Digital Government and ICTs in the service of SDGs

The Transport and ICT Global Practice

Smart Connections for All

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Digital technologies are changing the world

Electronic payments displace traditional forms of payment

- According to Gartner, by 2018, over 50% of Internet users of United States, Japan and Europe will make mobile payments with smartphones, and by 2022 the cost of the financial industry expense will be reduced by blockchains to **20 billion**. $ per year

E-commerce is becoming a major driver of the growth of SMEs

- According to Frost and Sullivan Research 27% of the total volume of world trade will take place over the Internet and will reach **25 bln**. $ by 2020

The role of social networks continues to increase

- **45%** of the 3.2 billion Internet users around the world are using Facebook

- In 2014, the daily number of messages on Twitter has grown to **155 million. 55** million a year earlier

More devices will be connected to the Internet IoT

- According to Cisco estimates that 50 billion devices will be connected to the Internet (IoT), which will allow annual savings of up to **8.9 bln**. $ by 2020

Drones and robots will replace many of the traditional forms of labor

- Gartner predicts over 5 years drones become standard equipment in industry and agriculture, and in 2030 drones and robots will replace **one third** of the global workforce

Big data will become an important tool in the growth of the country's competitiveness

- According to the Institute Demos Europa correct analysis and extracting value from big data can bring the countries of the European Union **206 billion. €** by 2020

SOURCE: McKinsey Group, Gartner, Cisco, Frost and Sullivan

Challenges in connectivity: Access, Capability, Affordability and Digital Divide

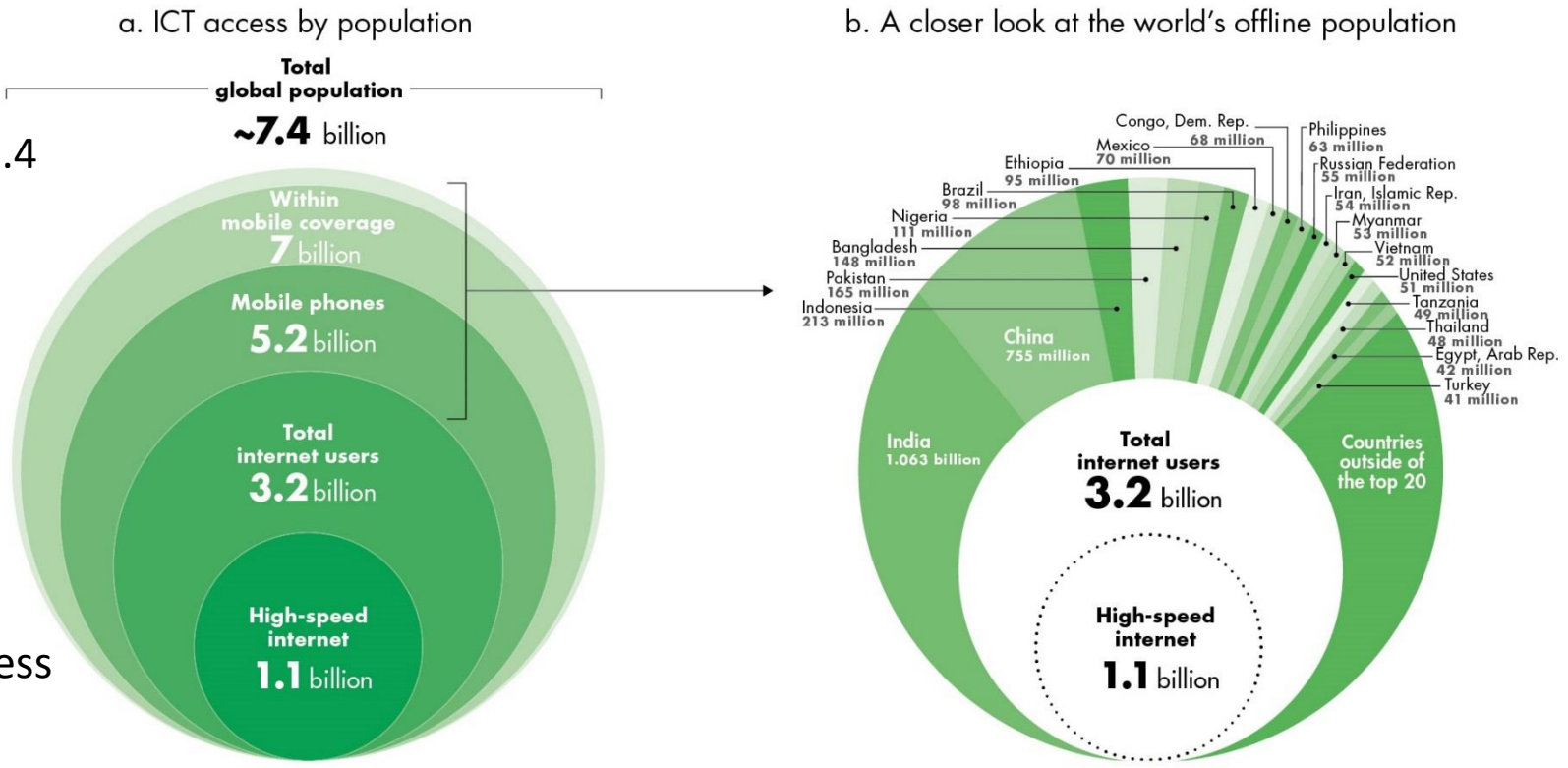
The Internet remains unavailable, inaccessible and unaffordable to a majority of the world's population

