



Building digital societies in Asia: mobile government and m-services

**Asia-Pacific Regional Forum on e-Government, Smart Cities,
and Digital Societies for Sustainable Development, August 2015**

About the GSMA



MEMBERSHIP



800

mobile operators in
over **220** countries



230 associate
members

PRESENCE



Offices in
9 countries
serving every region



Staff based in
26 countries
representing
36 nationalities

MOBILE REACH



6.6

billion
mobile
connections



3.2 billion
individual subscribers

Challenges faced in Asia

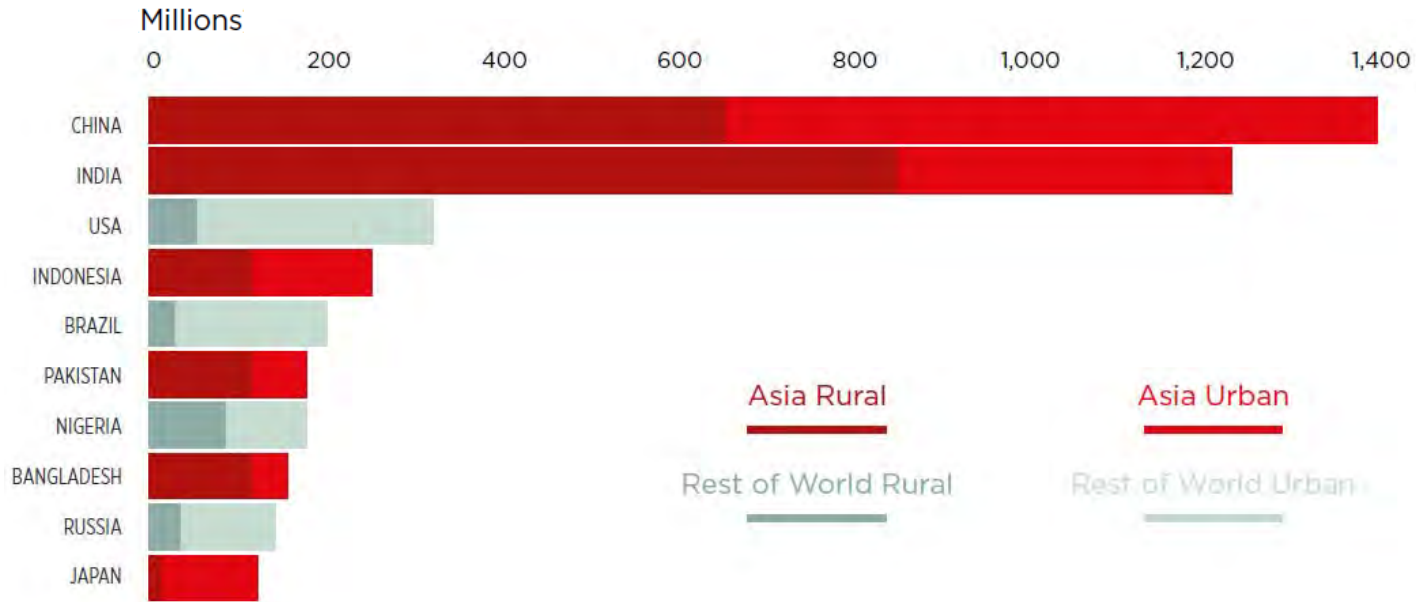


- Low level of access to essential services (health, education, financial)
- Inefficient utilisation of available resources
- Increasing pressure on existing infrastructure and services
- High economic and social costs arising from natural disasters

Challenges faced in Asia



- Problems exacerbated by large rural populations and growing urbanisation



A digital society can help address these issues



- Governments are turning to ICT services to help deal with these challenges
- Many governments in the region have formulated ICT policy frameworks in order to create “digital societies”
- Providing the backdrop to the GSMA’s report are the “Digital Society” policy frameworks of six countries:
 - **Bangladesh** Digital Bangladesh
 - **India** Digital India
 - **Indonesia** Indonesia Broadband Plan
 - **Malaysia** Digital Malaysia
 - **Pakistan** Vision 2025
 - **Thailand** Thailand Digital Economy

What do we mean by a digital society?



