



# ROLE OF ICT IN COUNTRY ECONOMIC DEVELOPMENT

## EACO GENERAL ASSEMBLY

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# Outline

ICT in economic Development

ICT Strategy and roadmap

Key Achievements

Challenges

Way forward

# ICT as enabler-Reflection of 10 yrs

## ICT and Economic Growth

- enhanced competitiveness
- increased business opportunities
- access to market for rural communities

## ICT and Improved Delivery of Social Services

- health/education/environmental/microfinance services
- reducing vulnerability to natural disasters

## ICT for Greater Transparency

- improved efficiency on government procurement
- reduced corruption
- increased civil society participation

## ICT for Empowerment of the Poor

- allowing the poor to better communicate their concerns

# Rwanda's Economic Development program

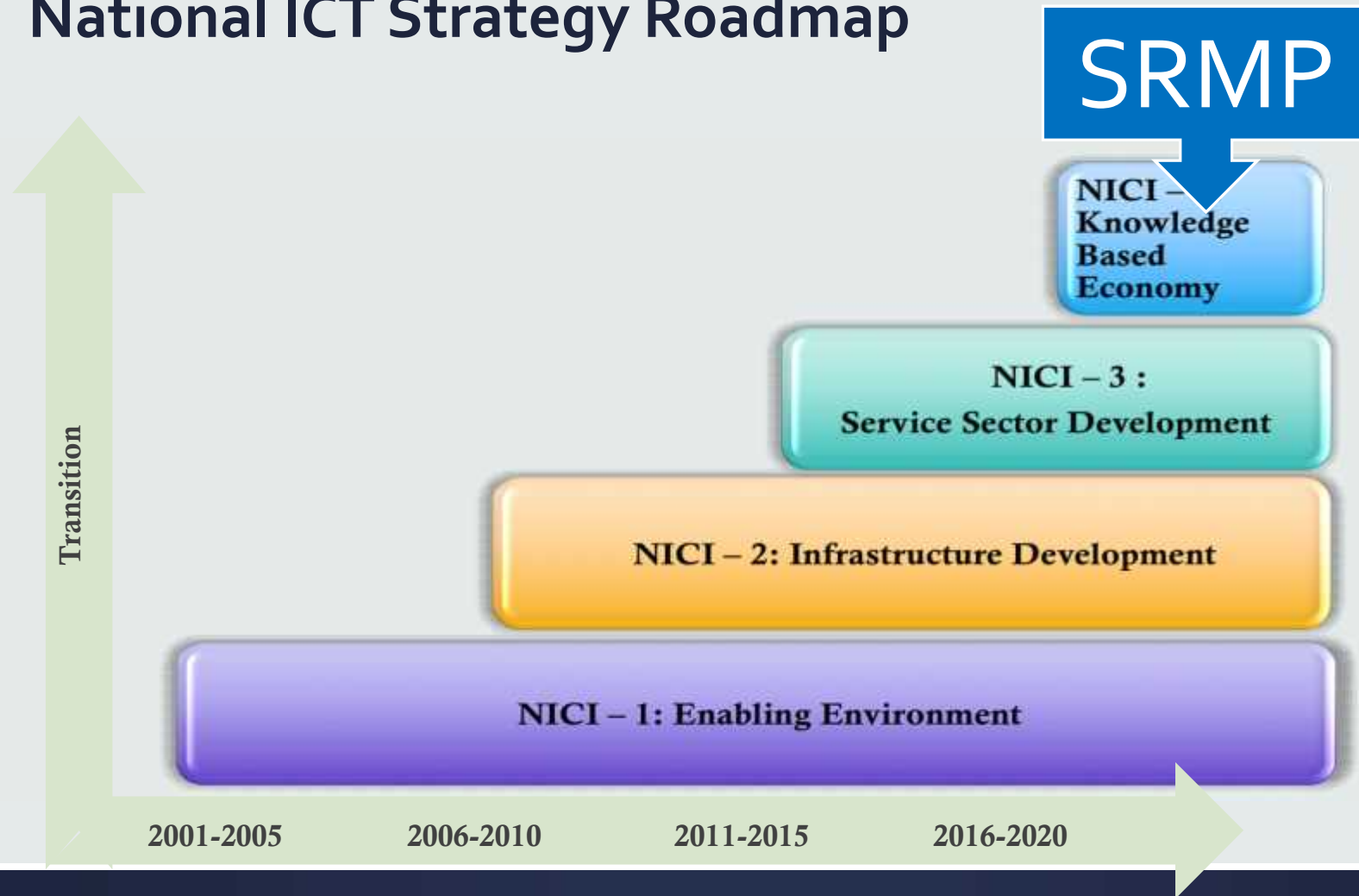


# ICT Strategic Objectives-

## STRATEGIC OBJECTIVES

- To develop a vibrant ICT industry and position Rwanda as the Regional ICT Hub
- To facilitate the creation of a highly competitive service sector, fueling economic growth (cross-cutting)
- To promote social and cultural interaction and integration in the society through the use of ICT
- Enable efficient and effective service delivery through ICT

# National ICT Strategy Roadmap



# ICT Sector institutional arrangement

Ministry:  
Ministry of Youth and ICT

Policy and Sector Leadership  
(Control Tower)



RURA:  
Rwanda Utility and  
Regulatory Authority

Regulate the ICT Sector



RDB:  
Rwanda Development  
Board-ICT

Implement and Coordinate  
The National ICT Programmes



## Key Flagships

### Smart Education



OLPC, Computer Assembly (Positivo), RwedNet, SmartSchool

### Smart Business



Company registration, ESW, eTax, Mobile Payments

### Smart HealthCare



TracNet, OpenMRS, HMIS, RapidSMS, Telemedecine.

### Smart City



Land Planning, Kigali Master Plan, Online Land Use, Construction Permit MiS

### Smart Government



Telepresence, GCC, Rwanda Online, ..

