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Facilitating Better Governance through E-Government Initiatives: Successful Cases in Sub-Saharan Africa

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ABSTRACT

"Corrupt political elites in the developing world, working hand-in-hand with greedy business people and unscrupulous investors, are putting private gain before the welfare of citizens and the economic development of their countries,"[CNN, 2003].

National governments in sub-Saharan Africa, a region which is home to 33 of the 48 least developed countries of the world, are notorious for bribery and corruption. A running joke among residents in this region is whether Cameroon or Nigeria wins the distinction of most corrupt country. Both seem to be competing annually for first and second places in the rankings for the World's most corrupt countries. E-Government is a possible approach to address such poor governance practices and to promote the use of information technologies (IT) for day-to-day governance and transparency. The World Bank defines E-government as, *"the use by government agencies of information technologies that have the ability to transform relations with citizens, businesses, and other arms of government"*[World Bank, 2005]. This study presents several successful E-government projects in sub-Saharan Africa. These successful projects lead us to propose that E-government initiatives hold possibilities for improved governance and increased participation in the democratic process. The model projects in this study serve as a reference for sub-Saharan African countries that desire to adopt E-government practices to address many undemocratic problems that plague the region. We trust our paper will serve as an impetus for the research community to consider investigating E-governance and other priority IS issues in sub-Saharan Africa; a region often omitted in mainstream IS research.

Keywords: E-government, E-government capabilities, Governance, Developing Countries, sub-Saharan Africa.

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Introduction

An increase in computer-based and computer-mediated applications usage in both the public and private sectors within sub-Saharan Africa resulted from the recent growth experienced in cellular telephony, Internet diffusion, and the proliferation of other technology-related services [Meso et al., 2005; Mbarika et al., 2005]. Despite these recent technological advances, sub-Saharan Africa continues to account for some of the poorest countries of the world. One of the key types of these applications is E-government: the use of information technologies for the delivery of government services and the execution of governance mechanism within a given country. E-government applications have the ability to transform the relationship between government and its citizens (G2C), government and legal entities (G2B), and the relationships between the various institutions of governance within a country (G2G). Given the history of poor governance in most of the sub-Saharan African countries, E-government applications may provide a feasible and affordable platform to enhance governance in these countries [Grönlund and Horan, 2005].

This study presents some successful projects from countries that implemented e-government practices which promoted transparency in governance and other democratic practices within this region. Before discussing the cases, we provide a summary background of this region of the world that is so often overlooked.

Background

Countries within the sub-Saharan African region are typically characterized as low-income countries suffering from long-term constraints against growth. In particular, these growth constraints include low levels of human resource development and severe structural weaknesses: economic, social, and political [Austin, 1990]. The historically poor infrastructure in sub-Saharan Africa yields a partial explanation as to why the region is home to 33 of the 48 least developed countries of the world, based on the World Bank definition. Figure 1 shows the World Bank's criteria for including countries in the list of Least Developed Countries, while Appendix A lists the 48 least developed countries in the world, along with their respective years of entry to the list.

In recent years, the sub-Saharan African region has experienced growth in various dimensions of ICTs. Mbarika et al. [2005] report that although the region of sub-Saharan Africa was a late starter on the Internet, it has undergone, and continues to demonstrate, rapid transformation. The countries in this region are experiencing growth in Internet connectivity, computer usage, and wireless communication diffusion. Naomi Schwarz reporting from a conference in Burkina Faso in 2007 where experts from African countries came to share some of the recent developments in the field stated that African governments looking for ways to decrease corruption and improve the lives of their citizens are increasingly turning to the idea of e-government, the use of computers and the Internet to exchange information and services directly with citizens, businesses and other arms of government. At the same conference, Aliyu Azizi, the technology advisor to Nigeria's Government stated his goal. He suggested that Africa as a continent should be able to improve organizational effectiveness and then make the government more open and accountable and improve service delivery, and in the end, engage the citizens through this medium (Schwarz, 2007). These statements indicate that there is a significant level of development of internet-based services within these countries [International Telecommunication Union, 2001; World Bank, 2002; Mbarika, et al., 2002; Mbarika et al., 2005].

