GLOBAL INFORMATION SOCIETY WATCH 2008

Focus on access to infrastructure

Global Information Society Watch
2008

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Introduction

The 1990s are considered the era of the greatest policy reform in communications technology that the world has ever witnessed. National carriers were privatised, and new competitors and services were authorised (Ayogu, 2003). Kenya has been part of this dramatic change. The information and communications technology (ICT) sector in the country is now fully liberalised, offering opportunities for the country's economy and opening up access to the rural areas. The ICT sector in the country is optimistic, civil society and business are proactive in the field, and the government's commitment to ICTs has achieved regional and international recognition.

Yet like most developing countries, the good mixes with the bad. The fixed telephone service provider, Telkom Kenya, has 330,000 lines, with a teledensity of 0.16% in rural areas and 4% in urbanised areas. This number of subscribers is gradually dropping due to the poor quality of the service and lack of compliance with universal service obligations. On the other hand, the mobile sector is expanding rapidly. The number of subscribers has grown from 5.3 million in 2005 to 7.3 million by December 2006, an expansion of 36.5%. By March 2008, the number of subscribers had risen to 11,989,007 with a penetration rate of 32.25%. Then again, the development of the internet in Kenya has not been as robust as the telephony sector. A Communications Commission of Kenya (CCK) internet study (2007) found that there are only 1,650,000 internet users, even though the internet was introduced in 1993. This is out of a population of some 37 million.

Since 2003, ICTs have remained amongst the Kenyan government's top development agendas. This is evident in various national plans and initiatives, such as The East African Marine System (TEAMS, 2007-2009), the Digital Villages project, and the e-Government Strategy (2004-2009). The Kenya e-Government Strategy provides a road map for the implementation of ICT initiatives and outlines a process for the modernisation of government. This is likely to impact on relationships between citizens, businesses and government. The potential of ICTs to store, process, retrieve and disseminate vast amounts of data and information will continue to provide opportunities for increased transparency, accountability and efficiency in government operations.

According to the 2005 World Public Sector Report published by the United Nations Department of Economic and Social Affairs (UNDESA), over 90% of the 191 UN member countries operated government websites. It is notable that e-government is closely linked to and shares similar characteristics with e-commerce and e-business in terms of the use and implementation of internet technology. It re-engineers inter- and intra-organisational processes and structures, generating new services, products and channels for the end-users. E-government holds promise for improved delivery of many types of public services, as well as disseminating information about government operations. It promises to improve communication between citizens and government, enabling more direct participation in decision-making. It is important that ICTs, and the internet in particular, function in a secure manner so users have confidence that they will work in a reliable and safe way. Security and trust in the online environment has therefore become an important goal for policy-makers.

A study conducted by Pyramid Research in 2000 noted that for most people in Africa, electronic interaction with government is usually through ICT intermediary institutions or other public access venues, typically the local district office, post office, community centre, cybercafé, library or school. This is unlike industrialised countries where citizens interact electronically with government at home or the workplace. For many Kenyans, this study still resonates, and many citizens continue to rely on intermediary institutions. The degree of trust that exists between citizens and these institutions tends to have considerable impact on how ICTs are used to achieve development objectives.

A UN Global E-Government Readiness Report (2005), based on a study conducted by UNDESA, notes that African countries face numerous challenges to fully adopting and adapting to e-government services, and seizing the opportunities presented by ICTs in general. Key challenges cited in the report are: the overall literacy rate; the commitment of government to genuine transformation; the development of communication infrastructure; and cyber security. Through e-government, citizens are required to reveal personal information and communicate with officials in a very impersonal way compared to telephone calls or face-to-face encounters, which are more interactive. The study suggests further that issues of security, trust and public confidence determine whether citizens feel comfortable enough to make use of and work with e-government services. On the other hand, under the appropriate conditions, ICTs can contribute to enhancing trust and trustworthiness by expanding access to public information and, thereby, promoting openness, transparency and accountability in public administration.

Similarly, in order for consumers and small and medium enterprises (SMEs) to benefit from e-commerce and e-business, they need confidence in the security of online transactions. As access to the internet diversifies, from personal computers (PCs) to mobile phones and other wireless

devices, there will be an increasing concern about the protection of assets and privacy in this networked world. These aspects will become important in a digital age based on convergence of technologies and systems.

