Digital Identification for inclusive access to services

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The Transport and ICT Global Practice
Smart Connections for All

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## Digital technologies are changing the world

<table>
<thead>
<tr>
<th>Electronic payments displace traditional forms of payment</th>
<th>E-commerce is becoming a major driver of the growth of SMEs</th>
<th>The role of social networks continues to increase</th>
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<tbody>
<tr>
<td>- 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 <strong>20 billion. $</strong> per year</td>
<td>- According to Frost and Sullivan Research 27% of the total volume of world trade will take place over the Internet and will reach <strong>25 bln. $</strong> by 2020</td>
<td>- <strong>45%</strong> of the 3.2 billion Internet users around the world are using Facebook</td>
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<td><img src="image1.png" alt="Electronic payments" /></td>
<td><img src="image2.png" alt="E-commerce" /></td>
<td><img src="image3.png" alt="Social networks" /></td>
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<th>More devices will be connected to the Internet IoT</th>
<th>Drones and robots will replace many of the traditional forms of labor</th>
<th>Big data will become an important tool in the growth of the country’s competitiveness</th>
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<td>- According to Cisco estimates that 50 billion devices will be connected to the Internet (IoT), which will allow annual savings of up to <strong>8.9 bln. $</strong> by 2020</td>
<td>- Gartner predicts over 5 years drones become standard equipment in industry and agriculture, and in 2030 drones and robots will replace <strong>one third</strong> of the global workforce</td>
<td>- According to the Institute Demos Europa correct analysis and extracting value from big data can bring the countries of the European Union <strong>206 billion. €</strong> by 2020</td>
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<td><img src="image4.png" alt="IoT" /></td>
<td><img src="image5.png" alt="Drones and robots" /></td>
<td><img src="image6.png" alt="Big data" /></td>
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**SOURCE:** McKinsey Group, Gartner, Cisco, Frost and Sullivan
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

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.

Effect I: eGovernment services stimulates broadband adoption

+1 % of e-Government users
+0.55 % of broadband penetration

Broadband penetration

Use of eGovernment services

Effect II: broadband penetration acts as a feedback loop stimulating the use of eGovernment services

1 % of broadband penetration
+0.1 % of use of e-Government services

Source: Katz and Callorda (2011)
Trends we are seeing today:

**Digital Government Technology Platforms (DGTP):**

- 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 for service improvements
- Identification for development (ID4D)

**eServices:**

- Transformational by design
- Open and secure by design
- Digital from end to end – Ask Once
- User-centered service design (customer as a focus, Identity-based)
- Digital Registries adhering to International Standards
- Mobile-centric – and able to accommodate new devices too
Principles of Digital Government
Identity & Services in the Digital Age

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
Elements of successful digital development

Successful Digital Government program

- Leadership
- Policy/Legal Framework
- Institutional set up
- Technology/Infrastructure
- Innovation Support
- Partnerships
- Effective communication
- Citizen engagement
- Capacity Building
Holistic approach is needed to effectively deliver public services.

Stakeholders
- Government
- Citizens
- Businesses
- Donors/NGO/CSO

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

Digital Enablers: Broadband, Cloud, IDs, Payment systems, Mobile, Content Mgmt, DataXchange/InterOperability, Archiving, Messaging,Authent&Security

Analog Enablers: Laws, Regulations, Standards, Governance, Skills
What is in an Identifier?

• It's all about Data & Metadata
  • Languages
  • Formats and Standards
    • Geo-spatial data
    • Chart of account
      Biometrics
      Exchange and Inter-operability
      Storage
      Encryption
Scale of the problem: 1.1 billion individuals are unable to prove their identity, resulting in exclusion and governance challenges

An estimated
1.1 billion people
are unable to prove their identity

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

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
Potential for a Digital Solution: Digital ID can be a foundation for inclusion and effective service delivery

Financial inclusion
✓ Removing barriers through eKYC
✓ Enabling digital payments
✓ Reducing risk for credit

Women’s empowerment
✓ Direct payments & transfers to women in the household
✓ Enforcing child marriage laws

Social protection
✓ Better targeting of beneficiaries
✓ Eliminating leakages ‘ghosts’
✓ Enable digital G2P payments

