

# Setting the Scene: An Overview of Global EcoSystem



WORLD BANK GROUP

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Arab Regulators meeting ITU-INPT May 2015, Rabat

**28 %**

Proportion of households with Internet access in developing countries in 2013, up from 12% in 2008

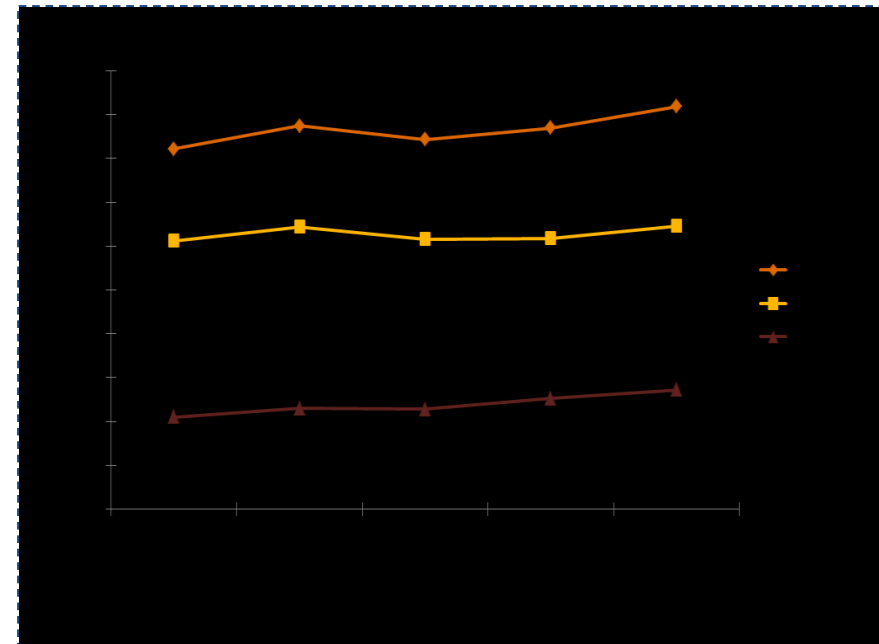
The ICT sector is fast growing and access to ICTs is rapidly increasing in developing countries.

### Key Trends

- ✓ Increased adoption of mobile broadband
- ✓ Increased deployment of WiMAX services
- ✓ Increase in data traffic
- ✓ Exploding Global traffic levels (81 Exabyte/month in M&F Bband in 2015)

