

# Trends and Emerging Issues of Smart Government: International Organization Perspective

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# UNAPCICT Introduction

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## A Hub for ICT Capacity Development



APCICT : Asian and Pacific Training Centre  
for Information and Communication  
Technology for Development



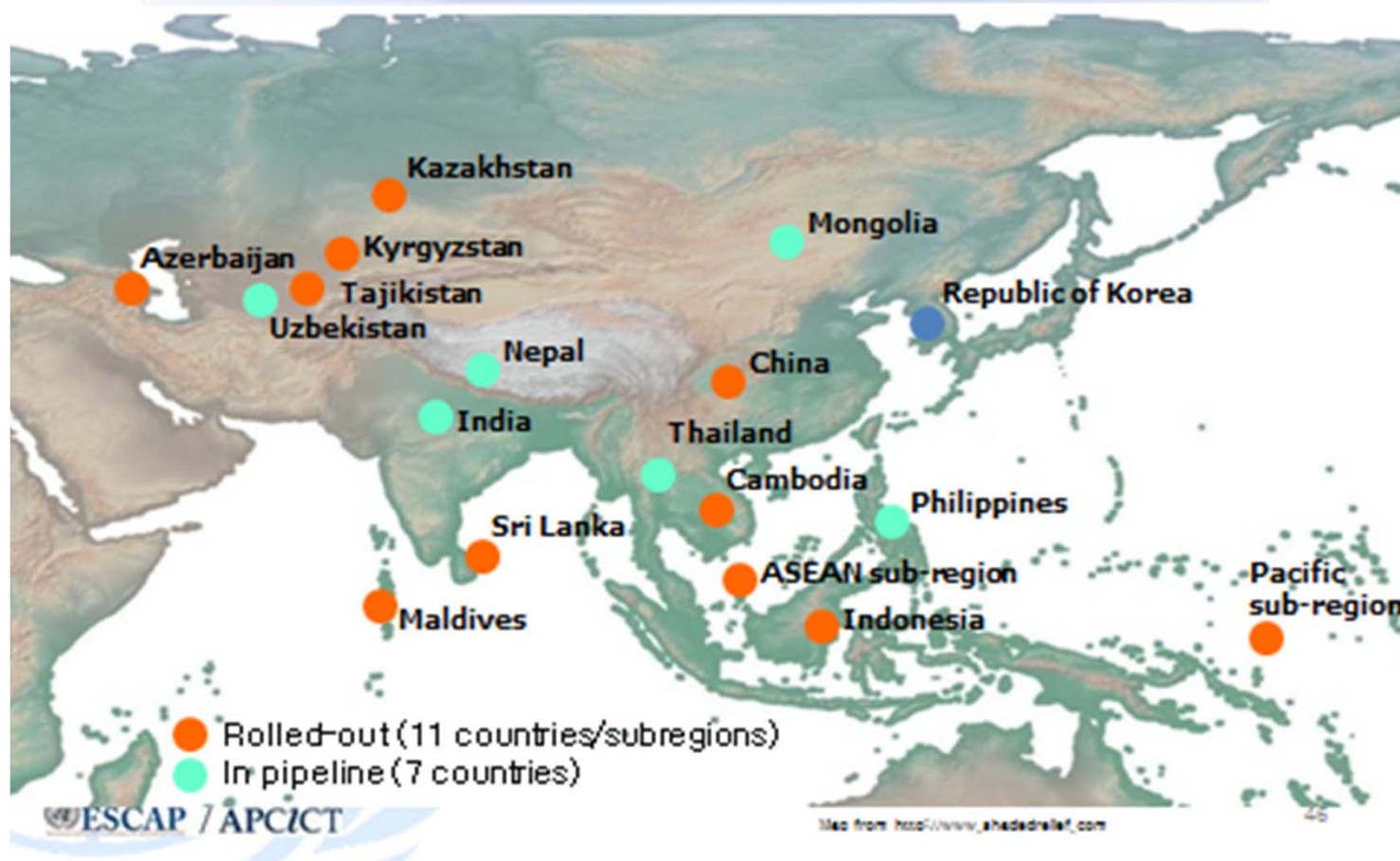
A Regional Institute of UN-ESCAP



Established in June 2006. Located in  
Incheon, ROK

# UNAPCICT Introduction

## Primer Series in Asia and the Pacific *(as of Sep. '13)*



# UNAPCICT Introduction

## Broadening Impact beyond the Asia-Pacific

- **Economic and Social Commission for Western Asia (UN-ESCWA)** in advanced planning stage to localize Academy modules and implement programme
- Academy rolled out by **Economic Commission for Africa (UN-ECA)**, is in advanced planning stage for introducing new Modules 9 & 10
- **Economic Commission for Latin America and the Caribbean (UN-ECLAC)** exploring utilization of Academy modules for a Leadership Development Programme





# UNAPCICT Introduction

## Mission and Main Activities

*Build human / institutional capacity of ESCAP members in the use of ICTs for socio-economic development and to achieve the MDGs*



# UNAPCICT Introduction

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**UNAPCICT is Asia and Pacific training center for ICT development.**

A core activity of APCICT is the '***Academy of ICT Essentials for Government Leaders***' (Academy).

***A Hub for Knowledge Sharing and Research on ICT for Development***

The ***e-Collaborative Hub*** (e-Co Hub – <http://www.unapcict.org/ecohub>) is APCICT's dedicated online platform for knowledge sharing on ICTD.

The ***APCICT Virtual Academy*** (<http://e-learning.unapcict.org>) is the online distance learning platform of the Academy.

The ***Communities of Practice*** (COP) is a collaborative online platform that enables learners and experts to share knowledge and best practices related to topics on ICTD.

# UNAPCICT Introduction

- Asian and Pacific Training Centre for Information and Communication Technology for Development's (APCICT) mission (mandated by the United Nations Economic and Social Commission for Asia and the Pacific) to equip policymakers and other government officials with the essential knowledge and skills they need to fully leverage opportunities presented by ICTs to achieve national development goals and bridge the digital divide, the “**Academy of ICT Essentials for Government Leaders**” (*Academy*) was conceptualized.
