



Science and Technology

...for Development

Theme 2: ICTs for Inclusive Social & Economic Development

3 December 2013





Technology...

...for DEVELOPMENT

- Jobs and GDP
- Essential Ecosystem





Technology for... JOBS and GDP





Digital technologies and applications contribute to the economic strength, societal well-being, and effective governance of a nation





GSMA: The Mobile Economy 2013

The Mobile Ecosystem Benefits the Global Economy

MOBILE ECOSYSTEM IMPACT

Overall, the whole mobile ecosystem's revenue was US\$1,551 billion in 2012, equivalent to 2.2% of global GDP.

Ecosystem Contribution to Public Funding

\$490m \$550m \$550m 2017

MOBILE WILL CONTRIBUTE

\$2.5tn

TO PUBLIC FUNDING OVER THE 5 YEARS 2013-2017

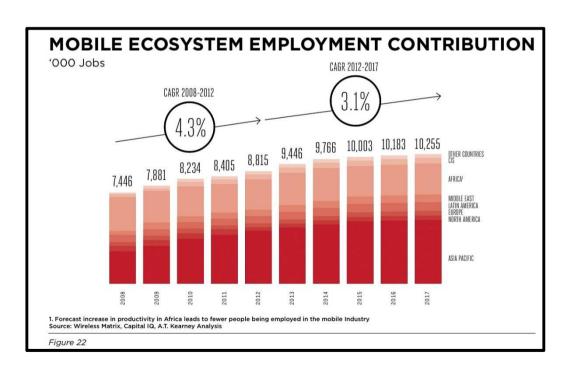
Source: Wireless Matrix, A.T. Kearney Analysis







GSMA: The Mobile Economy 2013



Ecosystem Jobs Created Adding 1.3m jobs in the next 5 years

Source: Wireless Matrix, A.T. Kearney Analysis





Region	GDP Impact (US\$ billions)	Number of Jobs created
Africa	8.3	618,699
Commonwealth of Independent States	11.8	340,820
East Asia and the Pacific	55.8	2,370,241
Eastern Europe	7.0	159,015
Latin America and the Caribbean	27.0	636,737
Middle East and North Africa	16.5	377,772
North America	25.3	167,650
South Asia	9.4	1,117,753
Western Europe	31.5	213,578
Total	192.6	6,002,266





Region	GDP Impact (US\$ billions)	Number of Jobs created
Africa	8.3	618,699
Commonwealth of Independent States	11.8	340,820
East Asia and the Pacific	55.8	2,370,241
Eastern Europe	7.0	159,015
Latin America and the Caribbean	27.0	636,737
Middle East and North Africa	16.5	377,772
North America	25.3	167,650
South Asia	9.4	1,117,753
Western Europe	31.5	213,578
Total	192.6	6,002,266
Advanced Economies: Emerging Economies:	29% 71%	6% 94%





Digital Divide

Bottom of the
 Pyramid (BOP)
 = 3.9 Billion People
 in Emerging Markets

Digitization Challenge

Digitization Benefits





Digital Divide

Bottom of the Pyramid (BOP)
 = 3.9 Billion People in Emerging Markets

Digitization Challenge

- Digitization Costs for BOP is placed at: US\$ 1.4T over 10 years
- Funding Gap for Digitizing BOP is placed at: US\$ 1.2T

Digitization Benefits





Digital Divide

Bottom of the Pyramid (BOP)
 = 3.9 Billion People in Emerging Markets

Digitization Challenge

- Digitization Costs for BOP is placed at: US\$ 1.4T over 10 years
- Funding Gap for Digitizing BOP is is US\$ 1.2T

Digitization Benefits

- For the BOP
 - **US\$** 4.4T => 300% Return
 - 64M Jobs
 - Move 580M People Above Poverty Line
- For Emerging Economies
 - **US**\$ 6.3T => 300% Return
 - 77M Jobs
 - Unlocking >US\$ 700B Market for Private Sector





The bottom of the pyramid represents the greatest opportunity for capturing the gains in job creation and GDP growth associated with digitization...





Technology... as an ECOSYSTEM

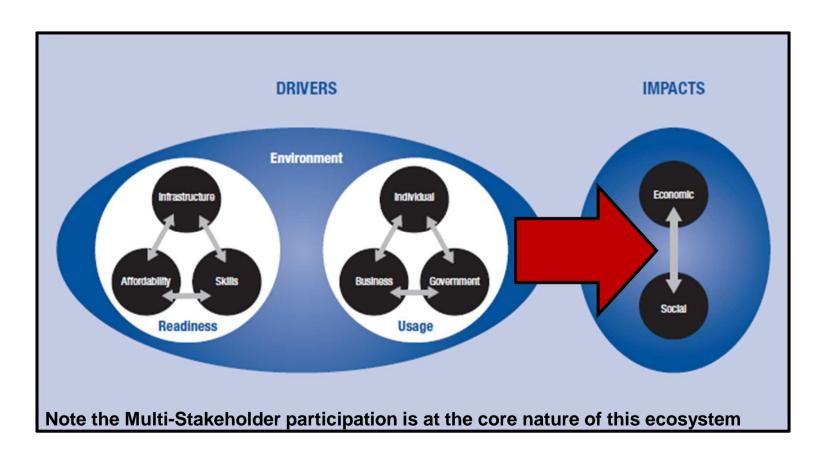




"Digitization" - the mass adoption of connected digital services by consumers, enterprises, and governments

