

world development report

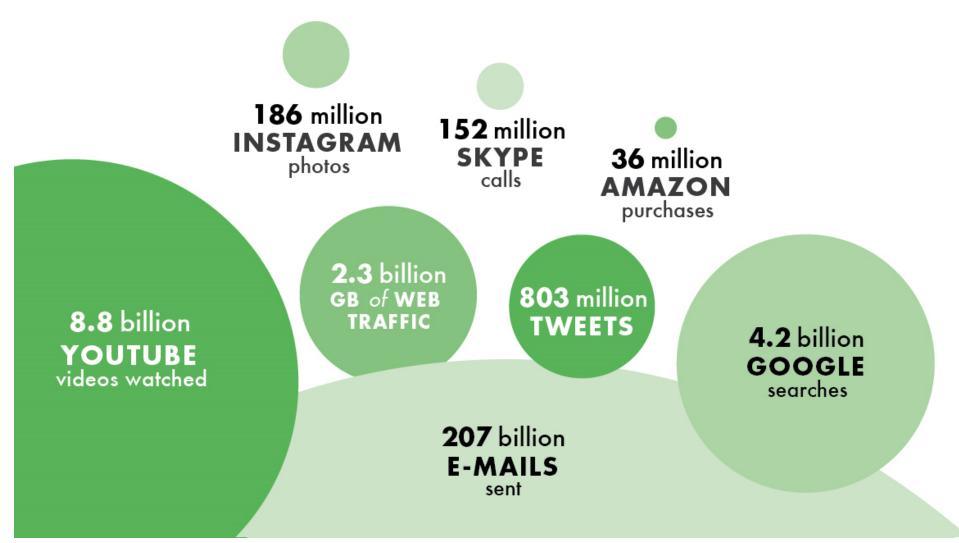
2016

DIGITAL DIVIDENDS

#wdr2016 www.worldbank.org/wdr2016 Deepak Mishra
Lead Economist and Co-director WDR 2016

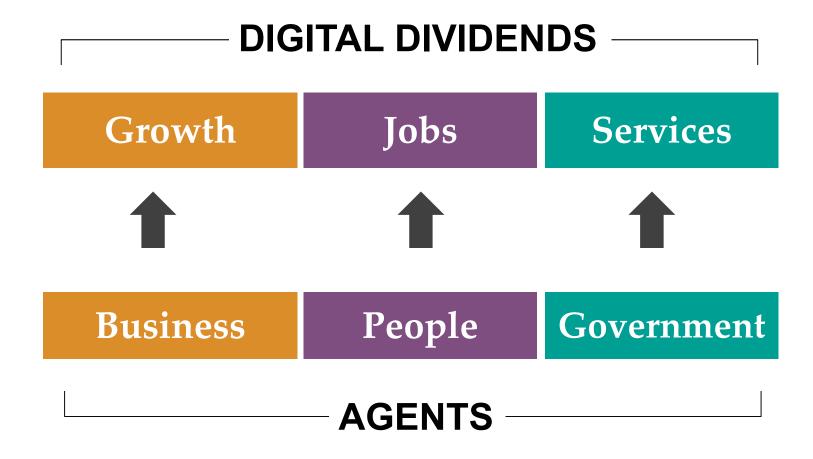
Digital revolution has brought many private benefits

A typical day in the life of the internet



SOURCE: WDR 2016 team; http://www.internetlivestats.com/one-second/ (As compiled on May 29, 2015)

But are countries reaping sizable digital dividends?



Are the benefits reaching everyone, everywhere?

Digital technologies are transforming:

Business

People's lives

Governments







Number of small & medium enterprises on Taobao (Alibaba):

5 MILLION & COUNTING

Number of mobile money accounts worldwide:

300 MILLION & COUNTING

(end of 2014)

Indians with digital identity:

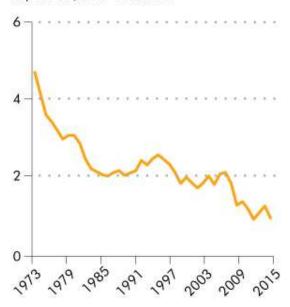
950 MILLION & COUNTING

SOURCE: WDR 2016 Team

But the aggregate impacts of digital technologies – growth, jobs and governance—have fallen short and are unevenly distributed