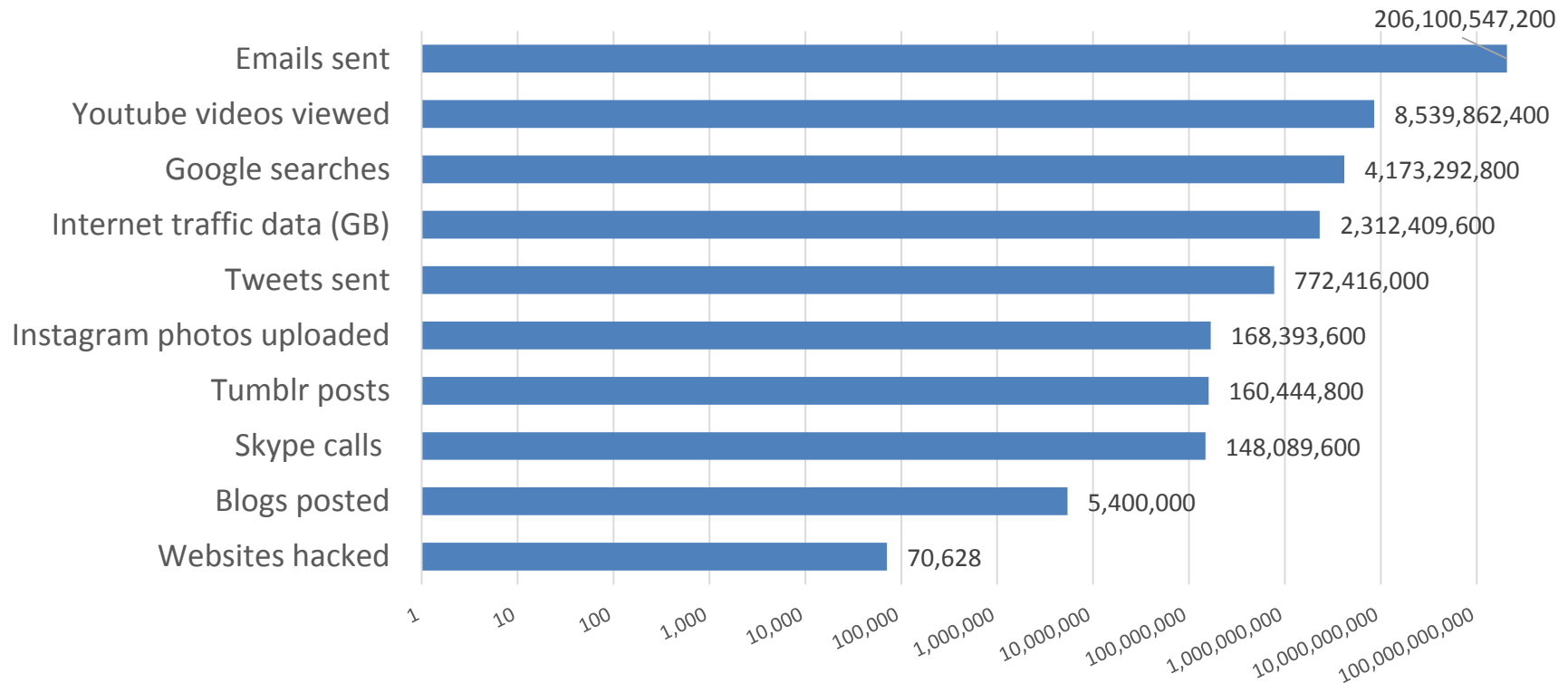
**1.1 bn**

No. of households worldwide that are not yet connected to the Internet, and that 90% of these are in the developing world



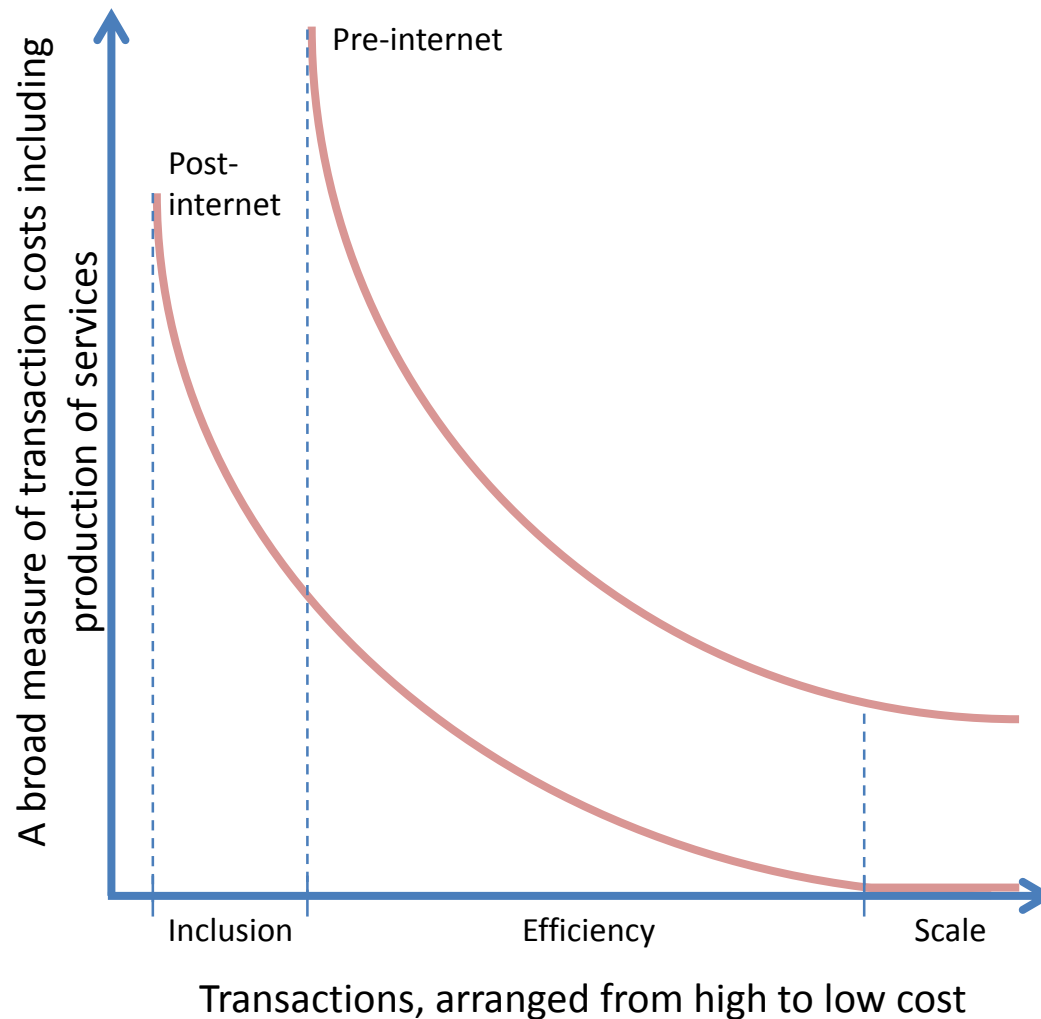
# There are millions of reasons to like the internet