World Bank's old criteria for inclusion

The original set of criteria for constructing a list of countries classified as LDCs were adopted in 1971. This includes:

1. Per capita income per year: less than US \$200. This figure, revised periodically, stood at US \$600 in 1998.
2. Share of industrial production in the Gross National Product (GNP): under 10 percent.
3. Adult literacy rate: less than 20 percent.

World Bank's new criteria for inclusion

New criteria for determining LDCs were established in 1994:

1. Population: less than 75 million.
2. Per capita Gross Domestic Product (GDP): less than US \$700 (averages 1990-92).
3. Augmented physical quality of life index (APQLI): less than 47.³
4. Economic diversification index (EDI): less than 26.⁴

Figure 1: World Bank's criteria for inclusion to the list of Least Developed Countries
Source: World Bank(2002) and World Bank Group(2005).

Evidence of the technology infrastructure improvements across sub-Saharan Africa includes the following:

1. Telephone density of sub-Saharan Africa is now well above the one per cent threshold considered essential to economic growth and development. For example, in the millennium year, fixed telephone density grew from 0.9 per cent to 1.2 per cent [International Telecommunication Union, 2001];
2. By 2001, the number of mobile subscribers had outpaced fixed line subscribers with a recorded ratio of approximately 17 mobile phone subscribers per 1000 population compared to 14 per 1000 for landline phones [International Telecommunication Union, 2001]; and

³ APQLI comprises four indicators: life expectancy at birth, per capita calorie supply, school enrolment ratio, and adult literacy rate.

⁴ EDI comprises the share of manufacturing in GDP, the share of employment in industry, per capita electricity consumption, and the export concentration ratio.

3. Between 1998 and 1999, 36 new operators launched mobile services with well over half of the countries across the region establishing independent organizations to regulate information and telecommunications sectors [Jensen, 1999].

Given the increased diffusion of Internet, telephone, and related technologies, some governments within the Africa region (sometimes through pressure from international donor organizations) have taken major steps to exploit these technologies for the purpose of enhancing governance and providing government services [Mbarika, 2001; Mbarika et al., 2002; Mbarika et al., 2005]. E-Government therefore is increasingly been viewed as an essential tool in the future outlook of these countries and is gradually transforming how services are delivered to the general public (Muraya, 2007). In the next section, we discuss the importance of E-government for sub-Saharan Africa followed by four cases of successful implementation of these technologies across the region.

Significance of E-Government

Positive outcomes of E-government include: improved efficiencies of governmental processes; empowerment of the general populace; improved interaction between the private sector, public sector, and general public which in turn results in an improved perception of governmental entities. The cases examined later in the study provide evidence that these positive outcomes do occur, and efforts to emulate these success stories should be encouraged.

Improved Public Sector Perception

Although Rumiany (2007) indicated that in Sub-Saharan African, the digital divide is still at its most extreme. That the use of information and communication technologies is still at a very early stage of development; it does not underscore the fact that providing people with the convenience of 24/7, fast access to services potentially improves citizens' perceptions of government [International Telecommunication Union, 2001]. This added convenience allows citizens the ability to perform transactions whenever and wherever there is Internet connectivity [Goodman, et al., 2001; International Telecommunication Union, 2001]. In addition to increased access to information and

improved public image, implementation of E-government initiatives influence and improve additional areas of the public sector such as:

- Managing Process Flows;
- Facilitating Strategic Connections In Government;
- Increasing Knowledge Sharing;
- Creating Opportunities;
- Removing Barriers; and
- Automation of Government Processes [Agarwal, 1999; Danowitz, et al, 1995; Ein-Dor, et al. 2000; Goodman, 1994; Goodman, et al. 2001; International Telecommunication Union, 2001].