From a global population of 7.4 billion

Only 3.2 billion people have internet access

Only 1.1 billion people have Broadband access

Source: WDR 2016



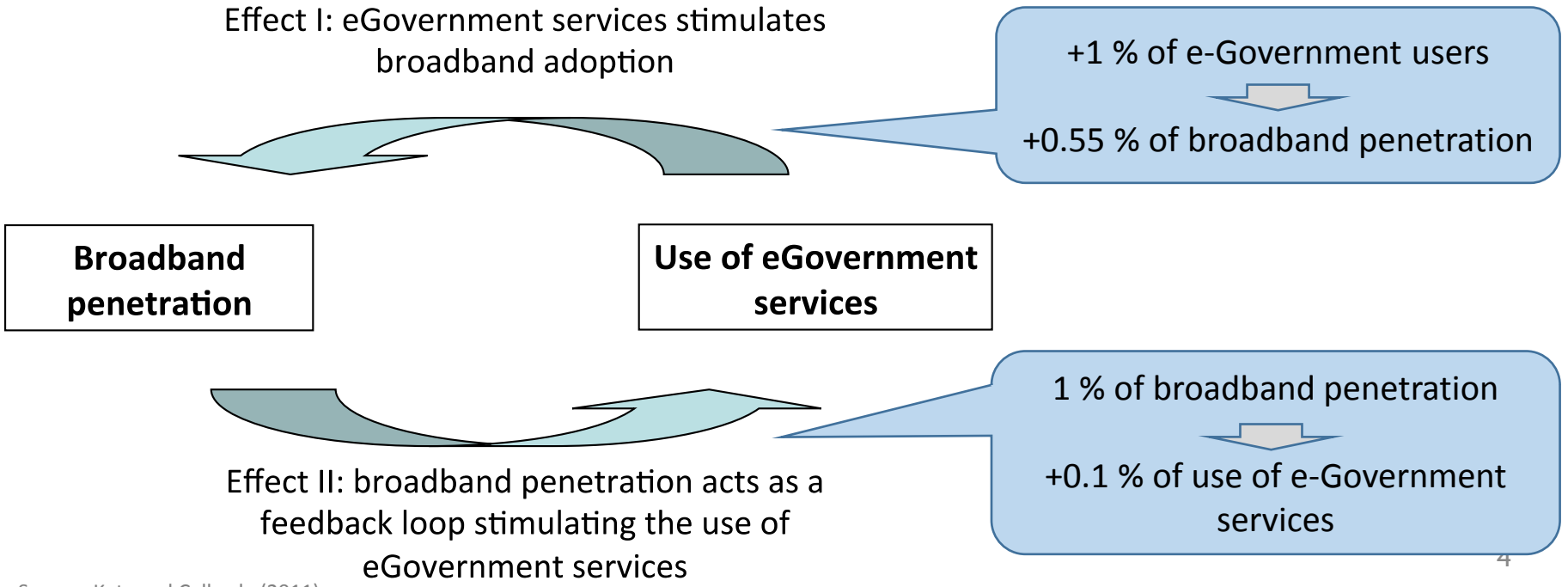
Sources: World Bank 2015; Meeker 2015; ITU 2015; GSMA, https://gsmaintelligence.com/; UN Population Division 2014. Data at http://bit.do/WDR2016-FigO_5.

Note: High-speed internet (broadband) includes the total number of fixed-line broadband subscriptions (such as DSL, cable modems, fiber optics), and the total number of 4G/LTE mobile subscriptions, minus a correcting factor to allow for those who have both types of access. 4G = fourth generation; DSL = digital subscriber line; ICT = information and communication technology; LTE = Long Term Evolution.

