E-government in Africa

A poor implementation record can be ameliorated by developing new infrastructure and changing government attitudes.

“It is now acknowledged that e-government has great potential for contributing to government reforms in Africa,” says John-Mary Kauzya, chief of the Governance and Public Administration Branch of the United Nations Department of Economic and Social Affairs. The promise of efficiency, transparency, and the potential for easier interaction between governments and citizens is all the more important on the continent given their sometimes striking absence. “E-government is a quick way for governments with limited infrastructure to catch up with the rest of the world in deployment of services,” says Douglas Woolley, group executive of the Technology Group at Business Connexion, a South African systems integrator. “We need this because it alleviates an administrative burden and helps deal with fraud and corruption.” “However,” Mr Kauzya cautions, “it is quite another thing to successfully implement e-government.”

Poor implementation

The UN’s biannual E-government Index shows that Africa is doing particularly badly on implementation. The continent had by far the poorest performance of any region in 2012: its score is only 56% of the global average and 38% of Europe’s – the best performing region. Although from an absolute perspective things are improving, in relative terms Africa is falling behind as other regions improve more quickly. Moreover, despite some excellent individual initiatives, over the last decade no country has shown consistent improvement. Arnaud Kouassi, chief executive of LP2i, an Ivorian systems integrator, which has worked extensively in West Africa, complains that e-government simply is “not going fast enough. Most governments have websites with information about the country and constitution, but they don’t provide a platform were people can interact with the government.” Similarly, Mr Woolley, says “even in South Africa we don’t have any big success stories.”

The barriers to the implementation of e-government in Africa help explain why it is lagging behind and how things might develop in future. It is possible to predict an African country’s E-government Index score with surprising accuracy by combining a handful of variables not used in that index’s creation. As the chart shows, a formula based on a state’s score in the EIU’s Democracy Index, its GDP, and its location (in particular whether it is a land-locked Saharan country and whether it is in West Africa). All of the variables are highly correlated to the E-
Government Index score, and collectively they explain more than three-quarters of the variation in it.

This gives clear statistical backing to the truism that e-government has two sides: technology and government. In Africa these can also be expressed as capacity and political will. As for the former, one obvious barrier to e-government on the continent has been the lack of infrastructure. Here income has a clear effect, with poorer countries doing worse. Especially in these states, there are much more basic things that need attention more urgently. As Richard Heeks, professor of development informatics at the University of Manchester puts it, “Africa needs to have ‘electric government’ before it can truly build electronic government, and yet power remains chronically under-supplied.” Geography can also exacerbate matters: West Africa is still poorly served by existing broadband arrangements. Moreover, Africa’s main internet backbone cables are undersea, encircling the continent. The Sahara remains largely a data, as well as a physical, desert, so its effect on the E-Government Index results will remain for some time.

Intra-Africa fibre network

The issue is as much one for governments as for private citizens. Austin Okerere, managing director of Computer Warehouse Group in Nigeria, who also acts as an advisor to the country’s Ministry of Communications, explains that government institutions themselves need “broadband so they understand the value of the internet.” Ironically, given the problems presented by a lack of infrastructure, existing IT also presents difficulties. Mr Kouassi, whose company has worked with a range of West African governments, notes that these public entities typically do not have integrated infrastructures. Each department is likely to have its own information technology infrastructure, exacerbating the data silos which e-
government is meant to prevent.

That said, although substantial infrastructure challenges will remain for many years and should not be underestimated, Africans are seeing improvements in IT capacity that could enable greater use of e-government. This year alone, two major undersea cables, the Africa Coast to Europe cable and the West Africa Cable system, will greatly enhance capacity as the SEACOM cable did for East Africa in 2009. At the same time, the rapid spread of mobile telephony has completely changed the technological landscape: even while the per capita penetration of landlines has decreased, that of mobiles has skyrocketed. By 2011, according to the ITU, there were 53 mobile subscriptions per 100 inhabitants, more than double the 2007 figure. Rapid growth is likely to continue. These phones in turn are giving Africans internet access that simply did not exist before. While it is impossible to generalize across the entire continent, progress – wired and wireless – is opening up substantial possibilities in parts of Africa. For example, Alice Munyua, chair of the Kenyan Internet Governance Steering Committee and active on Kenya’s Open Government Data Initiative – one of the best regarded e-government projects on the continent – notes that, although access remains expensive for many of her fellow citizens, for her initiative “in terms of infrastructure and from a technology perspective, we have it adequately covered.”

If technology were the only issue, it would be reasonable to predict rapid growth of e-government services as more Africans become connected, and that these would be designed with a view to being accessed from mobile phones. Infrastructure, though, is the easy part.

