i-Government Working Paper Series

The i-Government working paper series discusses the broad issues surrounding information, knowledge, information systems, and information and communication technologies in the process of government.

Paper No. 12

Building e-Governance for Development: A Framework for National and Donor Action

RICHARD HEEKS

2001

Published with the support of:

Published by:

Institute for Development Policy and Management
University of Manchester, Precinct Centre, Manchester, M13 9GH, UK
Tel: +44-161-275-2800/2804 Fax: +44-161-273-8829
Email: idpm@man.ac.uk Web: http://www.man.ac.uk/idpm

ISBN: 1 902518942

View/Download from: http://www.man.ac.uk/idpm/idpm_dp.htm#ig

Educators' Guide from: http://www.man.ac.uk/idpm/educig.htm
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Building e-Governance for Development: A Framework for National and Donor Action

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2001

Executive Summary

As noted in a related paper, information and communication technologies have a valuable potential to help meet good governance goals in developing countries. Yet that potential remains largely untapped to date. Why? Because of poor human, organisational and technological infrastructure and because of the inappropriate approaches taken by donors, vendors and governments.

This paper hopes to point the way forward by describing the contents of a National e-Governance Initiative (NeGI) for developing countries that would address the problems of the past and would grasp the opportunities provided for governance by the new connectivity.

Over a short- to medium-term timeframe, an NeGI aims to help deliver the following outcomes:

- Awareness and commitment to e-governance at a high level.
- A set of key e-governance institutions that can strategically plan and facilitate e-governance projects.
- New laws and regulations that enable e-governance.
- A national e-Governance Strategy.
- The operational capacities to implement e-governance pilot projects.
- A set of e-governance pilot projects focused on 'networked government'.

The paper places a particular emphasis on the potential contribution of donor agencies to such an Initiative. Principles, impacts, risks, priorities and other issues relating to e-governance initiatives are also described.

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1 The UK Department for International Development provided financial support for the writing of this paper, but the opinions expressed are solely those of the author. The author acknowledges the valuable comments made on earlier drafts of this paper, particularly from Claire Hickson and Robin Mansell.
A. Overview of the National e-Governance Initiative

A National e-Governance Initiative (NeGI) is required in all developing countries (DCs) in order to harness the potential offered to governance by information and communication technologies (ICTs). This and future sections describe this initiative in some detail.

A1. Scope and Vision of the NeGI

e-Governance is the use of information and communication technologies to support good governance. It moves beyond old 'IT in government' models thanks to the new digital connections that ICTs permit. These new connections strengthen existing relationships and build new partnerships within civil society. e-Governance therefore embraces:

- **e-Administration**: improving government processes by cutting costs, by managing performance, by making strategic connections within government, and by creating empowerment.
- **e-Citizens and e-Services**: connecting citizens to government by talking to citizens and supporting accountability, by listening to citizens and supporting democracy, and by improving public services.
- **e-Society**: building interactions beyond the boundaries of government by working better with business, by developing communities, by building government partnerships, and by building civil society.

The emphasis of current private sector and donor initiatives has been on e-business and on non-governmental e-society. This has left a large and growing opportunity gap around the other areas of e-governance. These areas are being largely ignored, to the detriment of development. It is these areas that form the NeGI priorities. The areas noted – e-administration, e-citizen and e-services initiatives, and the government-related components of e-society – together represent a *Networked Government* model for e-governance.

The vision guiding such initiatives is that developing countries can and must accelerate the pace of e-governance and build networked governments. By doing this, they will reap the benefits of government that costs less, delivers more, and is more responsive and accountable.

If action is not taken, the poor in DCs will be left on the wrong side of an ever-widening divide: not just a digital divide of access to new technology, but a divide of information, of knowledge, and of governance. Countries in the North and elites in the South will be the winners, and the poor in the South will be the losers as inequalities grow.
A2. Priorities, Objectives and Deliverables

The overall aim of an NeGI is to more effectively utilise ICTs for good governance reforms.

For e-governance to succeed in developing countries, 'e-readiness' must be built. This means the barriers to e-governance must be reduced by strengthening infrastructural inadequacies, and the drivers must also be strengthened. The priority for an NeGI is therefore to build e-readiness in six areas:

- Institutions
- Laws
- Leadership and commitment
- Human capacities
- Technology
- Data systems

The specific objectives of an NeGI are therefore:

- To develop the high-level awareness and commitment that will carry forward e-governance for development (see Stage 1 below).
- To develop the capacities necessary to address e-governance strategically (see Stage 2 below).
- To develop the human and data infrastructure necessary for e-governance pilot projects (see Stage 3 below).
- To implement a number of 'networked government' pilot projects (see Stage 4 below).

By addressing barriers and drivers, an NeGI provides a structured approach and a package of measures that will deliver the following outcomes for those countries that adopt it:

- Awareness and commitment to e-governance at a high level.
- A set of key e-governance institutions that can strategically plan and facilitate e-governance projects.
- New laws and regulations that enable e-governance.
- A national e-Governance Strategy.
- The operational capacities to implement e-governance pilot projects.
- A set of e-governance pilot projects focused on 'networked government'.
A3. Components, Schedule and Costs

One aim of this paper is to identify ways in which donor agencies can support e-governance for development at a regional or global level. Potential cross-national activities are therefore described for most stage components. Together with national actions, these could be regarded as a complete e-governance ‘start-up’ package: a five-year programme for e-governance. If so, assuming involvement of six developing country partners in each of which two or three e-governance pilot projects would be launched, then total donor costs would be between US$15m and US$25m depending on the activities undertaken by the donor. A possible timetable for the stages and components is shown below in Table 1.

However, it must be recognised that e-governance is a long-term project more likely to be measured in decades rather than years in order to reach down into the heart of governance in developing countries. Any five-year package represents just a small start.

