6

Commonwealth Secretariat Workshop Report

Setting the framework for the workshop

Devindra Ramnarine of the Commonwealth Secretariat began the substantive portion of the workshop with a presentation of a holistic approach for national connectivity to narrow the digital divide[1]. This national ICT plan would involve community connectivity, training and human resource (HR) development, ICT industry development, e-government and proper legislation and infrastructure. The creation of the national ICT plan was depicted through figure 6.1, below.

The progression of steps is from left to right. The first step is to develop an information and communications technology vision and policy that encompasses stakeholders and their expectations regarding e-government. Next, e-readiness needs to be assessed based on standardised measurement methodologies. At the same time, a benchmarking exercise can be conducted to compare experience and best practices in e-government from other countries. Based on the results of the e-readiness assessment and the benchmarking exercise, any gaps that have been identified in a country's e-government

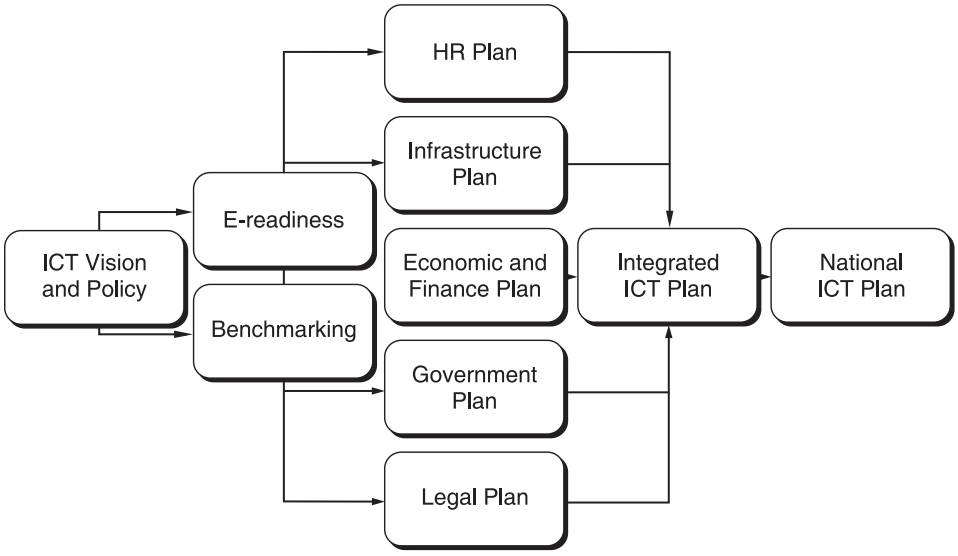

Figure 6.1 A holistic ICT policy for national connectivity

intentions with respect to its human resources plan, infrastructure plan, economic and finance plan, machinery of government plan or legal plan, can be addressed in the integrated ICT plan, which when effectively communicated to all stakeholders would become the national ICT plan for the country.

Mr Ramnarine cautioned about the need for national ICT plans to be implementable and not just rhetorical. Some existing policies might need to be revised, and funding arranged. All of this could best be done within a project management approach to assure that timelines were set, objectives met and risks ameliorated. He identified critical success factors as being (i) promotion of e-government by a sponsor; (ii) making the plan part of national development; (iii) achieving buy-in from stakeholders and managing change effectively; (iv) educating the public on the benefits of e-government; (v) procuring affordable technology; and (vi) providing leadership for e-government from within government itself. He also recommended that countries use the Commonwealth Secretariat's Commonwealth Connects Portal (www.commonwealthconnects.net) as a source of information about e-government best practices, the necessary legal framework, technical standards and so on.

Citizen-focused service and e-government[2]

A number of subsequent workshop sessions were then presented by Dr Albert Tan of Singapore. The rationale for Dr Tan's approach is the advocacy by the World Bank on the issue of public service delivery[3]. He began by defining the purpose for which e-government is adopted, namely for 'the integrated delivery of information and services by all levels of government to citizens, businesses and public organisations, through the application of information communications technology (ICT) for government transformation'. He illustrated his points using figure 6.2.

