
ICT, URBAN GOVERNANCE AND YOUTH

ACKNOWLEDGEMENTS

The *ICT, Urban Governance and Youth* report is the fourth report in the Global Youth-Led Development series. The report 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, the UN-Habitat has laid the groundwork by addressing issues of urbanization and ICT-based government. This report seeks to add the youth dimension in a way that builds upon the advanced draft and 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.

All reports in the series are available at www.globalyouthdesk.org/research.

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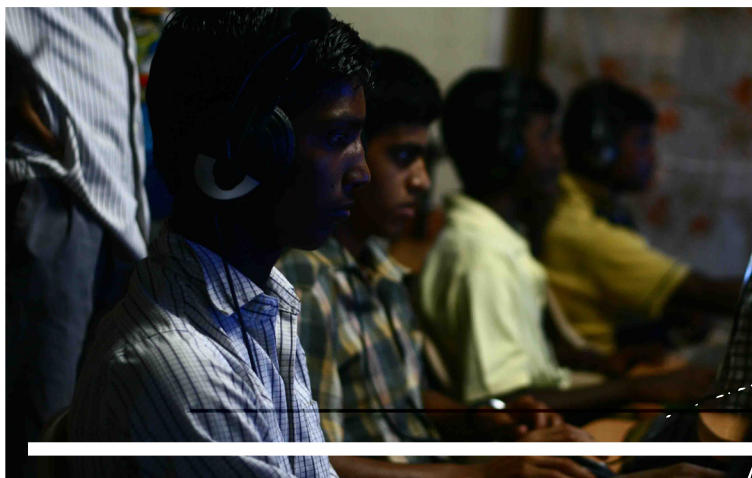
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SECTION 1: INTRODUCTION AND OVERVIEW

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, the UN-Habitat has laid the groundwork by addressing issues of urbanization and ICT-based government¹. 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, technologically savvy citizens.

The present review covers published and unpublished literature, internet searches, and direct interviews with youth activists who are exploring the impact of ICT and local governance on young people, among them beneficiaries of the Urban Youth Fund. In all, data were gathered on 51 cases, of which 17 were obtained through direct personal interviews or by Skype. More detail on the cases and methods of data collection appear in Appendix I.

One of the striking observation from the case data gathered for this review is that young citizens introduce an entirely new dimension in 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.²

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 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 several additional elements be integrated into the present four pillars of ICT enabled governance.

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.

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 local governments, which are often staffed by individuals with far less digital experience, and their youthful constituents, who have been 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 in to 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: youth are leading the way toward closer examination of, and greater accountability from, local governments.

Geo-referencing capabilities are increasingly available, 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 "seedclick-fix," programs that draw attention of authorities and to a wider constituency 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 also 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 and the ICT tools of modern democracy are 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 practiced with mobile platforms. Still, the specific consideration of youth needs is an important dimension that can enhance the outcomes of governance for young populations. Greater attention to this issue is needed in policy, academic literature and in practice.

In sum, this fast-moving field is to an important extent in the hands of youth, and the developing 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 level the playing field for females and the poor, and to safeguard the moral and ethical downside of open access societies.

The population of the developing world is increasingly young and urban. Today, the young (ages 15 to



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SECTION 2: BACKGROUND: THE “YOUTH BULGE” SEIZING THE OPPORTUNITY OF THE MOBILE ICT REVOLUTION

24) number more than 1.2 billion, and an estimated 87% live in developing countries.³ They comprise the largest youth cohort in history, often referred to as the “youth bulge.” The majority lives in cities, with cities of the developing world accounting for over 90% of urban growth worldwide.

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.⁴ 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. Many governments and organizations are beginning to rethink their engagement with youth⁵.

While events in the Arab Spring gained wide media attention, the UNFPA predicts that deeper, more fundamental changes may be in the offing.

“

Young people are the core of a nation’s future, yet this significant stakeholder is rarely involved in poverty reduction strategies, environmental planning, and sustainable urban development. Despite the momentum in the rhetoric on youth activism for positive social change, little regard is given to the views, opinions, needs, and perspectives of young people.

UN-HABITAT 2011

”

“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.”⁶ The demand for political participation matching youth’s proportion of the population has been repeatedly articulated in various international forums and conferences. This also forms the core focus in the Youth 21 agenda spearheaded by UN-Habitat’s Youth Unit. The Youth 21 initiative aims to bring youth into decision-making processes at local, national and international level. One of the activities in Youth 21 is the work to establish a Permanent Forum on Youth Issues in the UN.⁷

⁶ Ibid.

⁷ <http://edebates.globalyouthdesk.org/Download/Download.aspx?fcid=doc&fname=Youth.pdf>

³ UN International Year of Youth Brochure, Retrieved in June 2012 from: <http://social.un.org/youthyear/links.html>

⁴ Young People: Participation and Sustainable Development in an Urbanizing World, Tatek Abebe, Anne Trine Kjøholt, UN-HABITAT, 2011

⁵ UNFPA State of the World’s Population 2011, p. 24.

⁷ Young People: Participation and Sustainable Development in an Urbanizing World, Tatem Abebe, Anne Trine Kjøholt, UN-HABITAT, 2011.

“

Today's generation of young people is poised to change the world in fundamental ways. Governments would be better served to cultivate and harness their potential rather than miss out on opportunities they offer for development.