Table 1: Potential Timetable of National e-Governance Initiative Activities

<table>
<thead>
<tr>
<th>Stage 1: Building e-Governance Awareness and Commitment</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tbody>
<tr>
<td>1.1 National e-Governance Summit</td>
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<tr>
<td>1.2 Raising Awareness and Commitment Among Leaders</td>
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<tr>
<td>1.3 Awareness-Raising Among the Donor Community</td>
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<tr>
<th>Stage 2: Building e-Governance Strategic Capacity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tbody>
<tr>
<td>2.1 Building Strategic Institutions for e-Governance</td>
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<tr>
<td>2.2 Building Legislative Infrastructure for e-Governance</td>
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<td>2.3 Building Leadership and Commitment for e-Governance</td>
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<td>2.4 Building e-Governance Strategy</td>
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<th>Stage 3: Building e-Governance Implementation Capacity</th>
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<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>3.1 Building Human Capacities for e-Governance Implementation</td>
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<td>3.2 Building Technological Infrastructure for e-Governance Implementation</td>
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<td>X</td>
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<tr>
<td>3.3 Building Data Systems for e-Governance Implementation</td>
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<tr>
<th>Stage 4: Building e-Governance Pilot Projects</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<tbody>
<tr>
<td>4.1 Identifying e-Governance Pilot Projects</td>
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<tr>
<td>4.2 Implementing e-Governance Pilot Projects</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>X</td>
<td>x</td>
</tr>
</tbody>
</table>

X - major/main activity at this time
x - minor activity at this time
A4. Principles

Principles Underlying the NeGI Concept

A process not a blueprint
There is no 'one best way'; each country, each organisation must be helped to find its own 'best way'. Lessons can be learned by developing countries from the experience of Northern nations. Lessons can be learned by one DC from the experience of other DCs. But complete blueprints cannot be transplanted. Rather, a process must be put in place; a process of dialogue, learning, capacity building and facilitation. For the sake of clarity, this paper provides a description of stages and components. However, this should be seen – at most – as an initial skeleton framework for discussion, not as a cut-and-dried blueprint. Some of the content may not be appropriate in some contexts, and it should not be used prescriptively.

A significant part of the localisation of any e-governance initiative will be working out its relationship with existing initiatives and institutions. In particular, some countries may find it beneficial to ring-fence e-governance and give it a clear, separate identity. Others may find it artificial to put a boundary around e-governance and may prefer to take a more holistic approach to the role of ICTs across the whole nation.

Partnership balancing internal ownership with external facilitation and encouragement
Without external encouragement, e-governance initiatives may never be contemplated or started. Without internal ownership, e-governance initiatives may never be developed. Without external facilitation, e-governance initiatives may never be successfully implemented. e-Governance proposals must grapple with the difficult business of balancing and integrating these three forces. Alongside a due concern with partnership, ownership and dialogue, there must be an attempt to identify and trigger change drivers, some of which may lie outside government and even outside the individual nation.

Developing countries already have e-governance and ICTs
This should not be treated as virgin territory; as something the North knows about and South does not. ICTs have been in use by DC governments for the past 40 years. There are regional centres of expertise. There are vibrant, rapidly-growing national IT sectors. Developing nations are awash with e-development projects and proposals. All of this must be recognised and respected. It must also be remembered that the largest e-governance failures have happened in the North.

Principles Underlying NeGI Components

An integrated approach
ICTs must be integrated with, and driven by broader governance objectives (see Figure 1). Whilst recognising that ICTs can be valuable lever to reform, NeGI components must take governance objectives as the starting point, using ICTs as a means to those ends not as an end in themselves. ICTs will be one key tool in helping meet the need for reengineered information systems the governance reform demands.
In recognition of the need to integrate ICTs with people, processes and information, and the need to integrate all of these within the broader direction given by governance goals, it would therefore be more appropriate to talk of 'i-governance' – integrated governance – rather than the technology-biased 'e-governance'.

**Solutions for developing country realities**

e-Governance projects must show sensitivity to the reality of DC values, structures, infrastructure, etc. Pulling Northern and/or private sector solutions off-the-shelf and trying to impose them will drive square pegs into round holes. e-Governance solutions must be adapted not simply adopted, to ensure that the design of those solutions matches Southern realities. More detail about design—reality gaps, and best practice on closing such gaps can be found elsewhere.⁴

**A participative approach**

Participative approaches to projects can be a Northern imposition that mismatches Southern cultural and political realities. Nevertheless, as a prophylactic against failure, key e-governance project stakeholders (users, clerical operators, citizen beneficiaries, etc.) need to be more involved – at least talked to and listened to – than they currently are.

**A focus on networked government**

Notwithstanding the notion that priorities should not be pre-judged, the NeGI concept does take 'networked government' to be the core current priority within e-governance for development. Why? For two reasons: a) government still lies at the heart of the development process; b) the recent round of donor e-development initiatives has largely ignored these areas, yet the new connectivity means they provide a major opportunity for DC governments.

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**Keep it simple**

Evolutionary steps are likely to succeed; revolutionary leaps are likely to fail for both technological and human reasons. e-Governance projects should build carefully and sustainably on the existing ICT usage base. Projects like cyberballots via WAP should go to the bottom of the in-tray; projects like delivering government information to NGOs via e-mail should go to the top. Chronologies such as those described in the related paper are of relevance here: from automation to informatisation to transformation; and from publishing to interaction to transaction.\(^4\) As well as setting the likely trajectory for e-governance, these are also a reminder of the starting point for those who understand we must walk before we can run.

---

B. The National e-Governance Initiative

Precursor Arrangements

The Initiative as outlined below (see Stage 2) envisages some form of national Unit to co-ordinate e-governance. Prior to the creation of such a Unit, however, there needs to be a seed institution to administer and co-ordinate the initial processes, like those outlined in Stage 1. This could be seen as a national, regional or international body – with more or less input from donor agencies – that would help 'get the ball rolling' in individual countries. It might cover tasks like running any e-Governance Summit, and initial awareness-raising.

There will certainly be a value in co-ordination at the supra-national level to help in the sharing of experiences and expertise. Opportunities for such cross-national activity – quite possibly donor-supported – are identified and emphasised within this paper. Such cross-national inputs could be seen as informal/one-off or they could be seen as the rationale for a regional or global 'e-Governance Co-ordinating Centre' that would be created from the outset.

Stage 1: Building e-Governance Awareness and Commitment

1.1 A National e-Governance Summit

Target Deliverables: top-level political and resource commitment to e-governance from each participating organisation; overview guidance document of shared vision and priorities for the National e-Governance Initiative.

This would be the official launch event for a National e-Governance Initiative. The Summit could have three main objectives

• to raise awareness of and build commitment for e-governance in the country,
• to secure national and international resources for e-governance initiatives, and
• to create a document laying out process and structure, programme and project priorities for the National e-Governance Initiative, including any targets.