Interaction between governments, businesses and citizens via digital technologies

Social and economic benefits around efficiency and productivity gains

Improved wellbeing and living standards of citizens

The three pillars of a digital society



Digital Citizenship

Digital identity
eGovernance
eServices (healthcare,
education, social programs)
Financial inclusion



Digital Lifestyle

Digital literacy
Internet of Things
Smart cities (energy,
transportation and
infrastructure)
Local content



Digital Commerce

Mobile payments
eBusiness
New economic models
(Innovation, job creation
and entrepreneurship)
Industry development

Three types of digital society



Emerging digital society

- Early stages of digitisation
- Emphasis is on digital and financial inclusion
- Most services built around basic information and essential services

Transition digital society

- Personalised services, allowing interaction with public and private institutions online and in real-time
 - e.g. medical records, tax bills, social security
- Early stages of digital lifestyle service development

Advanced digital society

- Integrated public infrastructure and services
- Real-time interaction over multiple digital channels.
- Strong emphasis on efficient utilisation of scarce resources
- Well developed ICT infrastructure to support smart city programmes and IoT services
 - e.g. automotive, logistics and agriculture

Example countries



Bangladesh



Pakistan



India



Indonesia



Malaysia



Thailand



Japan



South Korea

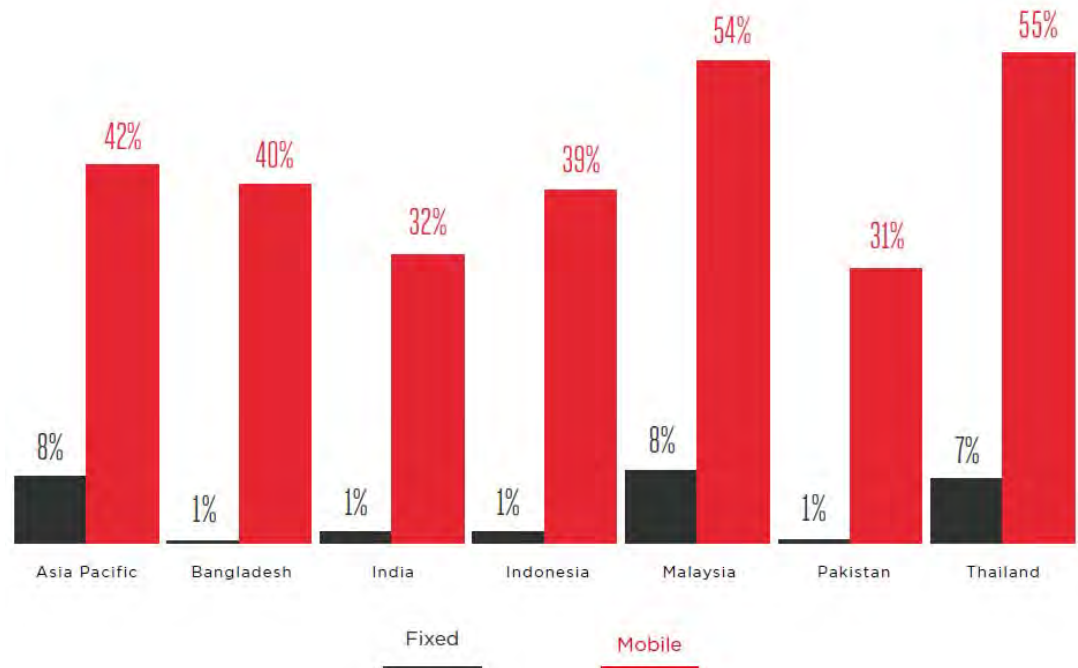
Focus markets

Mobile is the primary technology of connectivity



- Mobile is growing rapidly in Asia
 - Unique subscribers up 10% pa since 2009
 - Connections up 11% pa
 - Mobile broadband connections up 43% pa
 - Smartphone connections up 75% pa
- Mobile penetration is 42% across the region
 - Versus fixed line penetration of only 8%
- Mobile is key for service delivery to rural areas, reducing the digital divide
- Mobile can enable innovative services where other technologies and delivery modes fall short