## A typical day in the life of the internet

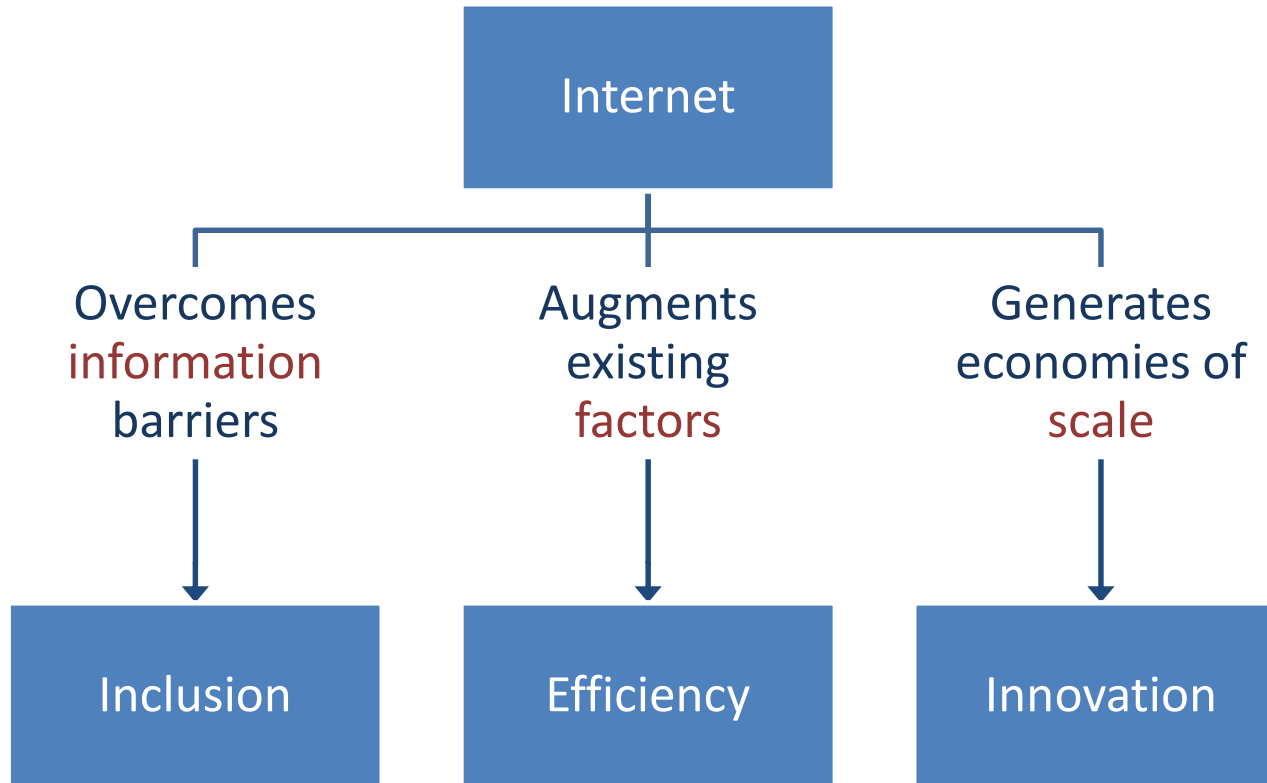


*Is accelerating development one of them?*

# How the internet affects development



# How the internet affects development



# Significant digital divide ...

6 billion without broadband

