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m-Government

Joint Workshop for e-Government and smart city

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Wireless vs Mobile

- The terms "mobile" and "wireless" are often used interchangeably.
- Wireless is a very broad category.
 - ✓ Wireless includes everything from fixed wireless applications to mobility applications.
 - ✓ While a wireless system provides a fixed or portable endpoint, mobile refers to portable devices that can be taken anywhere.
 - Mobile computing is the crossover between the two.

m-Government

- m-Government helps to make public information and government services available anytime, anywhere to citizens.
 - Examples include providing real time traffic information, sending security alerts, reminders to renew licenses, results of medical examinations, and tax returns, etc.
 - m-Government efforts are still limited in scope, but they present an unavoidable shift in the future evolution of e-Government.
 - m-Government is an effective tool to make public information and services more efficient, effective and more convenient.

Go Mobile!

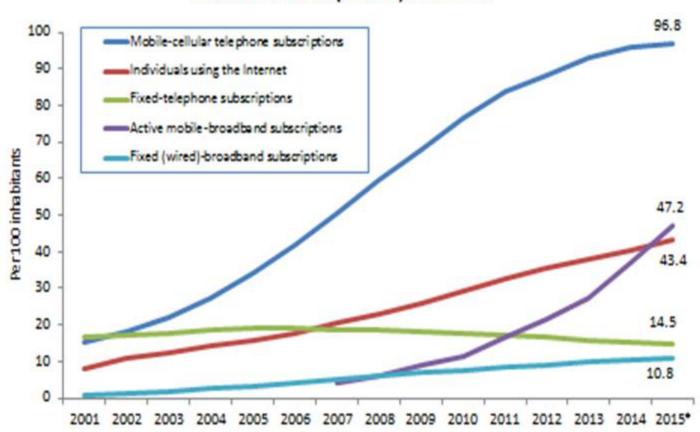
Global Mobile Subscription

- According to ITU, at the end of 2013 there were 6.8 billion mobile subscriptions in the world – corresponding to a global penetration of 96%.
- There were 118 countries with more mobile subscriptions than inhabitants.
- Globally, the number of mobile phones surpassed the number of fixed/wired phones in 2002.
- Total mobile subscriptions in the world reached 7 billion global mobile subscription approaches 100%.

Governments have to transform their activities according to this demand of convenience and efficiency of interactions.

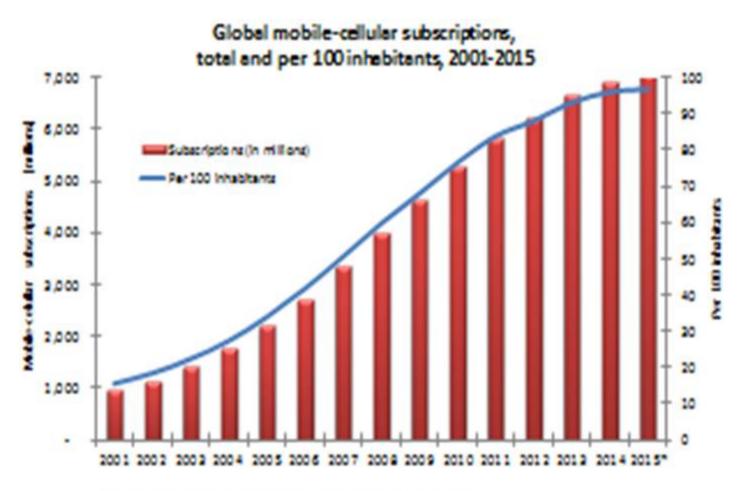
Global Mobile Subscriptions

Global ICT developments, 2001-2015



Source: Global ICT Developments, ITU (2015)

Global Mobile Subscriptions



Source: Global ICT Developments, ITU (2015)

m-Government vs e-Government

Extension or Replacement?

