

E-Governance: An International Perspective

The technology platform

E-governance is a spin-off from e-commerce. In many respects, the modalities and functions that were initially developed in e-commerce have subsequently been transferred to government, albeit in forms that are suitable to public, rather than corporate, administration.

In both e-commerce and e-governance, the 'electronic' component is provided by a combination of computers and communications networks. The basis for the computing component has been the capabilities of hardware and software. In the case of communications networks, it was necessary for data transfer protocols (http, ftp, etc.) to be added to hardware and software to produce e-mail and the world wide web.

This electronic platform provides the capability to make governance more effective and efficient, through the use of computers and communications. In e-commerce, the internet was first used for advertising and to distribute documentation more rapidly, widely and cheaply. The initial exercises in e-governance were essentially the same. Government departments posted publicly available documents on the web to reduce printing and mailing costs.

Electronic functionality

Commercially, e-mail was first used for internal co-ordination of operations and customer feedback. Government departments used it in the same way. Colleagues used e-mail to facilitate workflow and co-ordinate projects. E-mail links were also listed on internet documents so that the public could follow up with questions or suggestions about the government materials they were accessing and downloading.

The next phase of e-commerce involved selling over the internet by taking orders for products via electronic forms. Payments for these transactions were enabled by the development of secure credit card processing arrangements. Tangible goods could be shipped to the purchaser by mail or courier, and intangible goods (software and electronic books or reports) could be transmitted back as soon as the transaction was confirmed. Governments followed suit by collecting data via electronic forms (e.g. the census), accepting payments of fines and fees with card transactions, and selling publications and data in the same way as in e-commerce.

Most businesses now have websites, as do most government departments. The latest developments have been to engage customers or citizens in consultations, either through some form of market research for companies or policy research for governments. Just as increasing numbers of customers can make purchases electronically, some governments are also making electronic voting possible. In both business and government, more and more co-ordination and communication is being conducted electronically and then stored and retrieved in the same way. Since the technology is continually evolving, the need for updating and expansion requires ongoing investment and plans for change management.

E-governance in the Commonwealth

The examples of Mauritius, India, the United Kingdom and Canada illustrate how e-governance has been implemented within the Commonwealth.

Mauritius is an island in the Indian Ocean with a small population and a thriving tourist industry. The government saw an opportunity to invest in an e-governance infrastructure, both to acquire the benefits of e-government services for Mauritius and to act as an outsourcing supplier of governmental information-processing services via telecommunications links for other African nations. The Commonwealth Secretariat assisted Mauritius to develop a plan to finance, build and deploy the technology and acquire the training necessary for this project.

A consultant¹⁹ from the Commonwealth Secretariat went to Mauritius to assist its government in developing:

1. An e-governance audit – to determine the extent of electronic infrastructure and trained personnel;
2. An e-governance needs analysis – to estimate what additional equipment and training would be needed to enhance e-governance capabilities; and
3. An e-governance plan of action – to specify how much would be spent, on what priorities and over what time period, in order to accomplish the e-governance objectives the government had committed to.

The implementation phase is ongoing. The Government of Mauritius website has posted the following mission statement for public viewing:²⁰

A worldwide revolution in information and communications technologies is currently occurring. The Internet, the personal computer, the mobile phone and other modern communication devices are fundamentally changing our lives affecting the way we work, learn and interact.

Traditionally, interactions between a citizen or business and a Government agency used to take place in Government offices and with the emergence of information and communica-

tion technologies, it is possible to service citizens more efficiently and practically through a service kiosk or a personal computer, for instance.

E-government refers to the use by Government agencies of information technologies (such as Wide Area Networks, the Internet and mobile computing) to transform relations with citizens, businesses, and other arms of government, for:

- Better delivery of Government services to citizens;
- Improved interactions with business and industry;
- Citizen empowerment through access to information; and
- More efficient government management.

The resulting benefits can be greater convenience, increased transparency, revenue growth, cost reductions and less corruption.

E-government encompasses the electronic delivery of quality services to the citizens and the business community while at the same time facilitating inter- and intra-Governmental exchange of information in an effective and efficient manner. Analogous to e-commerce, which allows businesses to transact with each other more efficiently (B2B) and brings customers closer to businesses (B2C), e-Government aims to make the interaction between Government and citizens (G2C), Government and business enterprises (G2B), and inter-agency relationships (G2G) more friendly, convenient, transparent, and cost-effective.

E-government presents Mauritius with tremendous opportunities to move forward in the twenty-first century with higher quality and cost-effective Government services and gives rise to a better relationship between Mauritian citizens and the Government.

