ICT: THE PHILIPPINE EXPERIENCE

Conference on IT Utilization to Strengthen Economic and Social Infrastructure
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Information and Communications Technology Office
Department of Science and Technology
Outline of Presentation

• ICT Footprint
• ICT National and Sectoral Plans
• ICT Policies
• ICT Programs and Projects
• ICT Institutional Structure
• Challenges and Lessons Learned
ICT FOOTPRINT
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<td>Fixed Telephone Subscriptions per 100 inhabitants</td>
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<td>Mobile Cellular Telephone Subscription per 100 inhabitants</td>
<td>106.51</td>
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<td>2.22</td>
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<td>Wireless Broadband Subscription per 100 inhabitants</td>
<td>3.83</td>
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Population: 92 million (estimate)

- Fixed Telephone Subscriptions per 100 inhabitants: 4.07
- Mobile Cellular Telephone Subscription per 100 inhabitants: 106.51
- Fixed wired broadband Subscription per 100 inhabitants: 2.22
- Wireless Broadband Subscription per 100 inhabitants: 3.83
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ICT NATIONAL AND SECTORAL PLANS
National Plans

The Philippine Development Plan 2011-2016

The Philippine Digital Strategy (2011-2016)
Sectoral ICT Plans

- Philippine Information Technology & Business Process Management (IT-BPM) Road Map (2012-2016)
- E-Government Master Plan (2013-2016)
- The Strategic Roadmap of the Philippine Community eCenter Program (2011-2016)
ICT POLICIES
ICT Policies

Telecommunications Act (Republic Act 7925)

eCommerce Act of the Philippines (Republic Act 8792, 2000)
An act providing for the recognition and use of electronic commercial and non-commercial transactions and documents, penalties for unlawful use thereof (14 June 2000)

A.M. No. 01-7-01-SC Rules on Electronic Evidence
Rules promulgated to implement RA 8792 (17 July 2001)
ICT Policies

Institutionalizing the Certification Scheme for Digital Signatures and Directing the Application of Digital Signatures in eGovernment Services (Executive Order 810, 2009)

Mandating government agencies to migrate to the government web hosting service (GWHS) of the Department of Science and Technology-Information and Communications Technology Office (Administrative Order No. 39, 2013)

Mandating the Government–Wide Medium-Term ICT Harmonization Initiative (MITHI) to harmonize all ICT resources, programs and projects of the whole government (Joint Memorandum Circular No. 2012-01 î DBM, DOST and NEDA)
ICT Policies

Mandating policies on the Philippine National Public Key Infrastructure Certification Authority (ICTO Memorandum Circular No. 2013-001 and No. 2013-002)

Prescribing the Policies and Procedures Governing the Accreditation of Government Registration Authorities under the National Certification Scheme for Digital Signatures (ICTO Memorandum Circular No. 2014-001)

Mandating Govmail Service guidelines for Philippine Government Agencies (ICTO Memorandum Circular No. 2015-002)

Mandating Interoperability Framework - Technical and Information (ICTO Memorandum Circular No. 2014-9001, and No. 2015-003)
ICT Policies

Anti-Child Pornography Act of 2009 (RA No. 9775)
An act defining the crime of child pornography, prescribing penalties thereof

Anti-Photo and Video Voyeurism Act of 2009 (RA No. 9995)
An act defining and penalizing the crime of photo and video voyeurism, prescribing penalties thereof (15 Feb 2010)
ICT Policies

Data Privacy Act of 2012 (RA No. 10173)
An act protecting individual personal information in information and communications systems in the government and the private sector, creating for this purpose a national privacy commission

Access Devices Regulation Act of 1998 (RA No. 8484)
An act regulating the issuance and use of access devices, prohibiting fraudulent acts committed relative thereto, and providing penalties

Cybercrime Prevention Act of 2012 (RA No. 10175)
An act defining cybercrime, providing for the prevention, investigation, suppression and the imposition of penalties thereof
ICT PROGRAMS AND PROJECTS
8 Major PROGRAMS FOR 2015-2016

