Jumpstarting Africa's Digital Development:
Defining the 'Next Generation' Investment Program

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- Digital Resilience Program
- Digital Market Integration Program

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Africa's Digital Evolution has been impressive

**600 million mobile subscribers (+160m since 2012)**

Launch of e-Gov services (tax collection, business registration, etc.)

173 Tech Hubs (50+ new in 2015)

5 Gbit/s of international bandwidth (x4 growth since 2012)

Increasing levels of competition, private sector operation, and independent regulation

African innovations spreading globally – mobile money, pay-as-you-go solar, etc.
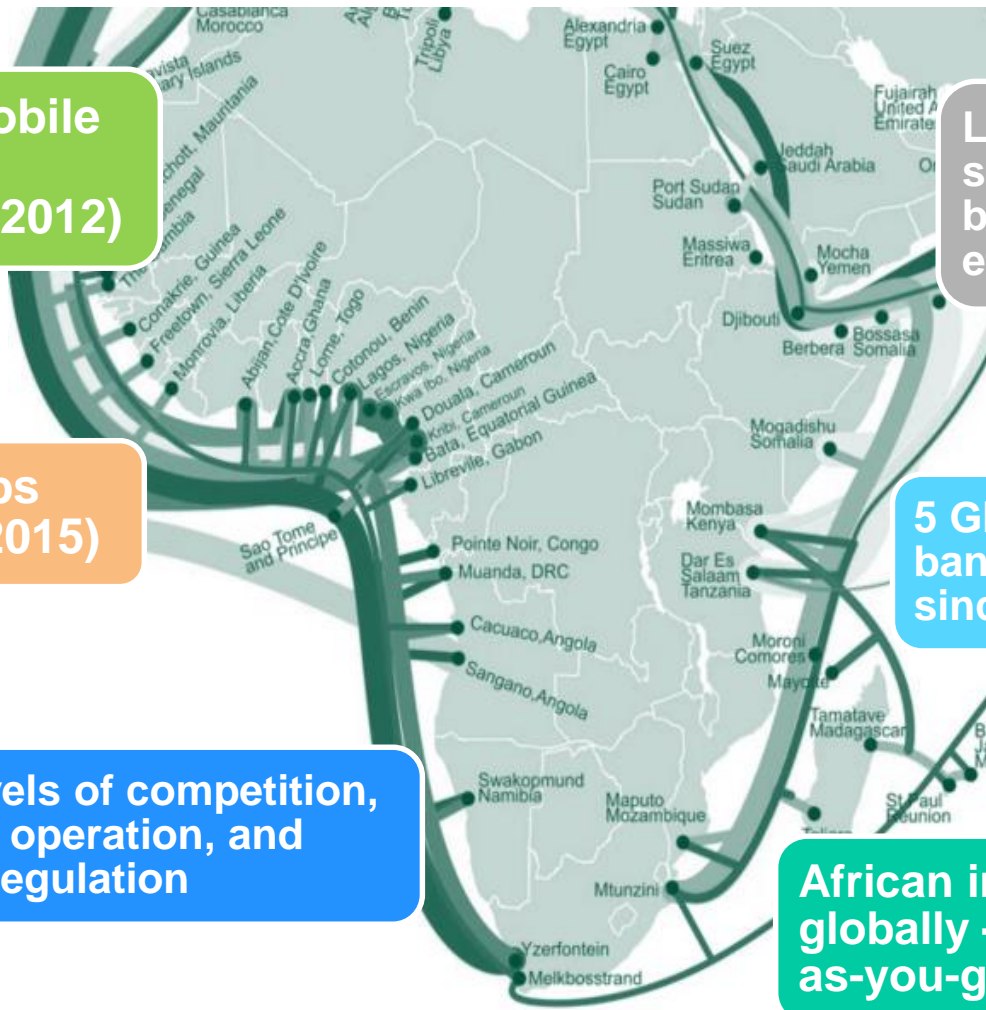
Sources: GSMA, TeleGeography, Endless Possibilities, World Bank
Submarine cables off coast of Africa (projected, 2018)

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"1st Generation" World Bank ICT Projects have greatly supported this evolution