UNFPA State of the World's Population 2011

”

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 potential⁸. One of the most 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”. The UN-Habitat Urban Youth Fund plays an important role in this work, where youth-led groups are given financial support and training to be change-agents in their own community, including governance processes locally and nationally, of which some have been highlighted in this report.

Youth: Champions of ICT

Only a few decades ago, the internet brought new hope as a tool for development. Young people quickly became the majority of those online in both developed and developing countries. ITU 2011 statistics show that 45% of the world's Internet users are below the age of 25; in developing countries, 30% of this age group use the internet compared to 23% of those above the age of 25.

⁸ Interview, Roxana Widmer, ITU.

“

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 articulates 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?”**

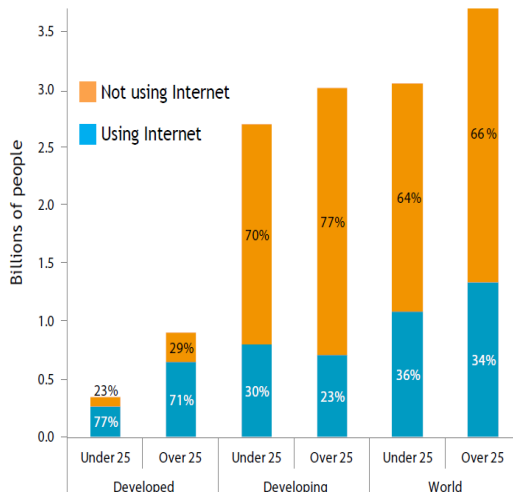
Source: UNFPA State of the World's Population, 2011, pgs 11-12.

”

Comprehensive statistical data for ICT usage among youth from public agencies in the past two to three years is difficult to attain. Updated, comprehensive reports by institutions such as the World Bank and ITU in 2011 and 2012 documenting the most recent trends in ICT usage have not placed a specific focus on young people. One reason for this dearth of information appears to be the general assumption that youth are the majority of ICT users. As a senior manager from ITU stated: “The high rate of ICT use by youth is already a fact, we don't need statistics to let us know this, they are using ICTs from a very early age.”⁹ The data that is available clearly illustrates the high rate of ICT usage among youth, as demonstrated by the graph below

⁹ *Use of Information and Communication Technology by Children and Youth*, ITU, 2008.

Internet users by age and by development level, 2011*



Note: * Estimate

Source: ITU World Telecommunication/ICT Indicators database

- Younger people tend to be more online than older people, in both developed and developing countries.
- In developing countries, 30% of those under the age of 25 use the Internet, compared to 23% of those 25 years and older.
- At the same time, 70% of the under 25-year-olds – a total of 1.9 billion – are not online yet: a huge potential if developing countries can connect schools and increase school enrolment rates.

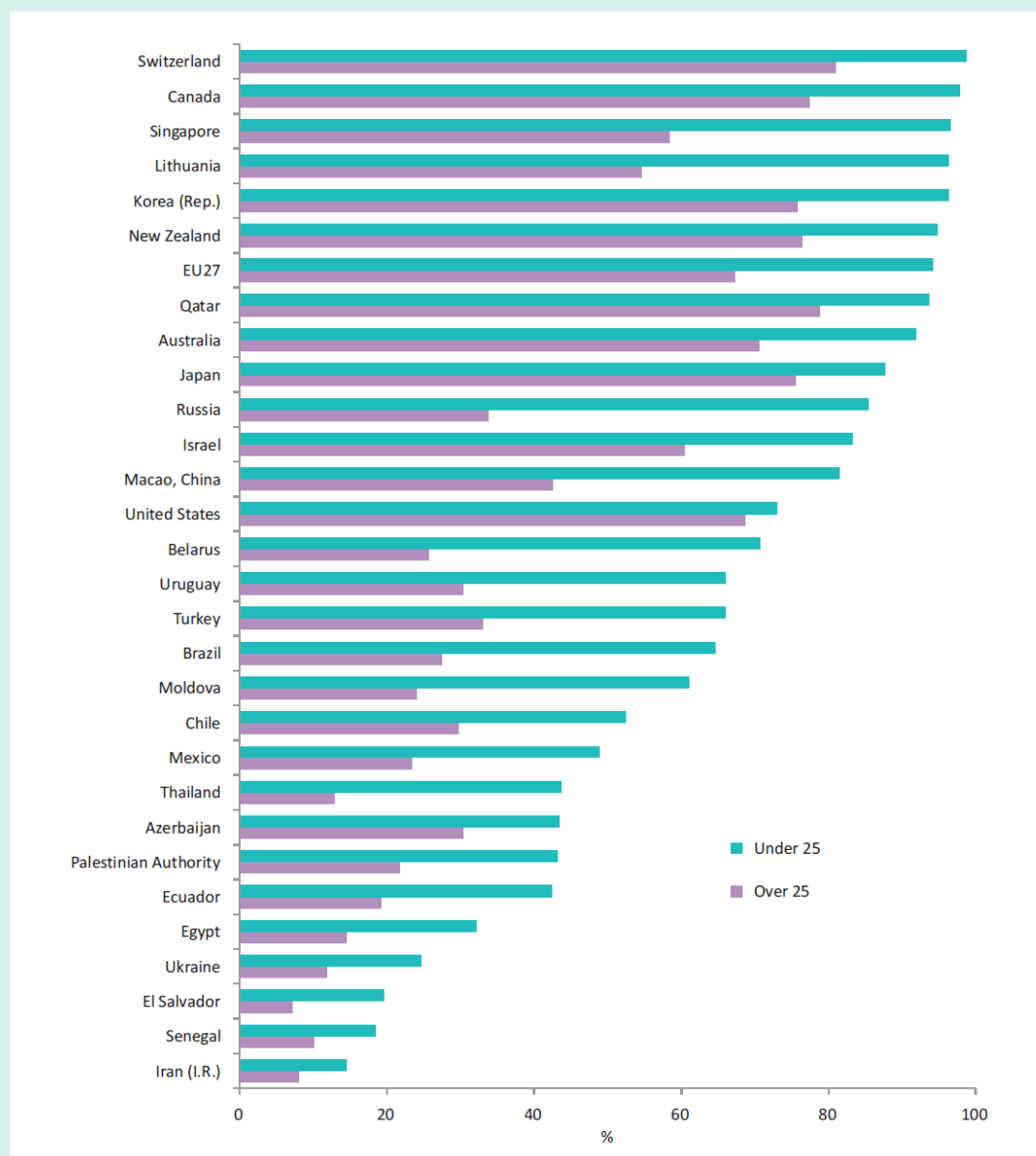
Source: *The World in 2011: ICT Facts and Figures*, ITU