4 billion without internet

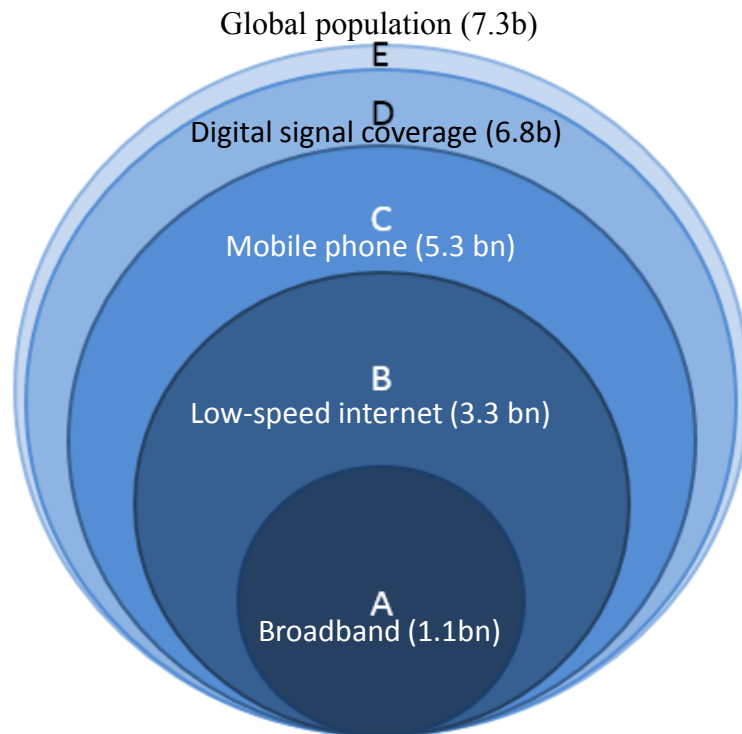
2 billion without mobile phones

0.5 billion without a digital signal

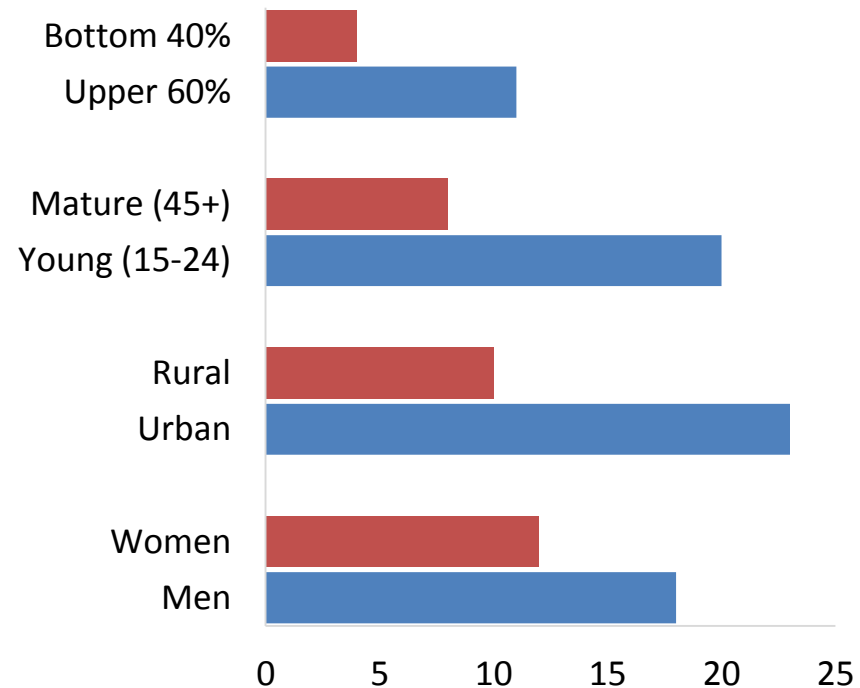
*Source: WDR 2016 team based on Research ICT Africa and ITU data*