Regional integration
✓ Safe & orderly migration
✓ Cross-border services & payments

Health
✓ Health insurance for UHC
✓ Unique ID for healthcare delivery & tracking, incl. vaccinations

Education
✓ Removing barriers to enrolment
✓ Improving EMIS

Regional examples:

INDIA: 73m new bank accounts opened using eKYC; 472m accounts linked with Aadhar

PERU: ID verifies beneficiaries to access universal health insurance, and enables tracking of vaccines

PAKISTAN: NADRA linked BISP payments to female HOH and had 12 female only enrollment centers; increased female enrolment by 100% from 2008 - 2014

SOUTH AFRICA: A deduplication of social security administration beneficiaries led to ~US$2 billion savings per year.

THAILAND: Universal ID system enables stateless children to attend school

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THAILAND: Universal ID system enables stateless children to attend school
Current Challenges in Implementation: Countries face consistent challenges in building robust & inclusive ID systems

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<td>- When systems are fragmented, silo ministries engage in duplicative or one-off efforts resulting in waste (e.g. Nigeria)</td>
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<td>- Lack of coordination e.g. between civil registries and adult identification.</td>
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<td>- Low capacity in National ID offices to take strategic technical decisions and follow through on implementation</td>
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<td>- Lack legal &amp; regulatory frameworks to cover ID agency mandates, privacy, and data protection</td>
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<td>- Where frameworks are in place, they are often dated or inadequate, and some face issues with implementation</td>
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<td>- Prevalence of legacy manual paper based systems</td>
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<td>- Where digital systems exist, increasing reliance on smartcards which often results in vendor lock in</td>
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<td>- Lack of connectivity and physical infrastructure; e.g. in storing/managing data and in remote authentication</td>
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<td>- Fees, indirect costs, and convoluted processes create inefficiencies and create barriers to identification</td>
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<td>- Disproportionate impacts of lack of access for women, displaced persons and other marginalized groups</td>
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Identified Success Factors: Common features in design and implementation can enable success

- **Political Will & Coordination**
  - High level support & cross-ministerial engagement for a national action plan

- **Unique Identifier from Birth to Death**
  - Identification is unique to the individual and linked to civil registration systems

- **Minimalist Approach to Basic Identity**
  - Identification as a basic foundational layer to ease rollout and protect privacy

- **Inclusive Approach to Enrolment**
  - Targeted enrolment strategies to bring in remote or vulnerable populations

- **Linkages to Development Uses**
  - Service delivery and demand-based approach to increasing enrolment

- **Standards based Open Approach**
  - Competitive approaches to avoid proprietary technologies & vendor lock-in

- **Robust Legal & Regulatory Frameworks**
  - Clearly defined institutional mandates; laws to protect data security and privacy

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**Uruguay**
- President positioned identification as a national priority

**Thailand**
- Integrated CR & ID agency provided unique number from birth to death

**India**
- Unique number for all residents with 4 data fields & biometrics

**Pakistan**
- Targeted enrolment strategies for remote areas and women

**Peru**
- ID links to finances, health, G2P, pensions, & scholarships

**India**
- Use of standard commodity hardware; 3 vendors for deduplication

**Belgium**
- The Data Protection Law (2001) and others regulate use of data
...Full Coverage is still a Way Off

Birth Registration Rate % (age 0-5)

Source: UNICEF 2013
Case Of Finland

- **Census and certificates were digitalized in 1980’s**

- In 1980’s Finland started to make **digital census** by using existing datasets. Censuses can be completed cost-effectively, quickly and without forms. This procedure has saved tens of millions of euros.

- In mid 1980’s Population Register Centre started a reform to reduce the number of **certificates**.

- In 1997 less than 0.6 million certificates were issued (reduction of 90%)

- Some requirements were completely unnecessary

- Authorities **can check online** necessary information from population register
**Country Engagement:** Over $500 million currently committed across the World Bank for identification projects; $500 million in pipeline
Conclusion: Our Approaches towards Digital Government for SDGs

The World Bank can help 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 – An enabler for all services provision and simplification
  - Enterprise Architecture, interoperability
  - Computing and Hosting Environment (Data Centers and Cloud)
  - Government WANs
  - MIS for several Government agency applications
  - 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)
Thank you for your attention.