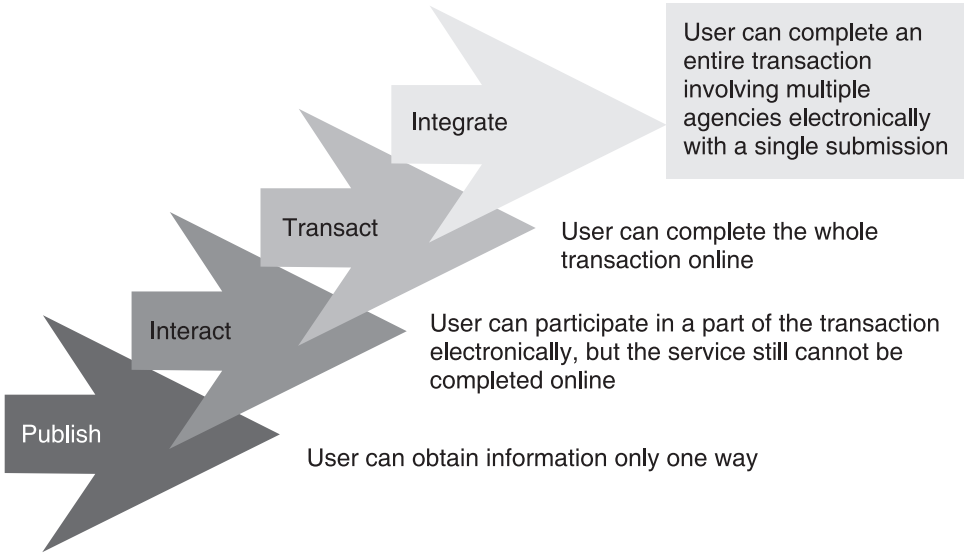

Figure 6.2 The purpose of e-government

Dr Tan reviewed the recent history of the spread of e-government, noting in particular that more and more services were moving online, and in the process that governments' relations with both their constituents and clients was changing. He emphasised that the transition to e-government was a continuous process rather than a short-term project. As a result, successive opportunities would present themselves for service extension, and governments should be ready to recognise and adopt these opportunities.

For instance, in government-to-business relations (G-B), e-procurement is the new business revolution that can help governments lower operational costs, empower aggregated cross-organisation spending, and gain unprecedented access to a global supplier base. The public sector can become a role model for e-procurement to catalyse the penetration of e-commerce into the private sector.

In a similar way, in government-to-citizen (G-C) relations, more and more citizens in Singapore are accessing their government services online. e-Citizen (a G-C portal in Singapore) is a first stop on the Internet for public e-services (online services). In the course of one year, the number of hits on e-Citizen increased from 240,000 to a few million hits per month. Going forward, a key focus of the public sector is to integrate public services across agencies to provide citizens with a single touch point or interface.

Government agencies in Singapore have made substantial efforts to make online government services simpler and more convenient to the public, and the number of government services delivered online increased over the year 2001 from 65 per cent to 90 per cent of all feasible services. The focus for Singapore today is in transformation of government services, rather than merely automating and digitising existing government processes as shown in the e-government maturity model.

Dr Tan concluded his presentation recommending that participants build e-government initiatives based on **outcome** measurements and avoid using **output** measurements only that might end up delivering e-government services that are not needed, resulting in user dissatisfaction and low utilisation.

Selecting e-government services[4]

In the session on selecting e-government services, Dr Tan highlighted the types of value propositions that can be derived from e-government: some are tangibles, while others are non-tangibles. Based on his experience, Tan asserted that tangible value propositions are easier to justify than the non-tangible ones. Government processes can be evaluated to match these propositions, with three criteria commonly used to justify selection being the cost, time and quality of service rendered. Processes that closely match the value proposition are selected for e-government implementation due to limited funding and resources. Examples of such value propositions are listed below.

Table 6.1 The value propositions that can be derived from e-government

FUNCTIONAL AREA	*Tangible value propositions*	*Non-tangibles value propositions*
Agency	❑ Faster business transactions ❑ Increased access to information ❑ Increased data integration across applications ❑ Fewer errors	❑ Stronger relationship with customer/citizens ❑ Enhanced responsiveness ❑ Better service ❑ Enhanced agency reputation
Information Services	❑ More effectively integrated systems ❑ Ease of support	❑ Increased system availability ❑ More satisfied end-users ❑ Availability of more accurate information to support data analysis activities
Acquisition	❑ Reduction of paper ❑ Reduction of manual effort ❑ Better information to make critical buying decisions ❑ Error reductions ❑ Reduced Inventory	❑ Fewer reorders due to discontinued items ❑ Stronger vendor relationships ❑ Cost reduction
Customer Service	❑ Reduce manual effort ❑ Reduce data entry ❑ Reduce paper process ❑ Reduce staff or avoid hiring more staff ❑ Move staff to more value-added jobs	❑ Faster, more effective customer support ❑ Lower burden on mailroom ❑ Reduced process steps facilitate faster processing of information
Finance	❑ Reduce discrepancies ❑ Reduce claims and adjustments ❑ Reduced data entry	❑ Process improvements in reconciliation of invoice, purchase order and remittance ❑ Reduced phone time/ improved efficiency
Administrative	❑ Reduce manual effort ❑ Reduce data entry errors ❑ Reduce paper process ❑ Reduce staff or avoid hiring more staff ❑ Move staff to more value added jobs	❑ Reduce redundancy ❑ Streamlined time to process information ❑ Accomplish more without additional hires