# Significant digital divide

World: The internet is yet to reach most of the poor



Africa: Digital divide along income, age, geography and gender dimensions (% of individuals)



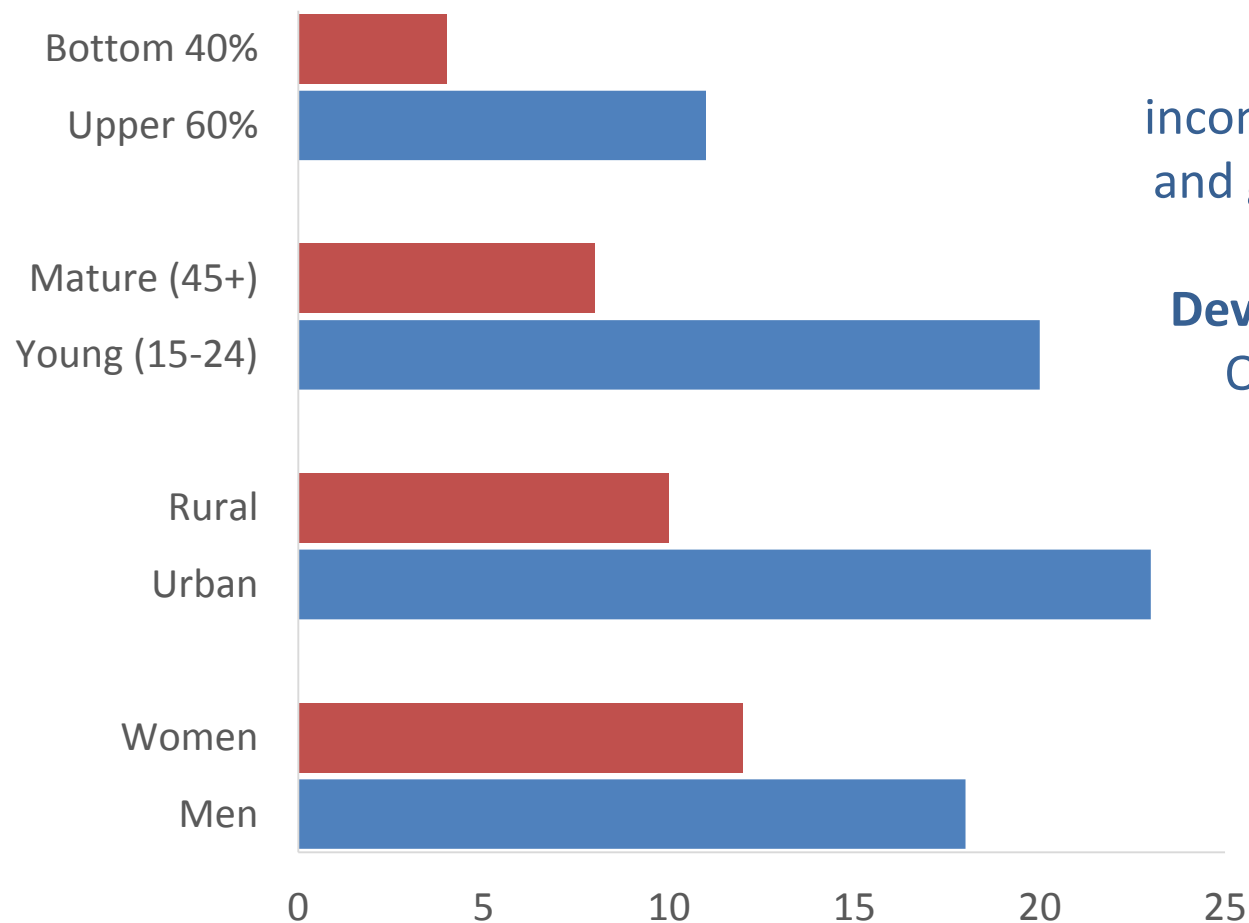
# ... and persistent disparities in access