Focus Areas

Regional Connectivity Programs
(RCIP, WARCIP, CAB)

- Establishing an enabling environment
- Creating PPPs to extend backbone networks from coast to inland

Sector Liberalization and Reform

- Technical assistance and online resources for regulators
- Market-based approaches to spectrum management
- Licensing of additional operators

e-Government projects:

- Bringing governments online, and establishing digital platforms
- Developing core e-services,
- Promoting citizen engagement

Results

Lower prices and faster speeds

In Kenya, for instance, costs of wholesale bandwidth have fallen to less than 10 per cent of their former level, in part as a result of the RCIP program

Increased competition and investment;

In Comoros, the RCIP-4 program has helped the government to draft a Communications Act and to license a second operator, bringing competition for the first time

Growth of digital public services offerings;

In Malawi, the use of advanced purchase of internet bandwidth provides a low cost platform for one-stop service points and supports services such as eTax filing

Despite progress, many challenges remain before African countries can fully harness the power of digital technology for transformation

Stubbornly Low Internet Adoption Rates

- Challenges of affordability, coverage, quality
- Need for modernized competition and regulatory policy & harmonization at regional level
- Lack of incentives in poor, rural, and conflict-afflicted areas
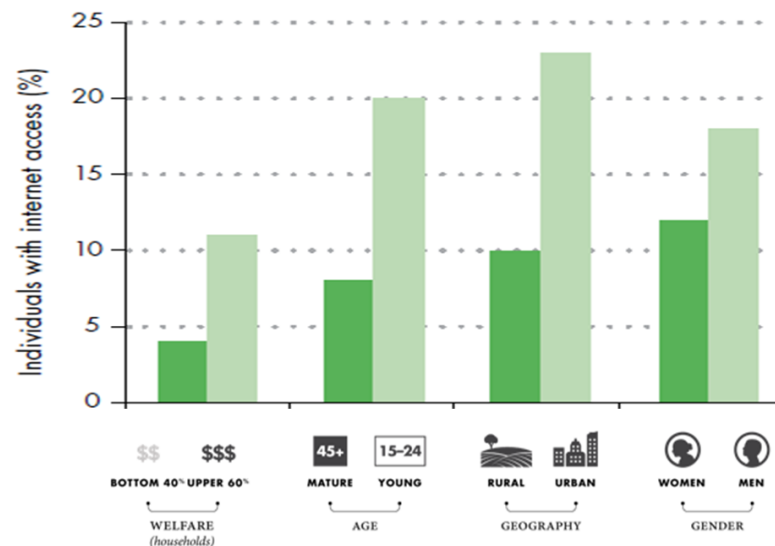
Sharp and Persistent 'Digital Divide'

- Young, wealthy and urban vs. poor, rural, elderly and women
- With proactive interventions – digital divide can shrink and create digital dividends; Without proactive interventions – digital inequality will grow

Digital Skills and Innovation Deficit

- Populations lacking in both basic digital literacy and IT specialization
- Potential of digital entrepreneurs and innovators not fully unleashed

Limited capacity for digital service delivery by governments and uptake by citizens

- Institutional and infrastructure constraints within governments
- Lack of access to digital services and know-how

DIGITAL HAVES

Wealthy young men in cities

DIGITAL HAVE-NOTS

Poor older women in rural communities

Individuals with internet access (%)

	BOTTOM 40%	UPPER 60%	MATURE (45+)	YOUNG (15–24)	RURAL	URBAN	WOMEN	MEN
	4	11	8	20	10	23	12	18

WELFARE (households)   AGE   GEOGRAPHY   GENDER

SOURCE: WDR 2016 team, based on Research ICT Africa surveys (various years) for 10 African countries.