- The *Academy* consists of a core ICTD curriculum with 11 modules ranging from basic to more advanced topics of ICTD that can be delivered face-to-face or as online self-study courses.

# UNAPCICT Academy Modules

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## **Module 1 - The Linkage between ICT Applications and Meaningful Development**

The module highlights key issues and decision points, from policy to implementation, in the use of ICTs to meet development needs.

The aim is to foster a better understanding of how ICTs can be used for social and economic development, and to equip policymakers and programme managers with a development-oriented framework for ICT-based and ICT-supported interventions in a range of social sectors.



# UNAPCICT Academy Modules

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## **Module 2 - ICT for Development Policy, Process and Governance**

This module focuses on ICTD policymaking and governance, providing critical information about aspects of national policies, strategies and frameworks that promote ICTD. It discusses key ICTD policy and governance issues, and shows benchmark that progress against those of other countries.

## **Module 3 - e-Government Applications**

This module is a comprehensive introduction on e-government that showcases various essential ICT applications for G2C, G2B, and G2G in delivering e-government, including their key elements and concepts, case study, CSS, and CFF factors in successfully implementing e-government . It also discusses how an e-government system is built by providing detailed analyses of exemplar systems and identifying design considerations.

# UNAPCICT Academy Modules

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## **Module 4 - ICT Trends for Government Leaders**

This module provides some insights into current trends in ICT and its future directions. It also looks at some of the key technical and policy considerations when making decisions for ICT development in the local and regional context. In particular, case examples of each of application are provided. important success factors that need to be in place, and common barriers to achieving success for each type of application. Best practices from countries that have achieved success will be highlighted.