Such an event would need to be based on considerable data-gathering on local e-readiness (as noted above, the institutional, legal, human, technological and data infrastructure) plus local needs, priorities and views. Significant pre-Summit activity would be required to build the constituency, the agenda, the ownership and the commitment to the Summit process. Depending on stakeholder politics, this might involve considerable negotiation around frameworks such as the one presented in this paper and/or their locally-contextualised equivalent. It would also involve positioning and dovetailing vis-à-vis other existing and planned national ICT strategies and initiatives.
1.2 Raising Awareness and Commitment Among Leaders

*Target Deliverable: top-level political and resource commitment to e-governance.*

In addition to the Summit, other mechanisms would need to be used to raise awareness and commitment among senior officials. These would include the President, Prime Minister, Ministers, Permanent Secretaries and leaders of other institutions of civil society who largely determine whether and how change takes place. By addressing both government and civil society leaders, drivers to e-governance are created both inside and outside government.

These mechanisms could include:

1.2a e-Governance Demonstrator Sites

To raise awareness and belief that e-governance is relevant, functioning e-governance projects can be identified. The e-governance pilot projects (see Stage 4) would become incorporated into this activity as they came on-stream.

Specific project activities could be to:
- undertake an identification exercise of appropriate existing Demonstrator Sites,
- fund development and maintenance of objective Web-based materials that allow for 'virtual visits' to the Demonstrator Sites, and
- fund physical visits to Demonstrator Sites linked to relevant regional/national training events and other meetings.

A danger of demonstrators must be avoided – the tendency to identify only vanguard/state-of-the-art technology applications and/or the tendency of sites to drift towards 'bleeding edge' applications under pressure from politicians, users and vendors. The problem here is that such applications cannot be applied in the majority of contexts. The emphasis must, instead, be on practicable, usable, replicable applications, and the emphasis must be more on the human and organisational aspects than on the technology. Terminology such as 'i-Governance-in-Practice Site' or 'i-Governance Replicator' may be more appropriate than 'e-Governance Demonstrator'.

1.2b One-to-one coaching

Although trivial in many ways, lack of hands-on confidence with ICTs can be a significant problem for leaders that undermines their commitment to e-governance. For senior officials, private and personalised training will be required. In order to sustain skills and confidence, direct and continuing use of ICTs will be beneficial. For example, there could be an arrangement to provide e-mail links (to family or senior national and international leaders) or for intranet access to key documents.
1.3 Awareness-Raising Among the Donor Community

Target Deliverable: e-governance components within programmes of major in-country donors.

A package of activities could be delivered that includes:
• seminars and training workshops for donor agency staff,
• Web-based documentation,
• individual meetings with key donor personnel, and
• support for monitoring and evaluation of donor e-governance projects.

The overriding objective would be to create donor partners for the National e-Governance Initiative. Other key objectives within donor agencies would be:

Raising the Profile of e-Governance
In general within development agency staff there is too little awareness of, and confidence with, ICTs. This needs to be addressed in the usual ways – by training, by seminars, by guidance and advice. It may also need to be addressed structurally: for example, ensuring that ICTs are not seen as the priority/preserve of just a single group or department but as something that touches the work of all groups and departments.

Ensuring an Integrated Approach
Ensuring that some of the best practice principles are adopted, particularly the notion of an integrated approach to ensure that ICTs are not ignored or isolated in development projects, but are integrated as a key tool for meeting project information needs. As well as training, seminars, guidance and advice, this may also need to be addressed structurally: for example, ensuring that there is some structural mechanism for bringing together 'hybrid' expertise that covers information/ICTs and specific development priorities, such as governance or public sector reform.

Knowledge Building on e-Governance Best Practice
There is a need for knowledge-building by better (or even just some/any) monitoring and evaluation of e-governance projects. This will be hard work. Firstly, M&E is consistently ignored for both rational and self-interested reasons of donors. Second, this is a particular problem in relation to ICTs. Because they have not followed some of the basic principles identified above, the majority of donor-supported e-governance projects have failed either wholly or partially. Not surprisingly, donors do not want this broadcast and have therefore been very reticent to conduct proper independent evaluation of ICT-related projects. This reticence means that projects are consigned to the 'Groundhog Day' of constantly repeating the mistakes of the past.
Stage 2: Building e-Governance Strategic Capacity

2.1 Building Strategic Institutions for e-Governance

Target Deliverable: existence of strategic and capacity-building e-Governance institutions.

2.1a A national focal point for e-governance: 'National e-Governance Units'

A single focal point for e-governance strategy – something like a 'National e-Governance Unit' – will be needed, responsible for areas such as:

- setting overall e-governance priorities;
- leading the development and implementation of framework policies, standards and guidelines;
- promoting cross-cutting e-governance infrastructure and applications;
- acting as a focus for learning about e-governance;
- possibly providing consultancy/facilitative inputs to individual e-governance projects

Institutions covering these responsibilities may already exist but others may need to be created. Each Unit would ideally also have an e-governance advisory board including not only government members but also representatives of key civil society institutions. Through this or other means, it would also need to be integrated with broader/other national ICT initiatives.

Donor/cross-national inputs could include:

- Advisory inputs on the structure and responsibilities of National e-Governance Units.
- Regional or global e-Governance workshops to provide the basis for knowledge exchange and partnership building between Units.
- A central Web site with e-mail list support to provide a central locus for continuous interaction between Units, and to act as a pool for e-governance experiences.
- Funding for Unit membership of key international e-governance forums (such as ICA: the International Council for IT in Government Administration) since this provides a key opportunity for knowledge- and partnership-building.

2.1b National Academies of Excellence in e-Governance

A single focal point for knowledge- and skill-building for e-governance – something like a 'National Academy of Excellence in e-Governance' – will be valuable. Its key responsibility would be to provide training of relevance to e-governance: the emphasis – at least over time – might need to be less on generic ICT skills and more on the broader range of competencies required for e-governance, as shown in Appendix 1.

Specific training initiatives are described elsewhere, with target groups that would include current political/civil society top-level leaders, second-tier public officials, current e-governance leaders, future e-governance leaders. Given the importance of leadership a separate Directorate for e-Governance Leadership could be included within the Academy.
Other Academy activities could include:

- Collaborating with other national, regional and international institutions to collate and disseminate best practices in e-governance: policies, strategies, replicator projects, case studies, and stories.
- Collaborating with the National e-Governance Unit to provide consultancy/facilitative inputs on individual e-governance projects.

Institutions equivalent to these Academies, or equivalent to their holding institutions, may already exist but others may need to be created.

Donor/cross-national inputs could include:

- Advisory inputs on the structure and responsibilities of National Academies of Excellence in e-Governance.
- Regional or global e-Governance workshops to provide the basis for knowledge exchange and partnership building between Academies.
- A central Web site with e-mail list support to provide a central locus for continuous interaction between Academies.
- Trainer training for Academy staff.
- Funding for Academy technological infrastructure.