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SSA countries and sub-regions fall along different points on the path to digital transformation; Most are falling behind global peers
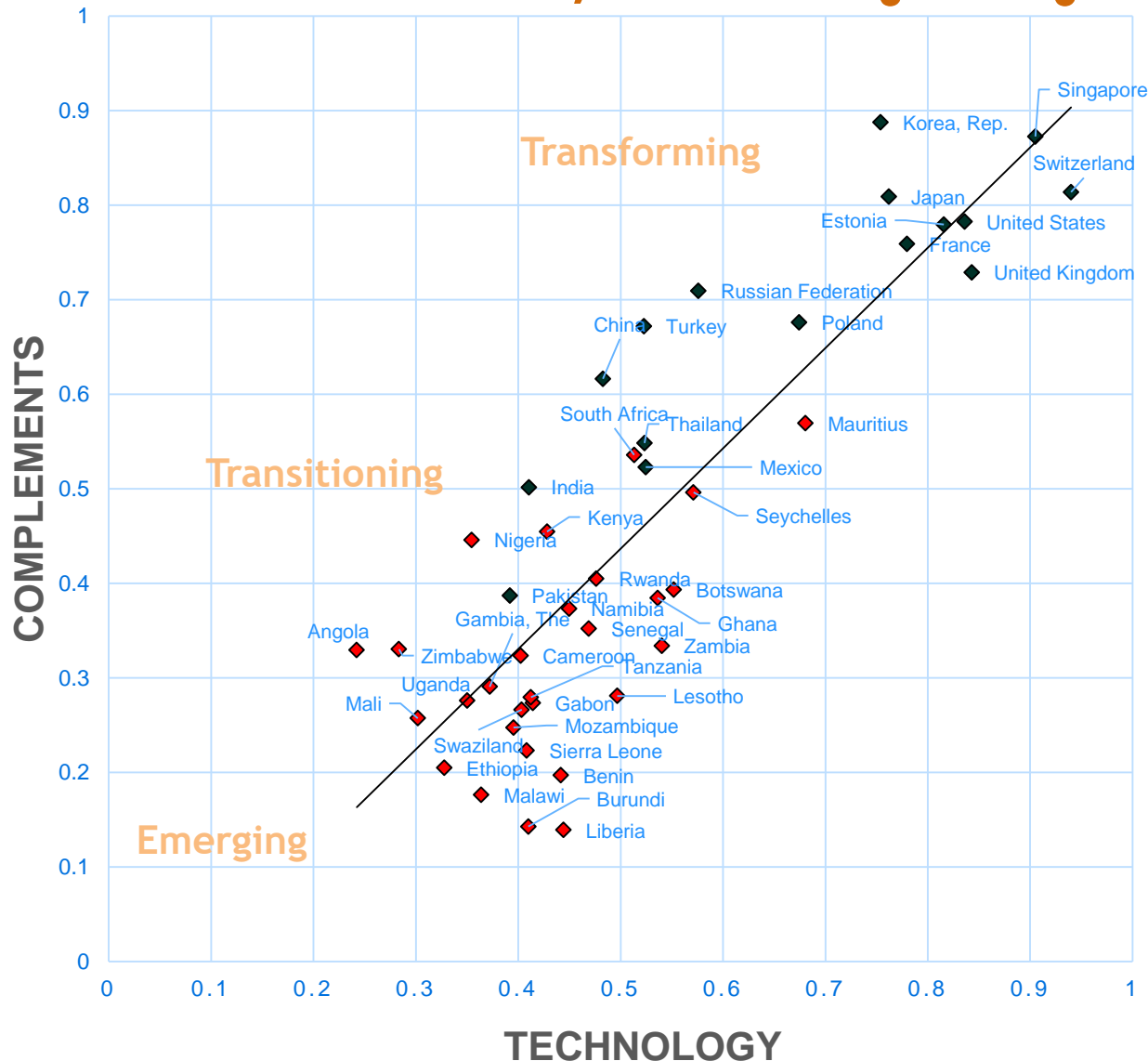
SOURCE: *WDR 2016*

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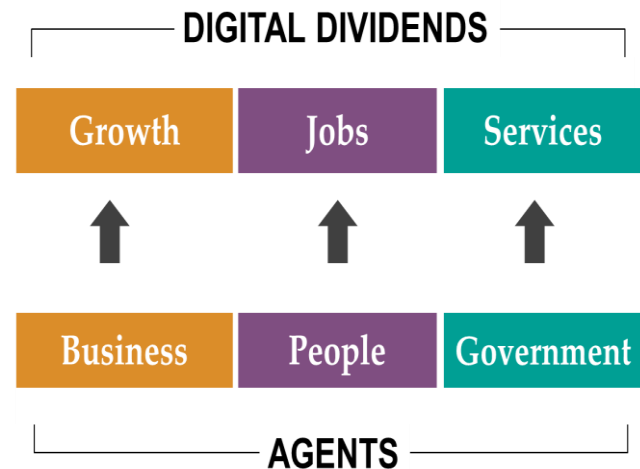
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Digital Development is no longer a luxury for Africa – It is essential for growth, job creation and access to services and information