## **Module 5 - Internet Governance**

The Internet raises significant challenges for public policy and sustainable human development, both internationally and for individual nations. Hence, the ongoing development of international policies and procedures to govern the use and operation of the Internet is important.

# UNAPCICT Academy Modules

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## **Module 6 - Information Security and Privacy**

As ICT becomes more prevalent in today's highly networked world, policymakers and other government officials need to understand how to ensure secure systems while maintaining user privacy. This module provides participants with a high-level understanding of the current threats to ICT security and helps them understand.

## **Module 7 - ICT Project Management in Theory and Practice**

Government officers are often charged with managing a variety of socio-economic development projects, such as e-learning programmes, e-health applications and development of telecentres. This module provides government leaders with the knowledge, techniques and software tools they need to better manage the projects for which they have primary responsibility. This module will help these project leaders stay within their budgets, meet project deadlines, evaluate and assess its progress.

# UNAPCICT Academy Modules

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## **Module 8 - Options for Funding ICT for Development**

This module will provide important information to participants on where they can look for funding, how to write proposals to gain access to these sources of funds, and how current projects are being funded and the outcomes of these projects.

## **Module 9 – ICT for Disaster Risk Management**

This module focuses on the ways in which ICTs are employed in the various aspects of disaster risk reduction, particularly computer and Web-based digital technologies used to connect and analyze information. This module also presents a number of disaster risk management initiatives in the Asia-Pacific region that utilize ICTs, elaborates upon a number of common barriers that hinder the implementation of ICTs in national disaster risk management plans and provides policy recommendations and regional cooperation measures to overcome such barriers.

# UNAPCICT Academy Modules

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## **Module 10 – ICT, Climate Change and Green Growth**

Climate change constitutes a major threat to the earth's ecosystems and the present and future development of human civilization. Although there is scope to check greenhouse gas emissions - which induce global warming-resulting from the use of ICTs themselves, ICTs also hold tremendous potential for addressing climate change in other sectors of the economy.

This module discusses the use of ICTs in better understanding and monitoring of the environment, and explores their potential for mitigating climate change and adapting to its impacts.



