ITU Kaleidoscope 2011
The fully networked human?
Innovations for future networks and services

DEVELOPMENT OF AN ICT ROAD MAP FOR ESERVICES IN RURAL AREAS

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Session 2 - Connecting rural regions
Session chairman: Ajay Ranjan Mishra (NSN – India)

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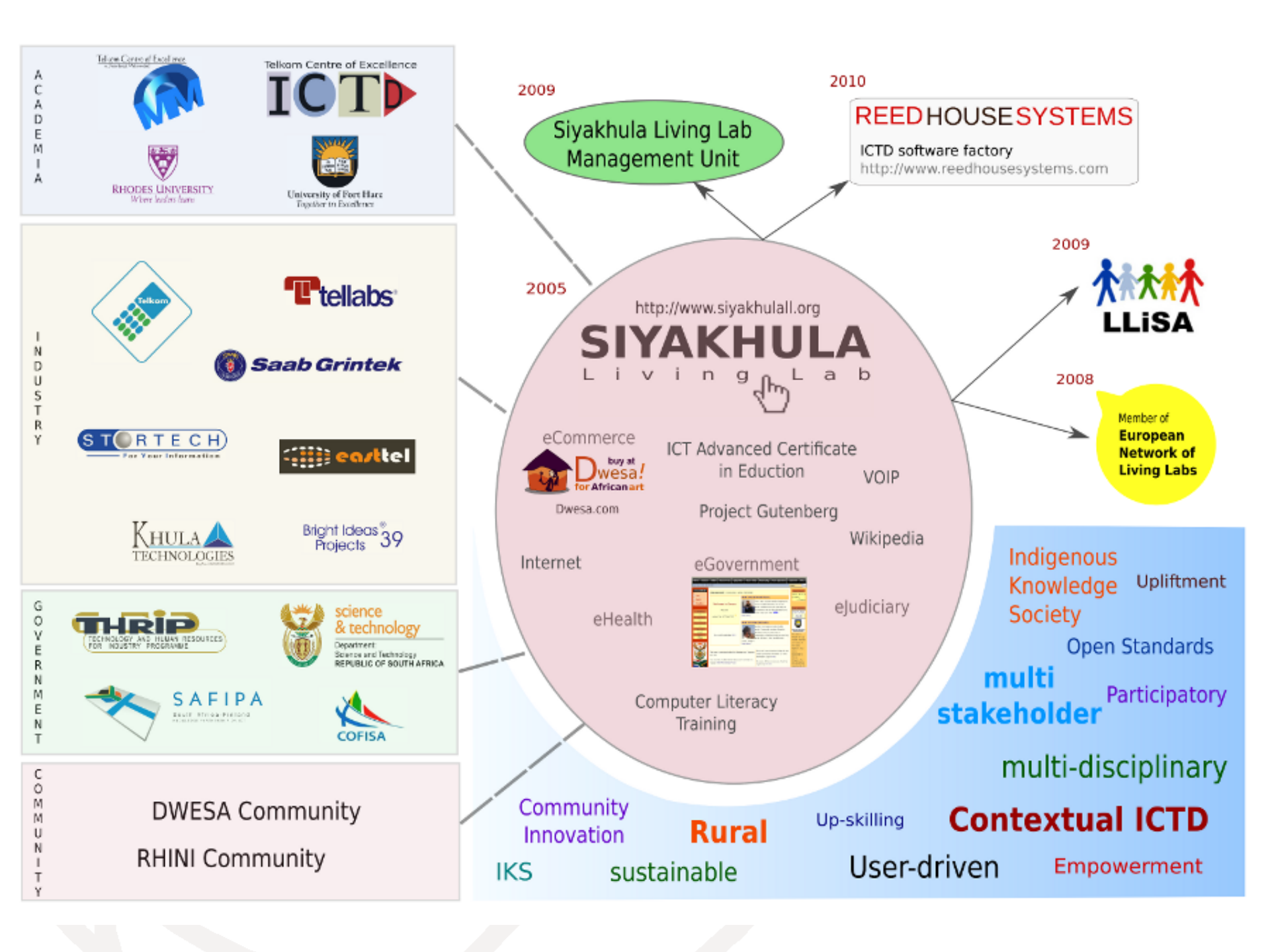
Overview