## Africa:

Digital divide along income, age, geography and gender dimensions (% of individuals)

## Developing Countries:

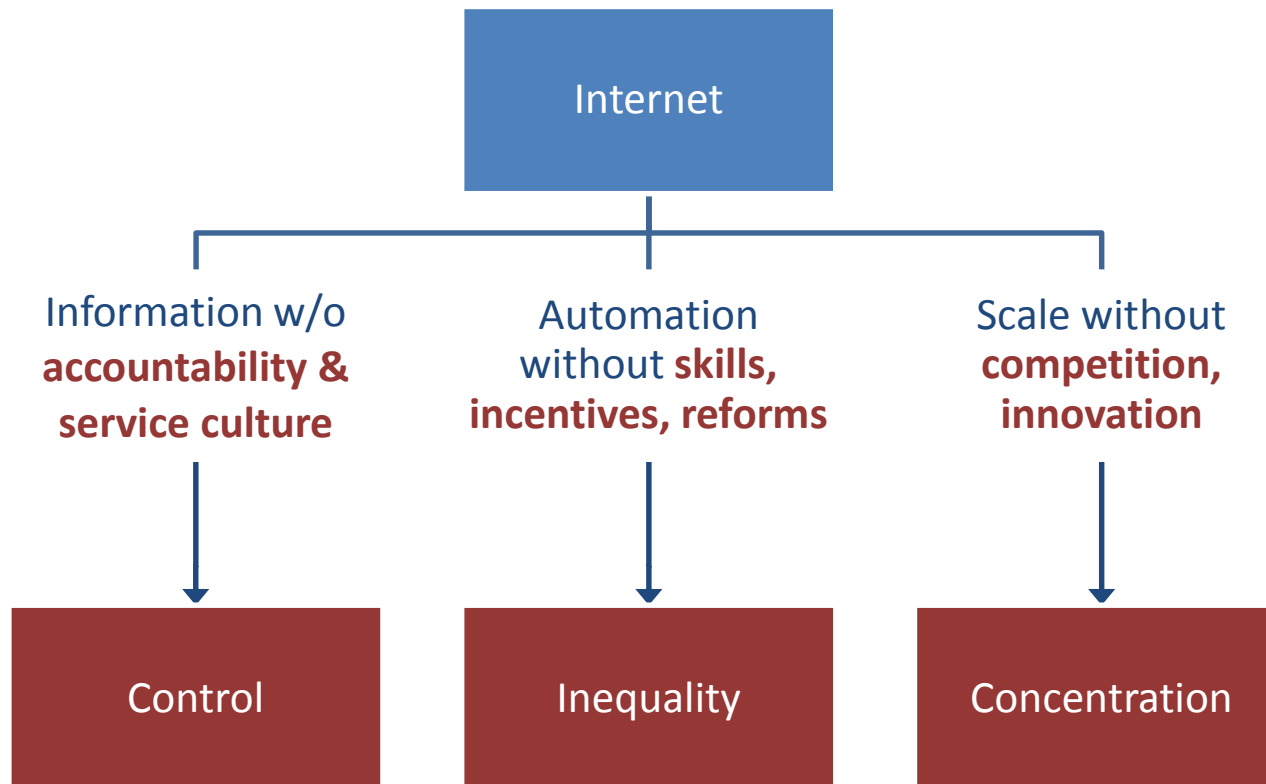
Only **30%** of (urban) workers use any digital technology at work



Source: WDR 2016 team, based on Gallup World Poll, Research ICT Africa



# No digital transformation without strong analog foundations



# The Opportunity

Improving access to broadband Internet service is an increasingly critical step toward economic and social inclusion.