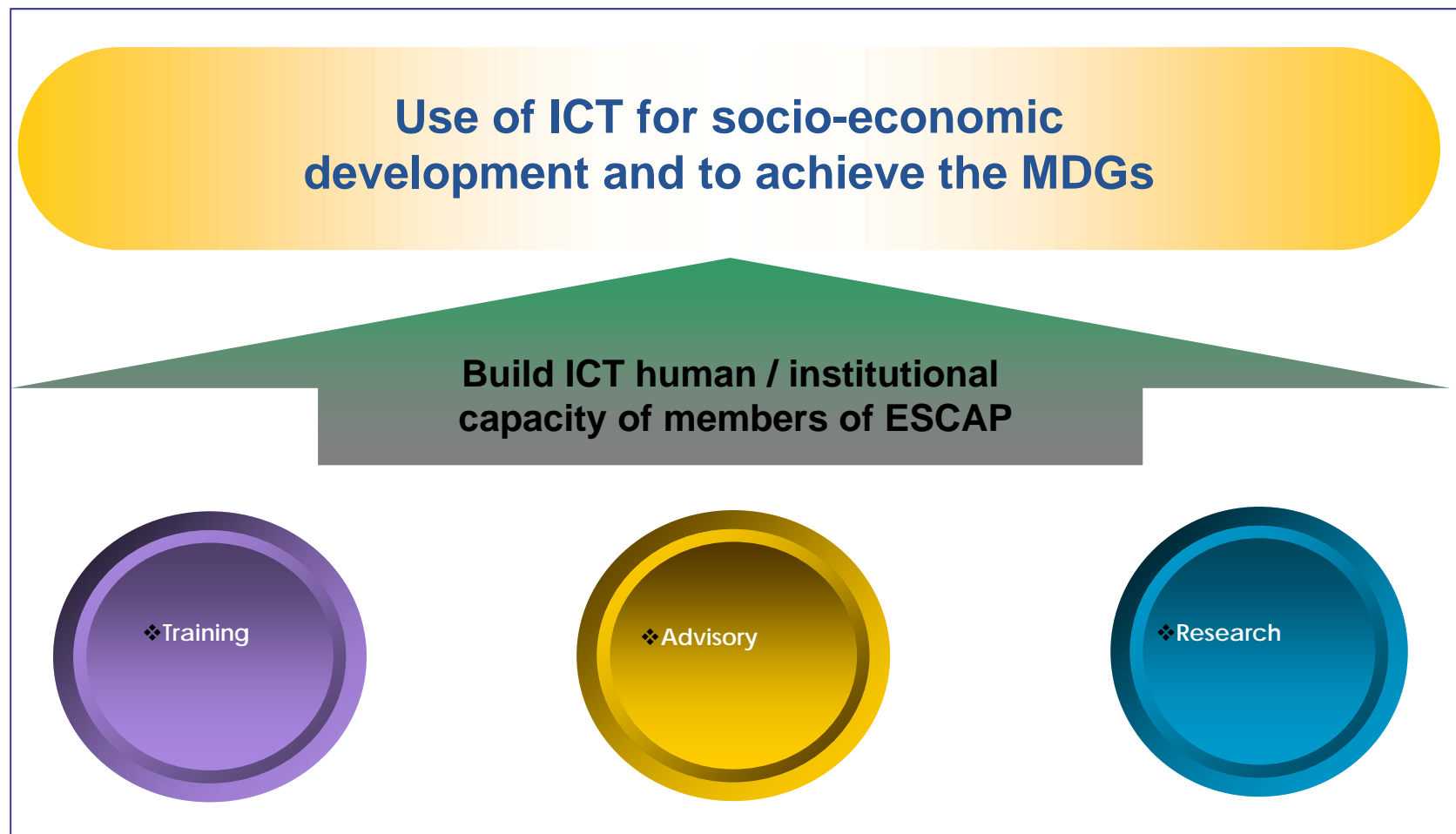
# UNAPCICT Academy Modules

## Module 11 – Social Media for Development

This module aims to build capacities of key stakeholders in leveraging the potential of social media as a tool for promoting socio-economic development in areas such as civic engagement, health and environment etc.

A draft annotated table of contents was developed and circulated for review to a range of respondents including ICTD experts, Academy partners, government officials and alumni of APCICT's training programmes.

# UNAPCICT Introduction



# Results Achieved

## 1. Training

- 237 conferences/workshops/courses organized
- Along with the number of course enrolments in the APCICT Virtual Academy, in total, over 24,000 participants from more than 149 different countries and territories have been reached, primarily comprising of high- and mid-level government officials as well as other development professionals.
- 171 events were part of APCICT's flagship programme, the ***“Academy of ICT Essentials for Government Leaders”*** (Academy), which has been rolled out in 27 countries
- 32 events were thematic workshops in the areas of e-governance, e-business, disaster risk reduction, climate change, information security, ICT capacity building for women, ICT accessibility for persons with disabilities and measuring ICTD.
- Over 80 percent of the participants who attended the APCICT training workshops expressed that the training content met their needs

# Results Achieved

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## *2. Advisory Services*

Advisory services provided to more than 25 countries, especially Countries with Special Needs.

Approximately 10 students per year offered internship at APCICT under the Future ICT Leaders Programme aimed at building their ICT capacity.

New project aimed at enhancing ICTD coverage in undergraduate and graduate curricula in universities launched in February 2012.

## *3. Research and Knowledge Sharing*

➤ 132 publications, handbooks, technical papers, information kits and journal issues, and modules of the Academy (in English, Armenian, Azeri, Bahasa Indonesia, Khmer (Cambodia), Mongolian, Myanmar, Pashto, Russian, Tajik, Turkmen and Vietnamese) published.