Fixed versus mobile penetration (2013)

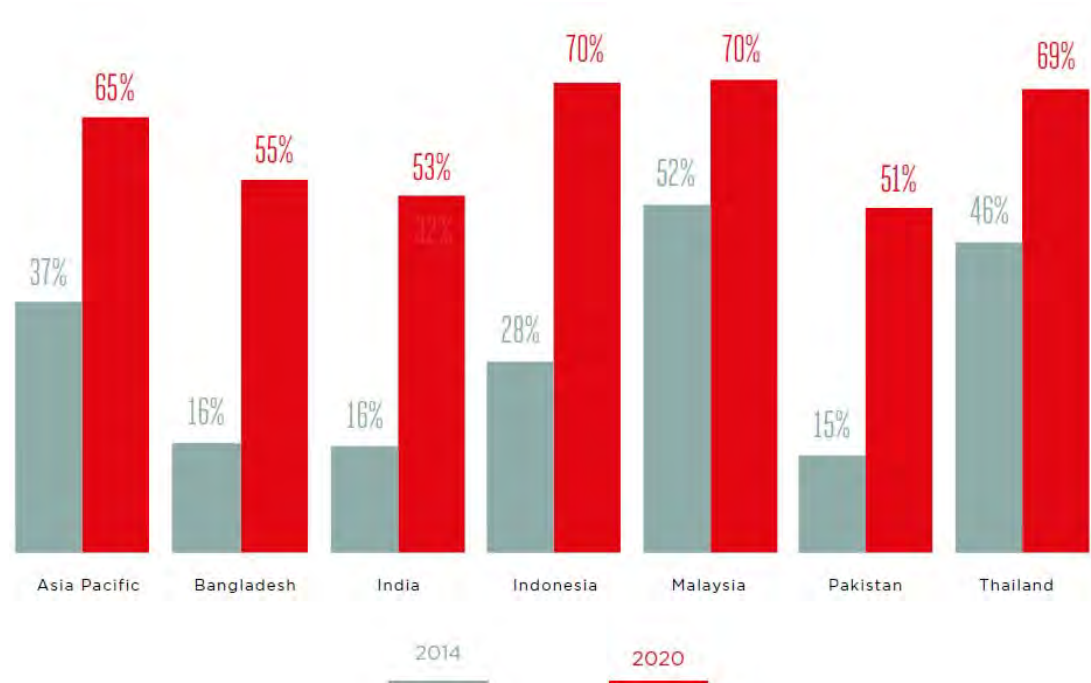


Growing smartphone ownership



- Smartphone adoption currently at 37% across the region
 - Set to reach 65% in Asia by 2020
- Smartphone will be the dominant mobile device in all focus markets by 2020
- Driven by increasing affordability
 - In India, 'entry' tier smartphones (<\$100) accounted for over 40% of total smartphones in 2014
 - Will account for around 60% by 2020
- More smartphones leads to increased VAS usage
- However, must remember that feature phones will still play an important role