After this material was presented, the workshop participants were asked to list some value propositions for their country's e-government. Most participants listed value propositions that would mainly be relevant to citizens rather than those for business people or employees. Dr Tan advised them not to limit exploitation of e-government to citizens, but to expand further to include its use by businessmen, women and employees.

Re-engineering e-government processes[5]

The session on re-engineering e-government processes focused on the presentation of the concept of process and 'business process re-engineering' (BPR) to the participants and highlighted the importance of BPR for public sector reform. BPR was defined in the classical sense as 'the fundamental rethinking and radical re-design of business processes to achieve dramatic improvements in critical measures of performance, such as cost, quality, service and speed' as per *Re-engineering the Corporation* by Hammer and Champy, 1993.

Even though BPR started in 1993 and has been used extensively in the private sector, the concept has not seen much use in the public sector. The key motivations for BPR in the public sector are mainly cost reduction or compliance with new regulations. Another possible reason for the application of BPR may be due to some 'burning platform' that an organisation is 'standing on'. In that case, something has to be done fast before the 'platform' sinks.

Dr Tan explained the typical drivers for BPR in the public sector. These included:

- Reducing costs
- Improving customer service
- Increasing national competitiveness
- Improving operating efficiency
- Increasing capacity
- Ensuring compliance with new law or policy
- Meeting/anticipating crisis
- Exploiting new technologies

A video on BPR was shown to further explain some of the key success factors for BPR and change management. Tan concluded with a BPR framework (see below) for everyone to use for future BPR projects.

Managing implementation[6]

The 'managing implementation' session consisted of a group discussion on how to manage the implementation of e-government. Participants were formed into three groups and tasked to discuss on how they could replace an agency counter service with online

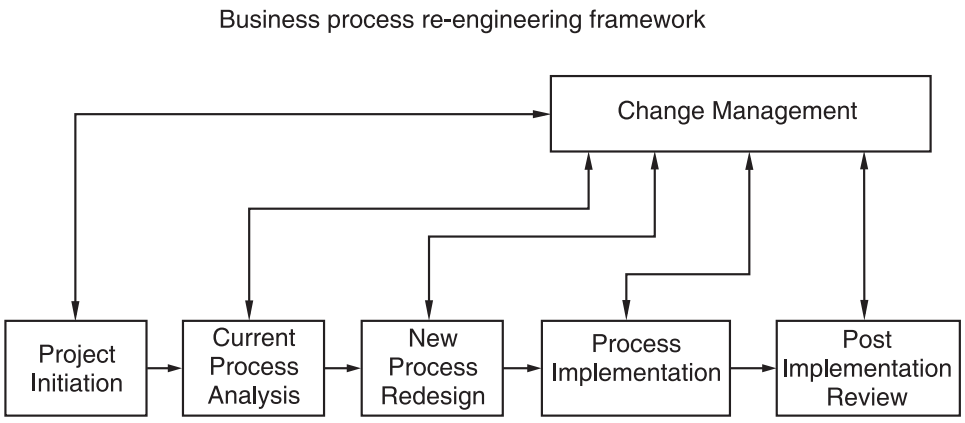

Figure 6.3 Business process re-engineering framework

e-services, and how they would overcome staff resistance to changing to the new process and new system. Each group was given 30 minutes to discuss and prepare their case.

All three groups were able to propose some ways to overcome staff resistance, with their suggestions generalised as follows:

- Secure buy-in from stakeholders through seminars, meetings etc;
- Involve staff members in designing the process;
- Provide training and guidance for affected staff members;
- Ensure transparency and equity in the process;
- Keep communication open and accessible;
- Change measurements to align with the new process;
- Get feedback from staff and respond when needed; and
- Empower staff to make decisions.

