

# Benchmarking E-Government

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Workshop

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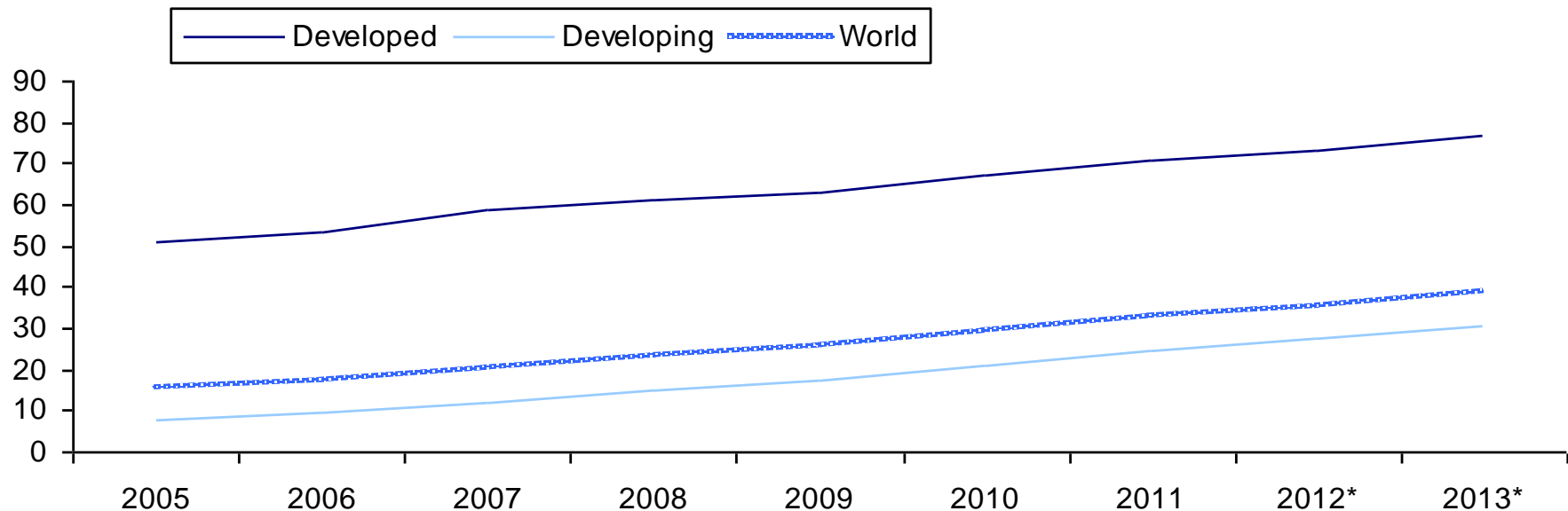