In Kenya, ICTs – particularly computers – are still poorly understood by many people, even though they have become a ubiquitous part of daily life. There is a good deal of technophobia, a lack of skills, as well as general unease in the face of computers, especially with the older generation, and also in the case of many policy-makers. Amongst other things, this is due to bad personal experiences, socialisation, culture, news of large-scale computer failures, and a mindset gap (Mundy et al., 2001).

How government actions/inaction can contribute to a lack of trust in ICTs

The extent to which what a government does and does not do can lead to distrust in technology can be illustrated by two examples:

Kenya National Examination Council

In 2007, the Ministry of Education blamed computers for a mix-up of the national examination results for over 40,000 national secondary schools. A committee constituted to look into the matter attributed the problem to the Kenya National Examination Council's (KNEC) outdated computer software. The ministry did not admit to professional negligence and sheer incompetence. It explained the national shame by blaming computers. By doing this it implied that the barriers to ICT adoption are a result of poor information technology (IT) equipment, lack of financial resources to purchase up-to-date computers and software, and poor infrastructure, rather than constraints such as a lack of skilled personnel.

This demonstrates the tension that can exist between technology and government, and how technology can be used as a scapegoat. Processing power and good software can make government more user-friendly and sometimes also more efficient, but technology on its own cannot compensate for the incompetence and mistakes of politicians and bureaucrats.

The Kenya Terrorism Bill

The terrorist attacks in Kenya in 1998 and 2002, compounded by the global anti-terrorism campaign, resulted in the initiation of an anti-terrorism bill published in the Kenya Gazette on 3 July 2003. If this bill is enacted, it will be a criminal offence to "collect", "make" (produce and make available on a website), or "transmit" (by email, voicemail or any other telecommunication method) any record of information of a kind likely to be useful to a person committing or preparing to commit an act of terrorism. This clause is followed by the statement that "it is a defence for a person charged with an offence under this section to satisfy the court that he had a reasonable excuse for his action or possession."[1] This is

likely to affect the use of the ICTs, particularly the internet. The challenge will be for users to discern what constitutes information likely to be "useful" to terrorists. Civil society critics argue that this, together with other provisions of the bill relating to increased powers of search and seizure by the police, will lead to a growing sense of distrust and uncertainty in using the internet in Kenya.

Managing risk: Privacy and security

In providing services to the public and carrying out various other functions online, governments collect and use a wide range of personal information about their citizens. These include data regarding income, education, health, property ownership and employment. Governments are therefore obligated to protect the privacy and security of the identity and personal information that they acquire, not only because of the right to privacy recognised by international laws, but also because trust is a critical factor of any successful online programme, whether in the field of e-commerce or in the field of e-government.

An Organisation for Economic Co-operation and Development (OECD) study into e-governance found that privacy and security are often cited as major concerns of internet users and major reasons why many non-users still avoid the internet (OECD, 2008). Individuals and businesses will not use e-government services unless they are assured that the information the government collects will be used responsibly and protected from abuse. To promote trust in online applications most effectively, policy-makers must address privacy and security issues in the planning and design of online services and application phases. Privacy and security measures included from the design phase are generally easier to implement. If the legal and technical challenges associated with identity are not successfully addressed, the quality of social interactions both online and in the physical world will deteriorate, further affecting trust in government and technology.

The way risks are managed is therefore one important aspect of whether people trust electronic governance, at least in terms of the protection of personal data. Victims of cyber crimes, for example, would be less supportive of national computerised files. Therefore, business and government will have to adopt highly concrete and effective rules of fair information practice in order for programmes using personal information to be seen by the public as acceptable.

The OECD study notes that despite a growing awareness of security problems and a corresponding growth in security measures taken, security incidents are still widespread and are not abating. Fraud with credit or debit cards is a serious barrier to engaging in e-commerce, which raises challenges for businesses to convince consumers that e-commerce can be conducted in a safe online environment.

Although the Kenyan government has begun to deal with issues of cyber security through various bills, including the Kenya ICT Bill 2007, there is still a lack of comprehension about the extent of the destruction that can be brought on by cyber crime.