In this discussion, Dr Tan was assisted by Devindra Ramnarine and David Spiteri Gingell. Devindra Ramnarine warned the groups that unless the affected staff could realise the benefits to changing to online e-services, most of those affected would not be keen or willing to change. Nobody likes to change unless there is 'something in it for them'. David Spiteri agreed with him and suggested to putting in place a 'change management' programme at the onset of the project.

Dr Tan shared his view on the 'one-third rule': in any BPR project, one third of staff will agree with the change, while another one third will disagree and the remaining one third will be indifferent to the change. The challenge for a change agent is to identify the one third who are indifferent and try to secure their 'buy-in'. Once they are

convinced, it is easier to implement the change with a two-thirds majority agreeing with its going ahead. Tan concluded the discussion by highlighting the importance of the 'business system diamond' for BPR implementation (see below).

Transforming the front office[7]

The 'front office' is the metaphor for those services that deal directly with constituents and clients. During the session on transforming the front office, Dr Tan highlighted the key considerations for such a transformation. They included:

- Value proposition for the transformation – was it for strategic or tactical reasons?
- Legal implications for the transformation – was there the legal framework in place to support online transactions (such as an electronic evidence act, computer misuse act and a data privacy act)?
- Roles and responsibilities of users during the transformation; and
- Prototyping the front office to determine the optimum use of limited resources.

Tan also pointed out the challenge in migrating from hard-copy-filing to e-filing. One would need to determine the cut-off point for e-filing, for conversion of hard copies into scanned files, and archiving of old hard copies. This must be carried out carefully in order to be compliant with the law. According to an EU report, the trend today for front office services is to provide high quality, but relatively simple customised e-government services, based on both Customer Relationship Management (CRM) and data protection principles. Service provision would occur at the appropriate regional or community level, grounded in local situations, responding to the large variety of individual needs of citizens and businesses, and respecting and promoting democracy at all levels.

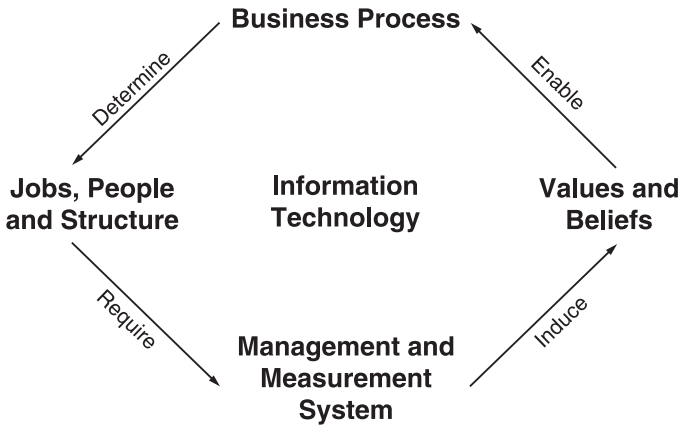

Figure 6.4 Business system diamond for BPR implementation

Enabling the back office[8]

The 'back office' is the metaphor for those services that deal with inter-government and intra-government transactions. For this session on enabling the back office, Dr Tan outlined the trend towards centralisation – even up to national and international levels, exploiting open standards, interoperability, comprehensive security systems, integrated processes and shared databases. Components of the back office include the Web Server, Application Server, Directory Services and Databases. Other considerations for the back office include infrastructure for enabling e-government services, for example, authentication payment and database connection.

The other trend that was noticeable in Singapore was to centralise back office functions – for example, HR, IT, finance and administration functions. This trend would have potential savings due to economies of scale. At the time of the presentation, the Singapore government was in the process of centralising some of these functions for later outsourcing. However, Tan warned participants that this trend might not work in their country for political reasons or because of the influence of unions.

A group exercise on change management[9]

Participants were given the assignment to address the following change management issue: **if more than 60 per cent of the citizens are not interested in using new online e-services, what can be done to change that behaviour?** The three groups were given 30 minutes to discuss and prepare their case. They presented their cases, with most of them having similar recommendations as summarised below:

- Provide a discount for online services
- Provide 24-hour support for online services only
- Conduct a public awareness campaign:
  - Billboards
  - Media talk shows
  - Focus group engagement
  - Jingles and cultural fiestas
  - Set up more kiosks in community centres to reach out to more citizens
- Make online services more user friendly
- Close down all the agency counters
- Make it a law to use online services only
- Educate citizens to use online services

Dr Tan said that these recommendations were useful and that governments could also consider extending the deadline to sign up for online services to boost their usage rate

(based on the Singapore experience). Devindra Ramnarine and David Spiteri Gingell felt that forcing a complete transition to online services was not a feasible option in many countries, given their publics' preference for a range of service delivery modalities.