In a report to the Government of Mauritius, the President of the Republic referred to some of the activities undertaken to move the e-government project forward. One part of this initiative is the assignment to the Citizen Advice Bureau of the responsibility of liaising with the public to ensure that they can access e-government services. The President reported as follows:

*The role and functions of the Citizen Advice Bureau will be revamped so that along with greater e-government services available to our citizens, greater access to government information and administrative services are available in all our towns and villages.*²¹

The President also drew attention to efforts to get greater acceptance and use of Mauritius's electronic infrastructure by taking steps to create public trust in both e-government and e-commerce. As the President indicated, the steps necessary to achieve this goal will involve technical protocols as well as changes in behaviour:

Government will encourage the setting up of a National Internet Exchange Point to enable peering of local ISPs and to ensure an efficient usage of Internet bandwidth. A National Information Security Policy based on EU and PIPEDAT (North America) standards will

*be defined to build and sustain trust for e-government and e-commerce applications as well as to develop our ICT industry. A new costing model will be introduced with a view to reducing prices of telecommunication services at the retail level for the benefit of consumers. The introduction of new technologies including wireless technology (WiFi) will be encouraged to enable productivity gains. E-commerce will be promoted to create new opportunities and employment.*²²

Regarding effective use of the electronic infrastructure, the President spoke of the ongoing training programmes established to ensure proficiency, especially in ministries and institutions that have been prioritised to develop e-government capabilities:

*Government will review the scope of ICTA, NCB and the National Proficiency Programme to ensure optimal performance. The establishment of e-government will be accelerated and priority given to its introduction in some Ministries and Institutions. The role and scope of Central Informatics Bureau and Central Information Systems Division will be reviewed.*²³

India is a populous and thriving country, with a wide spectrum of income distribution and economic development. The state and national governments have moved quickly into e-governance because skills and technologies were readily available. Much of the public, however, found itself on the downside of the digital divide because poverty precluded their acquiring the home computers and communications facilities needed to access government e-services. Therefore, many of India's e-governance plans have involved designing and deploying community-based technologies that can be operated and shared at far less cost than would be incurred by attempting to connect every household to the internet. These projects, combined with economic development projects that use India's e-governance and e-commerce infrastructures, are transforming India into a world leader in community informatics.

This e-governance leadership in India manifests itself in two ways. Expertise in the theory of e-governance is developing rapidly.²⁴ Schools of business administration and of public policy throughout India are creating and teaching courses on both the Indian context of ongoing projects and the international lessons that can be learned from tracking e-governance experience elsewhere. Secondly, the national government and state and community administrations are moving ahead with implementing e-governance plans. Recent reports on some of these projects indicate that significant progress is being made in e-governance enhancement; that similar efforts from elsewhere are being watched; and that the lessons learned from both the Indian and other countries' experience are being used to improve performance and revise plans.²⁵

The **United Kingdom** has been at the forefront of e-governance applications. The early phases of document distribution, workflow co-ordination and service delivery have been accomplished effectively enough to become the basis for many Commonwealth best practices. However, attempts to deal with the 'democratic deficit' have been con-

siderably more challenging. The labour and social activism in the UK's recent past has inspired the expectation of another phase in e-governance, enabling public participation in government deliberations. The in-house support for this has been met by the adoption of evidence-based policy development, but public consultations that satisfy the participants have been much more difficult to organise. Continuing efforts at 'out-reach' are still being met with some scepticism, which will probably only be overcome when enough experience has been gained to engender trust on both sides.

Many communities in the UK are extending e-governance to include e-democracy. As a result, toolkits are being designed and deployed that will enable local councils and their constituents to engage in dialogue and tackle issues.²⁶ Both council members and a sample of constituents are surveyed to ascertain their experience with e-governance to date, and what additional features and capabilities they believe could make online consultation more effective. On the basis of this information, a team of experienced technicians develops a prototype which is then field-tested and modified until it gives users acceptable performance. These projects are ongoing and will result in successive versions of e-democracy toolkits.

The other exemplary practice in the UK is the comparative analysis of different projects at different levels of government, so that systemic lessons can be learned for ongoing improvement on the trade-off between relying on standardised methods as against management experience.²⁷ Performance data are gathered and stored in a repository so that benchmarking questions can be posed and answered using the available information. This enables performance measures to be developed for the various aspects of e-governance (equipment costs, network deployment, personnel complements, training policies, etc.), so that efforts at improvement can be targeted where they are needed, rather than just pursued in a generalised sense.

