IICD Research Brief - No 1, March 2001

E-governance in Developing Countries

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Imagine a situation in which all interaction with government can be done through one counter 24 hours a day, 7 days a week, without waiting in lines. In the near future this will be possible if governments are willing to decentralise responsibilities and processes, and if they start to use electronic means such as the Internet. Each citizen can then contact the government through a website where all forms, legislation, news and other information will be available. In Europe and the USA, commercial banks have already adopted this approach. Most transactions can be done at an ATM, by mail or by the Internet, which has saved banks enormous costs. In other words, they do more work, with less people, in less time and with less and smaller offices: They use the Internet. Government, as a collector and source of information, could follow this trend, to serve its customers (citizens and businesses) better and to save costs by making internal operations more efficient.

What is e-governance?

E-governance is more than just a government website on the Internet. But what is it exactly, and what is it not? Many definitions exist for e-governance. Several other terms are also commonly used, including: e-business, e-democracy and e-government.

- E-democracy refers to the processes and structures that encompass all forms of electronic interaction between Government (elected) and the Citizen (electorate).

- E-government is a form of e-business in governance and refers to the processes and structures pertinent to the delivery of electronic services to the public (citizens and businesses), collaborating with business partners and conducting electronic transactions within an organisational entity.

Defining E-Governance

The application of *electronic means* in:

(1) the *interaction* between *government* and citizens and government and businesses, as well as in
(2) internal *government operations*

to simplify and improve democratic, government and business aspects of Governance.

Objectives of e-governance

The *strategic objective* of e-governance is to support and simplify governance for all parties; government, citizens and businesses. The use of ICTs can connect all three parties and support processes and activities. In other words, in e-governance electronic means support and stimulate good governance. Therefore the objectives of egovernance are similar to the objectives of good governance.

Good governance can be seen as an exercise of economic, political, and administrative authority to better manage affairs of a country at all levels.

More *practical objectives* of e-governance can be given when the objectives for edemocracy and e-government are described separately.

The two main objectives of **e-democracy** are:

1. To provide citizen access to information and knowledge about the political process, about services and about choices available

2. To enable the transition from passive information access to active citizen participation by:
   - Informing the citizen
   - Representing the citizen
   - Encouraging the citizen to vote
   - Consulting the citizen
   - Involving the citizen

Regarding **e-government** a distinction can be made between the objectives for internally focused processes (operations) and objectives for externally focused services.

The *external objective* of e-government is to fulfil the public's needs and expectations satisfactory on the front-office side, by simplifying the interaction with various online services. The use of ICT in government operations facilitates speedy, transparent, accountable, efficient and effective interaction with the public, citizens, business and other agencies.

In the back-office, the *internal objective* of e-government in government operations is to facilitate a speedy, transparent, accountable, efficient and effective process for performing government administration activities. Significant cost savings (per transaction) in government operations can be the result.

An e-governance model

The three main target groups that can be distinguished in e-governance concepts are government, citizens and businesses. Abbreviations such as B2B (Business to Business) and B2C (Business to Consumer) are used, like in e-commerce concepts, to shortly describe which of the main groups are interacting.

The most common interactions in e-governance, G2C, G2B and G2G, are presented schematically in Figure 1.

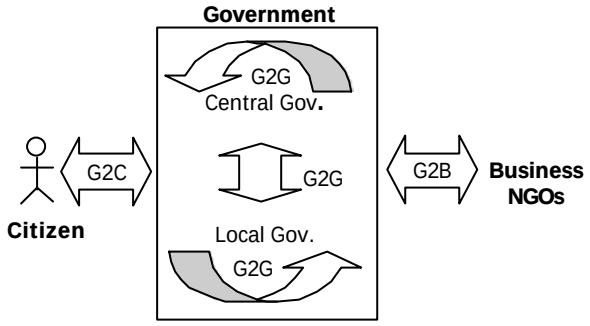

Figure 1: G2C, G2B, G2G interactions

Gartner, an international consultancy firm, has formulated a four-phase egovernance model. Thiscan serve as areference for governments to position where a project fits in the overall evolution of an e-governance strategy.

Most governments start by delivering online information, but public demand and internal efficiency soon require more complex services. Of course this takes effect gradually, some services will be online earlier than others. In some cases the public demand is the driving force, in other cases, cost saving aspects for the government are leading. According to Gartner, e-governance will mature according to the following four phases:

❶ Information	→	Presence
❷ Interaction	→	Intake processes
❸ Transaction	→	Complete transactions
❹ Transformation	→	Integration & change

The model does not imply that all institutions have to go through all phases and all at the same time. On the contrary, in the Western world, government institutions are in phase 1, 2 or 3.