Infrastructure for e-government[10]

The 'architecture' for e-government refers to the functional arrangement of the various layers of hardware, software and services, which informs the infrastructure for e-government. Dr Tan presented a framework for e-government architecture that was implemented in Singapore, as shown below.

The main components of e-government architecture are as follows:

a. Network layer – This layer looks into the type of networks (e.g. mobile, Internet, virtual private network [VPN] etc.) to enable e-government services. An easy access to the Internet via libraries, post offices and even schools gives members of public – especially the elderly who are often not IT-literate – a convenient and facilitated access to e-government services. Given the digital divide, it is important to pay particular attention to ensuring that every citizen has convenient access to government services online, preferably close to home. It also implies enabling services to be electronically delivered by various electronic media – over the Internet, electronic kiosks, mobile phones, call centres and, in the future, digital TV. The delivery channels for any service should be determined in relation to demand and cost.

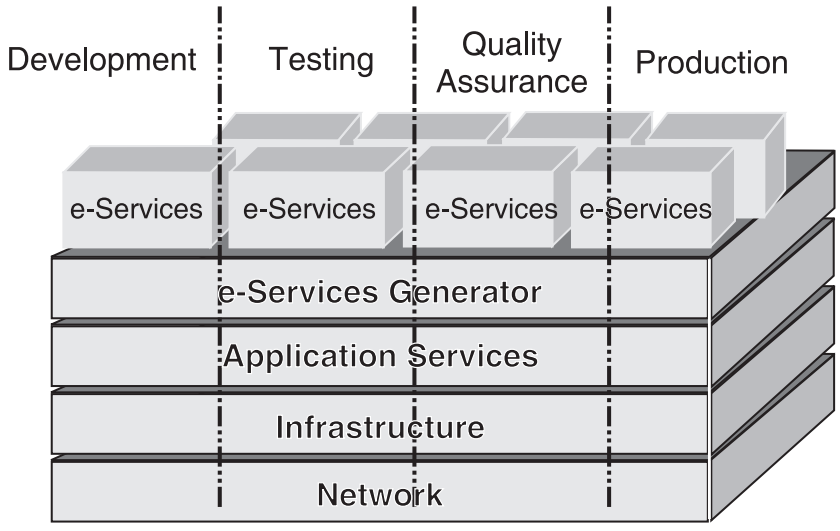

Figure 6.5 Singapore's framework for e-government architecture

b. Infrastructure layer – This layer looks into the basic component of ICT that will enable information sharing. For example, an integrated database system will enable the public service in question to provide an integrated, one-stop service to citizens and businesses, even if processing cuts across several agencies. This will reduce the number of visits to those agencies. For example, the procedure to start a business might involve applying for licenses from various agencies and these being processed sequentially. Any delay in one agency impacts on the service time for applicants. With an integrated database system, some of these processes can be carried out in parallel, resulting in a reduction in service time.

c. Application services layer – This layer provides some of the fundamental application services to support the entire value chain. Examples of such services include payment and authentication services. A flexible e-payment system is recommended to facilitate payment for processing fees and licensing fees, so that applicants are not penalised by having to pay the full fee even if their application is unsuccessful. The charging model needs to be flexible to ensure that applicants are not penalised unfairly in such cases. Another important application service is a public sector authentication system, which gives citizens a secure and convenient way of identifying themselves for the purposes of dealing with government agencies.

d. E-service generator layer – This layer generates e-government online applications by combining the various application services into a complete value chain. For example, the online application for driving licenses requires an authentication service, an e-form for the applicant to complete, an online verification using the integrated database system and finally a payment service to complete the value chain. Each agency can leverage on existing infrastructures and applications to deliver their services online consistently and without having to 're-invent the wheel'. This will reduce the lead-time and investment for rolling out e-government.

e. E-government portal – This is the main portal where all government services are organised into logically-grouped service or functional packages. Some of these logical groupings include employment services, education services, business services and so on. The aim of this portal is to provide a single interface for citizens and businesses to interact with government.