- Information and Communication Technologies for Development
- Siyakhula Living Lab
- Roadmapping
- ICTD eServices Roadmap components

ICTD

- ICT recognized globally as an enabler for socio-economic development
- Numerous ICTD efforts by Government, NGOs and private industry underway to connect rural communities
  - TENET connection to rural HEIs
  - DoC National eSkills Dialoque Initiative + NeSPA
  - DoE, DST, HP iCommunity, LLs, SAP LL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science & technology
Department: Science and Technology
REPUBLIC OF SOUTH AFRICA
SAFIPA
COFISA
COMMUNITY
DWESA Community
RHINI Community
2009
Siyakhula Living Lab Management Unit
2010
REED HOUSE SYSTEMS
ICTD software factory
http://www.reedhousesystems.com
2005
http://www.siyakhulall.org
SIYAKHULA
Living Lab
2009
LLiSA
2008
Member of European Network of Living Labs
eCommerce
buy at Dwesa! for African art
Dwesa.com
ICT Advanced Certificate in Eduction
VOIP
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Computer Literacy Training
Indigenous Knowledge Society
Upliftment
Open Standards
multi stakeholder
Participatory
multi-disciplinary
Community Innovation
Rural
Up-skilling
Contextual ICTD
IKS
sustainable
User-driven
Empowerment

Roadmapping

- Galvin R : “... and extended look at the **future** in a chosen field...”

- Vähäniitty et al : “... a popular metaphor for **planning** ... **identifies**, **evaluates**, and **selects** strategic alternatives that can be used to achieve desired objectives”

Roadmapping

- Road mapping is nowadays recognized as an important strategic **planning tool** to **forecast** both the critical development needs and the **steps** required to reach major advances in an area; and thus provides a valuable tool for **decision making**.

Technology roadmaps

- Provides information to make better investment decision
- Identifies critical technologies
- Identifies technology gaps
- Identifies ways to leverage R & D investments

ICTD Roadmaps

- should accommodate the challenges faced by rural communities
- Heeks R - in an attempt to move from ICTD 1.0 to ICTD 2.0, roadmaps can provide examples of services which can be provided to rural communities at minimal cost
- should improve the sustainability of ICTD solutions

ICTD roadmapping motivation

- Technology is changing – technology trends and projections
- These changes affect ICTD
- Need for strategic input into ICTD efforts (e.g. disconnect between various ICTD initiatives)
- The Research looks at the **past**, analyze the **present** and looks into the **future**