# Presentation overview

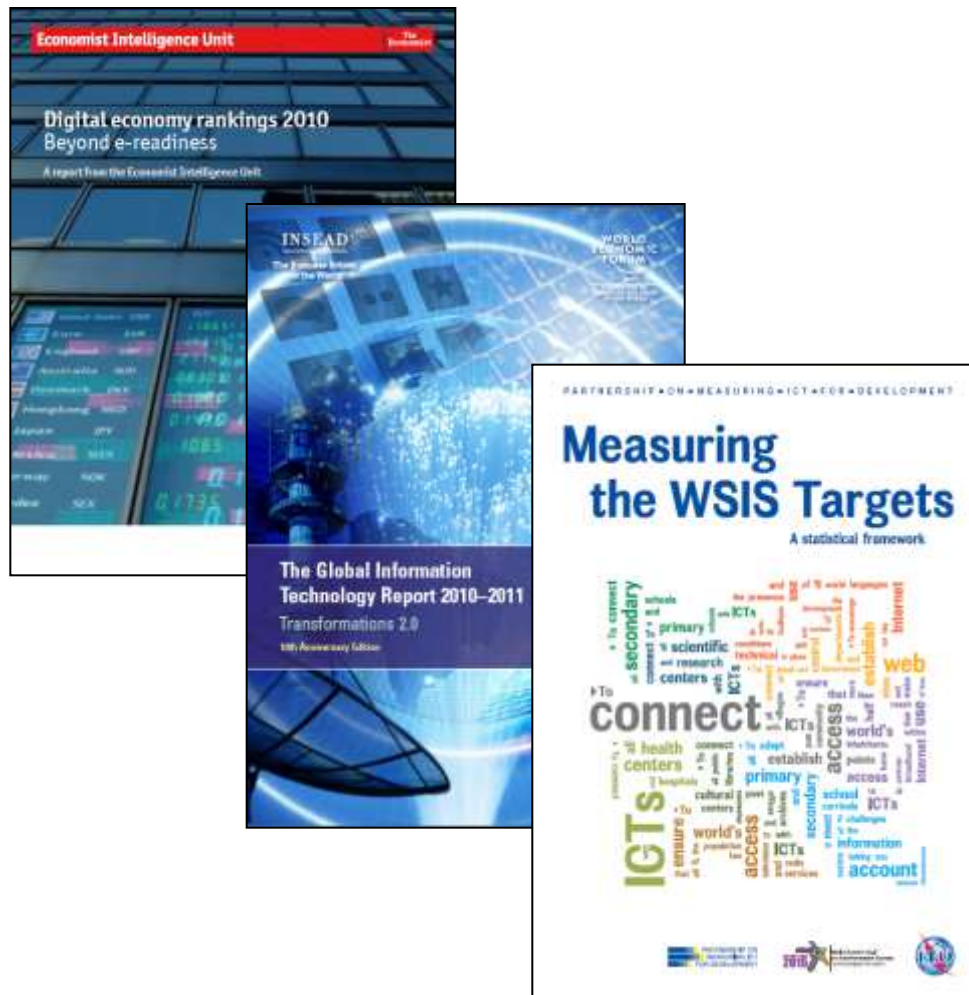
- Part I: The benefits of an information society and current e-government measurement
- Part II: Capturing trends and enhancing measurement, including its applicability at all levels
- Q&A

# The possibilities of the information society

- Information and communication technologies (ICTs), particularly the Internet, contribute strongly to economic growth and better social outcomes
- The world will go from 2bn Internet users in 2010 to 5bn in 2015



# Benchmarking the information society



- Benchmarking the information society is important in order for policy-makers to understand the factors behind it and how to achieve improved outcomes from additional investment
- Most benchmarks include a component of electronic government (e-government)

# An example of e-government progress

- In 1990, the American tax authority, the IRS, said 4m people used online tax filing (the first year such service was available)
- In 2000, the number filing their taxes online had risen to 35m
- Last year, 100m Americans used e-file

# A range of possibilities for e-government

- Information and service delivery
- Transparency and accountability
- Link to broader development objectives

# Information and service delivery

The screenshot displays the Omanuna e-government portal in a Firefox browser window. The page features a header with the Omanuna logo and a navigation menu with options like Home, Citizens, Businesses, Visitors, and Government. A search bar is also present. The main content area is titled 'Online Visa Application Service' and includes an overview section with a 'START THE SERVICE' button. The overview text states: 'This is yet another initiative from Royal Oman Police in enhancing its services to minimize the time and efforts of people. It enables people to fill Visa Application form online through the ROP website, thus reducing the time taken for purchasing the application form and getting it typed. It also removes the time taken by the visa officer to re-type the information at the time of submission.' Below this, there is a list of service details: 'Who can request this service', 'Steps to follow to request the service', 'Fill up and submit the Online Visa Application Form.', 'Print the completed form.', 'Take the printed form enclosed with the required documents to the nearest ROP Visa office.', and 'Forms related to this service'. On the right side, there is a 'Service Provider' section featuring the Royal Oman Police logo and the name 'Royal Oman Police'. At the bottom, there is an 'Evaluate this page' section with a feedback message: 'We are evaluating how useful are our content and services to your needs' and a 'Share this page on:' link.



# Transparency and accountability

The screenshot shows the Recovery.gov website interface. At the top, there's a navigation bar with links for 'Text', 'A', '+A', 'Google Translate', and 'RSS Feeds'. A prominent red button says 'REPORT FRAUD, WASTE & ABUSE'. The main header features the 'RECOVERY.GOV TRACK THE MONEY' logo and a search bar. Below the header is a menu with categories like 'HOME', 'ABOUT', 'ACCOUNTABILITY', 'WHERE IS THE MONEY GOING?', 'OPPORTUNITIES', 'NEWS', 'FAQS & RESOURCES', 'CONTACT US', and 'SITE INDEX'.