f. Policy and guideline layer – This layer defines essential policies and guidelines that public servants need to comply with during implementation. Examples of such policies or guidelines include privacy policy, public-private partnership (PPP) guidelines and security policies. One of the guidelines that requires special attention is the PPP guideline, which should be in place to guide the public sector when partnering with the private sector in order to play a bigger role in the delivery of online government services. These guidelines need to address fundamental decisions, such as which party (public or private sector) funds the capital and operation costs, as well as who should front the website. Another essential guiding principle is to ensure that commercial interests are not overriding the original intent of government to serve their customers well. Government should avoid competing

with the private sector by following the 'Yellow Page' rule, which states that the government should not be involved in any commercial activity advertised in the Yellow Pages. This also includes advertising on government websites, as well as hyperlinks to commercial websites – which must make clear that they are not public services nor are they endorsed by government agencies.

g. Standards layer – This layer defines standards to ensure consistency and interoperability across different agencies. For example, a standardised monitoring system is needed to measure the success of e-government implementation across all agencies. Deliverables are identified and targets are set for each project to serve as yardsticks to measure e-government progress; these can then be benchmarked against common indicators. Potential benefits to customers (e.g. shorter turnaround time, reduced number of trips etc.) and government agencies (e.g. reduction in manpower, economies of scales etc.) as well as intangible benefits (e.g. a better image of 'one government', improved communication within government agencies etc.) for the country are important criteria for assessing the value of e-government projects. Another consideration is to standardise all agency forms into a single form so that an applicant needs to complete only one application online for various related licences. Other standards include the use of technologies, applications and messages for information interchange.

Dr Tan concluded the session by highlighting the benefits of such an architecture, which would be:

- high availability:
- highly scalable; and
- a secure environment.

The Malta implementation experience[11]

Following the session on system architecture, David Spiteri Gingell outlined Malta's experience in implementing e-government based on the mission: 'To attain a first-class information society that is developing constantly and successfully'. The initial principles and success factors to achieve this objective were set in the year 2000 and are still the mission today:

- Deliver a first-class public service;
- Increase citizen participation in government decision-making; and
- Streamline public services and realise efficiency gains.

In this regard, Mr Gingell (a champion and leader of the e-government programme, formerly of the Ministry for Justice and Local Government and at the time of writing of the Ministry for Investment, Industry and Information Technology) headed an ambitious programme to ensure the timely implementation of these objectives. A number of public and private entities are being included in the initiative to create a unique

synergy that will put Malta on the forefront of e-government in the global ICT scenario.

The Government of Malta has been actively pursuing the attainment of the e-government initiative – treating it as an exciting opportunity that will factually demonstrate to Maltese citizens and businesses the tangible benefits that information and communication technologies can offer to improve their quality of life, streamline public administration and promote improvement in the business community. The initiative has been addressed through a number of inter-linked, parallel implementation streams. Primarily, the government has been actively pursuing public-private relationships with the local ICT sector, looking to establish long-term, trust-based relationships for the design, development and implementation of a range of electronic services. The core operations of the initiative have been developed within government's IT agency, MITTS Ltd, which seeks to provide a common platform and launching pad for all services. The approach, supported by the Central Information Management Unit (CIMU), seeks to achieve a world-class, seamless e-government, including a cost-effective and efficient re-engineering of existing services.

This programme has been an important milestone to the Government of Malta's reform in public administration – initiated in 1987 and still going strong today through the introduction of electronic practices. In this regard, the government has invested heavily in the use of ICT and seeks to invest further in the cultivation of a true information society and economy, a result Malta will benefit from both now and exponentially in the coming years. At the time of writing, a large number of electronic services were being launched across Malta – such as online applications for birth, marriage and death certificates, online submissions of income tax returns and payment of tax, and online applications for examinations. This development and promotion of electronic services is seen as a definite means for meeting citizens' and businesses' expectations and the perceptions of government in a modern world. These efforts towards new channels of communication in an ever more technology-dependant world are Malta's attempts at being more inclusive and receptive to society's needs.

The implementation of the government portal, 'Gov.mt', marked yet another significant milestone. Gov.mt serves as the principal point of entry to all government information and services in Malta. The portal will also change the way the public perceives government – from a 'silo-based' structure to a 'service-cluster' approach, which cuts across the organisational boundaries that exist in the public sector. The introduction of service clusters adds further value, with the presentation of traditional services and their structure being more personal and easy to understand.