Going back a bit further, 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 countries¹⁰. 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.”¹¹ Among the factors attributed to this relationship between ITU usage and young people are the following¹²: 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 predominately used by young people.

¹⁰ *Ibid*, p. 41.¹¹ *Ibid*, p 42.¹² “ICT4D 2012: Maximizing Mobile”, World Bank.

Chart 5.11: Proportion of individuals* using the Internet, by age group, latest available year (2009/2010)



Note: * Minimum and maximum age varies across countries, see Annex Table 3.1.
Source: ITU World Telecommunication/ICT Indicators database

Source: *Measuring the Information Society 2011*, ITU

The Mobile Revolution

The logic that drives internet use among the young is accelerated by the economic incentive of low cost of cell phone devices. Mobile phones have become the most ubiquitous form of modern ICTs. According to a recent World Bank report, three-quarters of the world's population has access to a mobile phone¹³. Dubbed the “mobile miracle”, the developing world now is “more mobile” than the developed world. Of the nearly six billion mobile-cellular subscriptions, global penetration reaches 87% worldwide and 79% in the developing world.¹⁴ Mobile subscriptions in low and middle income countries rose by more than 1,500 percent between 2000 and 2010, from 4 to 72 per 100 inhabitants. Combined with a young population, increasing income and decreasing mobile prices, the mobile revolution is contributing to social, economic and political transformation.

The question now is not so much the issue of access—one of the dominant themes of the past decade—but of usage.¹⁵ 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.¹⁶ See accompanying chart.

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 the ITU, access to wireless broadband Internet is the strongest growth sector, with the rise in mobile-broadband subscriptions representing the single most dynamic ICT development in 2011.¹⁷

Prices for smart phones 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.¹⁸ For example, 350,000 Kenyans purchased an \$80 smart phone launched in 2011 by the Chinese firm Huawei – a notable development given that 40% of the Kenyan population lives on less than two dollars a day.¹⁹ 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 network (90%) today is twice as high as the population covered by 3G network (45%).²⁰ Although subscriptions have grown quickly (up by a factor of three in the past year in the Philippines and more in South Africa), mobile broadband is out of reach for the majority of developing country users, with advanced mobile devices still prohibitively expensive, but rapidly decreasing in price.

13 *The World in 2011: ICT Facts and Figures*, ITU 2011.

14 This is a key point made in the «Maximizing Mobile» World Bank report, p. 4. It is also discussed widely by the ITU.

15 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.

16 *Measuring the Information Society 2011*, ITU, p. 1.

17 «Smartphone Usage Expands in Emerging Markets», Tony D'Altorio, Wall Street Blogspot. Retrieved in July 2012 from: <http://wallstreetmess.blogspot.co.il/2012/02/smartphone-usage-expands-in-emerging.html>

18 «\$80 Android Phone Sells Like Hotcakes in Kenya, the World Next?», Jeremy Ford, Singularity Hub. Retrieved on July 15, 2012 from: <http://singularityhub.com/2011/08/16/80-android-phone-sells-like-hotcakes-in-kenya-the-world-next/>

19 *ICT Facts and Figures*, ITU 2011.

20 *ICT4D Maximizing Mobile*, World Bank p. 13.