The biggest e-governance challenge for **Canada** has been the public's desire for a single window of access to all government electronic services, which is complicated by the country's federal constitution. Within government, this problem has been manifested by the way in which various departments and agencies have mounted their own service formats with their own technological preferences. Eventually, a common layout and standardised service provision were required for all government websites through such projects as the federal government's Government On-Line. The other troublesome aspect of the 'single window of access' has been between governments. Municipalities, provinces, territories, and federal departments and agencies have adopted differing philosophies and styles of e-governance operations. There are many different ways of organising information and navigating websites, and in many cases collaboration between governments has been premised on the assumption that agreement will only be possible if all participants' needs are met. Services Canada came online in 2006. The website is a one-stop approach to a plethora of services and programmes for the citizen. It covers many different aspects of the life cycle. The site is easy to navigate and leads

to offline contacts if people prefer to phone Services Canada or visit one of its centres, which are located all over the country.²⁸

Canada's Government On-Line project has also been the subject of a number of in-depth studies, including research papers and courses offered by the authors.²⁹ Professor Jeffrey Roy from the University of Ottawa's Institute on Governance has produced a comprehensive history of the project, together with a consideration of some of its implications.³⁰ His analysis shows that the plans and pronouncements regarding Government On-Line were elaborate and impressive, but their implementation was truncated by under-funding and lack of support. In 2007, a team of researchers from Canada, the UK and the USA investigated the internal dimensions of Government On-Line and compared it with lessons that could be learned from projects in other countries.³¹ The study concluded that the shortcomings of the Government On-Line project were also exhibited by the experience of the UK and USA, and that on a comparative basis Canada did as well as, or better than, these two countries.

What next for e-governance in the Commonwealth?

The next challenges for e-governance within the Commonwealth will be similar to those faced by all electronic networks. Perhaps the most important characteristic of future developments is that they will diverge significantly from the patterns of the past, as e-governance has grown into a significant global discipline.

There seems to be a growing expectation among members of the politically interested public that the culmination of trends in e-governance will be fully-fledged participatory democracy. People will want to be consulted and involved in policy development and regulatory specification in whichever areas they are most concerned about. This is the long-term implication of ubiquitous networks and the concept of 'citizens as partners'. Both elected and appointed officials will still play a lead role in governance, but the public will want evidence that their views are solicited, respected and factored into the governance process.

Another major role of e-governance will continue to be service delivery. There are contradictory requirements in this area. Service provisions depend upon individual eligibility – payment of taxes, fees, fines, etc., and authorisation and/or distribution of particular benefits. Access to most services can be customised. Such services can be based on specific personal profiles for every user. However, the public will only find this acceptable if files and databanks are not cross-referenced or used to enforce policies that are extraneous to the purpose for which the data are collected. The balance between customisation and confidentiality will have to be carefully crafted and continuously revised to reflect the changing nuances of public opinion. The issue of information sharing raises many questions because of the implications of how people's personal information is stored, shared and used in the vast databanks compiled by government

and the corporate world. Privacy is an important right, given the growth of the internet and the amassing of personal information for many different purposes. Citizens want to be assured that this information is not being shared or abused in any way.

Ongoing challenges for Commonwealth e-governance

The hidden side of e-governance will continue to involve the co-ordination of governmental internal operations. In many cases there are various idiosyncratic versions of the same functional processes, with the only justification for this diversity being the historical variability of different departments and agencies. The workflow is often too segmented, resulting in too many procedures, authorisations and personnel required for what could be simplified, faster and less costly activities. Those responsible for internal e-governance will continue to be pressed to squeeze additional efficiencies and expenditures out of these processes, partly so that the funds saved can be re-allocated to support the expanded public side of e-governance.

The most controversial e-governance issue of all, at least to date, is the trade-off between national security needs and expectations of open government. Not surprisingly, national security practitioners base information sharing on the ‘need to know’ concept. Equally obviously, advocates of open government talk about ‘the public’s right to know’. If these two choices are placed along one dimension, the other dimension for this issue would dichotomise political acceptability versus constitutional constraints. Together, these two dimensions create a matrix with four types of policy options. Some sectors of the public will always want more information and some sectors of the security establishment will always be able to rationalise why they think less information should be provided. Every choice requires political judgment: there are no hard and fast rules.

E-governance trade-offs between national security v. open government		BASIS OF INFORMATION SHARING	
		The need to know	The right to know
POLICY RATIONALES	Political acceptability		
	Constitutional constraints		

Other examples of e-governance

The World Bank invests in development projects in many countries around the world. One of the hurdles that developing countries and the World Bank have encountered is the presence of what have been labelled ‘corrupt practices’. Such practices have two dominant features: *bribery*, to facilitate authorisation, regulatory approval or timely action; and *secrecy*, to cover this up. In response to these hurdles, the World Bank has proposed two counter-measures: (i) laws and regulations prohibiting bribery and creating

protocols which apply to development projects in particular, and commerce in general; and (ii) a policy of transparency to make scrutiny and accountability possible. The chosen instrument for these countermeasures against corrupt practices is e-governance. Therefore, in addition to the other development projects which the World Bank helps to fund, it is also recommending that e-governance infrastructure should be put in place, in both commercial and political systems.