Two key foundations for digital government

- (i) Broadband Infrastructure
- (ii) Digital Government Platforms
- These two are considered positively inter-related.

Example: Statistical research in Colombia shows positive mutual influence between Broadband and e-Government enabled by Digital Government Platforms.



Source: Katz and Callorda (2011)

Principles of Digital Government

1. Digital by Default
2. **Open** and Secure by Design
3. Data-driven (not document driven)
4. Transformational by Design
5. Mobile and Cloud First

Our Approaches towards Digital Government for SDGs

The World Bank helps client countries form digital government platforms through:

- Establishment of the enabling environment cross-cutting approach
  - Formulation of National ICT Action Plan and Digital/e-Government strategy
  - Inter-ministry institutional coordination mechanisms and change management
- Digital platforms and shared infrastructure, services, databases, of e-Government services, in addition to sector-specific assistance
  - eID/Digital ID
  - Enterprise Architecture, interoperability
  - Computing and Hosting Environment (Data Centers and Cloud)
  - Government WANs
  - MIS
  - Open source policies, open data standard
- Improvement of e-Government services for better public service delivery
  - Back-end systems, Transactions (G2C, G2B, G2G), Capacity building
- Integration with mobile applications for greater reach to the disadvantaged target
  - Greater access in remote areas, by females and unemployed youth
  - Mobile-money services towards greater financial inclusion
- Promotion of ICT “trust” policies
  - Cybersecurity, data and privacy protection, and intellectual property
- Engagement of private sector for improving digital connectivity and platforms
  - Effective provision of knowledge and solutions, Partnership (i.e. PPP)

Trends we are seeing today:

Infrastructure:

- Single, integrated, platform for government services(Build once, re-use always)
- Mandated use of cross-government shared service components Unified data shared across public sector, and beyond
- New supply models (service contracts, PPPs)
- Integrated cyber-security and privacy
- Integrated sensors, IoT, Precision Agriculture, Smart Cities
- Data analytics

- **eServices:**
  - Transformational by design
  - Open and secure by design
  - Digital from end to end
  - User-centered service design (customer as a focus, Identity-based)
  - Mobile-centric – and able to accommodate new devices too

Elements of successful digital development

Leadership

Technology/ Infrastructure

Policy/Legal Framework

Successful Digital Government program

Innovation Support

Institutional set up

Partnerships

Citizen engagement

Capacity Building

Effective communication

Framework for Digital Government Platforms

Holistic approach is needed to effectively deliver public services.