Mobile Devices and Their Capabilities

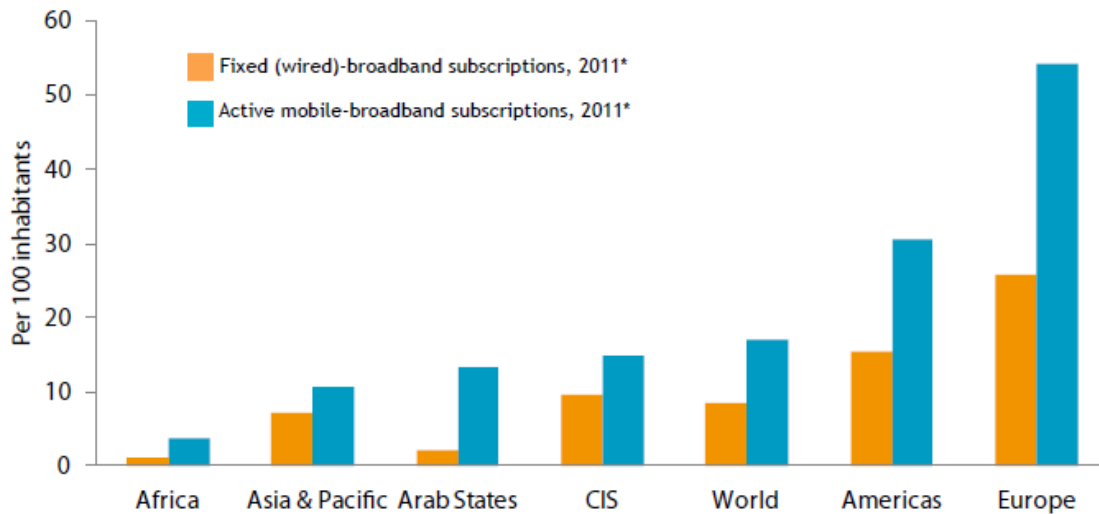
Device	Capabilities	Device	Capabilities
Basic mobile phone	<i>Network services, including:</i> Voice telephony and voice mail SMS (short message service) USSD (unstructured supplementary service data) SMS-based services, such as mobile money USSD services, such as instant messaging	Smartphone	<i>As Featurephone plus:</i> 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
Featurephone	<i>As basic mobile phone plus:</i> Multimedia Messaging Service (MMS) Still picture camera MP3 music player 2.5G data access	Tablet	<i>As smartphone plus:</i> 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

Note: The list of capabilities is not exhaustive, and not all devices have all features.

Source: ICT4D 2012: Maximizing Mobile, World Bank

The research and cases reviewed 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 con-

tinuously 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.



Source: *The World in 2011: ICT Facts and Figures*, ITU

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.²¹ 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. A summary of some of the most popular narrowband applications mentioned in the literature as well as by interviewees is provided below:

“

“Operators in developing countries are working around the limitations of low-end handsets that do not have internet capabilities by providing ways of interacting with social networking applications through instant messaging, such as MXit in South Africa. Safaricom in Kenya offers special SMS functions allowing users to send and receive Twitter tweets and to update their status and send messages on Facebook.”

Maximizing Mobile 2012, World Bank, p.25

”

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 than 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.

²¹ 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 for the social good: <https://smsinaction.crowdmap.com/main>

Narrowband Social Networking for Mobile Participation

Narrowband Social Networking Technologies

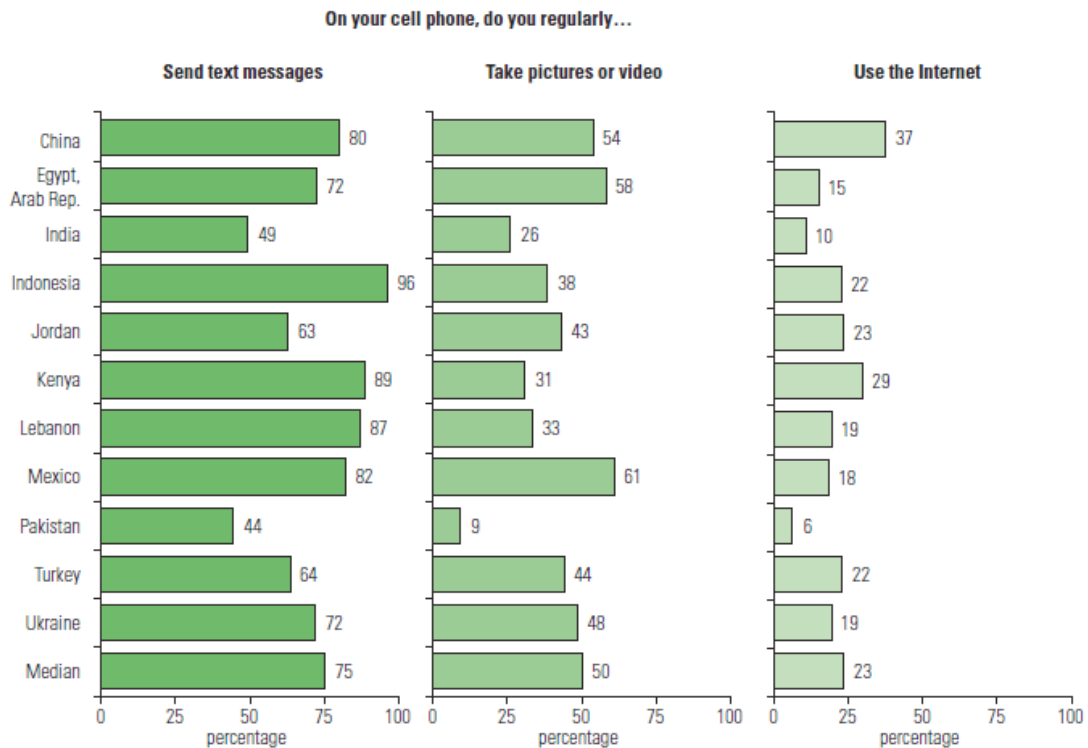
Narrowband Technology	Description	Usage
Facebook Zero	Stripped-down version of Facebook designed for mobile technologies. Works mostly with text, photos/videos/heavy data available through a secondary option. Optimized for speed through mobile operators (not only internet providers). Offers free texting and usage (no data charges).	Rolled out in 2010 with 50 mobile operators in 45 countries (mostly developing).
MXit Mobile Technology	Africa's largest mobile text messaging service and social network. Developed in South Africa, offering more affordable means of social networking and sending messages than SMS, utilizing instant messenger system available on almost any phone.	750 million text messages sent per day, 40 million registered users in Africa, majority of users ages 18-25.
Opera Mini	Web browser designed for mobile phones. Compresses web pages, speeding up transfer by two or three times and dramatically reducing the amount of data transferred, reducing data charges.	World's most popular mobile browser with 168 million unique users and 117 billion monthly page views.
Gmail SMS	Allows Gmail users to send and receive emails in the form of SMS from their mobiles. Developed to adopt to SMS-heavy user habits in developing countries allowing owners of even the most basic handsets to use email without the need for 3G or any data connection.	Currently launched in 3 African countries – Ghana, Nigeria, Kenya.