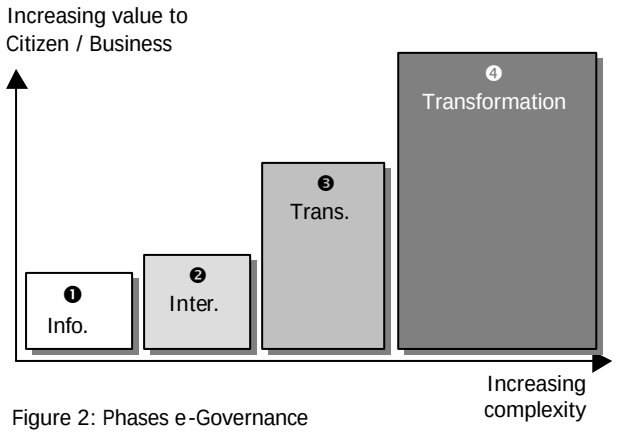

Figure 2: Phases e-Governance

The differences can be huge: the tax department can be in phase three, while the department of public works is starting phase one. It all depends on where the benefits are highest.

The four phases

❶ In the *first phase,* e-governance means being present on the web, providing the public (G2C & G2B) with relevant information. The format of the early government websites is similar to that of a brochure or leaflet. The value to the public is that government information is publicly accessible; processes are described and become more transparent, which improves democracy and service. Internally (G2G) the government can also disseminate static information with electronic means, such as the Internet.

❷ In the *second phase,* the interaction between government and the public (G2C & G2B) is stimulated with various applications. People can ask questions via e-mail, use search engines, and download forms and documents. These save time. In fact the complete intake of (simple) applications can be done online 24 hours per day. Normally this would only have been possible at a counter during opening hours. Internally (G2G) government organisations use LANs, intranets and e-mail to communicate and exchange data.

❸ With *phase three,* the complexity of the technology is increasing, but customer (G2C & G2B) value is also higher. Complete transactions can be done without going to an office. Examples of online services are filing income tax, filing property tax, extending/renewal of licenses, visa and passports and online voting. Phase three is made complex because of security and personalization issues. E.g. digital (electronic) signatures will be necessary to enable legal transfer of services. On the business side, the government is starting with e-procurement applications.

E-Governance Examples

Uganda - Parliament portal -
http://www.parliament.go.ug/
Type ❶ / G2C: informing the citizen
Information about Members of Parliament, constitution, country facts

South Africa - Government online services -
http://www.gov.za/
Type ❶ ❷ / G2C, G2B- Information: Tender documents online (G2B)
- Interaction: Feedback possibilities, downloading of various forms (ID applications, birth certificates, registration as a voter) (G2C)

India – Transformation to e-Government
Type ❷ ❸ / G2G, G2C

G2C: The Indian Ministry of IT will soon set the pace for hi-tech governance by developing software to process a wide variety of proposals. Officials at various levels will have to make online decisions on these proposals. Such software will not only get rid of red tape, butwill also increase transparency. Files and dossiers will no longer have to move from table to table. No longer will Indian people need to pay endless visits to government offices to get their proposals cleared.

G2G: Employees of the Ministry already taste e-governance. They receive their salaries online, air their grievances electronically. They also have electronic access to their bank account details.

In this phase, internal (G2G) processes have to be redesigned to provide good service. Government needs new laws and legislation to enable paperless transactions.

❹The *fourth phase* is the when all information systems are integrated and the public can get G2C & G2B services at one (virtual) counter. One single point of contact for all services is the ultimate goal. The complex aspect in reaching this goal is mainly on the internal side, e.g. the necessity to drastically change culture, processes and responsibilities within the government institution (G2G). Government employees in different departments have to work together in a smooth and seamless way. In this phase cost savings, efficiency and customer satisfaction are reaching highest possible levels.

Challenges for development

In this section, the challenges of e-governance for developing countries are investigated. Four SWOT-analyses are presented, with a focus on political, social, economic and technological aspects. Each is at a high level and they may be a starting point for further research and actual projects.

Political aspects related to e-governance include strategies and policies, laws and legislation, leadership, decision making processes, funding issues, international affairs, and political stability.

Political aspects	
Strengths	*Weaknesses*
Combination with democratisation reforms Internet as pull factor Modern image	Budget Lack of cyber laws No problem owner within government Slow decision making process Hierarchical structures Short term approach due to elections Integration and reform
Opportunities	*Threats*
Raise external funding Show competitive edge Transparency causes natural change of processes Reinvent government	Bureaucracy Piracy, misuse Corruption Maintaining disorder, no transparency Political instability Resistance

Examples of some **social aspects** of related to e-governance are people, (level of) education, employment, income, digital divide, rural areas vs. cities, rich vs. poor, literacy, IT skills.

