<td>y&gt;y</td>
<td>Vijanaforum.org - online platform by and for youth with information sharing center and discussion forum for youth to voice their views and organize.</td>
<td>Interview, Tanzania Development Forum for Youth, <a href="http://www.vijanaforum.org">http://www.vijanaforum.org</a></td>
</tr>
<tr>
<td>32</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Tanzania</td>
<td>g&gt;c</td>
<td>Open Governance Initiative Young people were successful in uniting to advocate a freedom of information bill in response to national government call for views of citizens in drafting country strategy document.</td>
<td>Interview with Thomas Maqway</td>
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<tr>
<td>33</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Global</td>
<td>n&gt;y</td>
<td>One Young World - a non-profit that provides an open platform for young people to create positive change</td>
<td><a href="http://mashable.com/2011/09/19/one-young-world-social-good-summit/">http://mashable.com/2011/09/19/one-young-world-social-good-summit/</a></td>
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<td>34</td>
<td>2 Engaging Citizens as Partners in Urban Governance</td>
<td>Yemen</td>
<td>n&gt;y</td>
<td>Ersod Project - youth trained to monitor elections and provide a means for reporting election violations, irregularities using SMS text messaging.</td>
<td><a href="https://smsinaction.crowdmap.com/reports/view/201">https://smsinaction.crowdmap.com/reports/view/201</a></td>
</tr>
<tr>
<td>35</td>
<td>3 Public Openness</td>
<td>Global</td>
<td>y&gt;c</td>
<td>Global Youth Anti-Corruption (GYAC) - global network of young leaders, journalists, artists and ICT experts from civil society who work to improve transparency for better governance.</td>
<td><a href="http://voices-against-corruption.ning.com/page/about-gyac">http://voices-against-corruption.ning.com/page/about-gyac</a></td>
</tr>
<tr>
<td>36</td>
<td>3 Public Openness</td>
<td>Global</td>
<td>b&gt;y</td>
<td>Mobile Alliance - association of worldwide mobile operators that works with governments and governing bodies to protect youth and young people from being exploited on mobile devices.</td>
<td><a href="http://www.gsma.com/publicpolicy/myouth/mobiles-contribution-to-child-protection/mobile-alliance/">http://www.gsma.com/publicpolicy/myouth/mobiles-contribution-to-child-protection/mobile-alliance/</a></td>
</tr>
<tr>
<td>37</td>
<td>3 Public Openness</td>
<td>India, Kenya</td>
<td>n&gt;c</td>
<td>I paid a bribe - Web sites and video cams capture and curate stories about corruption.</td>
<td><a href="http://www.ipaidabribe.com/">http://www.ipaidabribe.com/</a></td>
</tr>
<tr>
<td>38</td>
<td>3 Public Openness</td>
<td>Philippines</td>
<td>y&gt;c</td>
<td>Cellphone Ringtone - Recorded phone conversation alleged to be between Gloria Arroyo and election official - became popular cellphone ringtones after made public, especially among the youth</td>
<td><a href="http://en.wikipedia.org/wiki/Hello_Garci_scandal">http://en.wikipedia.org/wiki/Hello_Garci_scandal</a></td>
</tr>
<tr>
<td>39</td>
<td>3 Public Openness</td>
<td>Kenya</td>
<td>y&gt;c</td>
<td>MAP Kibera - ICT media mapping technology to encourage more participation of people in community, engage citizens in mapping</td>
<td>Interview with MAP Kibera <a href="http://mapkibera.org/">http://mapkibera.org/</a></td>
</tr>
<tr>
<td>40</td>
<td>3 Public Openness</td>
<td>Uganda</td>
<td>y&gt;c</td>
<td>War Child SMS-based campaign against corporal punishment - Text messages to stop abuse and corporal punishment of youth and children.</td>
<td><a href="https://smsinaction.crowdmap.com/reports/view/176">https://smsinaction.crowdmap.com/reports/view/176</a></td>
</tr>
<tr>
<td>41</td>
<td>3 Public Openness</td>
<td>Kyrgyz Republic</td>
