Africa Region

Advancing Development through smart use of ICTs to benefit the African Continent.

Progress to Date with a focus on Education at the margins – Internet2 Forum, April 22 2013
Agenda

1. WBG ICT strategy
2. ICT sector as a Transformation agent for service delivery: Trends and Opportunities for the Education Sector in Africa.
3. Portfolio Highlights
4. Education at the Margins
5. Q&A
Connect – Scale up affordable access to broadband internet
- Growing focus on broadband for high-speed internet access. PPP financing for backbone networks
- Capacity building for Regulators, Supporting Reform and legislative environment for Telecoms
- Policy and institutional reforms for private investment in broadband, associated impact on growth, infrastructure sharing, open access models

Innovate – Support ICT innovation for jobs and competitiveness across industries, education reform, LLL, STI
- ICT-enabled industry development and innovation for greater competitiveness, shift to service-oriented knowledge economy, export revenue generation
- Focus on skills development, infrastructure, technology parks, microwork, business environment, eLearning content & Delivery

Transform - Use ICT to transform service delivery across sectors
- Financing ICT applications for Public Administration
- Transformation of service delivery across all sectors of the economy, utilizing the rapid spread of mobile phone networks
- Increasing focus on Open Government: citizen feedback and other accountability applications to improve govt’ service delivery
Trends in Transform

ICT applications impact all sectors (1)

**e-Government**
- Public Expenditure Management
- e-Procurement
- Digital Government
- Electronic Payment Systems, Payroll Processing
- Administrative Systems
- Records Management

**Financial Sector**
- Centralized Transaction System (Central Bank)
- Treasury, Budgeting and Fiscal Systems
- Financial Management Information Systems

**Public Sector**
- Electronic Tax Products & Systems
- Public Debt Database/Monitoring System
- Judicial systems, Court Administration System
- E-voting Administration

**Trade**
- Single point of entry for the chamber of commerce
- Provide information on laws and regulations & compliance information
- Custom Systems

**SMEs**
- Access to international information
- Logistic support, e-commerce
- Business connectivity

**Human Resource Management**
- Human Resources Management Systems
- Employment and wage accounting information

**Urban Management Systems**
- Land/Property Management Systems
- Urban planning Systems
- Community based information systems & services
- Land titling, Registries, Cadastral Systems
- Transport Information Systems & GPS Applications

**Environment & Natural Resource Management**
- GIS initiatives
- Environmental Protection & Resource Management
- Environment/Agriculture Integration Systems
- Ecologically-balanced Agricultural Management
- Water Resources Management

**Health**
- Hospital Administration systems
- Preventive health care, Curative health care
- Internet based public health systems
- Doctors' forum, Diagnostic tools
- Health Information Systems & Technology Center

**Education**
- Basic, Higher, Professional Educational Systems
- Education MIS and ICTs for Education Reform
- Distance Learning, On-line curriculum, eTesting,
- Computers for Classroom, Labs, e-learning

**Social Sector/Service Delivery**
- Social Safety Net
- Pension, Social Risk Management Systems
The World Bank work on applications has grown rapidly over the past decade; More than 1,300 active investment projects with ICT components (74 percent of the 1,700 project portfolio, FY03-10).
ICT Portfolio Highlights

Current ICT Africa Portfolio is roughly $776.45m spanning 12 projects in 22 countries in CONNECT

Regional INF Projects
1. RCIP (10)
2. WARCIP (7)
3. CAB (5)

Country Projects
1. eGhana
2. eBenin
3. eRwanda
Increasing importance of Horizontals

- Policies, infrastructure, human resources, management methodologies can be effectively utilized and shared by multiple sectors.
- Holistic policy approach is highly desirable.
- Enabling Government ICT systems to interact and exchange accurate information for sound policy and decision making.
- Fragmentation is very costly. Donor-driven programs tend to increase silo approach and segmented solutions.
- Education Sector eco-system: Schools, vocational training institutes, IXPs, universities, Educational content, Rural schools and villages, teachers.
Trends in Transform

Mobile Enabled Transform

3.4 Billion Mobile Subscribers (more than 70% of penetration) in Developing Countries

Chile: Taxes online (from 25 days to 12 hours)

Botswana: Quality reporting and m-payment of energy bills

India: interstate check posts for trucks (from 30 min to 2 min)

Kenya: m-payments (15 million users)

Water resource management, Early Warning system

Philippines: customs online (from 8 days to 2 days)

Rwanda: eSoko AGR mobile based market place
Reaching HIV/Aid patients (from <30% to over 70% treated at early stage)

India: Land Title Certificate (from 3-30 days to 5-30 min)

Rapid spread of mobile phone networks

Largest Ever Delivery Platform with Multi-Sector Impacts
“Cloud Computing” refers to delivery of ICT resources over the internet rather than hosting and operating these resources locally on an individual dept’s network.

- Select and host ICT services from a secure, resilient, ubiquitous, and cost-effective shared environment.
- Reduce operating costs, lower the need for investment capital.
- Provide flexibility in switching suppliers
- Allocate ICT resources more strategically.
- Reduce energy consumption.
- Education Cloud
- How to enable access from Margins

Source: Adapted from EMC corporation
Open Gov4Education
Open Government, Open Data

The State

- Politicians / Policymakers
- IPA (Independent Pro-Accountability Agencies)

The State

- Increase capacity of state to respond/address public needs and oversight

Compact – the Supply Side

Social Intermediaries

- Informal / Formal
- ICT Enabled Groups, CBOs, etc.
- NGOs, Media, etc.

Compact – the Demand Side

Providers

- Enhance capacity of social intermediaries to provide effective participation and oversight (to inform, monitor, and improve service delivery)

Collective Action

- Improve capability of citizens to engage in governance
- Voice

Citizens/Clients

- Nonpoor
- Poor

Improve enabling environment for citizen engagement in governance and public decision-making

Client Power

Advocacy

Voice
**Is Africa ready for knowledge Economy?**  
A resounding YES.
- Policy makers aware of the need to educate population and diversify economy away from natural resources and Agriculture  
- Influence of globalization, awareness of East Asia and LAC experiences

**Benefits of a Regional Approach**
- Economies of scale
- Re-using content and accreditation methods
- Mobile workforce
- Legal and Regulatory Framework: Enabling environment

**What does it entail?**
- Understanding of the Internet economy
- Affordable Reliable Connectivity
- Skills at all levels of the education supply chain.
- Major Reform of Education
- Nurturing the Partnerships with all academic institutes in the network to create strong ownership
- Funding mechanisms
- Learning from others experiences
- SmartSchool for multipurpose community building.
ICTs for Education@Margin: An action Plan to impact the next Billion
Access to electricity, sanitation, facilities
Last Mile connectivity for all “smart schools”
Teacher Training, accreditation, qualification
Computers for Classroom, Labs, e-learning models, eBooks, mobile-based apps
Distance Learning, On-line course material
National Education MIS Linking all schools
Partnerships and Exchanges
Linkages with local/regional industry
Role models, mentoring, focus on ecosystem, gender, civil values, parents & community
Thank You!