### ICT Innovations



Klab, think, HeHe, GiraICT

### Smart Agriculture



E-Soko, EAX, mFarm, Fertilizer Voucher MS





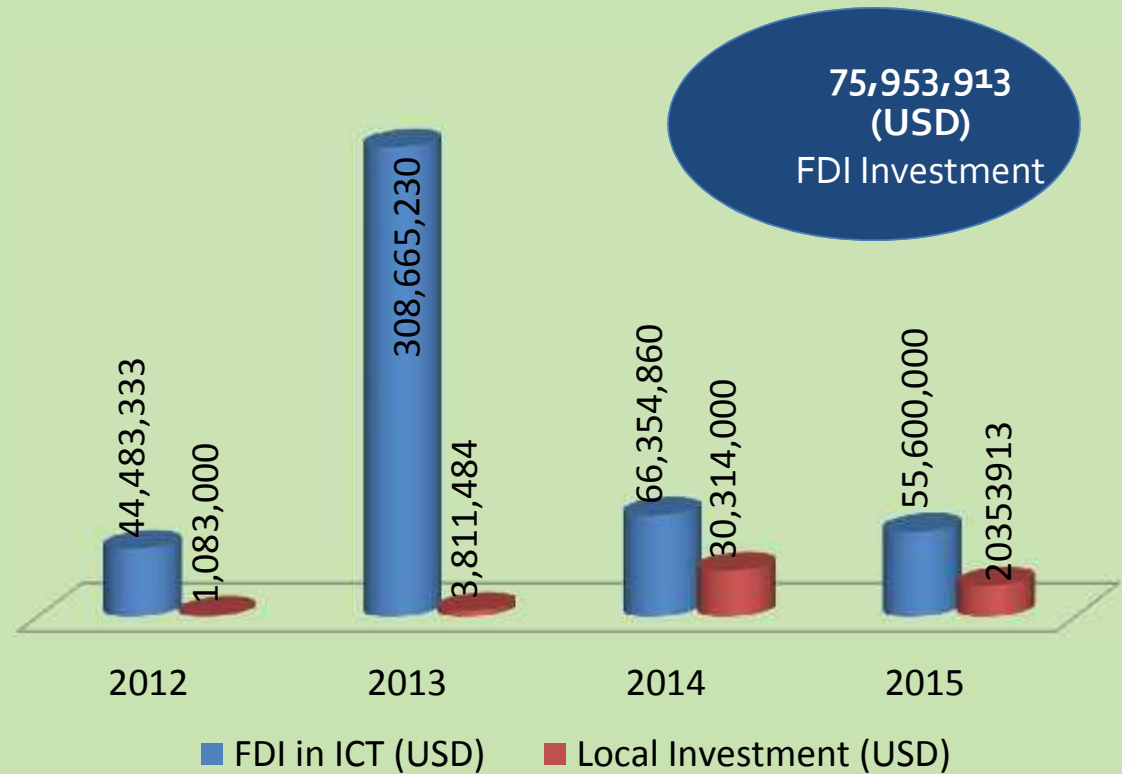
*Acheivements*

## ICT Contribution to Rwanda Economy

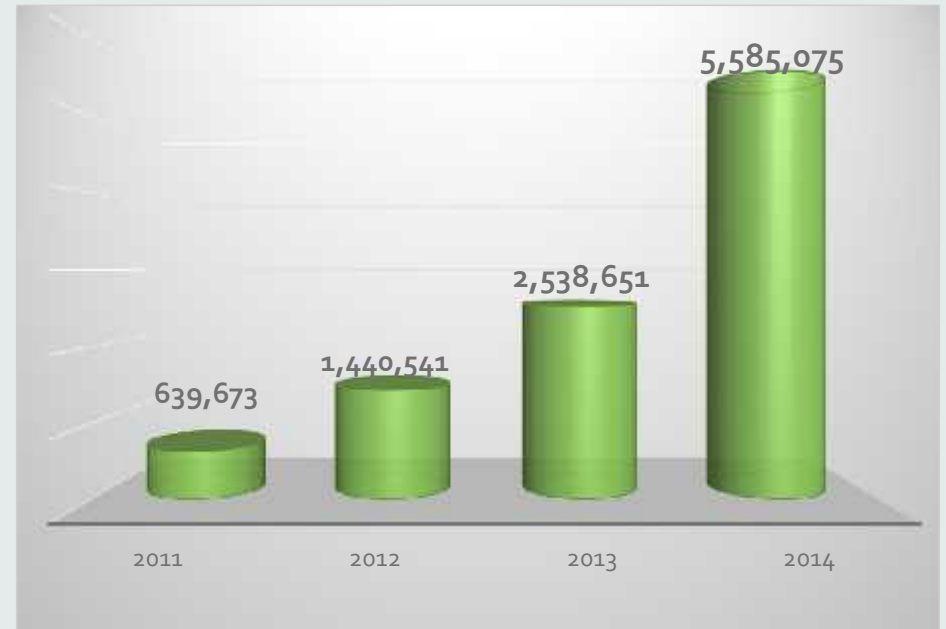
3%



### Investment in ICT



## Expanding Financial Inclusion



- 2016: 1,440,541 Mobile Money Subscribers
- 2016: 1,093 Billion FRW on Mobile Money Transaction

## Mobile-telephone penetration and internet subscribers

**RWANDA top the table of affordable internet in Africa.**  
Source: The report's 'Affordability Index.'



### Internet Penetration Rate (%)



Performance indicator	Dec. 13	May. 15	YoY Growth
Active Mobile Subscribers	63.5%	75.49%	11.5%
Internet Penetration	20%	32%	12.5%

## Growth of Telecommunication Sector

### Launch 4G LTE



Today: 4G LTE in 21 cities of Rwanda



### Digital Migration



# Infrastructure development

## Kigali Metropolitan Network

- 57 km Fiber optic cable installed, connecting 54 government buildings, 63 agencies
- Construction of NOC and National Data Center at Telecom House
- 1725 VoIP phones configured