The main content area includes a line graph titled '\$299B in Tax Benefits' showing the amount of tax benefits available from March 2009 to June 2011. The graph shows a steady increase from \$3.2 billion in March 2009 to \$298.5 billion in June 2011. Below the graph is a pie chart titled 'Estimated Dollars Available Through ARRA Tax Provisions March 2009 - June 2011' with the following breakdown:

Category	Percentage
Other Individual Credits	47%
Energy Provisions	8%
COBRA	3%
Tax Incentives for Business	23%
Making Work Pay	19%

Other features include a 'MONTH IN REVIEW' section with a 'Subscribe' button, 'RECENT ISSUES' listing July 2011 and June 2011, and a 'Text View of Featured Stories' link. At the bottom, there's a 'Recipient Profiles >>' link and a form to 'Enter Your ZIP Code to View Recovery Information in Your Neighborhood'.



# Link to broader development objectives

The screenshot shows the Korea E-Government website in a Firefox browser. The URL is [http://www.korea.go.kr/new\\_eng/service/viewContent.do?enContId=00001264653149512000\\_151](http://www.korea.go.kr/new_eng/service/viewContent.do?enContId=00001264653149512000_151). The page features a navigation menu with categories: For Citizen, For Business, For Government, About Us, Int'l Collaboration, and Information Library. A search bar is highlighted with a red box. The main content area includes a breadcrumb trail: Home > e-Government Overview. The article title is "Korea Leads Global IT and e-Government Development". The text discusses the Lee Myung-bak Administration's success in ranking first in the 2010 UN Global E-Government Survey. A table below the text shows the Republic of Korea's rankings in 2005, 2008, and 2010 across various categories.

**Search**

Home | Sitemap | Korean

**About Us**

- Introduction
- e-Government Overview**
- e-Government Services
  - G4B
  - G4C
  - G2G
- e-Government Agencies

Home > e-Government Overview

**Korea Leads Global IT and e-Government Development**

The Lee Myung-bak Administration of the Republic of Korea has succeeded in ranking first in both the e-Government Development Index and e-Participation Index of the UN Global E-Government Survey 2010.

The UN Global E-Government Survey is a biannual comparative report that has evaluated the e-Government level of the 192 UN member states since 2002. It aims to facilitate global cooperation in e-Government and improve national competitiveness by comparing the e-Government level among countries.

Korea has jumped to the top from previously ranking 6th place in e-Government Readiness Index and 2nd place in the e-Participation Index in 2008.

Republic of Korea Rankings - 2010 UN Global E-Government Survey

Category	2005	2008	2010
E-Government Development Index	5 <sup>th</sup>	6 <sup>th</sup>	1 <sup>st</sup>
Web Measure	0.97 (4 <sup>th</sup> )	0.82(6 <sup>th</sup> )	1.00(1 <sup>st</sup> )
Telecommunication Infrastructure	0.67 (9 <sup>th</sup> )	0.69 (10 <sup>th</sup> )	0.64 (13 <sup>th</sup> )
Human Capital	0.97 (14 <sup>th</sup> )	0.98 (10 <sup>th</sup> )	0.99 (7 <sup>th</sup> )
E-Participation Index	0.87 (5 <sup>th</sup> )	0.98 (2 <sup>nd</sup> )	1.00 (1 <sup>st</sup> )

Korea **Tops Ranking** in 2010 UN e-Government Survey

User's Guide

# Summary of commonly cited benefits of e-government

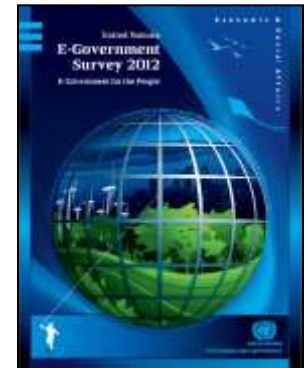
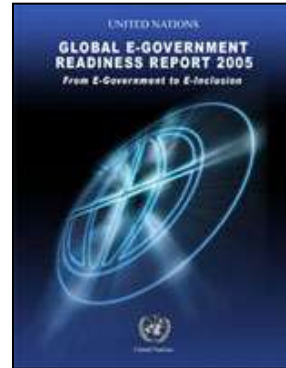
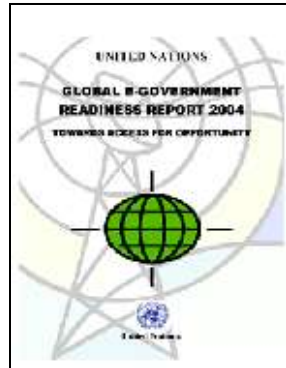
- Enhances government efficiency
- Increases convenience to users
- Provides cost savings for all
- Leverages ICTs to meet broader development objectives

