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From Developed to Developing Countries

Introduction – framing the issues

As will be shown in this chapter, much of the literature in the academic world reflects the important dichotomies between the developed countries' approach towards e-government and the obstacles facing developing countries. In summary, the challenge that developing Commonwealth countries face is that many of them still do not have either the advanced industries or the financial wherewithal to duplicate in all respects what their fellow members have achieved in the more developed countries. At the same time, however, public expectations are building to the same extent as they did elsewhere regarding the desire to modernise governments and their service delivery. Such a discrepancy, which sets the growing desire for change against the financial constraints on implementation, faces the Commonwealth system with a unique dilemma.

Fortunately, the tradition of co-operative endeavour is enabling the Commonwealth to tackle this situation successfully. By way of three approaches, e-government is reaching all corners of the Commonwealth, in that developing countries are: (1) identifying their ICT needs for e-government; (2) avoiding the pitfalls by tracking the lessons learned in other countries; and (3) focusing infrastructure acquisition and deployment on their particular service needs.

The way that developing Commonwealth countries are identifying their ICT needs for e-government is through '**benchmarking**'. A benchmark is a structural comparison or performance test of hardware and/or software[1] . A number of international organisations have conducted benchmarking studies of both developed and developing countries' efforts to apply ICTs to workflow, horizontal integration, service delivery and public consultation. By observing what others have accomplished, it is possible to pick and choose the best in the particular circumstances of each government.

The most effective technique for avoiding the pitfalls of previous projects is by tracking the lessons learned in other countries through seeking and applying **best practices**. The term refers to 'effective ways to perform processes or sub-processes that have been identified inside or outside' the organisation[2] . Lists of best practices have been published for the benefit of new projects in business and government. Infrastructure acquisition and deployment between different organisations or projects is called

'**technology transfer**'[3]. For some aspects of e-government, turnkey packages are available that will provide total systems for specialised functionality. In other cases, consultants can analyse and design a customised solution that includes such transfer elements as new equipment, software upgrades and ongoing user training.

Benchmarking

The procedure of benchmarking is now considered one of the standard methods in a manager's 'tool kit'[4]. In her description, Dr Suzanne Turner, University of Warwick, advises use of the technique whenever 'you are interested in learning from other organisations ways to improve your own organisation'[5]. There are a number of different ways to use the procedure, including either in-house observation or external comparison, and either staff conducted or professionally contracted benchmarking. In the case of benchmarking between countries, external comparisons and professional contracts would usually be the means deployed.

The European Commission, of which the United Kingdom is a member, sponsored a conference in Manchester, UK, in 2005 to compare governments' readiness for e-government projects[6]. Concurrently, research from a New Zealand academic focused on the impact that national cultures were having on worldwide readiness for e-government[7]. The School of Computing at Middlesex University is now offering PhDs to international students that consist, in part, of a study of e-government readiness in their respective countries. One notable example compares Egypt, the United Kingdom and Dubai[8]. The Victoria University of Wellington, New Zealand, has recently appointed the first Professor of e-government in the world.

Governments themselves sponsor some of the benchmarking studies. The e-Government Resource Centre[9] is a dynamic site hosted by the Government of Victoria, Australia, and aims to help everyone learn from each other and continue to be the pacesetters in using new technologies to deliver better government services. International financial institutions are also advocates of electronic government, with the view to increasing transparency and reducing corruption. The World Bank has a website devoted to teaching and assisting users with e-government[10]. One particular paper on this website covers sectors, stages, opportunities and challenges of online government.

What this sampling indicates is that there is an abundance of materials available that 'benchmark' (compare) the efforts of numerous national and regional governments to install and operate e-government. All of this material is available to Commonwealth countries, as are the invitations of many of the sources of material for countries to seek further information and/or help in studying and analysing their own situations, and in designing and deploying their own solutions.

Any government of a developing Commonwealth country that is seeking helpful comparisons of these kinds of projects may find the following guidelines useful:

- create a team of stakeholders to design a benchmarking survey;
- ask the stakeholders' team to craft a list of functionality requirements; and

- understand the local context and environment of the benchmarked projects.
- look for comparisons of hardware, software, and 'peopleware' (human issues);
- seek comparisons of both similar and dissimilar situations to your own;
- search for comparisons of costs, duration and disruption of e-government projects;
- find out how much was devoted to training (half the project cost is appropriate);
- enquire about sources of financing that different projects have used; and
- ask technology suppliers to compare projects they have implemented.