Raising Internet penetration in all developing countries from the current level of approximately 35% of the population to 75% would add as much as \$2 trillion to their collective GDP and create more than 140 million jobs.

# ICT empowers workers

## Microwork

\$1billion estimated market size and could grow to about \$5 billion in 5 years (Odesk)

## Online contracting

70% of businesses hire freelancers to fill a temporary talent gap in their organization  
- Elance -

## Job matching

Users (job seekers)  
1million  
Employers 60,000  
- Babajob -

## Impact sourcing

Helps increase employees' incomes between 40% and 200%  
- Accenture -

# The Challenge

- *Availability*: Only about 35% of the population in developing countries has access to the Internet (versus about 80% in advanced economies).
- *Affordability*: The cost of broadband subscription in the developing world averages about 30% of GDP (versus 5% recommended by A4AI & less than 2% in advanced economies,).
- *Capability*: More than half of ITC regulators still have a traditional telecom focus, according to the UN Broadband Commission, and markets are not conducive to modernizing investments.

To reach the goals for availability and affordability, the policy environment must be updated to (1) boost competition and (2) create incentives to better exploit existing networks and (3) to create new, faster ones. Often, an essential step by regulators is unifying a fragmented regional market (low cost, capital intensive, high impact)

# Dimensions and indicators of ICT

## ICT Dimensions

### ICT Infrastructure Availability

- Electricity production
- **Mobile network coverage**
- International Internet bandwidth
- **Secure Internet servers**
- **Accessibility of digital content**

### ICT Affordability

- **Prepaid mobile cellular tariffs**
- Fixed broadband Internet tariffs
- Internet and telephony sectors competition index

### Policy Framework and Business Environment\*

- **Laws relating to ICTs**
- Efficiency of legal system in settling disputes
- Efficiency of legal system in regulations
- Intellectual property protection
- Number of procedures to enforce contract
- Number of days to enforce a contract
- Availability of latest technologies
- Venture capital availability

### Human Capital and Skill Development

- Quality of educational system
- Quality of math and science education
- Secondary education gross enrollment
- Adult literacy rate
- **Tertiary education gross enrollment rate**

### ICT Usage\*

- **Mobile phone subscriptions**
- Individuals using the Internet
- Households with computer
- Households with Internet access
- **Fixed broadband Internet subscriptions**
- **Mobile broadband Internet subscriptions**
- Use of virtual social networks

### ICT Sector Status

- **ICT service exports**
- ICT goods imports
- ICT goods exports

\* Some select indicators have been listed

Details of sources for these dimensions and indicators are provided in the detailed study

## The digital agenda:

Making internet access universal, affordable, open and safe

### Supply side issues

- Competition policy
- Effective telecom/internet regulation
- Optimizing Infrastructure investments
- Improve revenue sharing models
- Public-private partnerships
- Agile, cross-cutting regulation
- A new deal is needed



### Demand side issues

- Multi-stakeholder governance model
- Content, Quality, Censorship
- Protecting personal privacy
- Cybersecurity
- Skills for digital jobs



*"On the Internet, nobody knows you're a dog."*

# Analog foundations for a digital economy

## **Regulations** that promote competition, investments and entry

- Remove barriers to entry, adoption, roll-out
- Competition regulation and enforcement
- Platform/Infrastructure level competition
- Encourage innovation on business models and sharing

## **Skills** to leverage digital opportunities

- Foundational skills and basic ICT literacy
- Education Reform at all levels for ICT citizens
- Prepare for a career and not jobs- life long learning

The internet  
can help  
improve these  
complements

## Capable, agile and accountable **institutions**

- Mobile phone based services and monitoring for citizens
- e-government delivery for citizens and businesses
- Participatory policymaking and digital engagement