<https://blog.facebook.com/blog.php?post=391295167130>
<http://www.mxit.com/files/MxitStatisticsMarch2012.pdf>
<http://www.gizmag.com/google-gmail-sms-africa/23368/>
http://en.wikipedia.org/wiki/Opera_Mini

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 applications²².

One implication is that new ICT services for youth should be largely based on SMS usage in one of its many forms.

²² Instruction by UN-HABITAT Task Manager for this assignment.



Source: *Maximizing Mobile 2012*, p. 16

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. They are being initiated from the bottom-up and often call for social and political change, transparency and inclusion. They are also being implemented from the top-down, with ICT

tools for enhanced citizen participation and service delivery. Either way, the role of youth is a crucial element not carefully examined. The young are not only forging new tools, but also they stand to benefit from the improvements in governance offered by ICTs.



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SECTION 3: METHODS, DATA AND CASES

The rapid conversion of mobile devices merely as phones to wider engagement in governance is illustrated richly in numerous cases reviewed for this paper. A body of empirical data of more than 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 literature and web searches, giving specific attention to the youth dimension in applications of ICT that affect local governance. A starting point is a list of grantees from the UN-Habitat Urban Youth Fund to 26 youth-led groups from different parts of the world covering a wide variety of activities for youth, for instance, 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, most of 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 26 additional cases discovered by internet search. In total, 51 cases were identified. See Appendix 3 for complete list. The geographic distribution and scope of agency (i.e., whether global, national, or local) appear in Tables One and Two.

TABLE 1: Cases by Region

Many/Global	8
N.America/Europe	5
Africa	18
E Europe	2
LAC	5
MENA	3
E. Asia	6
S. Asia	5

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

Most of the applications reviewed here were developed at the national or global level, but a significant number were born within the city or locality.

TABLE 2: Agency Locale Number

Local/City	22
Country	22
Global	8

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

Governance and Pillars

Each of the cases was classified in relation 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 seem to indicate that applications of ICT and youth cluster primarily in two key areas, inclusiveness and engagement. See Table Three, below.

TABLE 3: Case Impact by Pillar

Pillar	Occurrence
1 – outcomes	6
2 – inclusiveness & responsiveness	18
3 – public openness	6
4 – engaging citizens	20
TOTAL	50

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 these data were collected. The results are suggestive that the concentration in pillars 2 and 4 (inclusiveness and engagement) reflects a logical outcome of ICT, particularly mobile platforms, in the hands of youth. Mobile platforms with such applications as social networking naturally favor horizontal linkages of exchange among peers. Pillars 2 and 4 also intrinsically involve dimensions of connectedness, communication and exchange.

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 whether 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 population and in the area of openness and transparency.

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

The four pillars of ICT-enabled governance provide a solid approach for exploring how information and communication technologies are impacting urban governance on a general level. When applying a youth lens to this dynamic arena, additional dimensions are needed to adequately cover the full range of effects observed in the data.

Since, youth are (a large) part of the overall population, they naturally stand to benefit from ICT initiatives implemented for the general public. However, young people have specific characteristics, needs and interests that require distinct consideration 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.

We have therefore processed our observations by relating to the original four pillars and adding the new dimensions that emerged. It should be noted that we were encouraged to put the greatest emphasis on issues of engagement, interaction and openness, and less on service delivery.²³ This focus is evident in the structure and content of the observations. It is also important to point out that there is often conceptual overlap among the pillars, and to this extent the classifications of data are not always tidy nor exclusive.

Examination of other features of the cases illustrates the need for additional elements in a framework for youth and ICT-enabled governance. The cases were classified according to the “directionality” of impact each kind of project (case) was intended to have, for instance, whether it was 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, nine in all. See Table Four. The results show that almost half of the total involve 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 small 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.

As stated earlier, youth in many ways are the leaders of ICT governance initiatives for all citizens – innovating technology, generating content and developing applications. Their contributions do not necessarily target only youth beneficiaries; they benefit a much wider population. On the other hand, governments, NGOs and youth leaders are developing ICT tools and programs with the specific goal of empowering or engaging young people, and these types of activities have an explicit youth focus. This perspective is also echoed in the UN-Habitat report titled: “The Challenge and Promise of Youth-Led Development” by Carole MacNeil where the perspective of youth to citizen/community is significant. The report shows how most youth-led initiatives have a focus that transcend (?) youth-centered issues and have a clear focus on how youth can be a change agent in the wider community they reside.²⁴

²³ “The Challenge and Promise of Youth-Led Initiatives” by Carole MacNeil. UN-Habitat report 2012

²⁴ We have included local government services in this category, such as education, health and job creation.