➤ Over 75,000 unique visitors and more than 1,500 members on **e-Co Hub**, an online knowledge sharing platform.

➤ The **APCICT Virtual Academy**, the distance learning version of the Academy Programme has over 7,500 course enrolments.

# UNAPCICT Approach for e-Government Development

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When UNAPCICT design 11 Academy Modules it well consider the CSF and CFF model for successful e-Government development.

1. **UNAPCICT is Asia and Pacific *training* center for ICT development.** A core activity of APCICT is the '*Academy of ICT Essentials for Government Leaders*' (Academy). Training includes Concept, Theory, Case study, Best practice, Quiz, Group exercises, Brainstorm session, and Benchmarking.
2. **A Hub for *Knowledge Sharing* and Research on ICT for Development.** The *e-Collaborative Hub* (e-Co Hub – <http://www.unapcict.org/ecohub>) is APCICT's dedicated online platform for knowledge sharing on ICTD.
3. The *Communities of Practice* (COP) is a collaborative online platform that enables learners and experts to **share knowledge and best practices** related to topics on ICTD.



# Current e-Government needs of countries (Module 3 case)

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1. Government leader / Participants need a lot of e-Government training. Basic concept, Technical know-how, Experiences, Benchmarking, project management skills, etc.  
Lack of adequate human resources: insufficient institutional and human capacity building
2. Participants want to know the detail design and development for each e-government applications(G2C, G2B, G2G)
3. Government needs an expert or experienced consultant to guide e-Government development.
4. Absence of an investment plan on e-Government development.
5. The level of public participation and usage of e-government services remained quite low despite substantial public investment by the government. Citizens and business also need to be motivated to participate in e-governance.
6. e-government will only be successful if there is a *strong demand and support* for it from the majority of population.
7. Develop multi-channel single window common service delivery infrastructure, including “physical” citizen service centers and other public access points such as telecenters, call centers, web portals and mobile Portal.
8. Encourage development of relevant, compelling, user-friendly online and mobile content, including so called *“killer applications”*.

# Example for Module 3

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# Module 3 : e-Government Applications

## (Course Introduction)

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- This module provides background knowledge on the basic concepts and key elements of e-Government. It gives an overview of the evolution of e-government, its content and its applications, with particular reference to best practices.
- Topics include:
  - ✓ Session 1: Overview of e-Government
  - ✓ Session 2: Planning and Assessment of e-Government (Strategy, CSF, CFF, e-Gov Model)
  - ✓ Session 3: Types of e-Government Applications  
Citizen Centric Services (G2C Applications)
  - ✓ Session 4: Business Centric Services (G2B) Applications
  - ✓ Session 5: G2G Services Applications, Common Infrastructure, and Other Applications
  - ✓ Session 6: Trends and Future Directions for e-Government, including m-Government

# Global Trends in e-Government

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Key findings from the UN e-Government Survey 2012:

- Whole-of-government approached lead the way
  - ✓ Many countries are moving from a decentralized single-purpose organization model, to an **integrated unified whole-of-government model** contributing to efficiency and effectiveness.
  - ✓ The model aims at **centralizing the entry point of service delivery to a single portal** where citizens can access all government-supplied services, regardless of which government authority provides them.

# Global Trends in e-Government

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Key findings from the UN e-Government Survey 2012:

- Member States are paying close attention to **Multi-channel service delivery**.
  - ✓ The increasing power of ICT has also provided governments with the flexibility of providing services and information through multi-channels(Telecenter, Call center, Web portals, M-Government, T-Government, etc).
  - ✓ Citizens have diverse needs and demands for services; therefore it is no longer sustainable for governments to utilize one preferred way of service provision over the other.
  - ✓ It is now ever more essential that governments exploit all possible delivery channels in order to reach out to as many people as possible.