Smartphone adoption



Economic benefits



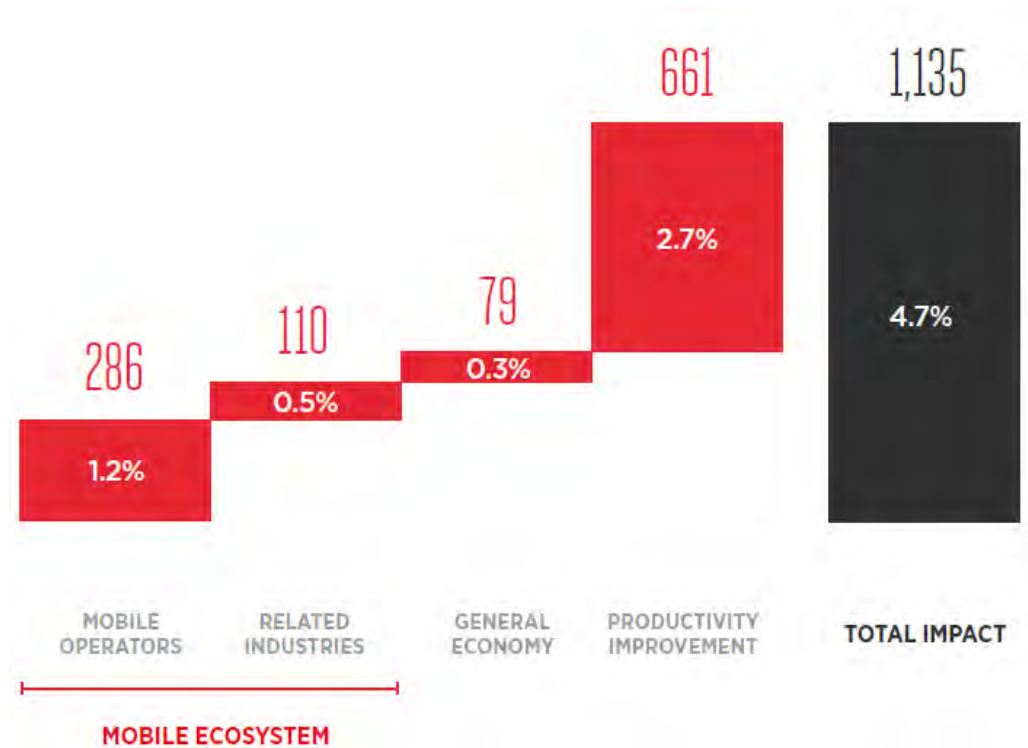
- Mobile contributed 4.7% of Asia Pacific's total GDP in 2014
 - Equivalent to over \$1.1 trillion

- This consists of two direct key elements:
 - mobile operators
 - the wider mobile ecosystem

- And two indirect elements:
 - the broader economy
 - increase in productivity brought about by the use of mobile technologies

- Mobile also makes an important contribution to employment across the region.
 - 12.5 million jobs supported by the mobile industry
 - 6.5 million directly and 6 million indirectly

Contribution to Asia Pacific GDP (2014, \$ billions)

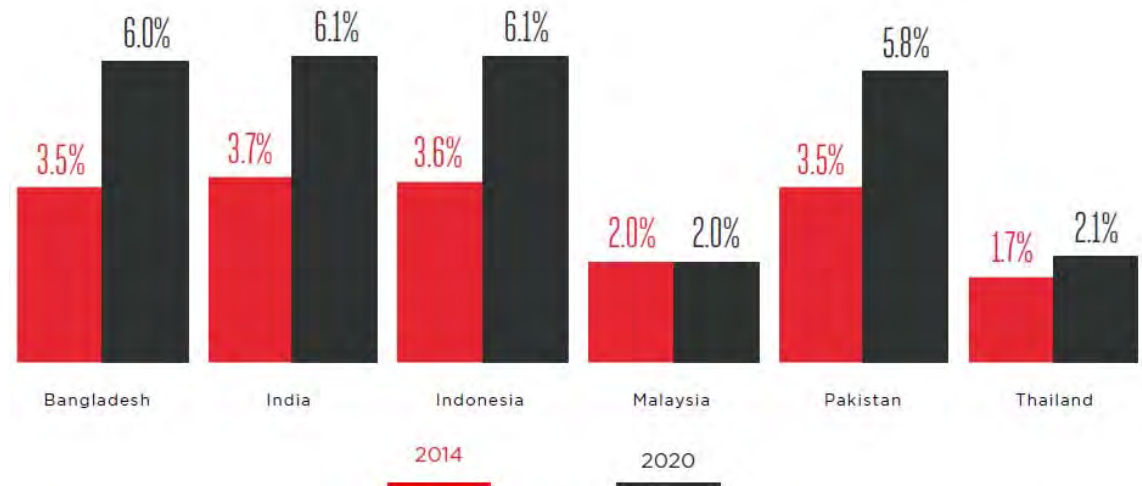


Productivity benefits



- Growth in mobile penetration and usage of mobile services will lead to an increase in productivity
 - Will have an impact of as much as 6% on GDP by 2020
 - Depends on market maturity
- In emerging digital society countries, productivity gains will come from an increase in digital and financial inclusion
 - E.g. Bangladesh and Pakistan
- In transition digital society countries, increased productivity will come from more advanced services, such as smart cities and IoT
 - E.g. Malaysia and Thailand