Stakeholders

Government

Citizens

Businesses

Donors/NGO/CSO





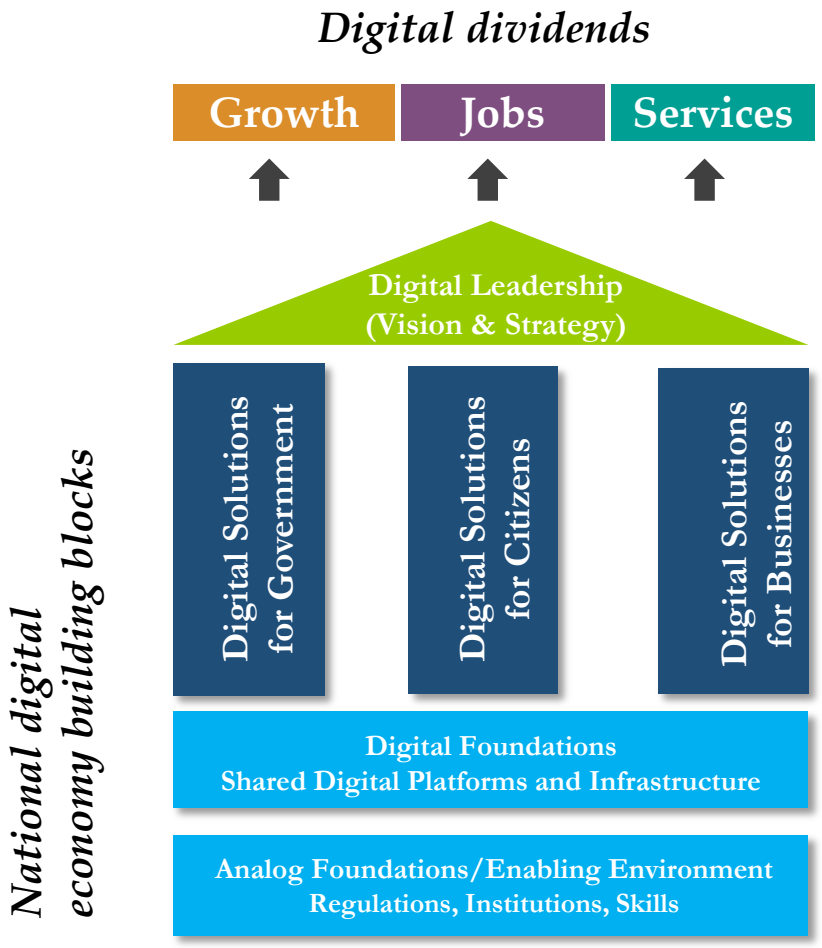


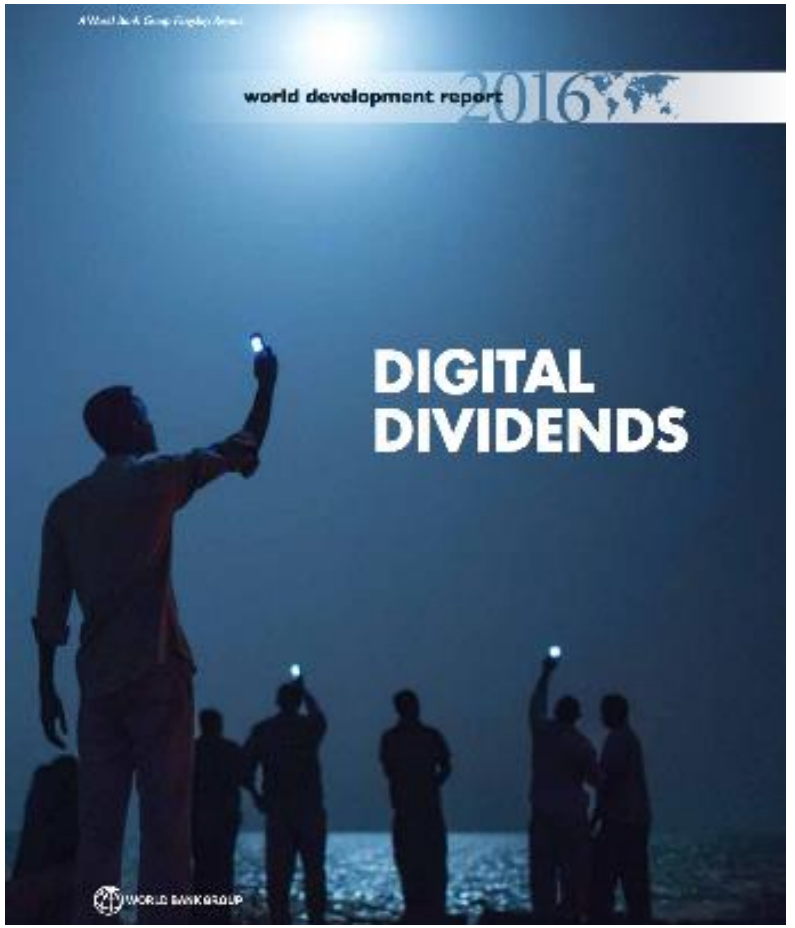

Solutions						
	Health & Welfare Social Svc	Education & Learning	Citizen/Busines Transactions	Revenue& Trade Facilitation	Finances Banking	Public Works Utilities Transport

Digital Enablers: Broadband, Cloud, eID, GIS, Inter-Operability , Data & Analytics etc

Analog Enablers: Laws, Regulations, Standards, Governance, Skills etc

Key framework for building a digital economy: Skills



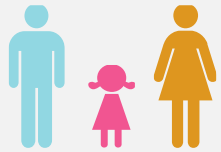


1.1 billion individuals are unable to prove their identity Identification

An estimated

1.1 billion people

are unable to prove their identity



The lack of ID makes it difficult for individuals to...