Reports on these efforts confirm that electronic governance is indeed being adopted, and that it is having the desired effect.³² The obstacles that can be expected during the implementation of e-governance are under discussion, together with policies to address these barriers. The following are the guidelines that are being used as e-governance projects go forward.

Workplan for the implementation of e-government projects

Once the vision and priorities have been established, a detailed work plan helps agencies and officials to implement e-government projects. Some of the key elements on which the work plan should focus are:

- **Content development** – including development of applications, local language interfaces and e-learning materials;
- **Competency building** – training of personnel for human resource development must be implemented at all levels;
- **Connectivity** – intranet/internet connections must be established across related agencies;
- **Cyber laws** – providing a legal framework to support the objectives of e-government policies;
- **Citizen interfaces** – establishing a delivery channel to ensure accessibility and affordability of e-government by citizens;
- **Capital** – identifying revenue sources to help achieve a financial equilibrium.

The **Soros Foundation**, through its internet programme projects, has provided assistance for many internet-enabled activities in various countries, in some cases through NGOs and in others with the participation of governments.³³ Some of the projects that have included working with governments to provide e-governance are listed below.

The Baltic countries – Estonia, Latvia and Lithuania – have all hosted Soros Foundation projects. The project in **Estonia** is an example of extending e-governance in the

e-services dimension.³⁴ It receives joint funding from the Soros Foundation, the Estonian Information Technology Fund and the Nordic Council of Ministers. The project includes networking for universities and schools, libraries, medical facilities and cultural institutions.

Mongolia's Internet Programme Project is an example of extending e-governance in the e-administration dimension.³⁵ After providing connectivity for universities and a walk-in dial-up centre, the Mongolian Parliament (the Great Hural) and its Secretariat were connected to the internet and training was provided for parliamentarians. Subsequently, connectivity was extended to schools and rural areas, and steps were taken to introduce effective e-commerce and to train publishers and designers to work in electronic media.

The Soros Foundation Project for **Slovakia** includes an example of extending e-governance to the e-democracy dimension.³⁶ After networking health facilities, schools and the offices of the Ministry of the Environment, a civic network education component was added, which allows people to go online and discuss issues relevant to Slovakian society.

The **OECD** has been advocating e-governance for a number of years, with a similar perspective to that of the World Bank.³⁷ The OECD does research on e-governance that is sponsored by member countries and then disseminated to member governments. Many of its reports are available free on the OECD website and others are published and available for sale. Conferences and seminars have been held throughout OECD member countries to discuss research reports and develop policies and plans to use the findings of the research in commerce and government. Governments then report back on the progress they have made in implementing e-governance, and this forms the basis for another round of research, dissemination, consensus and collaboration on using the lessons learned to further improve e-governance systems.

The initial three national e-government reviews have now been completed and posted on the project website. The reviews cover, in order of appearance, Finland, Mexico and Norway.³⁸ A brief summary of each is given below.

Norway's report (March 2005) provides an in-depth analysis of both successes and the challenges still faced in implementing e-governance. The report is the first 'total system perspective' on e-governance in Norway, and constitutes an overview which has already enabled the government to take more co-ordinated action and commit to even further improvements with each continuing step in the programme. The challenges which Norway now faces include the need to more effectively communicate high-level policy to lower-level government organisations; to loosen budgetary rules so that more collaboration can occur; and to adopt a funding formula which recognises the funding contributions and constraints of particular agencies.

Mexico's report (March 2005) refers to the challenges of integrating e-governance

capabilities with other public policy reform initiatives. The occurrence of developments on both fronts poses technical and training challenges which are being addressed, but continue to need attention. Another challenge Mexico faces is one that is typical of countries that tackle technical projects, namely that of re-use. Work should be re-used to save money and avoid spending time in 're-inventing the wheel'; this is also a process that takes time to learn and internalise.

The report from **Finland** (December 2003) details e-governance challenges in relation to strengthening internal governance structures, managing public-private partnerships, improving e-government planning, and monitoring and evaluating results. Because Finland pioneered many ICT applications, there was a greater likelihood of its making mistakes. The result has been a slower take-off of e-governance capabilities and accomplishments, but experience is finally beginning to produce useful lessons, and this should result in a faster pace of execution in future.