# Current measurement approaches

- Tools: Desk research, interviews, surveys
- Methods: Supply-side measurement, evaluation of defined websites or interviews with people, and binary or specific questions, i.e. do features exist or not, and best practices
- The UN e-government survey is a core component for international benchmarks of the information society and, as such, deserves a closer look based on public information available



# Measuring e-government



- Benchmarking global e-government development since 2003 to “inform and improve the understanding of policy makers’ choices to shape their e-government programs” (UN 2004)
- The survey measures “the willingness and capacity of countries to use online and mobile technology in the execution of government functions” (UN 2010)

# Current UN methodology

- The UN E-Government Development Index is composed of three indices:
  - Human capital index
  - Telecommunications infrastructure index
  - Online service index

The screenshot displays the website for the UN Public Administration Programme. The header includes the UN logo and the text 'UN Public Administration Programme', 'Division for Public Administration and Development Management (DPADM)', and 'UN Department of Economic and Social Affairs (UNDESA)'. A navigation menu contains 'About', 'Overview', 'Data Center', 'Global Survey', 'Resources', and 'UNPAN'. The main content area is titled 'UN E-Government Development Database' and features a search bar, a 'FOCUS ON' section with a 'Global E-Government Development Report 2010' link, and a 'SPOTLIGHT' section highlighting 'Malaysia's mySMS System'. A 'FAST FACT' section shows a bar chart for 'Top 3 Regions - 2010' with values ranging from 0.4000 to 0.7000. A 'Forthcoming: United Nations e-Government Survey 2012' notice is also present.

For more information:

[www.unpan.org/egovkb/](http://www.unpan.org/egovkb/)

# The online service index

- Supply-side measurement approach, which means that websites are visited by researchers to evaluate what is available on them (i.e. the supply of information and services)
- Every UN member state is assessed (now 193)
- A defined set of websites are evaluated, primarily the national portal of each country or its equivalent
- Almost all questions in the survey are binary, i.e. does the feature exist or not
- Team of researchers take a citizen approach, which means they try to find the information within a reasonable amount of time



# A quick case study on finding mobile services on www.gov.sg

Firefox gov.sg: Singapore Government Informat... +

http://www.gov.sg/government/web/content/govsg/classic/home

gov.sg

Singapore Government Integrity • Service • Excellence

GOVERNMENT CITIZENS & RESIDENTS BUSINESS NON-RESIDENTS

Home About Us News Calendar Directory Information & Policies Useful Links Careers

**Committee to draft programme and service masterplan for persons with disabilities**

Published: 20 Sep 2011 14:01 hrs

A Steering Committee comprising representatives from the people, private and public sectors will develop the next round of a national roadmap to chart the development of programmes and services for persons with disabilities over the next five years. It will focus on the areas of early intervention; education, employment and healthy lifestyle; and adult care and caregiver support.

Read More

News

→ 29 Sep Pulau effect Singa

→ 29 Sep HSA medic

→ 29 Sep Early

Step 1: Go to citizen & residents section

How many national government websites around the world have a feature that offers to send alerts to mobile phones?

Public Consultation → share your views

Calendar Of Events → more

Features

→ Arts and Culture Strategic Review Public Forums (27 & 30 Sep 2011)

→ 08 Aug - 31 Oct 2011 Aviation Centennial Exhibition

→ National Climate Change Strategy 2012 (07

→ 27 & 30 Sep 2011

National Environment Agency

Haze Condition Update



The screenshot shows the eCitizen website interface. The browser's address bar displays 'http://www.ecitizen.gov.sg/'. The main navigation bar includes 'GOVERNMENT', 'CITIZENS & RESIDENTS', 'BUSINESSES', and 'NON-RESIDENTS'. Below this, a secondary navigation bar lists 'Home', 'About Us', 'Payment Services', 'Mobile Services', 'Useful Links', and 'More eCitizen'. The 'CITIZENS & RESIDENTS' tab is circled in red. The page content is divided into several sections: 'GOVERNMENT SERVICES' with a sidebar of categories like 'Culture, Recreation & Sports', 'Defence & Security', 'Education, Learning & Employment', 'Family & Community Development', 'Health & Environment', 'Housing', and 'Transport & Travel'; a 'LATEST' section titled 'YOUR OPINION MATTERS!' with a 'Feedback' button; a 'What's Happening in OurCommunity?' section; and a 'FEATURED SERVICES' section with a 'SingPass' login button. At the bottom, there are sections for 'ONLINE PAYMENT', 'POPULAR E-SERVICES', and 'CITIZENCONNECT CENTRE'.