<td>y&gt;c</td>
<td>Poltimer website - used to track the promises made by politicians during elections once they are in office.</td>
<td><a href="http://poltimer.kg/ru">http://poltimer.kg/ru</a></td>
</tr>
<tr>
<td>42</td>
<td>3 Public Openness</td>
<td>Brazil</td>
<td>n&gt;c</td>
<td>Excelencias - developed by Transparency International Brazil and widely used by journalists to increase accountability through reporting; provides open access to public information at various levels of government.</td>
<td><a href="http://www.excelencias.org.br/">http://www.excelencias.org.br/</a></td>
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<tr>
<td>43</td>
<td>3 Public Openness</td>
<td>Zimbabwe</td>
<td>n&gt;c</td>
<td>SMS Reporting on Corruption - Transparency International Zimbabwe program people report on bribery and corruption by sending an SMS that reaches a center that processes the information and takes action</td>
<td><a href="http://www.kubatana.net/html/archive/cact/121105tiz.asp?sector=INFTEC&amp;year=2012&amp;range_start=1">source</a></td>
</tr>
<tr>
<td>44</td>
<td>4 Adopting technology to improve outcomes</td>
<td>Indonesia</td>
<td>g&gt;y</td>
<td>Surabaya Municipality Internship Program - internships for high school and university students to gain experience with ICT and help the municipality.</td>
<td>Interview with head of ICT department, Municipality of Surabaya</td>
</tr>
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<td>45</td>
<td>4 Adopting technology to improve outcomes</td>
<td>Indonesia</td>
<td>g&gt;c</td>
<td>Broadband centers in strategic locations in the city allow citizens to learn about the internet, emails, blogging, as well as other educational or job-specific applications in scheduled classes.</td>
<td>Interview with head of ICT department, Municipality of Surabaya</td>
</tr>
<tr>
<td>46</td>
<td>4 Adopting technology to improve outcomes</td>
<td>Many countries</td>
<td>n&gt;y</td>
<td>m2Work (mobile microwork) - aims to expand microwork to the 5 billion mobile phones in the developing world.</td>
<td><a href="http://www.ideasproject.com/community/en/treasury/m2work">source</a></td>
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<tr>
<td>47</td>
<td>1 Balancing inclusiveness and responsiveness</td>
<td>Rwanda</td>
<td>g&gt;c</td>
<td>Mobile Health &amp; ICT Unit - opened civil spaces (mobile spaces) on a bus bringing health services and mobile internet.</td>
<td>Interview with Olivier Mugame, Former Vice Mayor, Kigali</td>
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<tr>
<td>48</td>
<td>4 Adopting technology to improve outcomes</td>
<td>Senegal</td>
<td>y&gt;c</td>
<td>Jokko Initiative, Tostan NGO - community-wide democracy and empowerment programs integrating SMS texting as part of overall education and literacy.</td>
<td><a href="http://www.tostan.org/web/page/599/sectionid/548/pagelevel/2/interior.asp">source</a></td>
</tr>
<tr>
<td>49</td>
<td>4 Adopting technology to improve outcomes</td>
<td>Sri Lanka</td>
<td>y&gt;g</td>
<td>Youth Empowerment Society (YES) City of Youth - helps youth explore digital resources and employs these tools to change the city.</td>
<td>Report &amp; Interview, Project Coordinator Poornima Meegammana <a href="http://www.kandy-youth.org">www.kandy-youth.org</a></td>
</tr>
<tr>
<td>50</td>
<td>4 Adopting technology to improve outcomes</td>
<td>South Africa</td>
<td>g&gt;y</td>
<td>eThekwini Municipality community asset mapping pilot projects with youth in 2 communities, youth explored sustainability features of their community, sites collected and put on the municipality’s online Green Map.</td>
<td><a href="http://www.imaginedurban.org/sites/Blog/default.aspx">source</a></td>
</tr>
</tbody>
</table>
Appendix III: List of Interviewees and Consultations