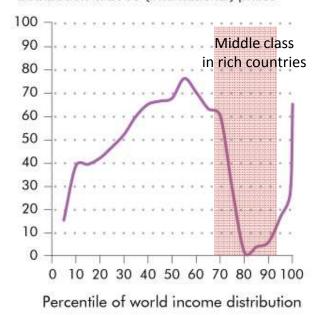
a. Global productivity

Five-year moving average of median growth of labor productivity per hour worked, in percent, in 87 countries



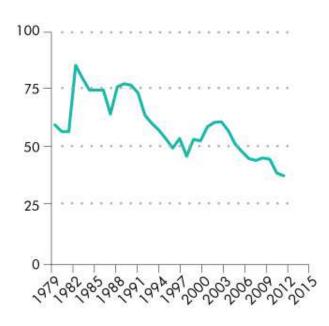
b. Global inequality

Percentage change in real income between 1988 and 2008 at different levels of world income distribution in 2005 (international) prices



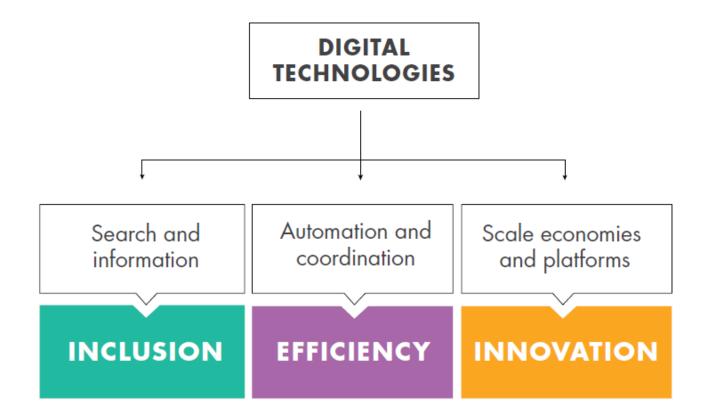
c. Global governance

Share of elections that are free and fair (%)



Not because of digital technologies, but in spite of them

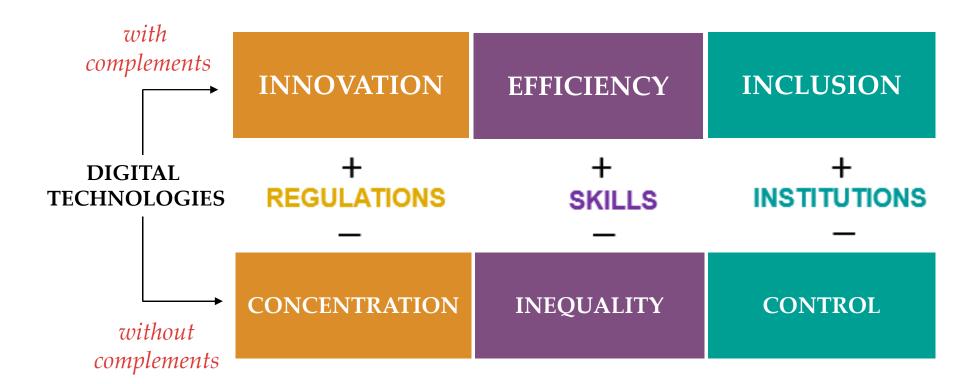
The main mechanisms to promote development



Expand the information base, lower information costs and create information goods