How many national government websites around the world have a feature that offers to send alerts to mobile phones?

Step 2: Go to mobile services sub-section

The screenshot shows the eCitizen mobile services page. The browser address bar displays 'http://www.ecitizen.gov.sg/mobile/index.html'. The page header includes the eCitizen logo and the Singapore Government logo with the tagline 'Integrity • Service • Excellence'. A navigation menu is visible with categories: GOVERNMENT, CITIZENS & RESIDENTS, BUSINESSES, and NON-RESIDENTS. Below this, there are links for Home, About Us, Payment Services, Mobile Services, Useful Links, and MyeCitizen. The main content area features a section titled 'Go Mobile with Government' with the text: 'You don't need a computer to access government services online - not when you can use a mobile phone.' and 'Do you know that you can access these government services on-the-go using your mobile phone?'. A large red banner for 'mGov@SG SG Government Services On-The-Move' is present, with the URL 'www.mgov.gov.sg'. To the right, a 'MOBILE SERVICES' sidebar lists: General Public, Employers, Businesses, NSmen, Motorists, and Special Needs. Below this, there are icons for 'Download Applications', 'WAP Service', and 'SMS Service'. The 'SINGOV Mobile' section offers 'Govt News and Info on mobile' with a link to 'Click here to find out more'. The 'MyeCitizen SMS alerts' section is circled in red and contains the text: 'Subscribe to receive timely and personalized SMS alerts and notifications for the following services: CPF account alerts and notifications, Passport Renewal'. Three blue-bordered boxes with white text are overlaid on the right side of the page, containing the following text: 'How many national government websites around the world have a feature that offers to send alerts to mobile phones?', 'Step 3: Confirm that Singapore offers it', and 'Answer: In 2010, 25 out of 192 countries'.

How many national government websites around the world have a feature that offers to send alerts to mobile phones?

Step 3: Confirm that Singapore offers it

Answer: In 2010, 25 out of 192 countries

# Rethinking measurement

- In light of e-government trends, there is a need to enhance measurement driven in part by progress

The screenshot shows a Firefox browser window displaying the Singapore Government website as it appeared in October 1997. The address bar shows the URL: <http://web.archive.org/web/19971013135214/http://www.gov.sg/>. The page content includes a navigation menu with links like 'government ministries', 'organs of state', and 'statutory boards'. A 'what's new' section lists several news items, including 'PSI Resolves from EMIY - 30 Sep' and 'National Police Award - 10 Aug'. At the bottom, there is a large red banner with the text 'the singapore government internet web site' and 'singapore government'.