Network Operation Center (NOC)



National Data Center





## Driving Regional Integration



Northern Corridor member countries adopt “One-Network-Area”, roaming charges to be scrapped and cost of calls reduce by 60%



**400%**

# Smart Africa Alliance



ECONOMIC GROWTH AND JOB CREATION

POLICY

ACCESS

E-GOVERNMENT

PRIVATE SECTOR/  
ENTREPRENEURSHIP

SUSTAINABLE  
DEVELOPMENT

INNOVATION

COMMUNICATION AND ADVOCACY

CAPACITY BUILDING

RESOURCE MOBILISATION



## Mission

**Coordinate SMART Africa Alliance**

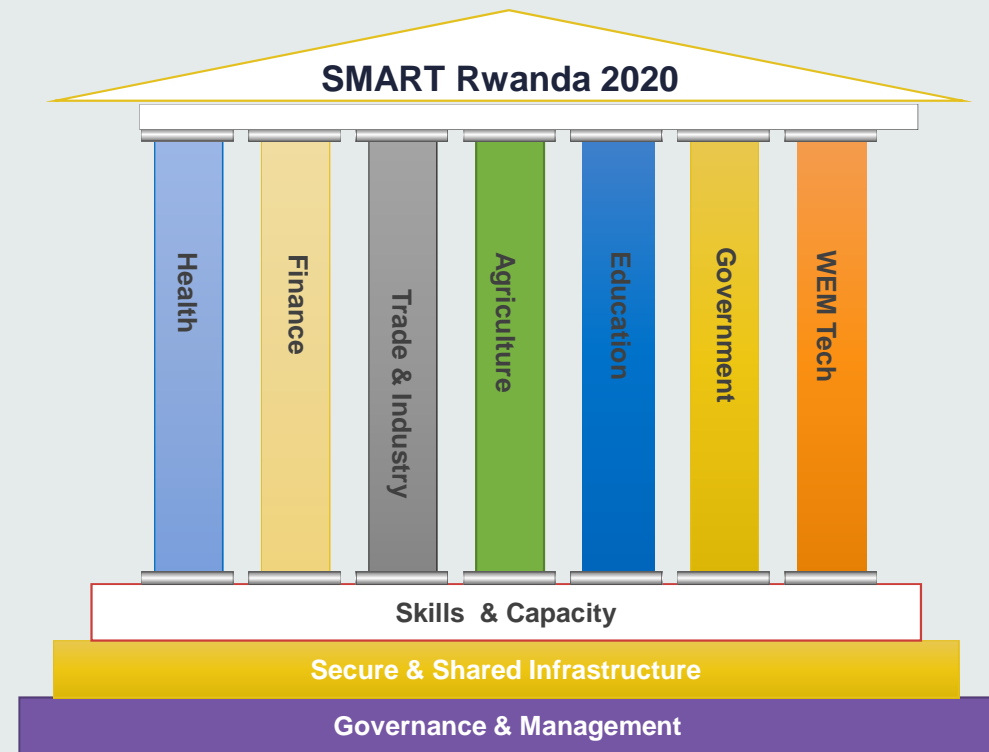
## Goals

1. Investment promotion
2. Skills building
3. Knowledge sharing
4. Innovation
5. Coordination



## Smart Rwanda 2020 Master Plan (SRMP)

- Approved by the Cabinet on **3<sup>rd</sup>/11/2015**
- Focus on business and innovation:
  - Rwanda to become Africa's ICT Hub
  - Private sector driven economy
- National economic digital transformation:
  - Government Digital Transformation by 2018
  - Broadband for all by 2020
  - Digital Literacy for all
- Future planning:
  - Research and Development for exports and economic digital transformation (Internet of Things, Big Data and Analytics, Cyber Security Research, Creative Industries and Multimedia, Mobility and Digital Lifestyle).