Government attitudes
“E-government is first and foremost government,” explains Mr Kauzya. “If a government has not reached the [requisite] level of commitment to effectiveness, equity, efficiency, transparency, and accountability, it would not have any incentive to invest in the development of e-government.” As the link between e-government and the Democracy Index shows, the use of e-government is a governance issue: if governments do not actually want to interact with – let alone empower – citizens, why would they make substantial investments in order to do so?

The resistance is rooted in both culture and self-interest. “You are talking about decades of a way of doing business that is focused on the process, not the result. They are not evaluated on results,” says Hisham Sanad, co-founder of Cairo-based Egabi Solutions. “People focus on doing business the way they know, with lots of requirements and paperwork, but e-government is about convenience and doing business as fast as possible.” He believes the potential of e-government to reduce corruption is slowing its adoption in a number of countries, especially when compared with the progress of countries in the Gulf. “You need the government to push e-government and to streamline [processes].”

Professor Heeks agrees: “The key determinant of e-government is the attitude of senior government officials. A few may be reformers who want their countries to modernise, others are, perhaps reluctantly, pushed along by donor money, but many see dangers in e-government; shifts in the patterns of power that threaten their modus operandi, leading them to ignore or resist it. Within that mixed picture you don’t find a continent-wide, critical mass of top-down pressure for e-government.”

Ms Munyua’s experience bears this out. She says that one of the Open Government Portal’s greatest strengths has been support from the top of government, including Kenya’s president. Yet even this has not prevented certain ministries from trying to avoid the provision of data for the project to release on-line. Michael Macharia, chief executive of Kenya-based Seven Seas Technologies Group, which has advised on a number of e-government initiatives, reports that they do not take into account the fragmented storage of
data across government departments and “the amount of bureaucracy needed to share this data. People create kingdoms within their own organisations. They don’t see the bigger picture that by sharing it will increase value.”

This lack of top-down pressure is all the more important in Africa because citizens themselves do not yet appear to be pressing hard for e-government. Like governments, many individuals are focussed on more concrete demands, such as an end to corruption or a better water supply. Nor do they always see e-government as a means to these ends. Ms Munyua’s biggest surprise in working on the Open Government Portal has been the lack of uptake, not just by politicians but by citizens, despite the political awareness of many Kenyans.

Looking ahead, there is certainly hope for a greater spread of e-government. Mr Macharia believes that economic competition will drive governments on: “I am positive, but it will take time.” Similarly, Mr Kauzya notes that eventually even reluctant governments will be dragged along as greater use of e-services becomes more common, not only around the world but in Africa itself. The shape of these services will also see some evolution. Given the current lack of interest in her country, Ms Munyua believes that one of the challenges of e-government is not simply the provision of information for its own sake, but approaching open data from a demand perspective.

Business opportunities
Slow adoption does hold back growth, but businesses should focus on the areas where governments may actually invest.

E-government implementation has been slow across Africa, attitudes among African policymakers are less than enthusiastic and citizens are not eagerly taking up the services that do exist. So where are the business opportunities moving forward? The key is to start with the low-hanging fruit and build up confidence step-by-step. Companies need to identify the few areas that governments want to spend on and then service that need. If policymakers are reluctant to break down barriers to accessing government data, for example, a first step is to integrate data held in administrative silos (in a way that can reduce government costs). Aside from the financial fillip this offers suppliers, it also creates the opportunity to “cross sell” and encourage public departments to adopt more sophisticated e-government services. Another approach is to focus on building broadband use, focusing for example on e-education. “This can act as a catalyst for the digital economy, creating areas where the digital culture spreads beyond students to the general population,” says Austin Okerere of Computer Warehouse Group, pointing to high internet usage in the poor north-west of Nigeria as a result of the American University in Yola. It is also worth noting that while e-government adoption is slow, m-government initiatives such as m-health are gaining traction across the continent, and thus offering new business opportunities.
Workshop on the development of e-government in Africa

Some of the questions we’ll explore in the discussion:

How will Africa’s specific technological environment, including the overwhelming use of mobile devices to access the internet, affect the shape of e-government on the continent?

Will technological constraints hold back e-government for the long term?

Where will demand for e-government services come from in Africa? Might it be bundled into a wave of demand for greater transparency and the elimination of corruption – a kind of African Spring? Or is it more likely to be pushed by business needs?

What e-government services do Africans want now and what might they be willing to pay for, that will make an immediate difference in their lives?

What, if anything, will motivate governments to speed up the implementation of e-government in Africa?

Is too much being made of the potential of e-government and will it appear as a result of more basic problems being solved rather than as a tool to help in their solution?