2.1c National e-Governance Champions Forum

These would be national bodies drawing together those responsible for e-governance initiatives within individual major public ministries and agencies. The Forum could be responsible for:

- sharing knowledge about best practices in e-governance,
- providing mutual support and sustaining commitment,
- facilitating cross-cutting e-governance initiatives,
- advocacy of e-governance within the public sector and civil society, and
- advising the National e-Governance Unit and/or Academy.

Donor/cross-national inputs could include:

- Advisory inputs on the structure and responsibilities of National e-Governance Champions Forums.
- Regional or global e-Governance workshops to provide the basis for knowledge exchange and partnership building between national Forums.

2.1d National Tripartite Forum on e-Governance

This Forum could be a loose (potentially virtual) association of those involved with e-governance from the public sector, private sector and NGO sector. Its existence is based on the need to provide solutions that are sensitised to specific national and public sector realities. Forum responsibilities would be:

- to shape national e-governance priorities;
- to disseminate to the national representatives of the private sector and donor community details of best practices for developing and implementing e-governance systems;
- to learn and adapt generic lessons of ICT use in the private sector and donor community and to disseminate those to the public sector.
Donor/cross-national inputs could include:

- Encouragement for donor participation in Forum meetings.
- Funding for initial meetings of the Tripartite Forum.

A summary of possible institutions is shown in Figure 2. As already noted, the need to create new institutions may be less than indicated: not all may be appropriate to the particular national context; and the functions of some or all may already exist within existing institutions.

**Figure 2: National e-Governance Initiative Key Institutions**

2.2 Building Legislative Infrastructure for e-Governance

*Target Deliverable: necessary legislative and regulatory changes to facilitate e-governance.*

e-Governance requires a range of legislative changes including electronic signatures; electronic archiving; data matching; freedom of information; data protection; computer crime; and intellectual property rights legislation. Regulatory changes are required for a host of activities from procurement to service delivery. All changes would typically form part of broader change to support generic e-economy and e-nation initiatives.

In order to support this process, donor/cross-national input could be to host a Web-based resource providing details of legislation and regulatory changes passed in various countries. It would also provide independent commentary analysing the content and
impacts of those changes. This would support the work of National e-Governance Units who would drive forward the process of legislative change.

2.3 Building Leadership and Commitment for e-Governance

Target Deliverable: a critical mass of strategic knowledge and skills within government, sufficient to support an e-governance strategy.

In addition to awareness-/commitment-raising activities for top-level leaders, there is also a need to train others who will take a leading role. Training activities to be provided by the Academies could include:

- e-Governance training for second-tier government and civil society leaders, focusing on building awareness, confidence and commitment to the e-governance process, allowing them to provide high-level inputs and support for e-governance.
- Leadership training for current e-governance leaders, focusing on their abilities such as leadership, interpersonal skills, strategic planning, and awareness of best practice.

The US 'Excellence in Electronic Government Initiative' provides a model for this.

Donor/cross-national inputs could include:
- Co-ordinated development of appropriate ICT-based distance learning materials.
- Funding of pilot training events for use as curriculum development mechanisms.

Given the centrality of government to e-governance, current (and future) leaders are likely to be principally drawn from within government. Other institutions, though, should not be excluded:
- Unions: though often politicised, these may play an important role in either blocking or facilitating e-governance initiatives. Bringing union leaders onside will help progress with e-governance.
- Civil society: leaders from the other institutions of civil society can also be usefully included in activities to build leadership and commitment for e-governance.

2.3a Building future e-governance leaders

Given the lack of e-governance leaders in developing countries, there is a pressing need to develop the next generation of leaders, who can champion e-governance from their current and future positions. This work could be undertaken by the National Academies.

Donor/cross-national inputs could include:
- Encouragement for the incorporation of e-governance components into existing 'Young DC Leaders'/Next Generation' initiatives.
- Organisation of national or regional e-governance seminars and networking events for 'rising stars'.
- Facilitating development of digital support communities for next generation e-governance leaders.
2.4 Building e-Governance Strategy


Any national drive for e-governance must be directed if it is not to become fragmented. Therefore, the NeGI should support the development of a National e-Governance Strategy. This could combine the priorities set by any e-Governance Summit with knowledge of particular national priorities and capacities, including other national ICT initiatives and policies.

Donor/cross-national inputs could include:
- Maintenance of a Web-based resource on existing ICT/Governance/e-Governance policies and strategies, with a commentary on best practices and impacts.
- Organisation with local partners of national Strategy-Making Workshops that would aim to set out the main contents of strategies.
- Provision of advisory inputs to the Workshops.
Stage 3: Building e-Governance Implementation Capacity

There is a huge e-readiness gap between the capacities needed for pervasive e-governance and the capacities actually present in most developing countries. Completely closing that gap would be a mammoth undertaking. Therefore a suggested priority is to focus on those institutions involved in any e-Governance Pilot Projects (see Stage 4).

3.1 Building Human Capacities for e-Governance Implementation

Target Deliverable: adequate human capacity for e-governance in the organisations likely to be affected by e-Governance Pilot Projects.

Detailed guidelines on the possible what and how of building human capacities for e-governance are provided in Appendix 1. Three main priorities arise:

3.1a Training

In general terms, priority human capacities for e-governance are 'hybrids': those who understand the technology and the business of governance and the role of information in governance. It is they – as individuals or small teams – who can most successfully champion e-governance in the target organisations.

Key implementation capacities to be developed for pilot projects would be likely to include:
- Capacity to develop information systems.
- Capacity to manage projects and to manage change.
- Capacity to be an 'intelligent customer': able to raise project finance, specify needs, manage procurement, and manage vendors.
- Capacity to operate and maintain information systems.

Training should also give a high priority to attitude change since a key stumbling block to e-governance is the lack of motivation amongst those involved. Such training should aim to speak to both 'hearts and minds'.

Academies of Excellence in e-Governance or their equivalent, would be likely to play a lead role in the training to develop human capacities. Donor/cross-national inputs could include:
- Capacity-building interventions with the Academies (already detailed above).
- Co-ordinated development of appropriate ICT-based distance learning materials.
- Funding of pilot training events for use as curriculum development mechanisms.
- Support for monitoring and evaluation of training in order to foster best practice.

3.1b Alternatives to conventional training

Conventional training approaches, which have tended to dominate training institutions in developing countries, have relatively limited value. The NeGI could therefore usefully support more innovative approaches. Donor/cross-national inputs could include:
• Funding and advisory inputs for pilot 'learning projects' adopting more learner-centred acquisition of skills and knowledge: learning diaries, learning sets, work shadowing, job exchanges, and secondments.