ICTs are fast becoming an *essential* enabler and pre-requisite to social and economic development

- Similar to power, roads, etc.
- Enhances productivity, access to markets and services across all sectors

Global commerce, access to services and information are all rapidly digitizing

- AFR citizens, businesses and governments must rapidly catch up or risk being left behind

DIGITAL DIVIDENDS

Growth	Jobs	Services

↑ ↑ ↑

Business	People	Government

AGENTS

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Supporting Africa's Digital Development: the need for a more comprehensive, scaled up approach

The scale of support from de velopment community is nowhere near the scale of the challenges and opportunities ahead
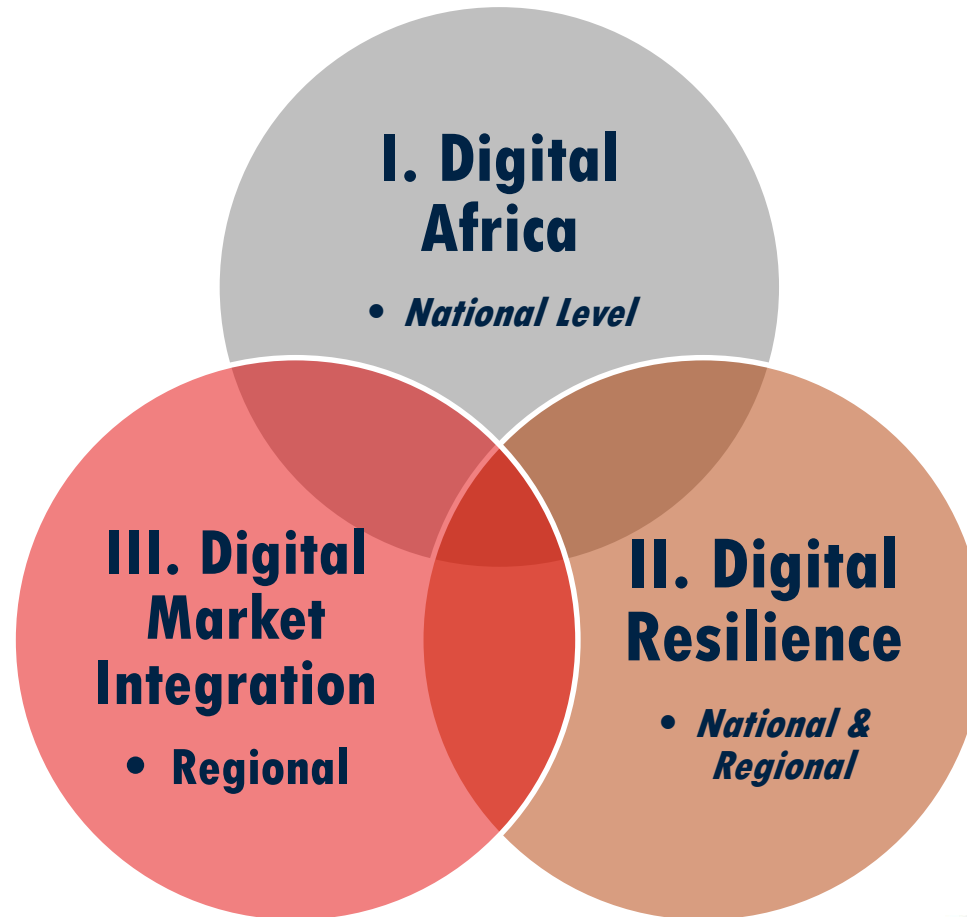
Many development partners are supporting digital initiatives on an ad hoc or sector specific basis

Limited support for comprehensive digital development programs to help countries leverage the benefits of technology across all sectors, government, business and society