Best practices

The American Productivity and Quality Centre (APQC) is an internationally respected think tank advocating the use of ICTs to increase productivity and improve quality. Tracking and trading best practices is one of its major endeavours, which it defines as 'an assessment recommending the most appropriate way of handling a certain type of task, based on an observation of the way that several organisations handle that task'[11].

Business consulting has the most experience with best practices to date, because commercial firms were the first to get into digital transactions and networked organisations. Best practices have now accumulated to the extent that large consulting companies often assign specialised groups exclusively to leveraging best practices knowledge[12]. Businesses that use best practices, and the consultants who can advise on them, are already practicing in Commonwealth countries, both developed and developing. Developing countries can use private sector expertise to move forward with e-government by partnering arrangements that could share experience and lower costs.

The European Commission maintains a website devoted to the e-government best practices of its members[13]. There is a Good Practice Framework on this website, the main objectives of which can be useful to all Commonwealth countries:

- to collect examples of well-defined e-government cases;
- to create an intelligent knowledge database of those involved in e-government;
- to provide easy access to e-government know-how and expertise; and
- to support the sustainable transfer of good practices.

Academic organisations have also taken a deep interest in e-government for developing countries. The 'e-Government for Development Information Exchange' Project is co-ordinated by the University of Manchester's Institute for Development Policy and Management[14]. This website covers five e-government topics, namely:

- Topic 1. Building e-government websites;
- Topic 2. m-government – mobile/wireless applications in government;
- Topic 3. Public sector health information systems;

- Topic 4. Using ICTs for government transparency; and
- Topic 5. Achieving success/avoiding failure of e-government projects.

The last topic of this list will be one of the most useful for less developed Commonwealth country governments seeking to digitise. Questions about actual or possible project failures are posed and then answered in such a way as to alert those contemplating further e-government, so they can recognise many pitfalls:[15]

- Why do failures occur?
- How costly are failures?
- What can be done to avoid failures?
- Where to get training on e-government successes and failures? [Online manual.]

Technology transfer

Building effective e-government facilities follows a supply-chain process: research, analysis, design, planning, deployment, training, operations, feedback and improvement. Although any of these steps might conceivably be either expanded into sub-routines, or contracted into larger steps, these activities are both recognisable and manageable. Further, depending on the resources available, not all these steps need to occur in a single linear process – some may run in parallel, depending upon the size, scope and strategy of the project. However, all these steps have to be properly engaged if the project is to succeed. In this respect, e-government projects resemble many other public policy initiatives, which will come as no surprise to Commonwealth governments.

Governments in Commonwealth countries, and in most other countries for that matter, want the acquisition and operation of e-government systems to be accompanied by technology transfer. They want not only to be the owners of the infrastructure, but also to be the masters of its design, operation and future development. The exercise of both national sovereignty and political stability depend upon these capabilities. There are different visions about how to accomplish these goals, though they will lead to different versions of technology transfer.

One approach to e-government seeks to focus primarily on digitising service delivery to the public[16] . Documents could be delivered to the public electronically, saving money and speeding dissemination. Developed Commonwealth countries began with this approach, and are now moving beyond it. With this approach, there has also been some talk of government operations with fewer employees per service process, a prospect that has more recently been downplayed in favour of 'improved service delivery'.

Of course, there is a caveat to this suggestion. In most developing countries, there is limited access to electricity, water and other life essentials. Poverty and literacy need to be addressed first, with technologies being enhancers of the process of change. Assessments of needs are the first step in helping a developing country to make effective use of ICTs.

A second approach revolves around improving the policy-making process through electronic workflow and horizontal co-ordination[17]. Silos of information and stovepipes of policy-making are slowly being reproached and replaced as the public demands. The rationale offered for this approach is that more co-ordination will reveal existing contradictions in statutes and regulations, and avoid them in new ones. The outcome will be policy integration, on the assumption that the public wants understandable programmes rather than jurisdictional roadblocks. Developed Commonwealth countries are now in the midst of implementing this approach, encountering more inconsistencies and resistance than was initially expected.