- m-Government is the extension of e-Government as well as the strategic supplement of e-Government services which are only possible or provide additional value using mobile technology.
 - ✓ All e-Government services cannot be transformed into m-Government services.
- m-Government implementation involves integrated and flexible data communication and exchange with the existing e-Government system(s).
- Developed countries focus on synergy between e-Government and m-Government, while developing countries focus on reaching citizens.

Reasons behind m-Government

Wider reach

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, enabling public services accessible anywhere, anytime, making information flow quicker.
- This is especially important in case of urgent messages and crisis communication.

Reasons behind m-Government

More personalization

- Mobile devices are designed for a single user. So, information through mobile phone reaches to the target user at any time.
- As mobile phones are typically personal, the possibility of locating an individual's exact physical location ensures that governments can directly provide services to each person.

Cost-effectiveness

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.)

Reasons behind m-Government

Faster information flow

✓ Use of mobile technologies can make information flow faster by enabling government officials to access to and transfer data in service site, resulting in time saving and better decisions within a shorter time.

Increased democracy

- Public officials can stay current on public opinion, while encouraging participation of citizens in decision-making and policy formulation.
- Solution to digital divide

Benefits of m-Government

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

General Framework of m-Government

Front-office applications

Back-office Applications

M-Government to citizen (mG2C)

which refers to the interaction between government and citizens.

M-Government to employee (mG2E)

concerning the interaction between government and its employees.

M-Government to business (mG2B)

describing the interaction of government with businesses.

M-Government to government (mG2G)

referring to inter-agency relationships and the interaction between governmental agencies

Individual

Organization

Source: Uhm, 2010

Types of m-Government Services

- Push vs pull services
- SMS-based
 - Listen, notification, pull-based information, communication, transaction, and integration
- Smartphone-enabled
 - ✓ Native App: Conventional mobile app
 - ✓ Mobile Web: Browser-based access to the Internet
 - ✓ Hybrid: Combination of the two approaches

No single approach for developing mobile applications delivers all of the benefits all of the time. Choosing the right approach depends on the specific needs of the government and can be driven by many parameters such as user demand, mission requirements, budget, and timeframe.

m-Government Implementation Issues

Infrastructure

- Developing wireless and mobile networks, promoting mobile penetration and increasing accessibility
- ✓ MDM and application distribution
- ✓ User authentication
- ✓ Payment infrastructure
- Protecting privacy and providing security for the data and interactions;
- Regulating and developing legal aspects of mobile applications and use of the services;
- Compatibility of the mobile systems with the existing e-Government systems;

m-Government Guiding Principles

- m-Government should be developed as part of the overall e-Government strategy and program.
- Choose m-Government applications wisely. Make sure they are non-trivial;
- Ensure that there are suitable back-office systems in place to deliver on m-Government promises.
- Encourage mobile web service
 - ✓ Native apps should be minimized to cost-effective cases.
- Facilitate m-Gov service development by opening up data to the private sector
- Focus on personalized services such as Location-Based-Services, while expanding the capability of the government to reach citizens and businesses

Minwon 24 (App) : MOI

Enabling citizens and businesses to access civil services via mobile phone

 Building Management Ledger and Land Registry, Certificate of Resident Registration are offered for reading









Main Screen

Application for Land Registry

Login

Keyboard Security

Inconvenience Report (App) : MOI

Report inconveniences and local problems

 Illegal parking, offensive business in school zones, damaged road, waste, street lighting, etc.







Main Screen Types of Reports Response to Report

The Fastest Way Finder (App): Seoul Metropolitan City
Real Time Traffic Information in Seoul









Main Screen Traffic Information

Mobile Disaster and Emergency Information (App): MPSS

Real Time Disaster Alert and Emergency Report

Disaster alert based on user location and emergency report by attaching photo,
CCTV, and video clip



Real Estate Price Based On Transaction Data (Web): MOLIT



Main Screen

Price Information by Type

Price Information in Detail



Thank you!

NIA 한국정보화진흥원