• Funding and advisory inputs for pilot 'training projects'. Donor-funded consultancy has been heavily criticised for too often creating inappropriate solutions whilst simultaneously failing to develop local human capacities. An alternative approach is the training project. Training projects turn conventional consultancy on its head, taking the external role from core to periphery and from consulting to training and facilitation. Local staff, ideally from within the target organisation, undertake the work for the e-governance project. External staff do not undertake the work directly, but are responsible for training and facilitating local staff as necessary. Given the advances in ICTs, some of this external role can be undertaken off-site. This ensures that local capacities are built and that local staff – who may have a better understanding of local realities – take the lead.

3.1c Stemming the loss of capacity from the public sector

e-Governance relies heavily on competent public sector staff. But training initiatives and acquisition of on-the-job competence are continuously undermined by the flow of specialist staff out of the public sector. Indeed, ICT-related training can increase the outflow. This could severely compromise the progress of e-governance in the pilot project organisations, and it needs to be addressed by the NeGI.

Donor/cross-national inputs could include:
• Funding and advisory inputs for pilot projects adopting innovative HR approaches to the problem. These could include recruitment bonuses, use of Web-based recruitment, and part-public/part-private working weeks. It could also include creation of an e-Governance 'Hit Squad' – potentially all or part of the National e-Governance Unit – that would be regarded as an autonomous unit and paid at market rates.
• Funding and advisory inputs for pilot projects adopting innovative public—private partnership approaches that reduce reliance on the public sector. These could include outsourcing, partial-privatisations/joint ownership, private finance initiatives, and the like.

3.2 Building Technological Infrastructure for e-Governance Implementation

*Target Deliverable: a sound ICT infrastructure in the organisations likely to be affected by e-Governance Pilot Projects.*

Development of ICT infrastructure is an area already being addressed by numerous donor, government, NGO and private sector initiatives in developing countries. The technology has been over-emphasised to the detriment of other components of e-readiness, and it will therefore not be separately discussed here in any great detail.

Institutionally, it could well be valuable to explicitly separate out responsibility for the technical infrastructure underlying e-governance to a national ICT Infrastructure body which would have infrastructural responsibilities across all areas of ICT application, not just e-governance. Bodies with this type of function already exist in several
developing countries. The intention is to ensure that the e-Governance Unit is not
distracted from its work on strategy, structures and processes, and that it retains the
understanding that technology is the servant of good governance. The ICT
Infrastructure body, as well as planning and overseeing the roll-out of technology,
would also need to focus on the standards and policies (for example on public key
infrastructure, on interoperability, etc.) needed to make the technology usable.

In terms of infrastructure, the model provided in Figure 3 points the way.⁵

**Figure 3: The Architecture of e-Governance**

Greater reliance on intermediaries (both ICT-owning institutions and humans) must be
recognised as a reality in developing countries given that ICT ownership is not an
option for most people. Technological initiatives need to recognise this and
incorporate identification and support for intermediaries within the public, private and
NGO sectors.

⁵ Adapted from: Cabinet Office (2000) *e-Government: A Strategic Framework for Public Services in
the Information Age*, Central IT Unit, Cabinet Office, London
http://www.iagchampions.gov.uk/Strategy.htm
3.3 Building Data Systems for e-Governance Implementation

Target Deliverable: more robust data systems in the organisations likely to be affected by e-Governance Pilot Projects.

e-Governance projects will rely to a significant degree on existing data, existing systems and existing processes. Where these are already in a mess, addition of ICTs just creates a faster, more expensive mess. Alongside – or even preceding – introduction of ICTs for the e-Governance Pilot Projects, there may therefore need to be moves to reconstruct and renew the underlying data systems.

Existing and planned good governance reforms ought to address this problem. In some ways, they can, through their work to reconstruct work systems and work processes. Unfortunately, they frequently pay too little attention to data issues, and they regularly fall foul of garbage in, garbage out data quality problems. This may well point to the need for support for existing data-centred initiatives, and also data sensitisation of existing governance projects. This means, for example, strengthening the information systems component of existing public sector reforms, and ensuring that information systems are not just equated with ICTs, so that an integrated approach is followed. Part of that integrated approach should be a recognition of the 'humanity of data' – the fact that data quality, data security and data sharing depend, at root, on human motivations and values.

Donor/cross-national inputs could include:
- Encouraging donors to pay more attention to data issues within governance and e-governance initiatives.
- Funding and facilitating initiatives in the pilot project organisations that take a data-focused approach.
Stage 4: Building e-Governance Pilot Projects

Target Deliverable: a set of functioning e-Governance Pilot Projects from which lessons can be learned.

The emphasis on partnership and process means that e-governance priorities will be set mainly on a national basis. In particular, those priorities (and the speed of their implementation) will tend to follow the political 'fault-lines' within the elites of particular countries.

Nonetheless, some potential priority areas for specific e-governance projects can be suggested. A range of possible priorities is discussed in Appendix 2. Here, the focus will be on pilot projects within the overall area of 'Networked Government' as defined at the start of this paper. These could be drawn from any sphere of e-administration, e-citizens, e-services and government-related e-society.

From the donor side, it is possible that emphasis would be given to projects that support more general governance goals. Examples could include:

- **Making strategic connections in government**: strengthening the role of the legislature by providing Internet-enabled flows of information on public sector accounts, spending against target and other performance measures.
- **Talking to citizens**: addressing accountability by providing Web-based information on public service types, schedules, availability and entitlements; and on details of government budgets and expenditure. This would recognise that most information flow to citizens would be intermediated by NGOs and the like.
- **Improving public services**: setting up basic interactional Web sites that facilitate the informational components of public services; for example providing forms that can be downloaded and printed, or simple request/feedback forms.

This stage would probably be divided into two components:

4.1 Identifying e-Governance Pilot Projects

This would be a negotiated activity between key stakeholders such as donors, national ministries and institutions of civil society. These negotiations could usefully be undertaken at the national Strategy-Making Workshops proposed earlier.

4.2 Implementing e-Governance Pilot Projects

National e-Governance Units would be likely to take the lead on project implementation. Donor/cross-national inputs could include:

- Funding or co-funding for pilot projects.
- Advisory inputs to support various stages of the project lifecycle, including monitoring and evaluation
- Dissemination of best practice lessons from the pilots.
- Advisory inputs on scaling-up through replication of successful pilot projects.
C. National e-Governance Initiative Issues

C1. Benefits and Justification

Focusing specifically on government, the benefits are that e-governance initiatives can:
• cut costs,
• speed up decision making and service delivery,
• increase the capacity of government,
• improve the quality of decision making and service delivery, and
• enable innovative approaches to governance.