ICT road map is the output

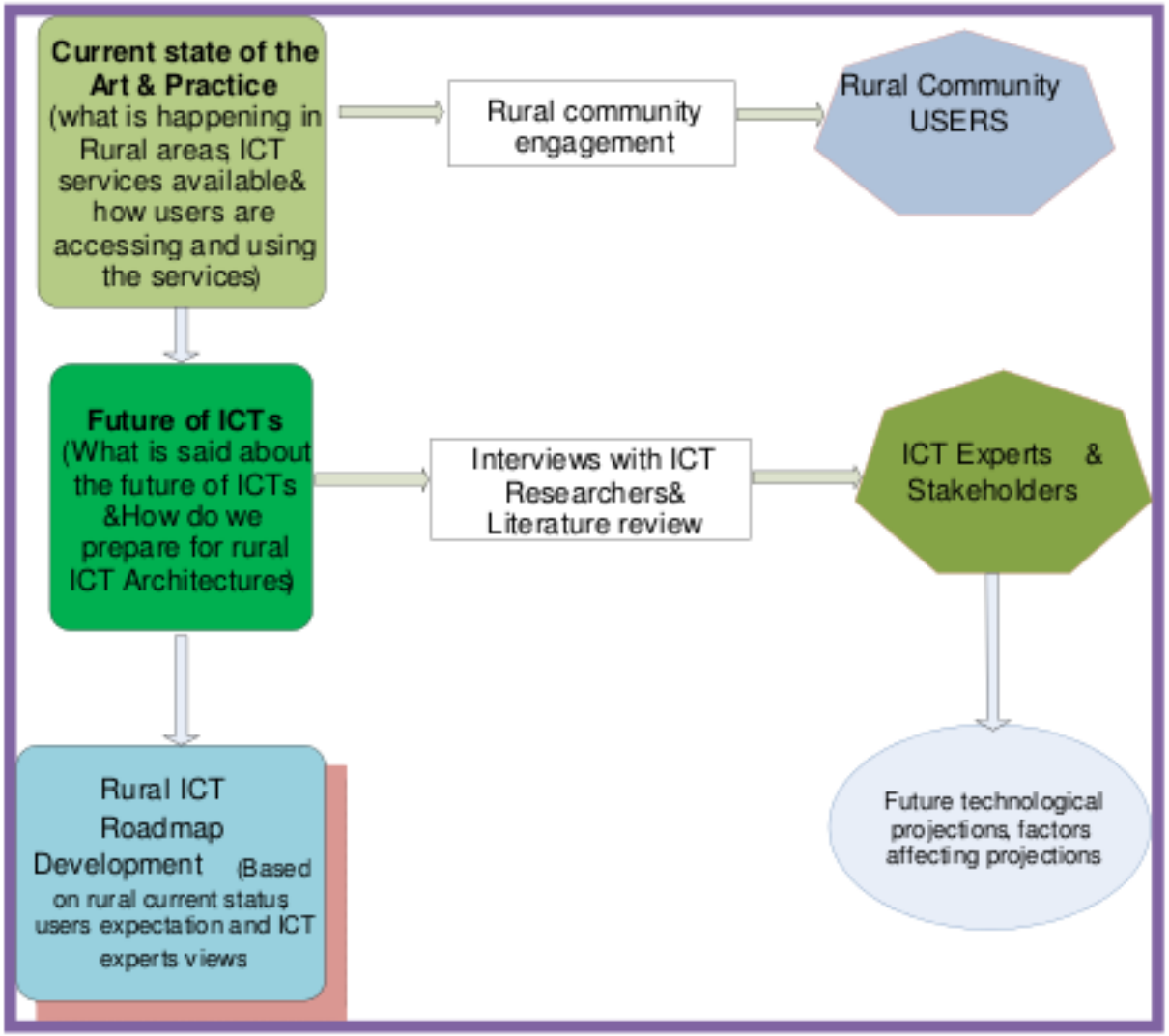
Technological projections/trends

- Some of the current technology trends/projections are:
  - Cloud computing
  - Mobile applications
  - Social networking
  - Semantic web
  - Giant Global Graph
  - Audio based applications
  - Intelligent applications
  - Crowd-sourcing

ICTD Roadmap Objectives

- Coming up with the blue print projections for ICTD in Africa (developing world)
- Choosing those which work in African rural ICTDs
- Designing architectures to accommodate the technological projections
- Developing an ICTD technological road map for eServices in rural areas