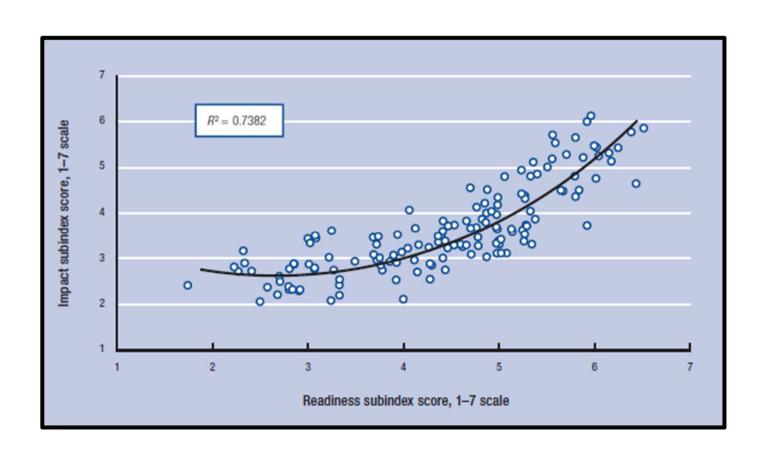






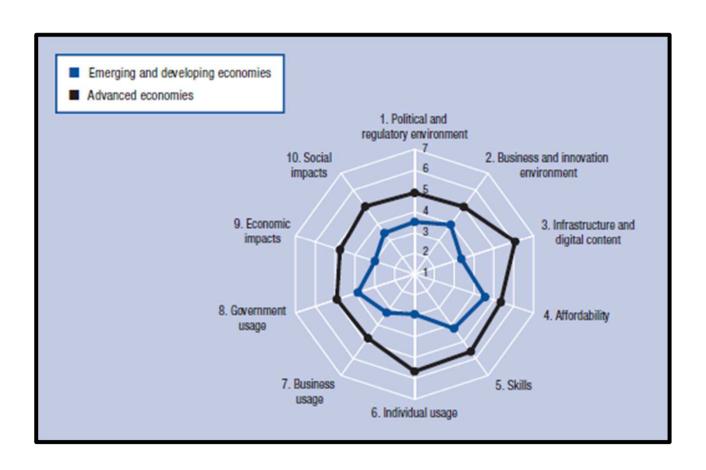














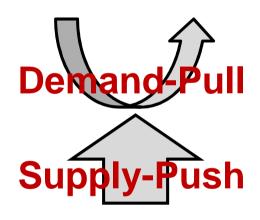


User Adoption:

Government, Business and Citizens

Voice & Data Networks **Applications** and Content

Facilitating Environment:









User Adoption:

Government, Business and Citizens

Voice & Data Networks

Applications and Content

Facilitating Environment:

- National Strategies
- Broadband Plans
- Competitive Environment
- Effective Regulator
- **♦ USAFs**
- Cyber Security
- Privacy





User Adoption:

Government, Business and Citizens

Voice & Data

Networks

Applications and Content

Facilitating Environment:

- SharedNationalBroadbandBackbone
- Shared Civil Works
- Low-Cost
 Wireless
 Distribution
 for Rural
 Population





User Adoption:

Government, Business and Citizens

Voice & Data Networks

Applications and Content

Facilitating Environment:

- Local Language Content
- Local Public & Private Sector Adoption
- Local Applications Development
- Local Hosting
- Security & Privacy





User Adoption:

Government, Business and Citizens

Voice & Data Networks

Applications and Content

Facilitating Environment:

- Language and Computer Literacies
- Early School Adoption
- Gender & HandicapPrograms
- Public & Private Sector Adoption
- Broad Access
- Affordability





Summary

- Technology is Development
- An Ecosystem approach is Essential
- Multi-Stakeholder engagement is at the Core
- Public Sector sets the Platform
- Value is Derived from Applications and Content
- Access Expands the Participation by All
- Value is Realized through Mass User Adoption





Thank You!

Darrell Owen
USAID – GBI Program
dowen@usaid.gov
+1(703)980-4053