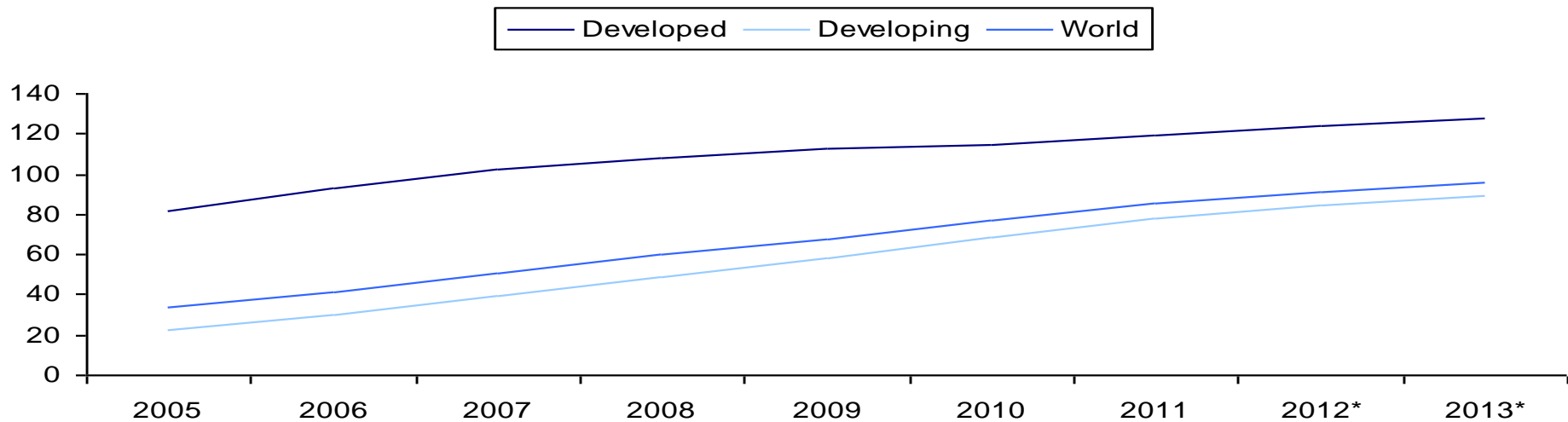
<http://www.archive.org>

## Part II: Trends in e-government and how to measure them

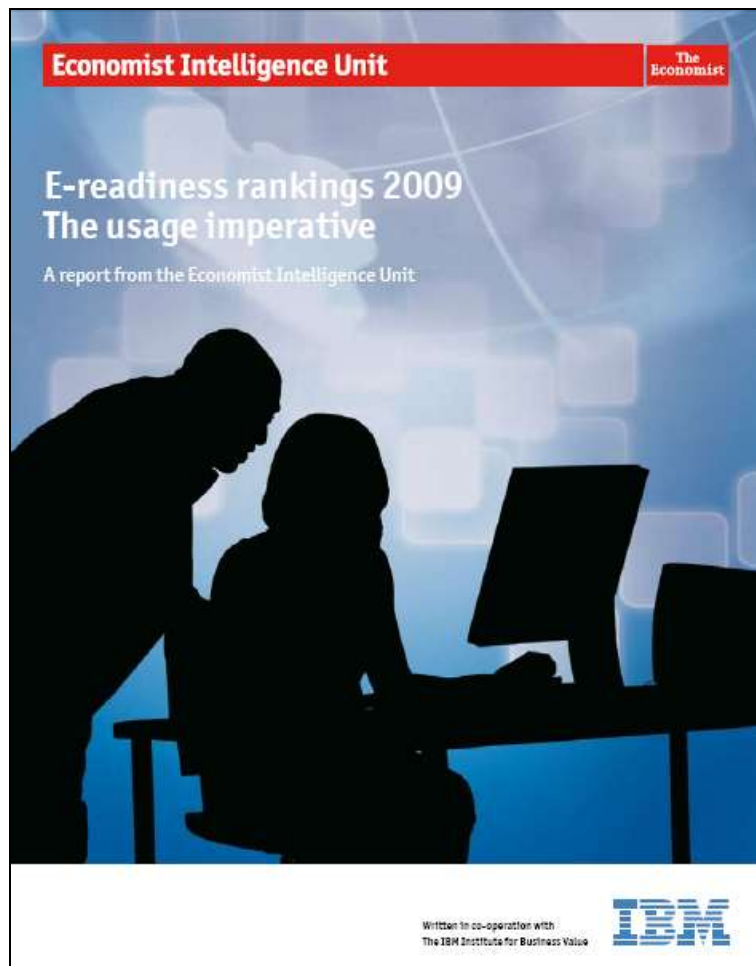
- Mobile government (m-government or m-gov)
- A focus on improving usage
- Open government
- Trust and security
- Back to where we started: performance and objectives

# Mobile government (m-gov)

- An opportunity to leapfrog
- An opportunity to improve service delivery
- Not only mobile phones but increasingly all mobile devices, e.g. tablets



# A focus on improving usage



- There is a gap between the availability of services (supply) and use of them (demand)
- Even in advanced countries less than half of the population typically use e-government, despite the rising number of Internet users



# Trust and security

- An increase in usage means an increase in dependency
- About 75% of organizations suffer from a cyber attack every year
- Attacks can compromise trust in e-government

## Information Security Strategy for Protecting the Nation

May 11, 2010

Information Security Policy Council

### I. Preface

The information security policy of Japan has, to date, been implemented by both governmental and private bodies based on the Second National Strategy on Information Security (February 3, 2009) resolved by the Information Security Policy Council (Chairperson: Chief Cabinet Secretary).