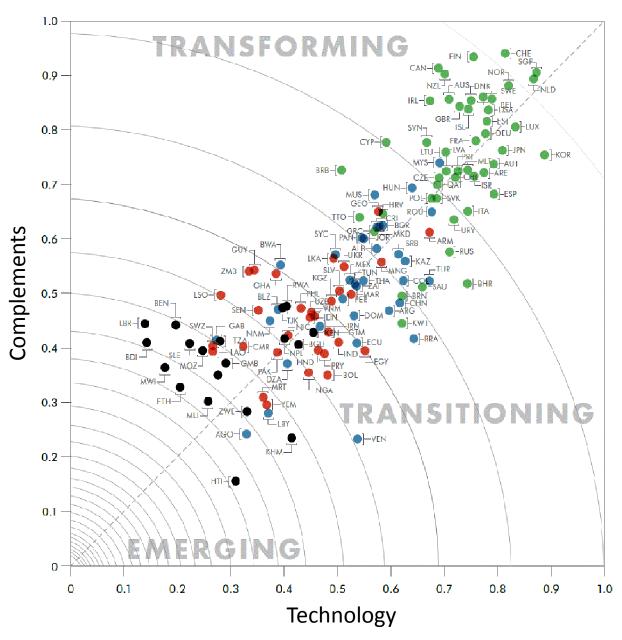
SOURCE: WDR 2016

Digital technologies hold benefits as well as risks



What are those complements?

SOURCE: WDR 2016



Race between technology and complements

- High-income
- Upper-middle-income
- Lower-middle-income
- Low-income

Complements: Index of quality of institutions, skills and regulations.

Technology: Digital adoption index - businesses, people and governments.

SOURCE: WDR 2016 team. For more details see figure 5.3 in the full Report.

The WDR 2016 proposes policies at three levels

SECTORAL

NATIONAL

GLOBAL

SECTORAL POLICIES

Overcoming digital divides across people, firms, and governments



6 BILLION without BROADBAND



4 BILLION without INTERNET



2 BILLION without MOBILE PHONES



0.4 BILLION without A DIGITAL SIGNAL

Divides persist between and within countries—in access and capability

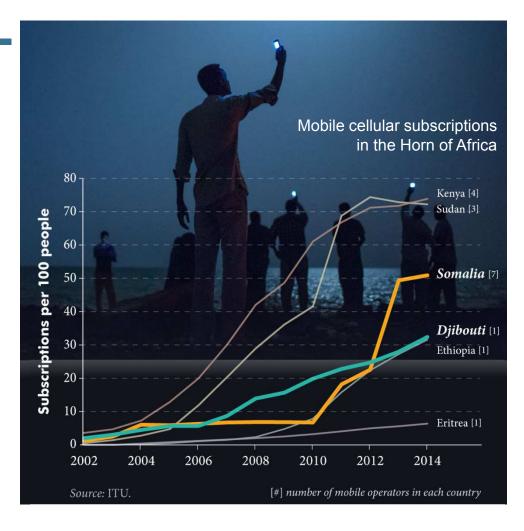
SOURCE: WDR 2016 team based on Research ICT Africa and ITU data

SECTORAL POLICIES

Making internet access universal, affordable, open and safe

SUPPLY SIDE ISSUES

- Competition policy
- Public-private partnerships
- Effective telecom & internet regulation



SECTORAL POLICIES

Making internet access universal, affordable, open and safe

DEMAND SIDE ISSUES

- Protecting personal privacy
- Cybersecurity
- Censorship and content filtering

1993



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

2014

"Now Google and its like are surveillance machines that know not only that you're a dog but whether you have fleas and which brand of meaty chunks you prefer." (Economist)

NATIONAL PRIORITIES

Analog foundations for a digital economy

EMERGING TRANSITIONING TRANSFORMING REGULATIONS Competition **Platform** Remove barriers regulation and that promote competition to adoption enforcement competition and entry **SKILLS** Foundational skills **Facilitate** Prepare for and basic ICT lifelong careers to leverage instead of jobs literacy learning digital opportunities **Participatory** e-government Mobile phone-**INSTITUTIONS** policy making delivery and based services that are capable and digital citizen and monitoring and accountable collaboration engagement

SOURCE: WDR 2016 team.

GLOBAL COOPERATION

International consensus on cross-border issues

- A governance model for an open and safe internet
- Removing barriers to a global digital market
- Leveraging information for sustainable development
 - Get wired
 - Build platforms
 - Go global

Digital development strategies beyond ICT

Connectivity + Complements → Digital Dividends

- Regulations that allow firms to connect and compete
- Skills that leverage technology
- Institutions that are accountable and capable

Digital technologies add new dimensions to development

- They amplify the impact of good (and bad) policies → Failure to reform means falling further behind
- While not a short-cut to development, they can be an accelerator, by raising the quality of complements

The payoff

Increasing digital dividends:
 Faster growth, more jobs and better services