TABLE 4

Classification	Code	No of Cases
business-to-youth	b>y	3
government-to-citizen	g>c	5
government-to-youth	g>y	7
NGO-to-citizen	n>c	5
NGO-to-government	n>g	1
NGO-to-youth	n>y	11
youth-to-citizen	y>c	11
youth-to-government	y>g	4
youth-to-youth	y>y	3
Total		50



SECTION 4: **FINDINGS IN EIGHT AREAS**

Turning to more detailed, qualitative analysis, our principal findings are organized in eight categories, taking into account the “youth lens” of the four pillars, together with three new categories, and a set of additional considerations that deserve to be noted. These are:

1. ICT Impact on Outcomes for Youth²⁵
2. Balancing Inclusiveness & Responsiveness when Using Technology
3. Public Openness through Technology
4. Engaging Young Citizens as Partners in Urban Governance
5. Capacity & Leadership
6. Level of Government
7. Technology
8. Additional Considerations

1. ICT Impact on Outcomes for Youth

ICT is a tool, and its effective use in the hands of youth only underscores the need for youth-oriented policies and programs that view youth as assets in development and shape budgets for youth-oriented implementation. Of course, mobilizing political will is imperative to meaningfully engage youth in urban governance.

These larger processes will have a decisive impact on the potential for ICT initiatives to positively impact urban governance for youth. Without a youth-focused policy approach, the large potential benefits of ICT may fall short both for young people as well as for local government.

The outcomes for youth in governance processes and services depend on improved sensitization and capacity at the local level. In processes—participation, deliberation, priority setting, and monitoring—the cases have shown that ICT is a powerful enabler to engage youth in governance decisions. ICT can be utilized to measure and quantify the results of youth-focused urban initiatives, thereby helping to demonstrate impact and break through barriers to increasing resources for such programs.

In a similar way, ICT has 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.

²⁵ Interview with ICT Manager of the City of Kigali, July 2012.

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.”²⁶

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.²⁷ Similar platforms and services exist in Peru and Lima²⁸. However, the research shows a dearth of youth-focused services in this context. Youth face specific challenges that are specific to their stage in the life cycle—a premium 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 and help the municipality.²⁹

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. 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 develop ICT usage.³⁰

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. ICTs are already transforming the relationship between government and youth in general. Instant communication and rapid flow of information are leading to an increased “voice” on the part of youth, increased consideration of youth viewpoints, and in some cases new or more responsive services.

ICTs are breaking 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.

²⁶ www.huduma.com

²⁷ <http://datea.pe/info/todos-somos-datero>

²⁸ Interview with Surabaya Municipality

²⁹ Interview with Cedric Umuhire, ICT Manager of the Municipality of Kigali, July 2012 and Interview with Surabaya Municipality, July 2012.

³⁰ Interview with Sangwa Rwabuhuhi, July 2012.

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 daily. Leaders can’t just promise things and disappear”³¹. The increased volume of traffic 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 communicate directly 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.

ICTs can improve outcomes for youth by providing faster, new, and often user-generated information to local governments through which they can better understand the status, needs and potential of youth. 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, 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 youth³².

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. This was for instance seen during the uprising in Egypt where the regime tried to cut the access to Internet and services like Twitter and Facebook.

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.

31 http://www.unicef.org/infobycountry/uganda_62001.html

32 This is a UNICEF initiative implemented with local NGOs, for more information see: <https://smsinaction.crowdmap.com/reports/view/137>

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 on a radio show heard by up to 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 network³³. In another example, an innovative youth-led mobile radio program in South Africa 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 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.

Refer to South Africa Case Write Up in Appendix I for details and reference



³³ <http://politmer.kg/ru>

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 appear 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 Mzalenddougou. 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 Politmer team through the site³⁴. A preliminary conclusion can therefore be 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 more³⁵. 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.

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 spread of ICTs is clearly linked to civic engagement on the part of youth. The usage of mobile phones has significantly increased political awareness and activism among young users.

³⁴ <http://www.excelencias.org.br/>

³⁵ Interview with Thomas Maqway, July 2012.

As one youth leader in Tanzania noted “There is a huge difference between 2005 when young people were not very aware of their rights or their opinions regarding what should be done in their country, and 2012. About two years ago, 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.”³⁶



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

See Appendix I for details and references of this case



ICTs are already providing 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 response they received. 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 web site³⁷.

The use of collaborative technologies is challenging traditional notions of democratic involvement by allowing youth greater opportunities to express their political will—for instance through Twitter, creative combinations of Facebook and radio, and mobile radio. These overtures are transforming ways governments interact with citizens and vice-versa. Innovative models are creating communities and impacting policies. Youth feel that they have gained more power through these tools, and that governments are beginning to show signs of being more responsive and accountable. For example, two 23-year olds from Latvia who were frustrated by their inability to participate in the political process built an e-petition system where Latvians could submit and support proposals for new laws and other political changes.