This, in turn, can have broader effects. First, by improving the work of government, you improve the lives of all those businesses and citizens which interact with government. Second, by being catalytic. Within government itself, e-governance can catalyse cultural changes that improve governance. In society more broadly, the presence of e-governance initiatives can be a national change catalyst in two ways: first by its demonstrator effect to other sectors; second, by building local ICT capacities. In India, for example, the decision under Rajiv Gandhi to press ahead with computerisation of passenger reservations on the railways had a major catalytic effect. It sent out ripples into both business and civil society that have helped put India where it is today in ICT terms.6

Could the type of efficiency and effectiveness gains identified above be achieved without recourse to ICTs? In theory, perhaps they could. There are certainly good arguments for ‘putting your house in order’ by non-technology reforms prior to ICT use. However, good governance requires an ever-increasing speed, volume, connectedness and complexity of information handling. The proportion of governance reforms that can be conducted without ICTs is therefore dwindling rapidly. Secondly, and still recognising the importance of an integrated approach, ICTs are a major tangible lever to change: they change attitudes, work pace, even whole work cultures in a way that earlier levers have not. If introduced according to the principles outlined above, they can therefore be highly cost effective.

Cost/benefit analysis is not a viable way to evaluate e-governance. Recent estimates suggest at least 80% of the costs of ICT-related projects are taken up in intangible, largely hidden costs. Likewise, the majority of e-governance benefits are also intangible.

Indeed, there is a strong argument for not making cost/benefit analysis the central plank of decision making. Where this has happened in Western government, not only are the figures involved spurious, but initiatives tend to be restricted to basic clerical automation, preventing real progress with e-government. In developing countries, where ICT costs can be 2-3 times higher while clerical costs are up to 10 times lower, even these basic projects would probably be struck out. Like it or not, one must take a leap of faith, an acceptance that e-governance is the future of governance and that we have to press ahead.

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I typically liken e-governance to a runaway horse. Developing country governments can either jump on and try to steer it as best they can. Or they can stand aside and watch other nations ride off into the future without them.

C2. Expected Impact

The overall impact can be described in terms of the deliverables outlined above for each stage earlier; that each developing country would gain:

• Awareness and commitment to e-governance at a high level.
• A set of key e-governance institutions that can strategically plan and facilitate e-governance projects.
• New laws and regulations that enable e-governance.
• A national e-Governance Strategy.
• The operational capacities to implement e-governance pilot projects.
• A set of e-governance pilot projects focused on 'networked government'.

All of these would serve to directly address key problems identified for e-governance development (see related paper for more details).\(^7\) They would thereby accelerate the move to good governance and e-governance in developing countries.

Each component of the NeGI is associated with a target deliverable that can be turned into a measure. Some potential measures include:

• proportion of governance initiatives that contain ICT components,
• number of countries with: e-Governance Units; e-governance policies,
• proportion of e-governance initiatives that follow the principles outlined,
• proportion of e-governance initiatives that succeed, and/or
• number of e-governance initiatives undertaken within a country

Benefits achieved from e-governance initiatives could be included but, given the intangibility of many benefits, measures would be largely for presentational purposes only.

C3. Political Acceptability

Despite the importance of technological and skill infrastructures, it is the politics of e-governance initiatives that probably hold the key. e-Governance projects have made slow progress in many countries because they do not serve the political self-interests of the major stakeholders, particular senior public officials.

The experience of India has shown that, where political leaders perceive they stand to gain from e-governance and support it, it moves on despite the other obstacles. Experience elsewhere has shown that, where stakeholders perceive they may stand to lose – or even merely to gain nothing – from e-governance and do not support it, it fails despite the presence of other success factors.

\(^7\) Heeks, R.B. (2001) *Understanding e-Governance for Development* (ibid.)
The views of senior public officials are therefore absolutely critical; hence the emphasis laid on the issues of leadership and commitment, the emphasis on building awareness and confidence, and the emphasis on 'winning hearts and minds'. Public officials must be convinced that e-governance is in their self-interest:

- in order to gain election victory,
- in order to respond to threats,
- in order to gain access to donor funds,
- in order to gain control, credibility, kudos, and other intangible resources,
- etc.

Other civil society stakeholders – managers, users, citizens in some cases – have less power but can still delay, skew or block e-governance initiatives. Building capacities, listening, addressing self-interest and motivation, and devising adequate incentives will all have a role to play here.

Vendors have much to gain, but have the potential to skew initiatives unless they can be kept in check. Hence the importance of building up the 'intelligent customer' capacity.

### C4. Risks

#### Key Issues

*The overall failure of governance*

Many developing countries do not have governance that even approximates to a normative framework. Many states lack stable polities; many lack macro-economic stability; in many, rule is by personalised leadership with rule by the executive that largely marginalises the legislature and judiciary; there are social cleavages along ethnic, tribal and other lines in many developing countries. Within this milieu, the potential for e-governance initiatives to make a significant difference may well be limited. However, that is not a rationale for inaction, and one must recognise that ICTs can act as a relatively concrete lever to change.

*Sustainability*

Where does the recurrent funding for e-governance come from when all the press photos have been taken and the donors/politicians have moved on? What happens when ministers and senior civil servants move on? These days you cannot find the elephants' graveyard because it is hidden behind the ICT projects' graveyard where the bleached boards of thousands of PCs lie rotting. Considerations of sustainability must therefore be high on the agenda in planning e-governance initiatives.

*A rushed job*

Overambitious timescales lead to short cuts that reduce sustainability; for example bringing in expatriate consultants or looking for off-the-shelf ICTs. Adhering to the 'keep it simple' principle can help here. So too can making project scheduling more recipient-driven than donor-driven.

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Failing to balance external and internal interests
The danger of e-governance being too external: many e-governance initiatives in developing countries are donor- or vendor-led. The latter is particularly problematic given often conflicting objectives between vendors and governance, and the poor quality of some vendors. Care must be taken that both initiatives and institutions relating to NeGI do not become vendor-dominated.

The danger of e-governance being too internal: for some ruling elites in developing countries, 'it seems that governance is seen as a tool for serving personal, then ethnic, then social affiliation and last the national interest. All state machinery, institutions and mechanisms are viewed and used in this light.' e-Governance initiatives will be just the same: if senior public officials do come to see e-governance as being in their interests and are able to take control of those initiatives, they are likely to steer projects towards their self-interest, and potentially away from broader goals.