Improved Efficiencies

Providing a means for citizens to interact with the government via a website reduces time, transaction costs, and labor costs. Transaction costs and time are reduced when citizens no longer have to stand in lines to conduct business with public sector entities. Instead, citizens go online to complete the desired transaction [Goodman et al., 1995]. Examples include electronic voting, acquisition and dissemination of information related to healthcare, agricultural education, employment, etc. The application of E-government practices enhances knowledge dissemination across large geographical areas [O'Brien, 2005]. E-government practices also potentially create a paperless government services environment or at the very least a reduction of paper-based processes. While a reduction of paper usage is generally viewed positively, the resultant elimination of civil servant jobs owing to the automation of simple and routine clerical operations could be misconstrued as a strike against E-government. However, the cost savings resulting from the elimination of redundant and low-value job positions could be reallocated to other areas such as health care or education [Agarwal, 1999].

Enabler of People, Businesses and Government Interactions

E-government initiatives facilitate availability of government resources. In turn, citizens are able to make informed and accurate decisions [Ein-Dor, et al. 2000]. New open

sources of information allow citizens to obtain and research information about upcoming elections or ongoing debates resulting in decisions based on knowledge. Access to information, enabled by E-government applications, enables empowerment of employees. E-government initiatives allow citizens to interact directly with the government via an array of Information Communication Technologies (ICT). Through the use of ICTs, citizens have the ability to email questions and concerns directly to government officials. Simultaneously, governments are afforded another means of obtaining information to assist in the decision-making process regarding bills and legislative issues that are currently in debate. Providing employees with the appropriate information allows them to better perform their primary responsibilities [Goodman, et al. 2001]. E-government initiatives often eliminate arduous tasks such as cross-checks of policy and compliance requirements [Goodman, et al., 2001]. As a result of using e-government technologies, most of the information regarding compliance and policies is available in some sort of digital format that is be readily available via the Internet or another ICT. Additionally, day-to-day governmental processes are streamlined by consolidating many tasks to only a few.

Given these positive attributes, E-Government, coupled with other initiatives, may help transform sub-Saharan African countries into more efficient and effective governments. However, before sub-Saharan governments can fully access, utilize, and realize the benefits of E-government some deeply entrenched impediments (some of which are discussed next) must be overcome.

Impediments to E-Government Implementations

Research shows that efforts to change the manner in which public sector employees conduct the business of the government are often futile for a number of reasons. Moon's 2002 study on E-government in municipal governments in the U.S. revealed that impediments to successful E-government implementations included: a lack of technology expertise by staff members; technological capacity security issues within individual agencies; a lack of financial resources for technological changes; and a lack

of commitment on the part of employees to change the manner in which work is done [Moon, 2002].

Moon's work reiterates similar impediments found in studies conducted by Accenture Consulting in 2002. In an on-going research project that assessed the level of e-government implementations of countries in North America, South America, Asia, Europe, and South Africa, Accenture found that despite significant increases in the use of e-government practices, countries around the world experienced serious impediments to fully implementing e-government initiatives which included: internal resistance from public sector employees; a culture of corruption; resistance from external stakeholders; poor technological infrastructure; and a lack of executive support [Accenture, 2002]. Countries in sub-Saharan Africa have also experienced similar impediments to e-government efforts. Internal and external resistance; a culture of corruption; and poor technology diffusion are three of the central impediments to E-government implementations in sub-Saharan Africa [Accenture, 2002].

Internal & External Resistance

From front-line service workers to top-level diplomats, internal resistance to E-government implementation is partially responsible for e-government failures in developing countries. For example, the use of videoconferences by diplomats, results in a reduction of overseas travel, which is a perk used to offset low salaries. Senior staff members may often view e-government initiatives as an attack on their authority. Resistance from clerical staff may result from misperceptions that e-government initiatives will make them obsolete.