³⁶ <http://ersod.org>

³⁷ “Can Youth Change the World with Technology?”, Alex Fitzpatrick, Mashable.com, May 24, 2012. <http://mashable.com/2012/05/24/youth-change-world-technology/>

The government agreed to look seriously into any petition that got a certain amount of popular support on the platform - it's been used by at least 20% of the Latvian population.³⁸



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."

-Poornima Meegammana, UN-HABITAT Urban Youth Fund Project Coordinator



ICTs can engage youth in developing and learning about their communities and thus forge increased commitment and empowerment, motivating them through ICT tools to get involved. For instance citizen journalism, user-generated content, reporting, and neighborhood videos and music are attractive and constructive ways to get idle 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."³⁹

Current ICT-enabled communication between government and citizens is already having an impact on youth, making them feel more 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. Such activity is still largely restricted to the national level, with great possibilities and promising beginnings on the local level.

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 such channels to address their specific needs and aspirations. ICTs can be effective in advancing this mission.

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.

³⁸ Interview with Keph Ngito, MAP Kibera, July 2012.

³⁹ «Maximizing Mobile», World Bank, 2012, p. 94.

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.

“

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 (Only 60% ?) of Africa's population is under 24. Urbanised youth populations are tech-savvy – and demanding.

Mobile Africa Report 2011

”

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.⁴⁰ The Executive Director of MAP Kibera, 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.”⁴¹

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.⁴²

The interviews provided clear evidence of a disconnect between older people found in most posts of confidence in local government and younger citizens. 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 where the majority of youth are voicing their opinions, and to enable them to take responsive actions.

National government leaders are setting the example for engaging directly with citizens (especially youth) through ICTs, although this trend has not been institutionalized. Several case interviews (Rwanda, 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.

⁴¹ 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.

⁴² This conclusion is supported by Secretariat of the, *Global Alliance for ICT and Development*, UNDESA in its issue paper *Youth and ICT as Agents for Change*.

⁴⁰ Interview with Kepha Ngito, July 2012.

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.

Youth are the leaders of ICT-led development. They have a key role to play in building innovative solutions based on technology and can be at the forefront leading the move to ICT-enabled governance.

They are the majority of the population, avid users of new technology and successfully adapt to it and make up a substantial market for the technology industry, leading to the proliferation of low-cost technology being developed today.⁴³

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?”⁴⁴

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 than local officials. President Kagame of Rwanda is a stark example. Several instances were cited describing how he directly interacted with young people via Twitter and addressed issues relating 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.

⁴³ 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.

⁴⁴ Low-cost semiconductor technology has pushed down the price of a basic smartphone to below \$100 in emerging markets over the past year.



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.\

Refer to Rwanda Case Write Up in Appendix I for details and references



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.

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 the critical, often taking precedence over local issues (also 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

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, Smart phones 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.⁴⁵ 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 mobile internet access is the only access method for many users across Africa.⁴⁶

⁴⁵ *Mobile Africa 2011*, Dr. Madanmohan, MobileMonday, March 2011. Retrieved from: slide/ page 34 <http://www.slideshare.net/momobeijing/mobile-africa-2011>)

⁴⁶ *Measuring the Information Society*, 2011, p.124.

Low rates of broadband internet access in developing countries limits the possibilities for advanced, data-intensive forms of ICT-enabled governance. The ITU concludes that limited bandwidth and low internet speeds might be one explanatory factor for the low degree of use of e-government services among African Internet users, as this type of application requires a minimum capacity and speed to offer a good user experience.⁴⁷ However, 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)⁴⁸ 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 consideration. A spectrum of ICT-enabled governance practices need 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.

Regional and global data are still needed to fill in gaps regarding age-specific usage of mobile phones and other ICTs. Major global reports on ICT usage does 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. The recent 2012 Report issued by the World Bank on mobile phone usage “ICT4D Maximizing Mobile” surprisingly has no section devoted to youth, with just a few sentences dispersed throughout relating to the young population of developing countries. 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.

47 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.

48 “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.

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.⁴⁹ 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 activities⁵⁰.

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. The mobile industry knows that young customers value customer 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.”⁵¹

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 their knowledge and development 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.”

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 (Gaza and West Bank) 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)⁵². This data is based on the latest available statistics disaggregated by both age and gender by the ITU in its 2008 report. While we may assume general trends remain the same, it is important to conduct an updated examination of gender and ICT use among youth.

⁴⁹ Ibid.

⁵⁰ Interview with Giuliano Stiglitz July 2012,

⁵¹ ICT 2008 Report on Children and Youth

⁵² This is part of a multi-year effort to transform Rwanda from a subsistence agrarian society into a knowledge-based economy, as outlined in the country's VISION 2020 plan. See Rwanda Country Brief, World Bank <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/RWANDAEXTN/0,,menuPK:368714~pagePK:141132~piPK:141107~theSitePK:368651,00.html>



SECTION 5: CONCLUSIONS AND POLICY RECOMMENDATIONS

Framework: Youth, ICT and 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 governance. The analysis has concluded that the four pillars of ICT-enabled governance identified by an earlier advanced UN 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 in particular 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, smart phones 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 citizens and government.

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 and 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 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 can be 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 and all levels? 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 access to 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 governance that have so far been impacted less by ICTs and youth, such as improving local services and transparency and fighting of corruption. 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 of-

fering 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 for good governance, possibly accompanied by workshops with input from youth in order to develop, discuss and assess ideas for ICT applications and programs to be implemented on the local level.