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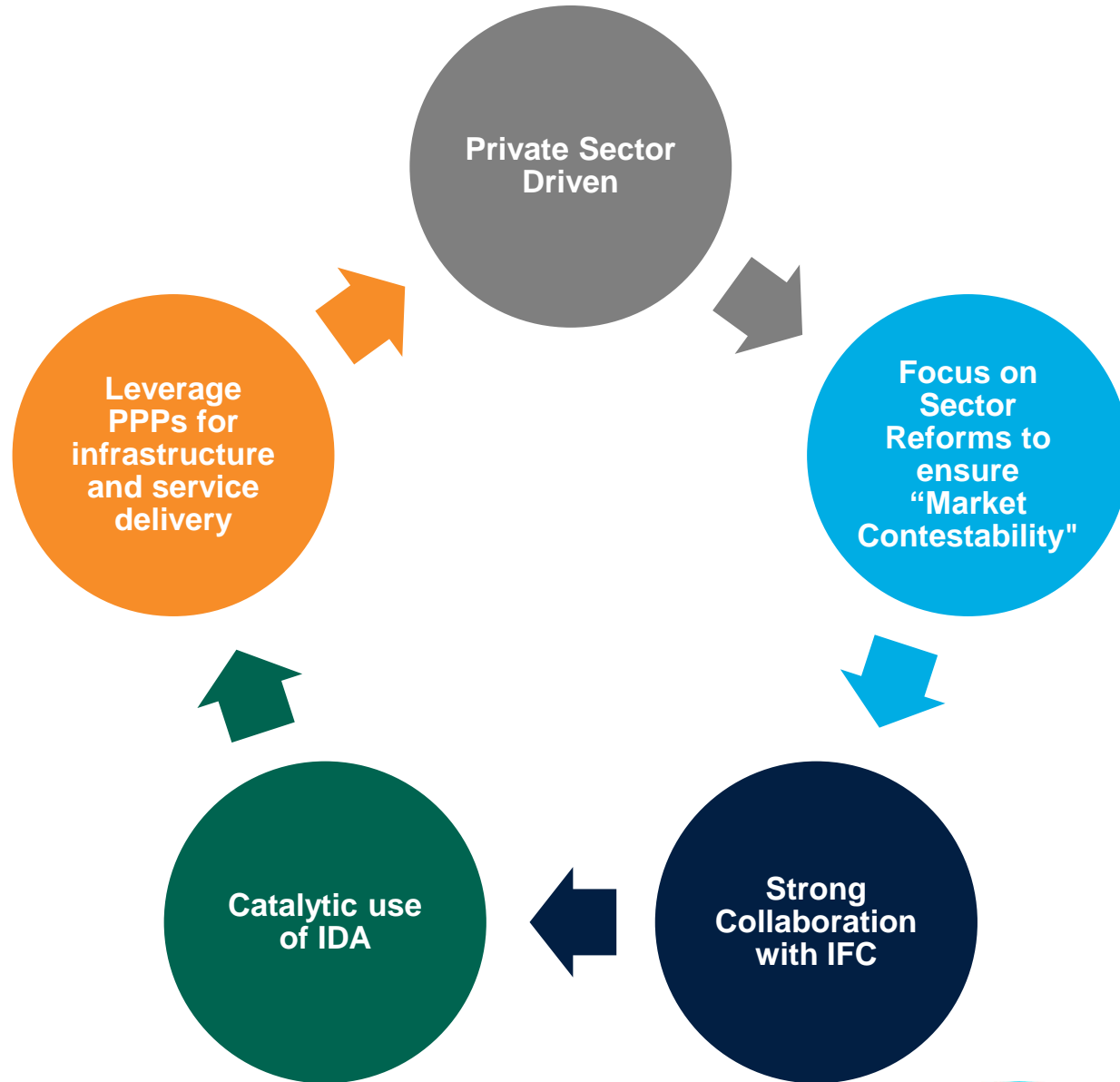Transport & ICT

A three-prong approach to support transformation of African economies, societies and governments through digital development

Three Proposed "Next Generation" Digital Development Programs:

I. Digital Africa

- *National Level*

III. Digital Market Integration

- **Regional**

II. Digital Resilience

- *National & Regional*

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Guiding Principles of Proposed Digital Development Programs:

Private Sector Driven

Focus on Sector Reforms to ensure "Market Contestability"

Strong Collaboration with IFC

Catalytic use of IDA

Leverage PPPs for infrastructure and service delivery

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I. Digital Africa Program

Comprehensive support to countries to achieve Digital Transformation of Society, Business and Government

Jobs, Economic Diversification, Service Delivery and Inclusion

- Pairs digital technology investments + 'analog' complements such as skills and institutions
- Phased approach targeted at countries at different stages of digital development

| Phase I: Digital Foundations | Phase II: Digital Acceleration | End Goal: Digital Transformation |

"Emerging" Countries → **"Transitioning" Countries** → **"Transforming" Countries**

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I. Digital Africa : Phase I - Digital Foundations

Basic building blocks for digital development

- Targets "emerging" countries

Digital Ecosystem

- Ensuring contestability of markets through Telecoms Regulation & Competitiveness Reforms

- Sector governance issues

- Enabling digital transactions

- Basic digital literacy

Digital Connectivity

- Closing the infrastructure gap through PPPs for Broadband Infrastructure

- Innovative Spectrum Management

- Research and Education Networks for higher education

Digital Service Delivery Fundamentals

- Shared Digital Public Service Delivery platform (infrastructure + services)

- Digital ID

- Essential government enterprise solutions (e-mail, e-document storage, etc.)

- Cybersecurity & Data Privacy

- Digitization and integration of cross-cutting information registries

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I. Digital Africa: Phase II -Digital Acceleration

Accelerating digitally-driven economic and social development, innovation, job creation & service delivery

- Targets **"transitioning"** countries

Digital Economy Acceleration

- 'Next generation' legal and regulatory reform

- Digital investment strategy and promotion

- Reducing the distance to the technological frontier through advanced ICT skills development

- Strengthening Digital Tech Innovation and Entrepreneurship support networks and services (from incubation to acceleration)

Universal Digital Connectivity

- Ensuring affordable, seamless, high quality, reliable nationwide connectivity

- Narrowing the remaining digital access divide – targeting the hardest to reach locations and populations through PPPs and partnerships

- Particular focus on gender and youth

Digital Government Apps, Innovation and Analytics

- Full transition to cloud for government operations and services

- Support for sector specific digital public services and apps

- Digital Platforms for citizen engagement and participation

- Open Data & Data Analytics for Informed Policymaking

- Government CIO function

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II: Digital Resilience Program

> **leveraging digital technology to promote recovery and strengthen resilience at regional and national level**

- **Targeted toward countries and sub-regions afflicted by economic fragility, conflict, displacement, climate change and other natural disasters**

| Technologies for displacement	Digital Fiscalism	Emergency Preparedness and Disaster Recovery
• Digital tools to assist countries facing high levels of displaced persons • Digital ID for Development • Digital civil registration of births, marriages and deaths	• Establishing licenses and authorization for service providers • Benchmarking tax rates and promoting best practice (revenue collection and maximizing access) • Safeguarding mobile money transfers	• Early warning systems (SMS and social media based) • Use of drones for land use mapping • Use of sensors for environmental monitoring

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III: Digital Market Integration Program

Building a Seamless, Dynamic, Competitive Regional Digital Ecosystem & Digital Economy

- Capturing economies of scale and network effects from integration and cooperation across borders to increase investment, innovation, efficiency and digitally enabled trade

- Can be approached in segments or as a comprehensive Digital Single Market Program based on sub-regional needs and opportunities

- Complements and builds upon national level digital development efforts (Digital Africa Program)

