

GOVERNMENT VIA THE NET THE SINGAPORE EXPERIENCE

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Portals are increasingly recognised by many governments as a key 'front-office' vehicle to deliver citizen and business-focussed, joined-up electronic services. They enable government to bring together services and organise them in a way that is both convenient and logical to users. In doing so, citizens and businesses no longer need to understand how government is organised or the department responsible for the service that is required.

Given the benefits that electronic service delivery offers, governments around the world are moving systematically to increase the contact their citizens have with them online by establishing country portals.

Singapore's e-Citizen Portal (www.ecitizen.gov.sg)

Singapore's e-Citizen portal was conceptualised in 1997. Its aim was to deliver useful information and online services to the citizens according to their viewpoint rather than to organisational boundaries of government agencies. The main objectives of the portal were therefore to enable citizens and business to:

- a) Search for and access a wide diversity of information from Government agencies.
- b) Conduct a wide range of transactions online with Government agencies.

- c) Experience "Many Agencies - One Government" in action.

Today more than 1600 e-services have been implemented. This represents all key government services suitable for electronic delivery. Now available 24 hours a day, 7 days a week, the e-Citizen portal provides a single access point to government information and services. In addition, individuals are able to interact online with the Government on a vast range of matters.

Key Drivers of Change

1.A Governance and Management Framework

The e-Citizen portal is an initiative owned by the Ministry of Finance (MOF). The MOF also owns all central ICT infrastructure, services and policies within the public service. They are the approval authority for the funding of ICT projects for the majority of public sector agencies.

The Infocomm Development Authority of Singapore (IDA) is the Chief Technology Officer and Chief Information Officer (CIO) to the Government. Among other things, as the CIO, the IDA manages the e-Citizen portal by:

- a) providing technical advice and recommendations to MOF;
- b) defining and recommending ICT policies, standards and procedures to MOF;
- c) performing service-wide ICT master planning;
- d) managing central ICT infrastructures; and
- e) project managing central ICT initiatives.

At the strategic level, the Head of the Civil Service chairs the Government Policy Committee (e-GPC) which comprises Permanent Secretaries of Ministries. The e-GPC charts the direction for achieving the e-government vision and sets specific targets and monitors the progress of e-Government initiatives. The Public Service Infocomm Steering Committee sets policies for ICT implementation and ensures coordination across civil service initiatives.

The screenshot shows the eCitizen portal interface. At the top, there are navigation links for 'Government Links', 'About eCitizen', 'Feedback on eCitizen', and 'Sitemap'. Below this is a search bar with the text 'Powered by Google' and a 'SEARCH' button. The main content area is titled 'Moving House' and includes an 'Overview' section with text about home owners and a list of 'Key Activities' such as 'Apply for Telephone Line', 'Apply for TV Licence', 'Apply for Utilities', 'Change Address', 'Re-direct Mail', 'HDB Parking', and 'URA Parking'. A green circle highlights the 'Key Activities' section.

'Moving House' — An Example of Multi-Agency Collaboration

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2. An Integrated Public Framework

Most government agencies develop services that perform fairly similar functions – collecting payment, authenticating customers, ensuring security, collecting or exchanging data with other agencies. This can be a fairly long development lifecycle that is likely to be repeated for most e-services. By leveraging ‘building blocks’, Singapore’s Public Service Infrastructure (PSi) shortens the development cycle.

The PSi, built by NCS Pte Ltd, is a government-wide core infrastructure that facilitates the seamless and rapid deployment of public services to citizens and businesses online – anytime, anywhere. Its infrastructure, application services and e-service development environment allow agencies to rapidly develop e-services. Components such as payment, authentication and data exchange, are ‘built-once, reuse-always’ services that agencies do not need to develop on their own. By leveraging this shared infrastructure, development time is drastically reduced from months to days and Government agencies are able to enjoy savings through economies of scale.

3. Citizen Centric, Integrated and Intentions-Based e-Services

The e-Citizen portal was designed with the users’ in mind. Navigating the portal, individuals can find information and services in user-centric packages that integrate public services across different government agencies, regardless of the government organisational structure. Following this approach, the portal was developed as a one-stop shop, containing all relevant user intentions, from employment and tax to sport and recreation, organised around user intentions and cutting across government structures and requiring multi-agency collaboration. Services and information are categorised into 16 ‘Towns’, which cater to essential touch points in life: Arts and Heritage, Business, Defence, Education, Elections, Employment, Family, Health, Housing, Law, Library, Recreation, Safety & Security, Sports, Transport and Travel.