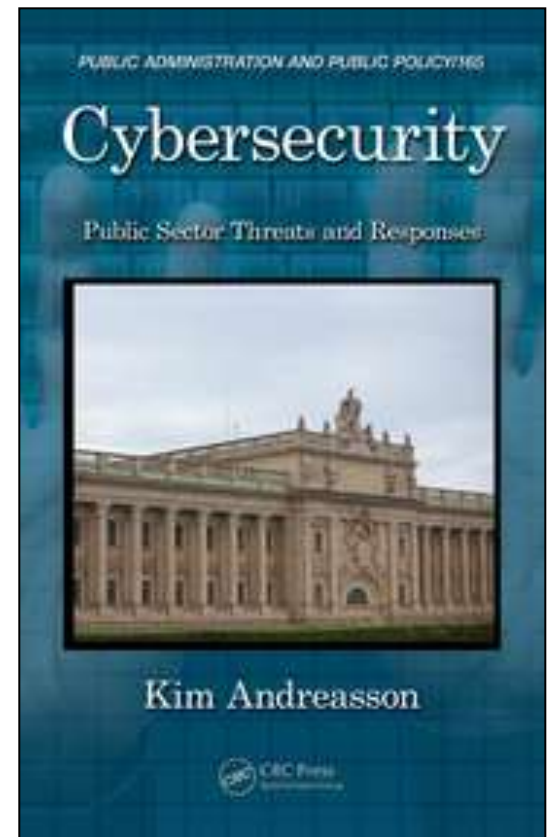
After the Second National Strategy on Information Security was resolved, a large-scale cyber attack took place in the United States and South Korea in July 2009. Also, numerous incidents of large-scale private information leaks occurred one after another.

The large-scale cyber attack in the United States and South Korea particularly alerted Japan—where many aspects of economic activities and social life are increasingly dependent upon Information and Communication Technology (ICT)—to the fact that a threat to information security could be a threat to national security and require effective crisis management.

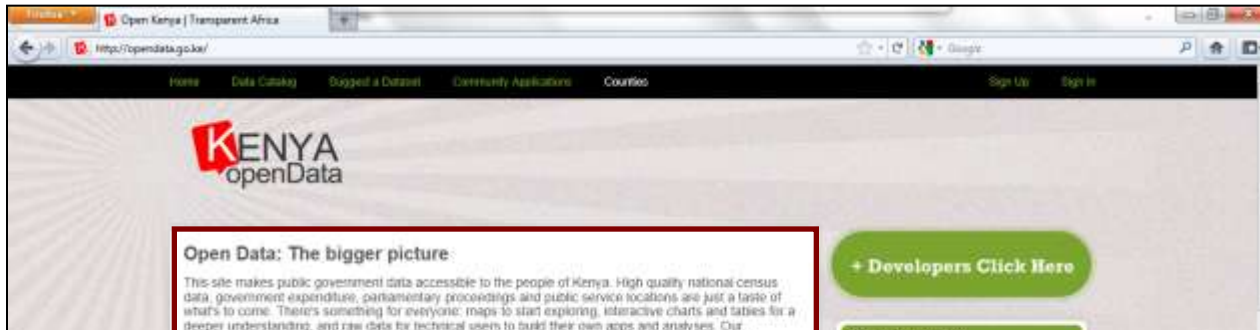


# Public sector threats and responses

- An increase in usage means an increase in dependency, especially with new ICTs
- **Politically motivated threats:** cyber warfare, cyber terrorism, espionage and hacktivism
- **Non-politically motivated threats:** typically financially motivated, such as cyber crime, intellectual property theft, and fraud, but also hacking for fun



# Open government



## **Open Data: The bigger picture**

This site makes public government data accessible to the people of Kenya. High quality national census data, government expenditure, parliamentary proceedings and public service locations are just a taste of what's to come. There's something for everyone: maps to start exploring, interactive charts and tables for a deeper understanding, and raw data for technical users to build their own apps and analyses. Our information is a national asset, and it's time it was shared: this data is key to improving transparency; unlocking social and economic value; and building Government 2.0 in Kenya.