Mr Gingell concluded the presentation stating that Malta's government is now planning to put in place a number of essential services – often referred to as 'shared components' – that will service the entire e-government programme, such as a mobile or m-government gateway.

The role of the portal[12]

Dr Tan introduced the role of a government portal and some of the key features that such a portal must include, such as:

- Categorisation of users and their needs;
- Allowing search and index capabilities;
- Managing content from submission to publishing and archiving;
- Providing personalisation to each citizen;
- Integrating with other common applications;
- Enhancing the development cycle using the tools provided;
- Providing software functionality, including redundancy, failover, load balancing and backup; and
- Providing adequate security to ensure the safety of data.

He went on to cite an example from the Land Transport Authority of Singapore (LTA). As the number of its vehicles grew, LTA began to have difficulties coping with the enquiries from the public. To overcome this challenge, LTA decided to develop a portal through which all communication would be interfaced. A strategy was developed using the '5C's': Content, Customer, Commerce, Convenience and Collaboration.

The LTA portal started offering information from the website and extended this to mobile devices. It has since reduced its backlog for enquires and the customer service level has improved dramatically. Dr Tan concluded the session by talking about LTA's successful partnership with a private company to roll out the portal. The partnership involved cost-sharing, revenue-sharing and risk-taking. However, the responsibility for results remains with LTA.

Multi-channel service delivery[13]

Dr Tan went on to present a session on diversifying service delivery. He emphasised the need to 'segment' customers, identifying the appropriate communication channel for each customer segment. For example, customers who are younger are more Internet 'savvy' and more comfortable with mobile services as compared to those who are more elderly. He went on to explain a multiple-channel service delivery, as shown in figure 6.6.

Ideally, a combination of high channel integration (front office) with process integration (back office) will result in offering richer services to customers. This is, in fact, the highest maturity level for e-government. This approach allows customers to access services over different channels and assures that available data are identical in all channels.

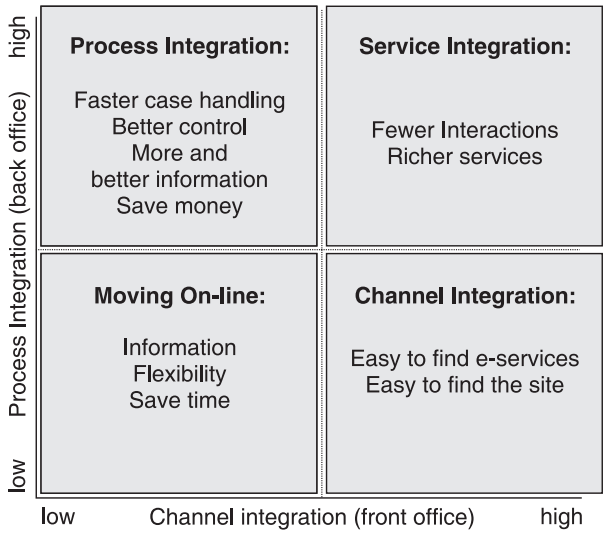

Figure 6.6 Multi-channel service delivery

Group exercise on best practices in e-government service delivery[1]

Dr Tan conducted a group exercise to illustrate best practices. Participants were given one hour to develop a tourism portal to attract and retain tourisms from overseas. They were expected to present their portal design and how it would meet objectives. Participants were divided into two groups: both of the group presentations are summarised below.

Group 1:

- Segment the tourists by country, understand their needs and interests
- Provide the enabling environment in terms of legislation
- Explore PPP to build the portal with a powerful search engine
- Offer special packages and promotion to each customer segment
- Collect feedback from tourists for improvement
- Provide e-payment options

Group 2:

- Gather/analyse available information
- Develop tourism baseline
- Identify niche markets (segmentation)
- Develop portal

- Determine content required
- Determine methods of delivery
- Estimate operation costs
- Identify technology required
- Engage public-private partnerships along the entire development and delivery process
- Provide products and services
- Maintain the portal

Each of the groups did well in applying the concepts learned. Dr Tan continued the session by presenting some of the areas that could compliment their efforts, which included understanding the tourism value chain, as shown below.

There are many stakeholders involved and the portal should cater to all their needs. Thus, the portal should be designed with an end-to-end process – from attracting tourists to retaining them. One method to assist in the portal design is to use the 'mind-map' technique devised by Edward De Bono[15]. The end result of the tourism portal using a mind-map could be developed as shown below.