**Next Wave Cities**
- Increase the overall IT-BPM employment share of the countryside
- Creation of 2 NWCs in 2014 and 2 NWCs in 2015

**e-Government**
- Provision of shared services by government agencies
- Improvement of PH’s global e-Government ranking to 50th or better

**e-Civil Servants**
- Empower the civil servants through ICT

**ICT Ecosystem**
- Formulate an integrated framework for networks, services, applications, and content
- Development of plans and policies for ICT Related Programs/Project such as the Digital TV Project

**Stepping Up the Value Chain**
- High growth segments
- Provides Industry Capability Building for the Industry

**e-Filipino**
- Improve ICT Skills of different groups of people
- Provides alternative learning and skills training, through the established Philippine Community e-Centers

**ICT Enabled Startups**
- Promote entrepreneurship through ICT
- Targets the creation of 50 ICT enabled Startups

**National Connectivity**
- Address the connectivity challenges of PH through TVWS technologies
- Free Wireless Internet Access in Class 4,5,6 municipalities

ICT Ecosystem Development

Formulation of an integrated framework for networks, services, applications, and content; and determine the institutional, legal, and regulatory mechanisms to manage the integrated framework

**Major Target:**
- Plans and policies relative to the implementation and adoption of infrastructure, systems and applications and other related frameworks

**Projects/Activities:**
- Adoption of Digital Terrestrial Television Broadcasting
- Revision of R.A. 7925
- Development of National Broadband Plan
- Policies on: Cloud Computing, PKI Related, and Free WiFi related policies
National Connectivity

Bridging the Digital Divide among communities, and addressing various challenges of connectivity requirements in the PH to drive the economy of the country

**Major Targets:**
- Policy environment for the establishment of the TV Whitespace stations through PPP in 21,000 sites of Elementary, High School, and Rural Health Units in 4th to 6th class municipalities by 2016.
- Free Wi-Fi Internet Access in Public Places
- Increased delivery of government services to targeted underserved communities

**Projects/Activities:**
- Juan Konek: Free Wi-Fi Internet Access in Public Places
- TV White Space Technology
Free Internet Wi-Fi Connectivity in Public Places Project

- Proven Driver of Inclusive Growth
- Catalyst for Industry Growth
- Improved Global Rankings

- 50 MB/day @ 256 kbps
  2.5M user per day
- 967 Municipalities in Income Class 3-6 (<P45M/yr)
- Points of Presence
  - 7 Centers of Government
  - 7 Strategic Cities
- Sites include
  - Plazas / Parks
  - Public Schoolyards and Libraries
  - Public Spaces in Rural Health Units
  - Public Spaces in Gov’t Offices
  - Transport Terminals

7,118 Free Wi-Fi Beneficiaries by Region
Internet via TV White Space Technology uses unallocated TV frequencies and radio spectrums to provide connectivity of up to 6 Mbps of data throughput at a maximum range of 20 kilometers. It is ideal for the Philippines as its signals can pass through concrete walls and vegetation, and can travel over water.
THE FUTURE

- Provides Wi-Fi for the towns and barrios that need it
- Last mile distribution to achieve 99% connectivity nationwide
- Reaches two to three times farther than current Wi-Fi capabilities
- More obstacle-resistant
- Uses unregulated spectrum to lower cost of communications
To use an empty channel at a particular location on a daily basis, a TVWS device requires an online TVWS database service. The channel can become dynamic by updating the database.

TV WhiteSpace para sa e-Filipino mula sa ICTO

99% Connectivity NATIONWIDE
e-Civil Servants Development

Improving ICT competency of civil servants through training programs in collaboration with the public and private training institutions and Subject-Matter Experts (SMEs)

Major Targets:

- Trainings on e-Government Management, Application Development, and Technology Solutions
- Improved productivity and efficiency of civil servants

Projects/Activities:

- DigiE Fund (reformed)
- Training Administration and Management
- Development of e-Learning Modules
- Institutionalization of the Gov’t CIO
Programs

E-Filipino Development

Improving ICT Skills of different groups of people by providing alternative learning and skills training, through the established Technology for Economic Development (Tech4ED) Centers

Major Targets:

- E-Filipino Tech4ED Centers in each municipality by 2016 through Private-Public Partnership (PPP)

- Improved knowledge and skills on use of safe and secure ICT infrastructure and services by the citizenry

Projects/Activities:

- Tech4ED
- ICT Competency and Certification
THE Tech4ED PLATFORM

- **eEduSkills**: Aims to deliver e-Learning on demand to address the educational divide.
- **eAssist**: Aims to provide vulnerable groups with special content for more competitive careers.
- **mAgri**: Aims to enhance farm technologies for product diversity.
- **mMarket**: Aims to help people reach markets beyond their communities for more growth.
- **eGovServ**: Aims to automate paper-based solutions and enhance access to government services.
- **eAssess**: Aims to provide industry partnerships that will provide an avenue for shortlisting of job applicants.
e-Government Harmonization and Development Program

Improving the PH status in the global eGovernment ranking, which is currently on the 76th spot

**Major Targets:**
- e-Government ranking of 50th or better
- Adoption of shared services by government agencies
- Efficient and effective delivery of services to the public
- Efficient utilization of ICT resources by the government agencies

**Projects/Activities:**
- iGov Philippines Project
- National Government Data Center
- Philippine Gov't Information Exchange & Authoritative Registries Project (Philippine Government Interoperability Exchange)
Next Wave Cities Program

Increasing the overall IT-BPM employment share of the countryside by creating Next Wave Cities that are viable investment destinations for IT-BPM operations

Major Targets:

- 141,000 new employees by the end of 2015
- Additional 3 IT-BPM hubs outside the Centers of Excellence
- Additional 3 Next Wave Cities included in the Top 100 IT-BPM destinations in the World by 2016
Stepping-up the Value Chain

Strengthening the country’s global positioning in the targeted high growth segments in the IT-BPM areas such as IT, HR, Multilingual, Creative, and Engineering.

Major Targets:
Industry capacity/capability building through the provision of industry trainings, seminars, workshops.
ICT Enabled Startup Development

Promoting entrepreneurship and leverage the use of ICT to provide solutions for different industries in the society through technology startups

Major Targets:

Total of 50-ICT enabled Startups by the end of 2016.
ICT INSTITUTIONAL STRUCTURE
| **MANDATE** | The Information and Communications Technology Office shall be the primary policy, planning, coordinating, implementing, regulating, and administrative entity of the executive branch of Government that will promote, develop, and regulate integrated and strategic information and communications technology (ICT) systems and reliable and cost-efficient communication facilities and services. *(per E.O No. 269 dated January 12, 2004, as amended by E.O No. 47 dated June 23, 2011)* |
| **VISION** | A globally competitive knowledge-based economy, enabled by open and innovative ICT-enabled governance, providing world-class responsive services to digitally-empowered citizens and communities in a progressive, equitable and sustainable society. |
| **MISSION** | To provide leadership, direction and coordination in the development, implementation and use of ICT for socio-economic development and for delivery of public service to digitally empowered citizens. |
Priority Areas

**E-SOCIETY**
Infusion of ICT into all areas and levels of Philippine society to derive the maximum benefits that will drive socioeconomic development

**E-GOVERNMENT**
Catalyze the optimum use of ICT in government to expand and improve government services, operations and capabilities

**E-INNOVATION**
Ensure the growth of ICT and ICT-enabled industries through public-private partnerships (PPPs) with the industry, academe and civil society, and through close collaboration with partners in government.

**CYBER SECURITY**
Promote the security of Philippine cyberspace, and ensuring the security of government ICT resources through collaboration with public, private and international partners
Challenges & Lessons Learned

- Lessening silos across government
- Strengthening multi-stakeholder collaboration and public private partnerships
- Adoption and implementation of policies
- Building capacities
- Establishment and maintenance of sustainable infrastructure
“A digitally empowered, innovative, globally competitive and prosperous society where everyone has reliable, affordable and secure information access in the Philippines. A government that practices accountability and excellence to provide responsive online citizen-centered services. A thriving knowledge economy through public-private partnership.”

Vision, Philippine Digital Strategy
THANK YOU