- Accountability
- Mash-ups: providing users with the ability to use the data
- Transparency

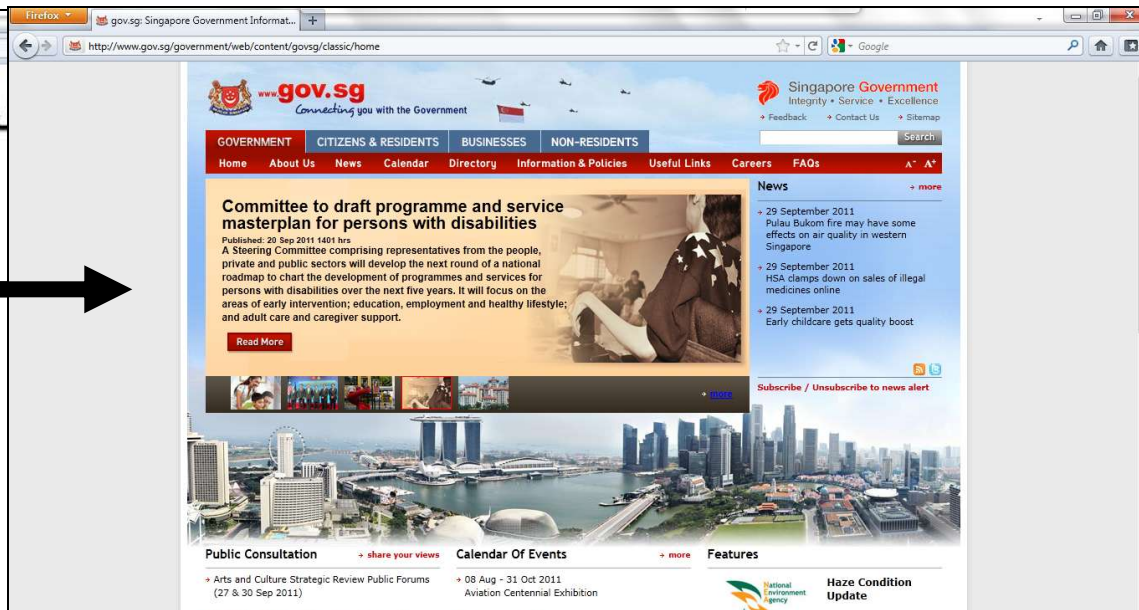
## Back to where we started: performance and objectives

- There is an increasing focus on e-government performance; what is the return on investment (ROI) and how is it connected to broader development objectives?
- “Ultimately, the challenge is to assess impact. A few studies exist about the utility citizens derive from e-government, mostly relating to the performance of government in developed countries, but even less is known about the impact of e-government programmes on national development goals.”

*UN e-government report 2010*

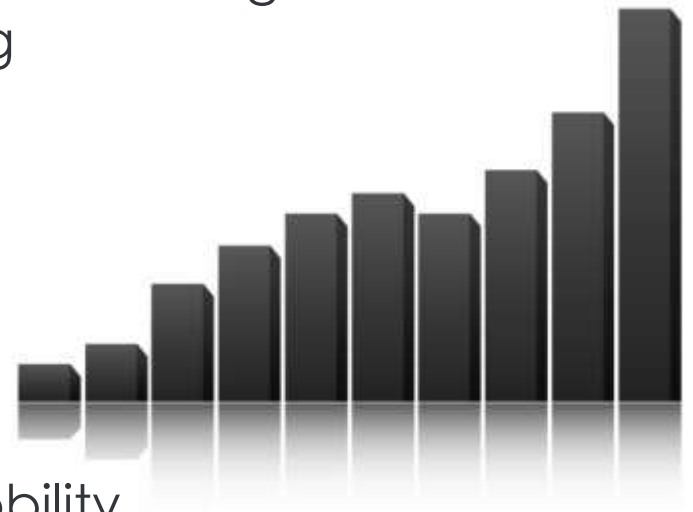
# Keeping pace with development

- How can supply-side assessment evolve to meet trends?



# Steps towards an enhanced measurement framework moving forward

- Collaborate and cooperate with users and stakeholders alike
- Capture new trends that affect users
- Increase transparency and engage users through data visualization and crowdsourcing
- Have the suppliers supply the data and offer self-assessment tools
- Automate and innovative, such as the use of web crawlers
- From websites to search tools and mobility
- Link measurement to performance and development objectives



# Measuring e-government at all levels

- Compared with just a decade ago, there has been significant progress in expanding e-government and in measuring it
- Yet, there is still a demand for better measurement in order to capture new trends and give local policy-makers and public sector managers the equivalent data, tools and benchmarks available at the international level
- Information and services are available at all levels, as should accountability and transparency, and the need to link them all to broader development goals
- Every case is different, yet fundamentally the same