Productivity improvement impact on GDP



Socioeconomic benefits of mobile



Social benefits



Health

- Facilitates rapid diagnosis of critical conditions
- Improves access to specialised treatment
- Platform for remote monitoring and disease prevention



Food security

- Enhances competitiveness of local farmers
- Facilitates connections between buyers and sellers
- Can be used to monitor irrigation and other equipment, increasing efficiency



Financial inclusion

- Makes it easier for consumers to execute payments
- Offers a platform for further innovation (e.g. contactless payments)
- Contributes to a vibrant economy



Education

- Increases educational opportunities
- Platform for skill-building
- Promotes development in rural and remote areas



Utilities

- Increases efficiency of energy consumption
- Reduces wastage



Disaster management

- Platform for providing coordinated, impactful solutions to recovery
- Facilitates coordinated response mechanisms
- Can reach the majority of the population

Case study: e-Estonia

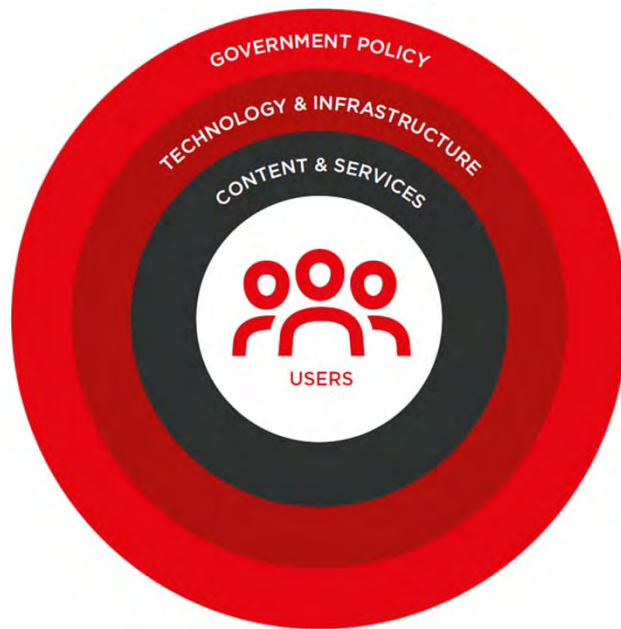


Moving government online through:

- e-Business registry
- e-Cabinet
- e-Prescription
- e-Tax
- Mobile-ID
- Mobile payments



Factors enabling a digital society



Users

- Mobile tax reform
- Online protection
- Improved digital literacy

Content and services

- Fostering innovation
- Accessibility
- eGovernment services

Technology and infrastructure

- Mobile operator investment
- Public subsidies
- Low frequency spectrum
- Infrastructure sharing

Government policy

- Initiate and support digitisation of public services
- Create investor-friendly environment
- Facilitate interconnection of services

Action plan for the six focus markets



Bangladesh

- Rationalize sector specific taxes
- Finalise national telecoms policy and Digital Bangladesh roadmap
- Incentivise mobile operator investment in spectrum
- Level playing field for mobile financial services and infrastructure sharing



India

- Implement National Telecom Policy 2012
- Allocate spectrum for public and civil sector usage
- Promote efficient use of USFs
- Rationalize sector specific taxes



Indonesia

- Accelerate the digital switch-over
- Level playing field for distribution of mobile money
- Finalise spectrum roadmap
- Resist imposition of mobile handset taxes
- Promote efficient use of USFs



Malaysia

- Market based approach for universal mobile coverage
- Promote investor confidence in spectrum



Pakistan

- Rationalize sector specific taxes
- Release the revised national telecom policy
- Develop long-term spectrum roadmap
- Provide incentives to promote rural connectivity



Thailand

- Ensure independence of the regulator
- Develop fair, transparent and consultative auction and regulatory processes
- Harmonise telecoms licenses
- Continue transition from concessionary system to a liberalized licensing regime



Thank you

June 2015