

Building digital societies in Asia

Chris Zull, Interim Director, Asia Digital Societies Policy Forum, Bangkok, 25 June 2015

The GSMA







- 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



Problems exacerbated by large rural populations and rapid urbanisation





- 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 Digital Economy Plan



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





Three types of digital society



I services I private $\begin{bmatrix} @ \\ Bangladesh \\ \hline \\ Bangladesh \\$

Focus markets

Japan



Example countries

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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 scare resources
- Well developed ICT infrastructure to support smart city programmes and IoT services







- 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)







Mobile Internet coverage in Asia over time

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



Socio-economic benefits of mobile





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





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





Social benefits



- 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



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





Factors enabling a digital society





Users

- Mobile tax reform
- Online protection
- Improved digital literacy

Content and services

- Innovation fostering
- 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



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

India

Rationalize sector specific taxes



- 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



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



Pakistan

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



- 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



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