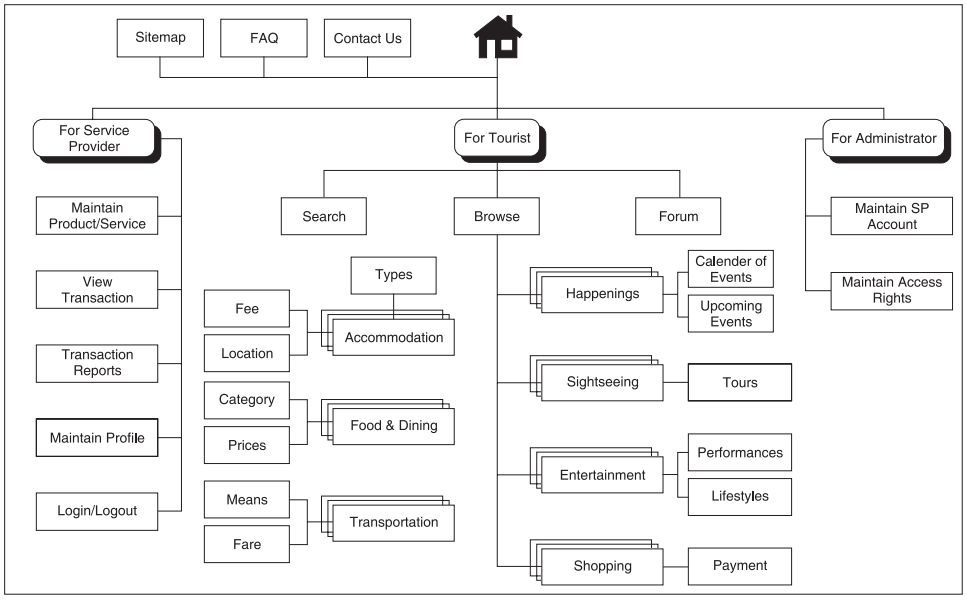

Figure 6.7 A tourism portal designed using the 'mind-map' technique

Site visit to the Civil Service College, Government of Cayman Islands[16]

Participants visited the Civil Service College in UCCI and attended a series of presentations as follows:

a. A welcome speech by Mr Peter Gough on the portfolio of the civil service followed by public sector reform, based on his experiences in several countries. Public sector reform is necessary to drive change when the economy needs to grow, or it might take place due to pressure from donor organisations. Reform can be broad based or by sector, e-government being one of the action plans for administrative reform.

b. An overview of Civil Service College strategies by Dr Hassan Syed, during which he explained why education is becoming lifelong learning, as knowledge learned becomes obsolete overtime. Thus, in order to deliver effective service delivery, public servants need to constantly upgrade their knowledge and be aware of environmental changes taking place due to globalisation.

c. A presentation by Dr Robert Weishan on how to invest in people development for performance improvement. He explained the mission of the college and its key features to provide training for public servants in the Cayman Islands. He updated the participants on college development and partnerships with other institutions to jumpstart course development.

d. A demonstration on 'Angel e-learning' – and how the system can provide busy executives with access to learning after work – was presented by Dr Andy Smith. The course materials for this have been developed by faculty members and used to complement existing classroom lectures.

e. Some of the participants stayed behind to learn more about public sector reform from Mr Gough.

Presentations of work plans and country papers

Selected participants were asked to present their action plans for e-government, either in their organisation or their country.

This concludes the summary of the individual sessions that were presented at the workshop. Chapter 7 goes on to present a comparative analysis of the workshop materials based on criteria developed by The World Bank and by Icfai University, Hyderabad, India.

Notes

1. Commonwealth Secretariat (2007) p. 12.
2. Ibid, p. 13.
3. Shah (ed.) (2005).
4. Commonwealth Secretariat (2007), pp. 12–13.
5. Ibid, p. 13.

6. Ibid, p. 14.
7. Ibid, p. 15.
8. Ibid, p. 15.
9. Ibid, p. 15.
10. Ibid, p. 16.
11. Ibid, p. 18.
12. Ibid, p. 19.
13. Ibid, p. 19.
14. Ibid., p. 20.
15. See http://www.effectivevision.co.uk/EVAHIThinkingTechiques1.pdf [accessed 22 April 2008]
16. Ibid, p. 21.