Social aspects	
Strengths	*Weaknesses*
People eager to learn IT skills Skilled people possible export product	Basic education poor Low literacy IT literacy Different languages Public acceptance of self-service models Skill shortage: competition with private sector
Opportunities	*Threats*
Employment increases Education system improve People get structural job Cheap manpower widely available Promotion of Internet	Brain drain IT skilled people after training Influence of other cultures Resistance of people Digital divide Privacy

Economic aspects related to e-governance are funding, cost-savings, business models, e-commerce, spin-offs of e-governance.

Economic aspects	
Strengths	*Weaknesses*
E-governance argument for external funding Transparency for businesses (procurement)	Investors Budget control
Opportunities	*Threats*
Higher cost efficiency New business	Corruption

Technological aspects involve software, hardware, infrastructure, telecom, IT skilled people, maintenance, safety and security issues.

Technological aspects	
Strengths	*Weaknesses*
Everything is new: no negative legacy Leapfrogging possible Internet as pull factor Lack of IT standards?	Shortage IT skills High cost of internet Heterogeneous data Lack of IT standards? Software licenses
Opportunities	*Threats*
2nd hand hardware available Use one standard	Dependency of technology

The following factors have to be taken into account when examining the risk of implementing e-governance solutions.

- Political stability (democracy or dictatorial regime)
- Level of trust in government (perception of service levels)
- The importance of government identity (fragmentation or integration)
- Economic structure (education, agriculture, industry or service)
- Government structure (centralised or decentralised)
- Different levels of maturity (weakest part of the chain determines speed)
- Constituent demand (push or pull)

Implementing e-governance

The model presented can serve as a reference for governments to position where projects fit in the overall evolution of their e-governance implementation.

The model can also support governments in defining an e-governance vision and strategy. A ***vision*** is a high-level goal, or ambition level, of government regarding the democracy, government and business aspects of e-governance. A ***strategy*** consists of plans that translate the vision into SMART (simple, measurable, accountable, realistic and time-related) ***projects***. A good strategy is crucial to keep the speed in the reform and implementation process. Thus, budgets must be available, time consuming legal transformations should be initiated and quick results must be achieved and communicated to all stakeholders, including the public.

A good approach towards implementation of e-governance is to combine short-term steps (projects) and long-term goals (vision). Projects will have a more structural value for development when embedded in a vision and supported by a strategy. Accenture has defined an approach to implement e-governance projects: *Think big, start small and scale fast* (Figure 3).

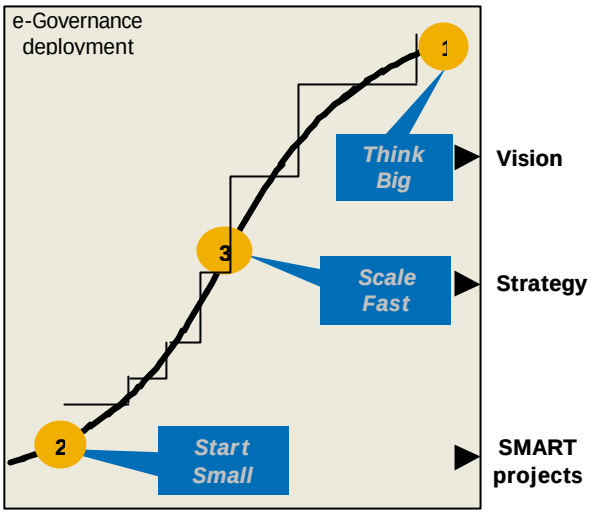

Figure 3: Implementation approach

The process of going from global objectives to concrete targets is complex. It is a joint effort undertaken by all stakeholders. IICD's core activity is to organise workshops in which this process is facilitated and first steps can be taken.

More information

- www.worldbank.org/publicsector/egov
- www.whatis.com
- www.oecd.org
- www.iicd.org
- http://egov.mit.gov.in
- www.gov.za

The International Institute for Communication and Development (IICD) assists developing countries to harness the potential of information and communication technologies (ICTs) for realising sustainable development. The driving force behind IICD activities is that local 'change agents' themselves identify and develop proposals for realistic ICT applications. Acting as a catalyst, IICD's three-pronged strategy is mainly delivered through a series of integrated Country Programmes. First, IICD facilitates ICT Roundtable Processes in selected developing countries, where local stakeholders identify and formulate ICT-supported policies and projects based on local needs. Second, working with training partners in each country, Capacity Development activities are organised to develop the skills and other capacities identified by the local partners. Third, IICD draws on its global network to provide information and advice to its local partners, also fostering local information exchange.