External forces may also impede the progress of e-government initiatives. E-government stakeholders outside of the public realm often view their interests to be threatened with the onset of new technology, particularly service providers that are contracted by the government. Because the use of technology may replace the need for the service provider, there is often an effort to stifle or sabotage the implementation of E-government in sub-Saharan African countries.

A Culture of Bribery and Corruption

Unfortunately, corruption within sub-Saharan African governments persists. As a result, implementation of e-government projects suffer from cronyism related to contracts being given to private sector companies that may not actually be the best service provider. Nevertheless, as a result of their affiliation with government leaders, these companies receive public funds to deliver services to government agencies. Although not unique to sub-Saharan Africa, this impediment is particularly stifling in implementing E-government initiatives.

Poor Infrastructure and Limited Computer Availability

Lack of technological infrastructure such as basic telephone service in some remote rural areas of sub-Saharan Africa is a serious impediment to e-government implementations. As noted earlier, without the proper technological infrastructure, a government's ability to provide services through the use of technology is limited. Sub-Saharan countries have some of the lowest rates of teledensity and technology diffusion in the world [Mbarika, 2001; Musa et al. 2005]. As such, the governments of these countries are limited in their abilities to implement e-government services.

Despite significant hurdles to overcome, successful implementations of E-government initiatives have taken place in sub-Saharan Africa. The following paragraphs discuss in detail four such successful implementations. These examples highlight the potentials of E-government for the region.

E-Government Projects in Sub-Saharan Africa

Project 1: Ghana - National Information Clearing House (NICH)

The Ghanaian Ministry of Communication's mission is to develop projects that facilitate effective and transparent policy by integrating communication technologies and government information [Ghana NICH, 2000]. The National Information Clearing House (NICH) project was proposed and implemented by the Ghanaian Ministry of Communication at the International Institute for Communication and Development ICT

roundtable conference jointly organized by the Information Society of Ghana (ISOG) and the International Institute for Communication and Development (IICD) in May 1998 [Ghana NICH, 2000; IICD, 2005]. This project was presented as a “Good Governance Initiative”, and was designed to provide access to the nation’s information flow. Both public and private sector entities in Ghana developed their own electronic systems to serve their respective information needs but with very limited information exchange between the two entities. The NICH project facilitates interaction between the public and private sectors that otherwise would never exchange information.

The core component of the NICH is the development of web-based information systems within government institutions. Other components include building ICT capacity through the use of training and raising awareness among employees within government. The technical inputs required to release the clearing house included five file servers; five air links; five routers; sixteen personal computers; five Windows NT software licenses and a customised application to be developed [IICD, 2005]. The project’s staffing is comprised of a project coordinator, five system administrators; and ten data entry personnel [Ghana NICH, 2000]. The project is both financially and technologically sustainable. Sustainability is enhanced through active advice and support from the project partners, the Private Enterprise Foundation of Ghana, the Institute of Engineers in Ghana, and the Internet Society of Ghana [Ghana NICH, 2000; IICD, 2005; Clarke, 2001].

In April 2000, the pilot phase of the project started with a focus on the development of a basic database system at the Ministry of Communication to link two institutions. The pilot project made use of the existing ICT facilities at the Ministry to train the technical staff and information officers at the Ministry. An extensive ICT training was conducted with the development of the official Government of Ghana web site. After the successful completion of the pilot project, the National Information Clearing House was fully implemented.

The National Information Clearing House links the database of four main government institution agencies including the database of Ghana’s export promotion council which

provides private and government parties with a range of market information and statistical trade data services [Ghana Export Promotion Council, 2004]. The NICH also linked the database of the Ghana free trade zone board, which encourages the development of commercial and service activities at seaport and airport areas [Ghana Free Trade Zones Board, 2003]. Ghanaian citizens are afforded access to investment information through the investment promotion center which collects and disseminates information about investment opportunities and sources of investment capital in Ghana [Ghana Investment Promotion Centre, 2004; Ghanaian Ministry of Roads and Transport, 2004]. The NICH also provides advising services to assist approximately forty-five other interested government and private entities in linking to the information clearing house [Ghana NICH, 2000].