Another dimension of youth-local government relations 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, a new front is opening in both policy and research 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 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 immedi-

ate policy step would be to re-double 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 youth/ICT 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 mobile platform explosion and engage more fully in the obvious users of these devices: whether they are the young or those who are for cultural or economic reasons, female or disadvantaged. International support should aim to foster increasingly productive applications or to promote tried and true forms for wider adoption. National governments can play a similar role by supporting early reformer

local governments and celebrating private and individual contributions to the public good by means of ICTs.

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, and 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. Other areas of research are more speculative, but need to be explored. For example, rapid technological change holds the promise of accelerating all of the trends discussed in this report. Mobile devices are already hooking up with scaled down internet services like Facebook and Twitter, as well as radios (and even busses) to improve their reach and effectiveness. In another decade, mobile devices will be smarter and more fully integrated with the internet, and a decade after that in Africa for instance, broadband internet will increase speed and capacity a hundred to a thousand fold.

Beyond mobile platforms. Because broadband internet access is 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.

APPENDIX I SELECTED CASE WRITE UPS

1. Khanyisa Youth Network, South Africa

Project: Drive Out Philippi Radio (Recipient organization of UN-HABITAT Urban 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 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. 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 Urban 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 Urban Youth 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, and thematic maps, 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 policy-making, 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 previously they 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 City Council 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 Urban 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 a reconciliation 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. Created on the initiative of the former mayor and enjoys 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 ID number. Same for police, who can track criminal records and citizenship status and welfare programs and special needs of for 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, email. A standard operating procedure has been put in place to handle complaints and requests. A response must be issued within 24 hours. 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). The media center has 45 people with 3 to 5 operators working full time on responses.

Youth specific

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

Internal. **Internship Program.** The city maintains an internship program on ICT related issues in the city for youth from high schools and universities. The internships last one to three months, and there are 70 interns at any given time, whereas 20 to 30 of them are university students doing final year project. The interns learn how to do programming, design of web, networking and implement projects from within the ICT department. Both the internship and program is on Facebook, and the application takes place on line and some internship work itself are done online. There is a strong demand not just from Surabaya high schools, but from youth 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 and routers and PCs that operate public spaces. Communications Department also teaches students how to do news and PR.

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

External. **Broadband Learning Center**, though not just for youth, also helps youth and other citizens to become digitally literate. The center is a partnership between the telecom provider in Java and the city. Telecom finances for the first two years, after which the city will operate and maintain the center. Five centers operate in 2 in public parks and 3 in flats on a regular and walk-in schedule offering structured classes and access to equipment for self-guided exploration using PCs and internet. Classes cover basics of internet, email, web site addresses, blogging, other courses related to youth interests, housewives, businesses.

The centers are open every day including weekends, 8-4 to all citizens. They get instruction on web pages, blogging, internet search, 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 1000s per month.

Other programs

The city also maintains government and business services on line. For instance, business licensing and other routine transactions are processed on-line 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 processed 200 percent increase (from 100 to 300 per year) between 2009 and 2011. No evaluation of applicants by age.

Other external

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. She doubled the area for parks and 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 scale⁵³. Aspiring to build an ICT-driven economy, the government completed a rollout of a 2,3000 kilometre fibre 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.

53 "Youth, ICT Ministries Merged", April 14, 2012, Frank Kanyesigye, *New Times*. Retrieved from: <http://www.newtimes.co.rw/news/index.php?i=14962&a=52483>

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."⁵⁴

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.⁵⁵ 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.

Capacity

According to Kigali's ICT Manager, there has been limited capacity at the local level to integrate ICTs in governance, with only one staff 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.

54 *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.*

55 *denotes recipient organization of UN-Habitat Youth Fund

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 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.’ “

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 YouTube. 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

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“African youth possesses 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”.

Paul Kagame, President of Rwanda

Broadband Commission Meeting, Kigali, Rwanda September 8-9, 2011

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Quoted in:

“Accelerating Broadband Access”, April 2, 2012, The New Times <http://allafrica.com/stories/201204021120.html>

7. Democratic Youth Foundation, Yemen

Project: Digital Expression

(Recipient organization of UN-HABITAT Urban 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.

APPENDIX II: LIST OF INTERVIEWEES

Saeed Mohammed Al-Dowail*⁵⁶

President of the Assembly,
Democracy Youth Society, Yemen

Eric Brown

Youth Coordinator
Sustainable Cities International, Vancouver, Canada

Chalid Buhari

Head ICT Department, **Surabaya, Indonesia**

Ajit Jaakar

Oxford University

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 Manager, **Palestinian Friendship Center for Development, Gaza**

Noluthando Hermanus*

Project Coordinator,
Khanyisa Youth Network, South Africa

Kepha Ngito*

Executive Director, **MAP Kibera**

Vincent Mikuru*

MAP Kibera

Cedric Umuhire

ICT Manager, **Municipality of Kigali**

Oliver Mugame

Former Vice Mayor,
Finance and Economics,
Municipality of Kigali

Sangwa, Rwabuhuhi

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

Roxana Widmer-Iliescu

Senior Programme Officer, ITU

Srinivas Chary Vedala

Executive Director,
Administrative Staff College, Hyderabad, India

⁵⁶ *denotes recipient organization of UN-Habitat Youth Fund

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