Digital Single Market

Regional Digital Networks

Regional Digital Frameworks

Regional Digital Platforms

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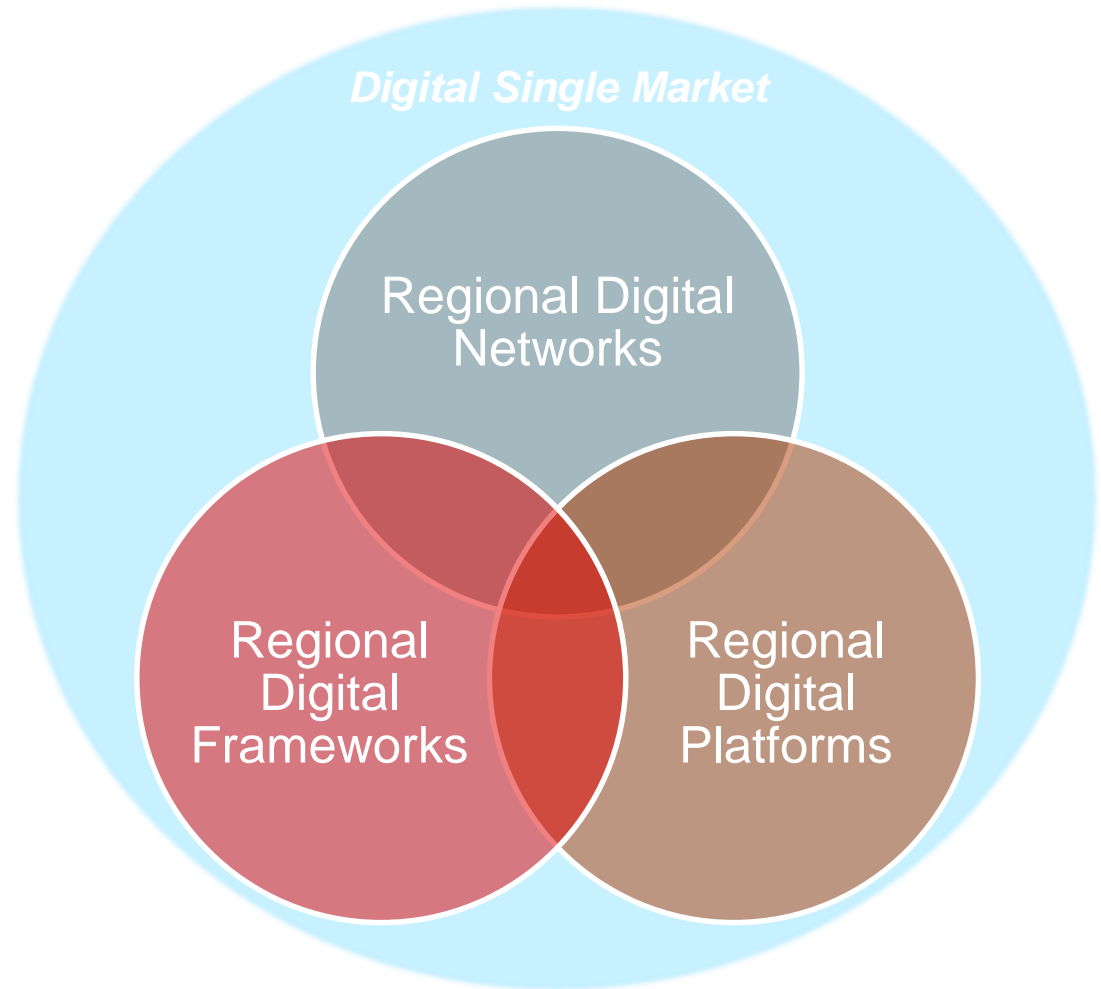
III. Digital Market Integration Program

Building Blocks of a Single Digital Market

- **Target Sub-regions: East Africa for Comprehensive Single Digital Market Program (Strong political backing and momentum); Selective interventions in other regions at earlier stages of Digital Integration**

Regional Digital Frameworks

- Regional 'Regulatory Watch'

- e-Trade policy

- Regional Digital Development Policy & Investment Promotion

- Cybersecurity Cooperation

- Cross-border data sharing and privacy protocols

Regional Digital Platforms

- Regional Digital ID (Standards, common ID or Mutual Recognition)

- Cross-border digital payment integration

- Regional Cloud/Data hubs

- Regional Address System/Digital Mapping

Regional Digital Networks

- Filling cross border connectivity infrastructure gaps & Developing Shared Infrastructure

- Regional Tech/Startup Incubation and Acceleration Support Networks

- Advanced ICT skills development networks/centers of excellence

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