Currently the Ghanaian government has accelerated their efforts to implement additional ICT initiatives. For example, the Ghana government is negotiating with Telecom Malaysia to buy back the 30% share of Ghana Telecommunications Company (GTC). GTC has revamped its business strategy and is focused on providing 750,000 mobile phone lines and 450,000 fixed phone lines that will solve Internet connectivity issues. An additional initiative by the Ghanaian government is the creation of a new ICT policy. This policy, the Ghana Information and Communications Technology for Accelerated Development Policy, serves as the governing document for ICT infrastructure development in Ghana.

Ghana is currently engaging the media to assist in educating the general public on Information and Communications Technology. Furthermore, the country's leadership believes that in order to implement ICT initiatives, it is imperative to improve the current reliability of telecommunications infrastructure through a new regulatory system for all sub-Regional entities [The Institute of E-Government, 2005].

Project 2: Kenya – Busting Corruption Using the Internet

In 1996, the Berlin-based international anti-corruption lobby group, Transparency International, released an index that was an assessment of the corruption level in 52

countries. Kenya was listed as the world's third most corrupt country ahead of Pakistan and Nigeria [Githongo, 1998]. Bribery, private payments to public and private officials to influence decision-making, is the most prevalent manifestation of corruption in Kenya [Transparency International, 2000 and 2005]. A concerted fight against corruption is imperative for both the country's internal management and a sound relationship with donors [Kibwana et al., 2004].

In Kenya, there is a critical shortage of concrete information on the incidence of corruption in general, and bribery in particular [Transparency International, 2000 and 2005]. The Kenya Anti-Corruption Authority (KACA) was formed with a mandate to investigate corruption and bring prosecutions against perpetrators [Githongo, 1998]. To increase access to information, the Kenya Anti-Corruption Authority partnered with Information Technology Standard Association (ITSA) of Kenya, a major Internet Service Provider and the media to increase public awareness by electronic means and encourage public participation in the fight against corruption [Onunga, 2000]. ITSA has launched an Electronic Graft Management (EGM) pilot project that uses the Internet and e-mail as the channel for communication by the public for reporting crimes [Transparency International, 2000 and 2005]. Kenya's Electronic Graft Management is available 24 hours a day 7 days a week, 365 days a year and has been expanded to include Internet Cafés and e-Touch centers in various towns for reporting corruption, at no cost. Additionally, an EGM website was developed that informs the public about official procedures for conducting government transactions and provides a feedback channel to report complaints.

Successful implementation of the EGM system focused on appropriate system design, adequate security, public awareness, and strategic geographic locations. The project made use of the existing Internet infrastructure in Nairobi, Mombasa, Kisumu, Eldoret, Nakuru, Nyeri, Busia, and Isiolo [Onunga, 2000]. The information collected by these centers is routed to the EGM where it is filtered electronically with minimum human intervention. The EGM then forwards the information to the relevant authorities [Onunga, 2000]. The EGM Centre monitors the volume of corruption reporting on a

monthly basis and produces relevant reports [Transparency International, 2000 and 2005].

The greatest challenge facing the implementation of this project has been encouraging people to genuinely report corruption activity in the country. ITSA proposes to use highly motivated youth volunteers to inform the public about the availability of the online channel and to report corruption to the KACA. The awareness campaign targets teachers and trade associations, NGOs, community based organizations, churches and religious organizations, as well as private and public institutions.

Project 3: Tanzania – ICT for improved District Governance

Tanzania, located in eastern sub-Saharan Africa, has put information and communication technologies (ICT) development first on their agenda as stated in the country's "Vision 2025" initiative [Government of Tanzania, 2005]. As a commitment to its Vision 2025 initiative, the Government published a national ICT policy aimed at guiding the growth of the communication and technology infrastructure [Tanzanian Ministry of Communications and Transport, 2003]. The Kinondoni project, located in one of three districts that comprise the city of Dar es Salaam, is an example of how this initiative is being implemented.