A third approach, just recently started, is to increase public consultation and participation in policy-making. One aspect of this approach is to invite the public into the policy process via electronic networks that deal with specific issues and operate under controlled formats[18]. The other aspect of this approach is to take network accessibility to the public, often in the form of community informatics, to act as a combination of economic-social-political infrastructure, so that poverty does not continue to perpetuate the digital divide[19].

Commonwealth governments are contemplating these possibilities, with some moves in this direction – but power sharing is a stretch for government officials, and the public wants clarification of the rules of engagement before it can trust the process. Public consultation and participation in policy-making is sometimes referred to as electronic or digital governance. The premise behind the use of this term is that the outcome (the process of governance) is becoming more important in the public mind rather than the means of accomplishment (i.e., governments). Be that as it may, the instruments for delivering public services are still organised governments, so even e-government is just another project in the public forum.

Whichever phase of e-government a country is in, the key variable in successful technology transfer is operator training[20]. No country is immune to this requirement, regardless of its type of government or form of political culture. However, because of their democratic ethos, Commonwealth countries are better positioned to achieve an alignment between technology systems and political needs through the mobilisation of operator 'buy-in'. That is why technology transfer must be factored into the process of building e-government right from the beginning of project planning. There is no single 'right way' to design or implement e-government – it all depends on what the country needs and the trajectory of its political aspirations.

Reflecting this diversity of possibilities, academic analysts are taking a broad view of e-governance alternatives. The DigitalGovernance.org Initiative is a project of the London School of Economics in the UK[21]. It is aimed at studying, designing and propagating e-governance models. These models of e-government are generic, and include the following:

- a broadcasting model (disseminating information to the public);
- a critical flow model (informing the public of important issues);

- a comparative analysis model (benchmarking government performance);
- an e-advocacy model (mobilising the public, lobbying for action); and
- an interactive-service model (facilitating public participation).

As can be seen, these models summarise both the history and the alternatives of e-government. And depending on which choice, or combination of choices a Commonwealth government makes regarding e-government, the design of the system and the kind of technology transfer needed to support it will differ.

Conclusion

Commonwealth countries have had a wide range of experience to date regarding their decisions to adopt e-government, and they face a diversity of choices as they contemplate the future of their e-governance capabilities. How they will deal with these choices depends on their approaches to **benchmarking** (comparing other projects), **best practices** (identifying the best alternatives), and **technology transfer** (training the operators properly). Because e-government and e-governance are developing fields rather than co-modified products, there is no one right way to do things, nor one single goal towards which to strive. That is why the Commonwealth tradition of mobilising support and building consensus will still be the most effective basis to continue moving forward with electronic government.

Notes

1. Alan Freedman (2001).
2. Davenport and Prusak (2000).
3. DeLong (2004).
4. Turner (2002).
5. Ibid, pp.6–7.
6. eStrategies Online (2005).
7. Kovai (2005).
8. School of Computing (Middlesex University) (forthcoming).
9. Government of Victoria, e-Government Resource Centre, http://www.egov.vic.gov.au/ [accessed 1 February 2008].
10. Seifort (2003).
11. Vestel (2005) p.68.
12. Hiebler, Kelly and Ketteman (1998).
13. European Commission, *eGovernment Good Practice Framework*.
14. University of Manchester's Institute for Development Policy and Management, e-Government for Development, available at: http://www.egov4dev.org/ [accessed 1 February 2008].
15. Ibid, Topic 5: *Achieving Success/Avoiding Failure of e-Government Projects*, available at: http://www.egov4dev.org.topic1.htm [accessed 1 February 2008].

16. Roy (2006).
17. Perri 6 (University of Birmingham) (2004).
18. Bounfour (2005).
19. Gurstein (ed.) (2000).
20. Strassmann (1999).
21. London School of Economics, *DigitalGovernance.org Initiative*, available at: http://216.197.119.113/artman/publish/index1.shtml [accessed 1 February 2008]