## Challenges



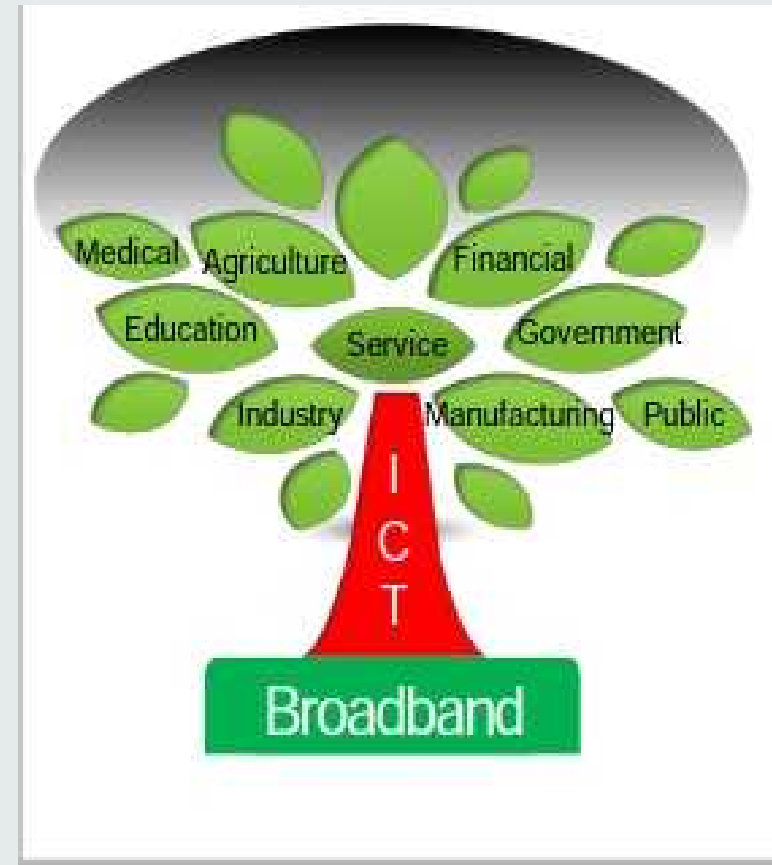
Electricity



Digital Literacy



Local Content



# ICT SECTOR – WAY FORWARD

## ❑ Smart Rwanda Master Plan

- Establishment of **RISA** and **NCSA**
- Position Rwanda as Africa's ICT Hub
- Private Sector Dev't – 100 companies with \$ 50
- Digitally Transformed Gov't – 24 hour self-service
- GDP contribution of 5 %
- 1000 Jobs created for youth through projects/PPP's
- Digital Literacy for all
- Broadband for all – Through 4 G roll-out & Fiber
- Safe & Resilient Cyber space – Through RCSA

## ❑ Develop Sub-Sector ICT Strategies

- Priority Sectors with ICT multiplier effect:  
*[ Education, Agriculture, Health, Finance, Governance, Women & Youth, Trade & Industry ]*
- Support each sector to develop respective ICT Strategies by June 2016 and shape how ICT will enable them achieve strategic objectives by reduced cost of doing business, Efficiency and productivity

## ❑ Focus on Innovation / Research & Dev't

- Step-up Innovation Eco-System – More kLab(s)
- Innovative Project Implementation models – PPP
- Drones/ Un manned Aerial Vehicles (UAV)
- Artificial Intelligence
- Internet of Things/Wearable/Social Media
- Big Data & Business Analytics
- Support Home grown innovations / IPRC
- Personalized Interactive Displays

## ❑ Key Initiatives/Flagships

- Smart Africa alliance – Continued leadership
- Kigali Innovation City – Houses ICT Eco-system
- Positivo Africa Export– Use ASI distribution plan
- Curriculum digitization
- Cyber Security Center of Excellency – ITU Choice
- Over Top Service Initiative – RURA
- Smart Class Room – Smart Class Room
- Irembo Centers – Community access of ROL
- Mobile Number Portability
- Device penetration / TV (34) and Radios (10)

# TANK YOU