Through the use of ICT, the overall aim of the district computerization Kinondoni project is to bring about good governance in the Kinondoni District [Backus, 2001]. The project was a product of the National ICT Roundtable held in Dar es Salaam in July 1998 which focused on facilitating governmental processes through the use of ICT. The Office of the District Commissioner in the Kinondoni District is a primary user of the project. The District Commissioner heads the central government administrative structure, which is responsible for maintaining law in the district. Prior to the implementation of the Kinondoni project, the district commissioner's offices in Kinondoni conducted manual processing of information that was extremely ineffective and inefficient [IICD, 2005]. Implementation of the project has resulted in increased efficiency of organizational processes [IICD, 2005].

Like many attempts at procedural change, the Kinondoni project experienced serious problems. Prior to implementing the systems there was an absence of a computerized management information system in the district; consequently, the resources were not used properly [Backus, 2001]. After reviewing the initial reasons for failure, the implementation team narrowed the scope of the implementation and focused on establishing a simple management information system at the district level that captured information generated from three selected sectors that included education records, health records, birth records, marriage licenses, and death certificates. After an extensive revamping of the project, the implementation efforts resulted in timely and customized reports on education, health records, registration of birth/death certificates, and marriage licenses [Backus, 2001]. The success of the project prompted the district leaders to initiate a similar project for business licenses, land data, and other geographic information systems (GIS) applications. In January 2003 the project was completed with assessment of the lessons learned.

Currently, the Tanzanian government has accelerated the implementation of e-government strategies through the Permanent Secretary for Establishments. A \$60,000,000 budget has been approved to construct a system-wide infrastructure network to connect all government offices on a consolidated platform. Additionally, the Tanzania Commission for Science and Technology (COSTECH) has approved a strategic plan that will assist in the promotion of ICT and establish regional ICT based networks [COSTECH, 2004].

Project 4: South Africa – City of Cape Town: Smart City Strategy

Cape Town's Smart City Strategy was the culmination of several projects in the Cape region that ultimately changed the way citizens and businesses interact with the government [Nyitambe, 1999]. In 2002, the city of Cape Town contracted SAP to implement an Enterprise Resource Planning system to streamline the city's current IT system [Sasekepa and Kaapstad, 2002]. The project, known as Ukuntinga, (which means "to soar" in the Xhosa language), replaced the old IS 240 system; integrated

local administrative departments; and eliminated inconsistencies that existed among those departments [SAP, 2003]. The system is comprised of 70 discrete information systems and interfaces on 12 different IT platforms, which accommodate 28,000 employees who serve over 3 million people [SAP, 2003]. The SAP system enables the city to efficiently and effectively manage resources, devise accurate projections of future needs, and link those departments that are dispersed geographically to a centralized computer system.

The first live transactions of the SAP system were conducted on December 30, 2002 [City of Cape Town, 2003]. An immediate benefit of the system was efficiencies gained as a result of direct linkage to business partners. Instead of maintaining similar data in several locations, the new system eliminates redundancy and reduces the possibility of inaccurate data [SAP, 2003; Sasekepa and Kaapstad 2002]. Moreover, it standardized 380 council business processes. The city benefits from streamlining services such as collections, payment processing and settlement. Additionally, city leaders are able to utilize the accurate data in the decision-making process regarding strategic business alliances [City of Cape Town, 2002; Sasekepa and Kaapstad 2002].

To ensure that citizens have the tools available to utilize these systems, Cape Town implemented another project known as the Library Business Corner Project. This project allows users to have access to basic information and Information Communication Technologies [City of Cape Town, 2002]. Six libraries were chosen as access points throughout Cape Town. The libraries provide free access to computers with word processors, web browsers, e-mail, presentation tools, acrobat adobe and other software applications. All participants receive free e-mail and registration available in three languages.