Interviewees

Saeed Mohammed Al-Dowail*
President of the Assembly, Democracy Youth Society, Yemen

Eric Brown
Youth Coordinator, Sustainable Cities International, Vancouver, Canada

Rachel Hilary Brown
Founder & CEO, Sisi ni Amani Kenya

Chalid Buhari
Head ICT Department, Surabaya, Indonesia

Ajit Jaokar
Oxford University

Everlyn Kemunto
Head of Knowledge & Learning, Well Told Story, Kenya

Eva Clemente Miranda
Transport Water and Urban and Information Technology, World Bank

Thomas Maqway*
Former Coordinator of the vijanaforum.org, Tanzania Development Forum for Youth, Current Executive Director at Centre for Economic Prosperity

Walaa Mdoukh*
Projects Coordinator, Palestinian Friendship Center for Development, Gaza

Mahmoud Zant*
Executive Manger, Palestinian Friendship Center for Development, Gaza

Noluthando Hermanus*
Project Coordinator, Khanyisa Youth Network, South Africa

Kepha Ngito*
Executive Director, MAP Kibera

*denotes recipient organization of UN-Habitat Youth Fund
Vincent Mikuru*
MAP Kibera

Oliver Mugame
Former Vice Mayor, Finance and Economics, Municipality of Kigali

Geoffrey Njenga
Communications Officer, Youth Agenda, Kenya

Sangwa, Rwabhuhihi
Director, Digital Empowerment Initiative, Former Glocal Youth Parliament Member, Municipality of Kigali, Youth Leader & Activist, City of Kigali

Giuliano Stiglitz
CEO, Orange Advertising Americas - France Telecom Group

Cedric Umuhire
ICT Manager, Municipality of Kigali

Roxana Widmer-Ilieiscu
Senior Programme Officer, ITU

Srinivas Chary Vedala
Executive Director, Administrative Staff College, Hyderabad, India

**Consultations**

**Youth Consultations**
Anette Arneberg
Member of Oslo Youth Council

Joanne Kariuki
Executive Director, YouthAlive! Kenya

Balder Bryn Morsund
Vice President of Oslo Youth Council

Chris Muthuri
Partnerships and Institutional Development Officer, Youth Alive! Kenya

Sigri Stokke Nilsen
Coordinator for Young Participation at UngOrg, City of Oslo, Norway
Ida Ragnarsson  
Programme Manager Development Cooperation, The National Council of Swedish Youth Organizations

Andreas Svela  
President, Oslo Youth Council

Viktor Orri Valgarðsson  
National Youth Council of Iceland, International Telecommunication Union

Doug Court  
Broad Band Commission for Digital Development & Junior Analyst, ITU

Nicolas Jammes  
Project Coordinator, ITU-Global Girls in ICT Day Project

Roxana Widmer-Iliescu  
Senior Programme Officer, ITU
REFERENCES CITED OR CONSULTED


Nabatchi, T. and I. Mergel (2011) “Participation 2.0: Using Internet and Social Media Technologies to Promote Distributed Democracy and Create Digital Neighborhoods.”

One Young World (2012). “One Young World.”


ICT, URBAN GOVERNANCE & YOUTH

The ICT, Urban Governance and Youth report is the fourth report in the Global Youth-Led Development series. The report provides a conceptual framework which reflects the rapidly changing dynamics in three areas of urban development: the demographics of the fastest growing segment of urban populations, youth (ages 15 to 24); information and communications technology (ICT) and particularly mobile phones; and governance, particularly local governance in the developing world. This report takes into account the special characteristics of young, technologically savvy citizens. The reader is encouraged to read the first three reports to put these findings into a larger context of youth-led development.

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