It is very difficult, but a balance must be struck between external and internal interests. One lesson from a recent Zambian MIS initiative was that an independent project team was required 'so that government cannot intimidate team members and that donor countries cannot hijack the project for their own benefit.'

Lesser Issues

Donor fad-ism
There is a danger that some donors too readily run away with the latest fads in ICTs and miss the hard grind of churning out vital but unsexy basic administrative and managerial information systems. When e-governance projects focus on Web sites, for example, who are these for: local people or Westerners? White elephant projects can be introduced before a critical mass of users exists.

Weakness of central e-Governance Units
Such Units are not a panacea: they can be weak and find it hard to push initiatives through within individual ministries and agencies. Nevertheless they are a necessary part of the process to act as a focal point both nationally and internationally.

9 Adeboye, T.O. (ibid.)
Appendix 1: Guidelines on Development of Human Capacities for e-Governance

What are the human capacities for e-governance?

Human capacities are typically identified as having three components: knowledge, skills and attitudes. The focus in this Appendix is particularly on building skills and knowledge (‘competencies’), especially skills.

What skills and knowledge are required in general?

A typical ‘wheel of competencies’ for e-governance is shown below in Figure 4.

Figure 4: Competencies for e-Governance

ICTs: Hands-on skills

'Big Picture':
Contextual knowledge
Vision/strategy/policy

Intelligent Customer:
Financing
Contracts
Procurement
Vendor relationships

Change:
Change mgmt
Project mgmt
Systems thinking

Information Systems:
Data, information and knowledge
Information systems

Interpersonal:
Leadership
Communication
Negotiating and influencing

The particular competencies required by particular groups in particular countries will vary. They will have to be identified by training needs analysis, with training provided to meet those needs. The Academies of Excellence in e-Governance, or their equivalent, can play a lead role in both analysis and training.

Beyond this generic activity, a number of more specific points/proposals can be made about building competencies for e-governance:
Training Content for e-Governance
Training content would need to pick up and disseminate the lessons of best practice, such as the need to adopt an integrated approach to e-governance, the need to adapt solutions to developing country realities, and the need for better communication with key stakeholders.

Building e-Governance 'Hybrids'
The failure to adopt an integrated approach to e-governance relates in its most perennial form to the way in which technology design pulls in a different direction to proposed good governance objectives. The gulf between IT professionals and senior public servants/politicians is one root cause. Successful projects are those whose champions cross this gulf by being 'hybrids' (see Figure 5): those who understand the technology and the business of governance and the role of information in governance. Training may therefore focus on building such hybrids (or 'tribrids' since they combine three key domain competencies).

Figure 5: Hybrids as Champions for e-Governance Projects

The hybrid should not be thought of as a single entity. For example, IT professionals for e-governance need to be hybridised into broader change agents who combine IS and ICT skills with an understanding of the public sector context, of the civil society context and of change management. Public and NGO sector managers need to be hybridised towards a broader skill set that includes an understanding of information systems and ICTs.

Gender-Sensitised Training Content
Introduction of ICTs can lead to polarisation: to winners and losers. In some organisational contexts, more men than women can be winners and more women than men can be losers. Where relevant, training should incorporate a gender sensitivity that exposes and discusses such outcomes and ways to address such outcomes.
Distance Learning Delivery
The medium is the message, so the Academies and other training providers could be encouraged to use ICTs for delivery of materials for distance learning.

Training Content for Attitude Change
Knowledge and skills are important but so, too, are attitudes. In particular, the issue of motivation arises for all those involved with e-governance: why should they support e-governance initiatives? Training content can therefore benefit from including attitude-related material that speaks to three things:

- **The Rational Mind**: this can be addressed through arguments about the ways in which ICTs cut costs, improve effectiveness of decision making and service delivery, etc.
- **The Political Mind**: this can be addressed through arguments that go to the roots of self-interest. Individual self-interests differ and these need to be identified for each individual stakeholder before they can be addressed. Having said this, political leaders – for example – typically want:
  - to respond to their need for stronger control over the mechanisms of government;
  - to respond to internal political pressures from other politicians, institutions of civil society (the media, lobby/pressure groups, unions, chambers of commerce, etc.) and – to some extent – from citizens;
  - to respond to external threats or opportunities such as criticism in the foreign media or availability of foreign investments and donor funds. Demonstrating ways in which ICTs can help deliver these responses will help align leaders' self-interest with e-governance.
- **The Heart**: this can be addressed through stories, particularly of those implementing or benefiting from e-governance, that resonate at an emotional level. Examples might be innovative officials overcoming the odds to deliver e-governance, or of disadvantaged clients benefiting from e-governance.

Replicator projects, seminars, training initiatives, personal contacts, etc. currently tend to focus too much on speaking to the rational mind. In planning such NeGI components, it should be ensured that they also make an attempt to speak to the political mind and to the heart.

**What specific skills and knowledge are required for implementing e-governance projects?**

In many contexts, this can be divided into four main components:

**Systems Development Capacity**
ICT initiatives generally in developing countries have frequently – and often to their cost – had to rely on the import of external ICT personnel in order to develop new information systems. The indigenous information systems development capacity for e-governance must be strengthened, both within user organisations in the government and NGO sectors, and within private sector vendor organisations.

**Project/Change Management Capacity**
The public sector particularly has been poor at managing e-governance projects and at managing change. That capacity needs to be strengthened. As well as techniques for
managing the non-human resources, e-governance project managers particularly need help with managing the human components of projects and change. They especially need a greater capacity to manage the issue of motivation; to be able to make use of external drivers, of internal rewards and punishments, of their own negotiation and influencing skills in order to help answer the "what's in it for me?" question for all key e-governance project stakeholders.

Intelligent Customer Capacity
Public sector organisations especially have been poor ICT customers, unable to raise the finance for projects, unable to specify their needs, unable to manage the procurement process, and unable to manage vendors. All of these capacities need to be addressed to change a client—vendor relationship that, to date, has been too combative, too corrupt or too vendor-driven. Whilst not a panacea, the corruption within procurement may be partly addressed by broader anti-graft, transparency and accountability initiatives.

Operational Capacity
Finally, the ability of the public sector and other governance-related organisations to operate and maintain information systems must also be strengthened. For almost all developing countries this will still initially include (but not be limited to) a need to build basic computer literacy skills within user communities.