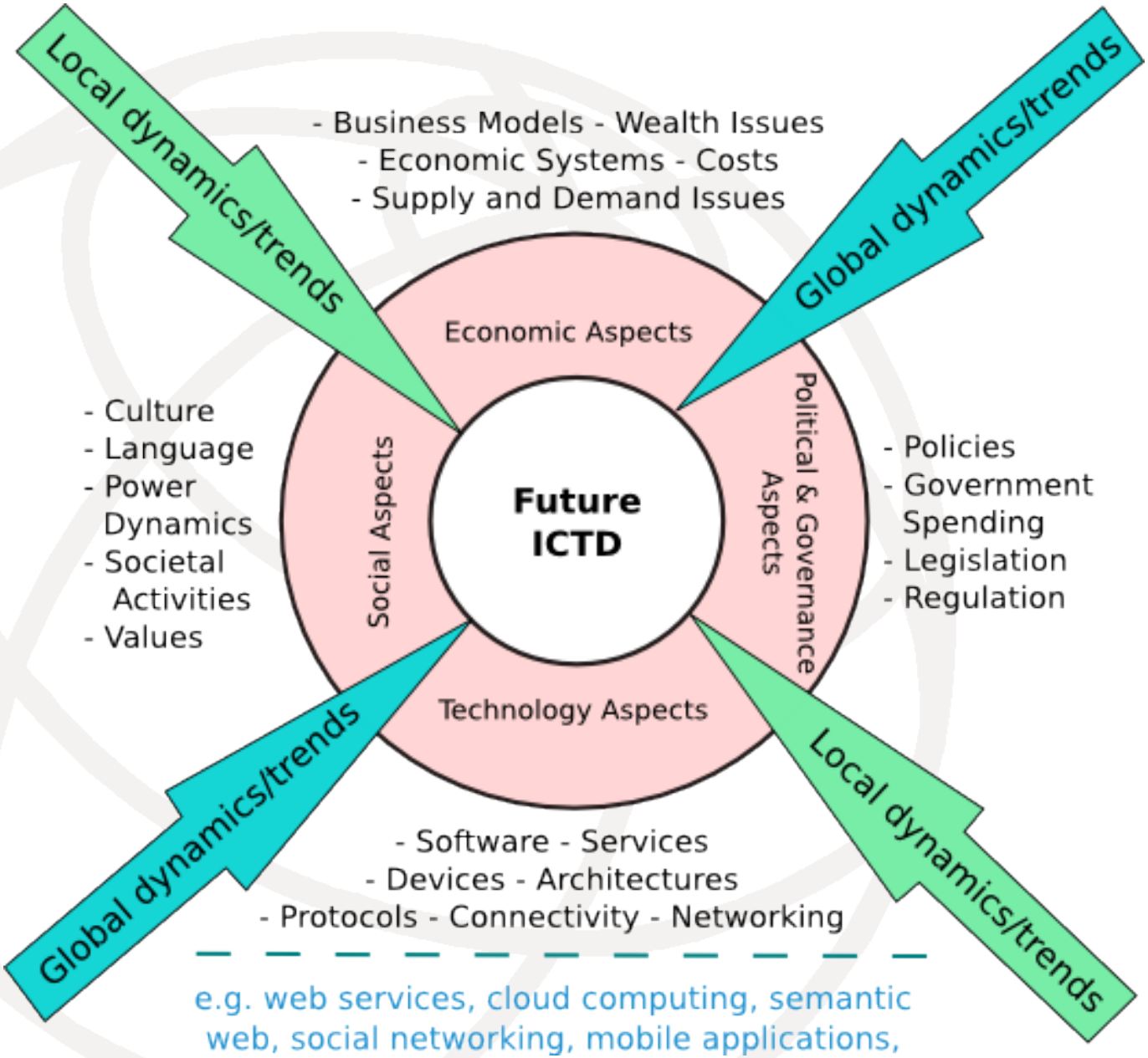
Roadmapping approach



ICTD Roadmap

- An ICT road map for eServices
- With the following solutions:
  - eServices for rural areas
  - Architecture based on future projections
  - Stakeholders involvement
  - How rural users access services
  - Low cost & localized services
  - Technical ICT model for eServices

ICT Road map components



FUTURE PROJECTIONS

ICT EXPERTS

PROJECTIONS

Cloud computing
Semantic Web
Mobile Application
Social Networks
Audio based application
Intelligent application

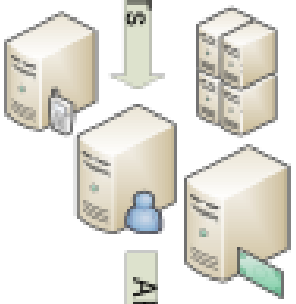
USERS EXPECTATIONS

RURAL USERS ICT SERVICE EXPECTATIONS

Agriculture, government services, social services, economic services

ICT SERVICES

HOW ICTs

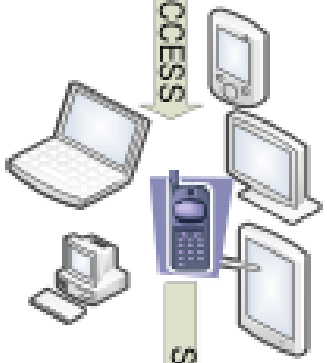


ARE PROVIDED

Real- time communication
E-Services
Mobile application services
Application services

USER ACCESS

HOW TO ACCESS



SERVICES

Laptops
mobile phones
LCD Monitors
PDA
PC

ICT Road map Summary

- Provides a high-level blueprint / reference model for ICTD initiatives
- Identifies, Analyses and Selects appropriate technology to achieve ICTD goals
- Highlights the technical and business models applicable for rural communities;

Conclusion

There are different challenges in rural areas towards enabling technological progress in ICTs,

- However, there are different efforts by ICT stakeholders to enhance the future of ICTD
- ICT road map enables different stakeholders to plan for the ICT services required to address the needs of low resource areas.

Thank you

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ICTD