Access financial accounts and credit

Own, transfer or inherit property

Prove eligibility for and access social and health benefits

Vote in elections

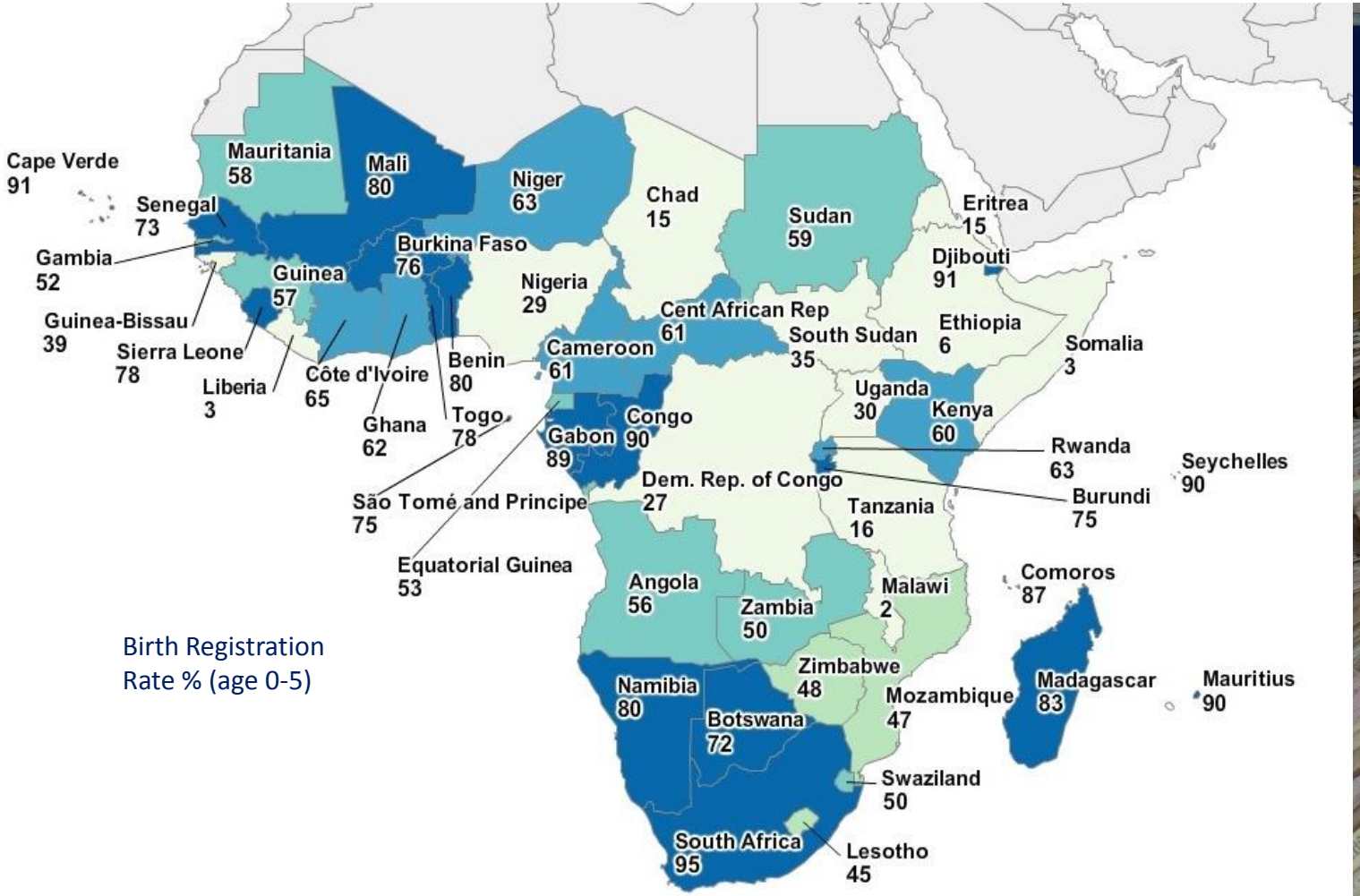
Cross borders safely and legally

...which results in...

- Economic, political and social **exclusion**
- **Service delivery** and **governance challenges**, e.g. leakages and ineffective targeting in programs
- **Difficulty tracking development progress** due to no or unreliable data
- **Missed opportunities** for innovation, digital inclusion and e-government

Large proportions come from **vulnerable populations**: the poor, people living in rural/remote areas, children, migrant refugees and stateless persons.

…Full Coverage is still a Way Off



Birth Registration
Rate % (age 0-5)

Source: UNICEF 2013

Lessons Learnt

- Think Customer, Not Government Agency
- Reinvent Government, Don’t Simply Automate It
- Early priority on getting the key databases and data platforms established – citizen/identity, companies, land, geospatial data infrastructure and so on. This will save you the trouble of having to align different databases later.
- Priority on common building blocks – e-payments, notifications, e-identity and so on – many of which can be projected through SMS.
- A single portal and a cross-government approach from **the start (!)**
- Build and capitalize on partnerships early on with solid, reliable, and honest companies .
- Digital development Partnership Launch

Thank you for your attention.

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