Building an e-Governance-Ready Local IT Industry
All of these capacities bring with them related training needs for the public sector and civil society, helping to reduce the problems of vendor-/consultant-driven computerisation. The first brings with it a much wider need: to support the local IT industry within developing countries. This does not mean local hardware manufacture or even local 'software factories' on the Indian model, but it does mean local enterprises with the capacity to adapt software and systems to local realities, including local languages. There is insufficient space here to go into detail but required policies and strategies have been identified elsewhere.11

How can one address the haemorrhage of public sector staff?

As noted in the main text, e-governance is easily undermined by the loss of specialist staff from the public sector. Here, more than anywhere, there are no panaceas, but possible approaches that can be taken to the problem include:

Improved Recruitment and Retention Practices
There is insufficient space here to go into detail, but a summary of valuable practices includes: emphasise job security and public service job content; cut back on recruitment bureaucracy; develop short-term assignments for outsiders; use up-to-date recruitment techniques; offer recruitment bonuses; recruit non-IT staff; articulate and promote a clear development path for specialist staff; improve the handling of training opportunities; provide challenging projects and other non-financial incentives; improve remuneration; strengthen HR practices.12

11 Heeks, R. (1999) Software Strategies in Developing Countries, i-Development working paper no.6, IDPM, University of Manchester http://www.man.ac.uk/idpm/id_w6.htm
**e-Governance ‘Hit Squad’**
An autonomous central unit, paid at market or market-and-above rates, responsible for implementing e-governance projects. Could be seen as part of the e-Governance Unit or the Academy of Excellence in e-Governance.

**Public—Private Partnership Models**
If the public sector cannot retain sufficient capacity for e-governance, it must look elsewhere. Alongside intelligent customer capacity-building, the public sector should investigate the potential for greater use of models such as outsourcing. PPP models like outsourcing and private finance initiatives cannot just be picked up and dumped on developing countries; they must always be viewed through a DC lens, and adapted or rejected in line with developing country realities.

**What are the alternatives to training?**
Other ideas for improving human capacities for e-governance without use of the traditional training model include:

**From Training to Learning**
This would aim to shift the emphasis onto providing resources and facilitation for learner-centred, learner-driven acquisition of skills and knowledge. Although valuable, such a move is particularly difficult for developing country learners given the very didactic, teacher-centred model with which most have grown up. Other learning-related options include: learning diaries, learning sets (groups of staff from different organisations sharing learning experiences); work shadowing; job exchanges; secondments to other organisations; attending seminars and exhibitions; and reading.

**Other Mechanisms for Building Knowledge**
A number of these have been suggested elsewhere: demonstrators/replicators to build basic knowledge; institutions and forums for developing knowledge about best practice; transfer mechanisms to adapt knowledge from the private sector and from foreign countries; better monitoring and evaluation of e-governance projects to build knowledge. Other mechanisms include: ring-fencing explicit periods at the start and end of e-governance projects for accessing knowledge on past projects, and for building knowledge through reflection on the current project.

The present lack of knowledge-building about e-governance projects is striking. In part it arises because the Internet-inspired wave of interest and investment in such projects is relatively recent. In part it arises because of the perpetual Cinderella status of project monitoring and evaluation. However, more does need to be done: there has been too little reflection on what is working and what is not; on best and worst practices.

**Tapping into the Diaspora**
The millions who have left developing countries to work and live abroad represent a powerful pool of human capacity that could well be tapped for e-governance; for example, by being linked into physical and virtual networking.
Appendix 2: Potential Priorities for e-Governance Pilot Projects

In addition to the suggestions made in the main text, some other potential priority areas for specific e-governance projects can be suggested. In some cases, these may require 'common good'/catalytic actions by donors. In all cases, national politics will be a key determinant of priorities.

1. **Strengthening the Pressure Points**
Governments seem to change more often due to external than internal drivers. Strengthening those local external drivers by helping them gain maximum benefits from ICTs could be a priority. In practice, this could mean three target sectors:
- the independent mass media,
- local NGOs, and
- public libraries, community centres, post offices and other access points to information for citizens
Risks here, however, are considerable if there is a perception of attempting to undermine government rather than strengthen civil society. One way to ameliorate this might be to work with existing initiatives such as those that already support the mass media, NGOs/community centres, and libraries.

2. **Hitting the G-Spot: Networked Government**
As noted elsewhere, too many current ICT projects seem to take an 'anywhere but government' approach. They focus on telecentres, telemedicine, schools, and e-commerce but not on the core activities of government. Yet government remains at the heart of the development process. Unless it can be reformed – and e-governance has much to offer – then progress will be limited. Therefore use of ICTs to support government reform can be seen as a priority for e-governance.

3. **Balancing Inside-Out vs. Outside-In**
Two dangers need to be avoided:
- First, the 'hollow' organisation that has a veneer of Web sites and e-mail hiding a mess of chaotic manual systems. This suggests that priority should go to internal-focus initiatives, such as building and sustaining basic data systems and management information systems, then moving on to institutional links and only finally to intermediated citizen-related projects.
- Second, the 'insular' organisation that keeps information to itself and is closed to external pressures and interactions. This suggests that priority should go first to initiatives that increase openness and external links to citizens and institutions which will then help act as levers to further change.
In practice, then, priorities must seek a balance between these two dangers.

4. **e-Governance Replicators**
A priority could be funding projects that would aim to be used as demonstrators/replicators and as ways of building the knowledge base on e-governance best practice. Benchmarking and strong monitoring and evaluation components would be built into such projects.
5. Good Governance Before e-Governance?
As already noted above, adding the 'e' can make good governance better and bad governance worse. This provides an argument for supporting general governance and data-centred initiatives, so long as they follow an integrated approach.

6. Good Governance Goals
Pilot projects to support governance were noted in the main text. There are arguments for other priorities. For example, that the frailty of the legal system in developing countries fundamentally undermines both governance and development more broadly. Legal projects would be a priority under this approach, to strengthen the rule of law. Alternatively, that the failure of government to rely on tax payments from a broad mass of the citizenry in developing countries undermines governance. Under this approach, revenue-related projects would be a priority, to strengthen the dependence of governments on their citizens.

7. Supporting Cross-Cutting Development Priorities
Three priorities currently cut across many development initiatives: women, the poor, and the environment. They all offer opportunities to act as e-governance project priorities. However, these three already form priorities for existing e-development initiatives and they leave the gap noted above that core government functions are being ignored. Arguably, therefore, whilst women- and environment-oriented projects will be included within overall e-governance priorities, they should not be prioritised to the exclusion of other areas.

8. e-Business and e-Commerce Projects
In this paper, these areas have been seen as separate from e-governance. However, they could be included, perhaps via encouragement of g2b (government-to-business) projects such as e-procurement or electronic delivery of government services to business.

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