An example of multi-agency collaboration and how online services are presented in an integrated manner can be seen in ‘Housing Town’. In Housing Town, citizens are able to apply for various services from different government departments/agencies without having to visit each agency web site individually. Some of these services include:

- a) Applying for season car park tickets from the Housing and Development Board
- b) Installing electricity, gas and water from Power Supply Limited
- c) Applying for radio /TV license from the Singapore Broadcasting Authority
- d) Have mail redirected from Singapore Post
- e) Applying for new telephone number from Singapore Telecom

Within Family Town, services are organised by Life Stages. The Town provides

comprehensive information and services on family issues, which one may experience as one goes through different stages in life. These include youth matters, courtship, marriage, parenthood, elderly care, family violence and financial security. Being a portal, Family Town will provide you with links to related family resources for more detailed guidance, so you will be directed to web pages of other agencies and organisations dealing with the subject matter.

Services are intuitively clustered around the following the life categories:

- a) Children & Parenthood. To meet the needs of parents and parents-to-be, by providing information such as birth registration, adoption, pregnancy and child care.
- b) Teenage & Youth reaches out to youth (age 10-24) and parents of teenagers, by providing relevant information, such as available youth activities and how to deal with life transitions.
- c) Courtship & Marriage showcases available programmes to help singles find potential partners, provides information on the marriage process for couples planning for marriage and informs married couples of relevant activities to be done after marriage.
- d) Elderly & Ageing aims at equipping the elderly and their caregivers on the practicalities on how to care for the elderly, as well as provide useful tips for the elderly to stay active and healthy.
- e) Family Support provides support to families going through a demise of a family member, as well as to families experiencing domestic violence.
- f) Family Resource is for everyone in the family. The topic on ‘Financial planning’ is an important one for family.

For its efforts, NCS was conferred the e-Government Award 2002 for the e-Citizen Portal and is currently working with the IDA to further enhance the portal.

4. High Degree of Transactional Capability

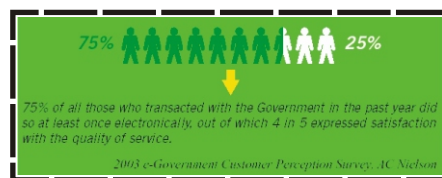
Approximately 70% of the Government online services at interact (i.e. part of the transaction can be completed online) or transact (i.e. the entire transaction can be completed online) level are currently available through the portal. Various electronic payment

mechanisms are offered. Customers can choose to pay by cash card, credit card and direct debit (also known as Internet banking). Authentication through the use of a common user ID and password is available so that Singaporeans need remember only one user ID and password for accessing multiple on-line services. Examples of on-line services that make use of the common authentication are filing of income tax, checking of Central Provident Fund statements and encashment of New Singapore Shares.

For on-line services that require stronger proof of identification and non-repudiation, PKI is available to support this level of authentication through the Psi.

5. Continuously Improving the e-Service Experience

To understand the different and evolving needs of individuals and businesses, the Government consults widely and continually through focus group discussions, public surveys and advisory panels involving different segments of the population, for example housewives, students, professionals and the elderly.



Value Created

The portal has been popular with individuals and businesses. The hit rates of the portal have increased from 240,000 per month in October 2001 to 14.4 million hits per month in June 2003. According to an e-Government Customer Perception Survey conducted by AC Nielsen in 2003, 4 out of 5 users who transacted with the Government electronically expressed satisfaction with the quality of service.

Other areas where e-Services have created value by reducing transaction costs and processing time are included in the table below:

Business Needs	Previously or Manually	Now through eServices
Incorporating a New Company	S\$1,200 or S\$35,000 (depending on company size) Time required: 2 days	S\$300 (flat fee) Time required: 2hrs
Submitting building plans	Manual despatching of documents to 12 agencies	Savings of S\$450 by submitting online
Setting up a new entertainment outlet	Time required: 8 weeks	Time required: 2 weeks
Processing of Vehicle Tax	S\$2.40	S\$0.50. Cost savings of 79%
Search for Vehicle Records	\$11.20	S\$0.05. Cost savings of 99%
Request for duplicate tax renewal notice	S\$3.78	S\$1.70. Cost savings of 55%
Issue income tax assessment	Time required: 12-18 months	Time required: 3-5 months