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1   Suppression of Terrorism Bill, 2003, Part II, 5.

The pending legislation that deals with issues of internet privacy and security are the following:

- The Kenya ICT Bill 2007: This bill aims to facilitate the development of national infrastructure to enable universal access; establish a regulatory framework for the carriage and content of communications under convergence; promote a plurality of news, views and information; and create a framework for increased investment in and application of ICTs. The bill contains a clause that holds cyber criminals liable for crimes and proposes an enforcement framework that would involve cyber inspectors. It does not adequately cover the issues of privacy or data protection. The government has proposed the development of a separate data protection bill.

- Consumer Protection Bill 2007: This bill aims to "establish a regime of consumer protection law, in order to provide comprehensive consumer protection and appropriate legal recourse to aggrieved consumers." It proposes to "codify and consolidate consumer laws in Kenya; to prevent unfair trade practices in consumer transactions…" The bill attempts to protect consumers from unfair practices and provides legislative provisions that would apply to all consumer transactions. It has specific safeguards for protection of consumers who use the internet for goods or services and defines an "internet agreement" as a "consumer agreement formed by text-based internet communications." This is to encourage public confidence and trust regarding internet-related transactions.

- Electronic Transaction Bill: The overall objective of the bill is to create an enabling legal environment for consumers, businesses, investors and government that will facilitate and promote the use of electronic transactions which are conducted using various types of ICTs. The bill aims to encourage the use of ICTs, including e-government and e-commerce services. It also aims to protect the privacy of the public and the interests of consumers and investors from abuse.

Action steps

The above-mentioned OECD study notes that citizens have more confidence in a system of government where there are widespread opportunities for civic participation and the protection of human rights. However, government websites rarely facilitate unmoderated public feedback, and there are very few published public reactions to policy proposals. There is also little use of discussion forums, electronic mailing lists and bulletin boards. As a result, the overall impact of the internet seems to have failed to improve transparency of government decision-making, increase access to policy-makers, or facilitate public participation in policy-making. Most Kenyans still depend on radio as their source of information. Traditional methods like letters, written submissions, and informal face-to-face meetings continue to dominate communication.

Citizen trust is an important catalyst of e-government adoption, which depends heavily on the internet. Lack of confidence and trust in government cannot be compensated for by ICTs. For Kenyans to use the internet and other ICTs to communicate and conduct business electronically, it will depend on the level of confidence and trust in people, in organisations and indeed in the technology they use. Technology on its own will not bring reform, but it can make changes easier, cheaper and more effective.

Trust is about risk management, which often means that the government needs to be proactive, even in seemingly innocuous regulatory changes. For example, in 2015, Kenya will introduce digital broadcasting. Digital broadcasting has emerged as a globally accepted standard for next-generation mass media. While digital migration is a very significant technological turning point, it will force the take-up of new technology, which cannot be accomplished without having an effect on issues of trust and public confidence in legal and regulatory relationships.

Embracing new technologies will involve much more than organisational and technical issues or regulatory frameworks. It will include ethical dimensions of state-citizen interaction, in which trust, consent and democracy are crucial. And the absence of clear attention to these in the current policy-making processes is a cause for action. ■

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GLOBAL INFORMATION SOCIETY WATCH 2008

GLOBAL INFORMATION SOCIETY WATCH 2008 is the second in a series of yearly reports critically covering the state of the information society from the perspectives of civil society organisations across the world.

GLOBAL INFORMATION SOCIETY WATCH or **GISWatch** has three interrelated goals:

- **Surveying** the state of information and communication technology (ICT) policy at the local and global levels

- **Encouraging** critical debate

- **Strengthening** networking and advocacy for a just, inclusive information society.

Each year the report focuses on a particular theme. **GISWatch 2008** *focuses on access to infrastructure* and includes several thematic reports dealing with key access issues, an analysis of where global institutions stand on the access debate, a report looking at the state of indicators and access, six regional reports and 38 country reports.

GISWatch 2008 is a joint initiative of the Association for Progressive Communications (APC), the Humanist Institute for Cooperation with Developing Countries (Hivos) and the Third World Institute (ITeM).

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