# Global Trends in e-Government

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Key findings from the UN e-Government Survey 2012:

- Citizen up-take of e-services currently remains at low levels
  - ✓ While the primary focus of e-government policy has been the provision of services from a supplier perspective, recently there has been a shift towards a **more consumer demand driven policy and greater emphasis on citizen usage.**
  - ✓ Nevertheless the level of citizen up-take currently remains at low levels.
  - ✓ Usage divides across and within countries is one of the many challenges hindering high levels of citizen up-take.

# m-Government

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Mobile phones are a crucial mode of communication in developing countries, especially those lacking an infrastructure of fixed lines.

- Total mobile-cellular subscriptions reached almost 6 billion by the end of 2011, corresponding to a global penetration of 86%.
- There were 105 countries with more mobile-cellular subscriptions than inhabitants.
- Globally, the number of mobile phones surpassed the number of fixed/wired phones in 2003.
- According to ITU, at the end of 2011 there were 4.46 billion mobile subscriptions in the developing world – that's 75 per cent of global subscriptions.

Increasingly, mobility is being accepted as a part of daily life and the governments have to transform their activities according to this demand of convenience and efficiency of interactions.

# m-Government

Mobile-cellular subscriptions for developed and developing countries and the world (ITU, 2012)

	Total(millions)			Per 100 inhabitants		
	2009	2010	2011	2009	2010	2011
Developed	1,384	1,413	1,514	112.6	114.5	122.3
Developing	3,263	3,898	4,457	58.4	68.9	77.8
World	4,647	5,311	5,972	68.2	77.1	85.7

# m-Government

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m-Government helps to make public information and government services available anytime, anywhere to citizens.

- Examples include sending security alerts, reminders to renew licenses, results of medical examinations, and tax returns, etc.
- Most of these efforts are still at the experimental stage and limited in scope, but they nonetheless present an unavoidable shift in the future evolution of e-Government.
- There is a growing body of evidence that demonstrates the potential of m-Government.

# m-Government

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## Reasons behind m-Government:

- Wider reach
  - ✓ Because mobile penetration already exceeded Internet penetration, public services that are offered via mobile phone can be available to a greater number of people than those offered over the Internet.
- Always carried, always on
  - ✓ People carry their mobile phones with them all the time, but most computers are connected to a specific location. So, public services via mobile phone are accessible anywhere, anytime.
  - ✓ This is especially important in case of urgent messages and crisis communication.

# m-Government

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## Reasons behind m-Government:

- More personalization for targeting users
  - ✓ Computers are often shared among different users, but mobile devices are designed for a single user. So, information through mobile phone reaches to the preferred addressee at any time.
- Cost-effective
  - ✓ m-Government provides many cost saving opportunities for the government as well as for the citizen (For instance, an SMS is much cheaper than sending a stamped letter.)
- Better management
  - ✓ Mobile technology can help government officials to better manage allocated financial and human resources.

# m-Government

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## Reasons behind m-Government:

- Faster information flow
  - ✓ Mobile technologies enable government staff to save time. A decrease in time for transferring data results in better decisions within a shorter time. It also enables access to data in service site so that they can spend time on their job rather than travelling around for information.
- Increased democracy
  - ✓ As an extension of e-Government, m-Government is expected to transform the relationship between citizens and governments, and encourage participation of citizens in decision-making and policy formulation.

# m-Government

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## Reasons behind m-Government:

- Solution to digital divide
  - ✓ Mobile technology is probably the most rapidly expanding of technologies in terms of the speed of expansion and reach to the unconnected. The technology is mostly based on voice and SMS, but with the rapid growth in mobile phone usage.
- Better the lives of disabled
  - ✓ SMS can be helpful for those who are hearing-impaired. Many hearing-impaired people find text-messaging to be an ideal form of communication because no audible conversation is needed.



# m-Government

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## Benefits of m-Government:

- Cost reduction;
- Efficiency;
- Transformation/modernization of public sector organizations;
- Added convenience and flexibility;
- Better services to the citizens; and
- Ability to reach a larger number of people through mobile devices than would be possible using wired internet only.



# THANK YOU