The aforementioned projects along with several others still in their infancy all make up what is known as Cape Town's Smart City Strategy. This strategy integrates business processes across departments and removes existing communication barriers. The end results include: increased citizen interaction with the government; improved seamless

communications between government agencies and strategic partners; increased efficiencies; and increased revenue for government agencies and their strategic partners. Cape Town's efforts to empower local government to address developmental needs through efficient and accountable ITC use has been lauded by international representatives of IT organizations such as Microsoft founder Bill Gates. In June of 2004, Cape Town received the prestigious 21st-Century Achievement Award from the Computerworld Honors program hosted in Washington D.C. for its use of IT in the category of Government & Non-profit organizations [Ntuli, 2005].

Significance of E-Government Cases

Each e-government initiative was designed, developed and implemented with the help of private entities that deliver completely integrated, scalable and solutions that are collaborative across departmental networks. These solutions have had an immediate business impact, provided cost-efficiencies, reduced waste, and improved overall efficiency [Agarwal, 1999; Danowitz, et al., 1995]. Moreover, the new systems created a communications network.

Our examination of e-government initiatives in sub-Saharan Africa reveals that the environment is ripe for future research on e-government in this specific region of the world. Sub-Saharan Africa's slow start in the technological race can be paralleled to its slow start in the self-governance race. After decades of colonial rule, these countries are faced with the challenge of crafting a modern functioning government that is charged with the responsibilities of delivering services to citizens, adopting appropriate legislation, and simultaneously developing natural resources to increase their respective Gross Domestic Product. Future research should focus on how these countries are employing e-government initiatives to accomplish these goals.

Implications and Conclusion

Each project has the same goal: to connect citizens with their government. The projects improve service delivery and citizens' perception of government by reducing transactions and/or providing a means for users to utilize automated processes to

accomplish tasks. Instead of conducting business through manual processes, citizens were given the ability to transact online, not *in line*. Finally, E-Government empowers users to become active participants in governmental processes. Each level of user: citizens, government employees and strategic partners are empowered with the information needed to accomplish goals efficiently and effectively. As teledensity and technology diffusion continue on the arduous road toward ubiquity in sub-Saharan Africa, E-government initiatives will correspondingly increase the benefit of all citizens of the region.

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Appendix A: The World's 48 Least Developed Countries

	Africa	Asia and Pacific	Americas	Middle East	Year of entry to list
Afghanistan		X			1971
Angola	X				1998
Bangladesh		X			1975
Benin	X				1971
Bhutan		X			1971
Burkina Faso	X				1971
Burundi	X				1971
Cambodia		X			1991
Cape Verde	X				1977
Central African Republic	X				1975
Chad	X				1971
Comoros	X				1977
Congo D. R.	X				1991
Djibouti	X				1982
Equatorial Guinea	X				1982
Eritrea	X				1998
Ethiopia	X				1971
Gambia	X				1975
Guinea	X				1971
Guinea Bissau	X				1981
Haiti			X		1971
Kiribati		X			1986
Lao (PDR)		X			1971
Lesotho	X				1971
Liberia	X				1990
Madagascar	X				1991
Malawi	X				1971
Maldives		X			1971
Mali	X				1971
Mauritania	X				1986
Mozambique	X				1988
Myanmar		X			1987
Nepal		X			1971
Niger	X				1971
Rwanda	X				1971
Samoa		X			1971
Sao Tome & Principe	X				1982
Senegal	X				?
Sierra Leone	X				1982
Solomon Islands		X			1991
Somalia	X				1971
Sudan	X				1971
Tanzania	X				1971
Togo	X				1982
Tuvalu		X			1986
Uganda	X				1971
Vanuatu		X			1985
Yemen				X	1971
Total (48)	33	13	1	1	

Source: (OHRLLS 2003)