

# Meraka Institute



Living Labs as ecosystems taking innovation to the market

4<sup>th</sup> Euro-Africa cooperation Forum on ICT research

14-15 November 2011

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Chairperson: LLiSA



# The concept of Living Labs

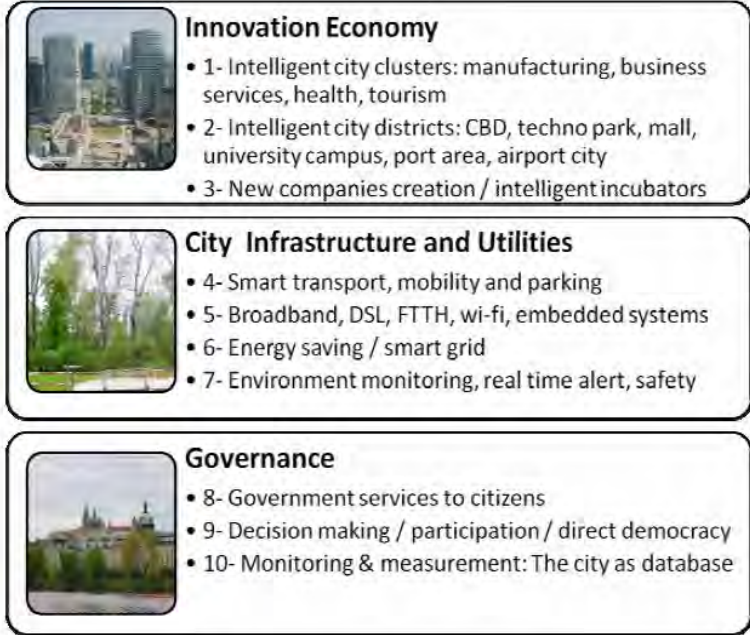
## key components



*Living Labs are providing innovation services, resulting into new product / service ideas, business ideas, improvements, faster innovation cycles and acceptance*

- Living labs are innovation environments where stakeholders have formed a public-private partnership of firms, public agencies, universities, research organisations and people
- Collaborating for creating, prototyping and using new products and services, in real-life environments
- Involving critical mass of users (test users, contributors, innovators)
- Not only testing prototypes at the end of the innovation process, but influence product / service development in early stage: user-centric innovation, "co-creation"

# Types of Living Labs

- Living Labs focused around social and technological innovation
- Types of Living Lab should be based on environment, national priorities, socio-economic drivers and innovation goals
- **Rural Living Labs**
  - Addressing rural communications challenges
  - Providing training and technology support in rural communities
  - Support innovation and entrepreneurship
  - Support specific sectoral and process challenges
  - Validating new business models, processes, services and products
- **Urban Living Labs – Smart Cities**
  - 

**Innovation Economy**

    - 1- Intelligent city clusters: manufacturing, business services, health, tourism
    - 2- Intelligent city districts: CBD, techno park, mall, university campus, port area, airport city
    - 3- New companies creation / intelligent incubators

**City Infrastructure and Utilities**

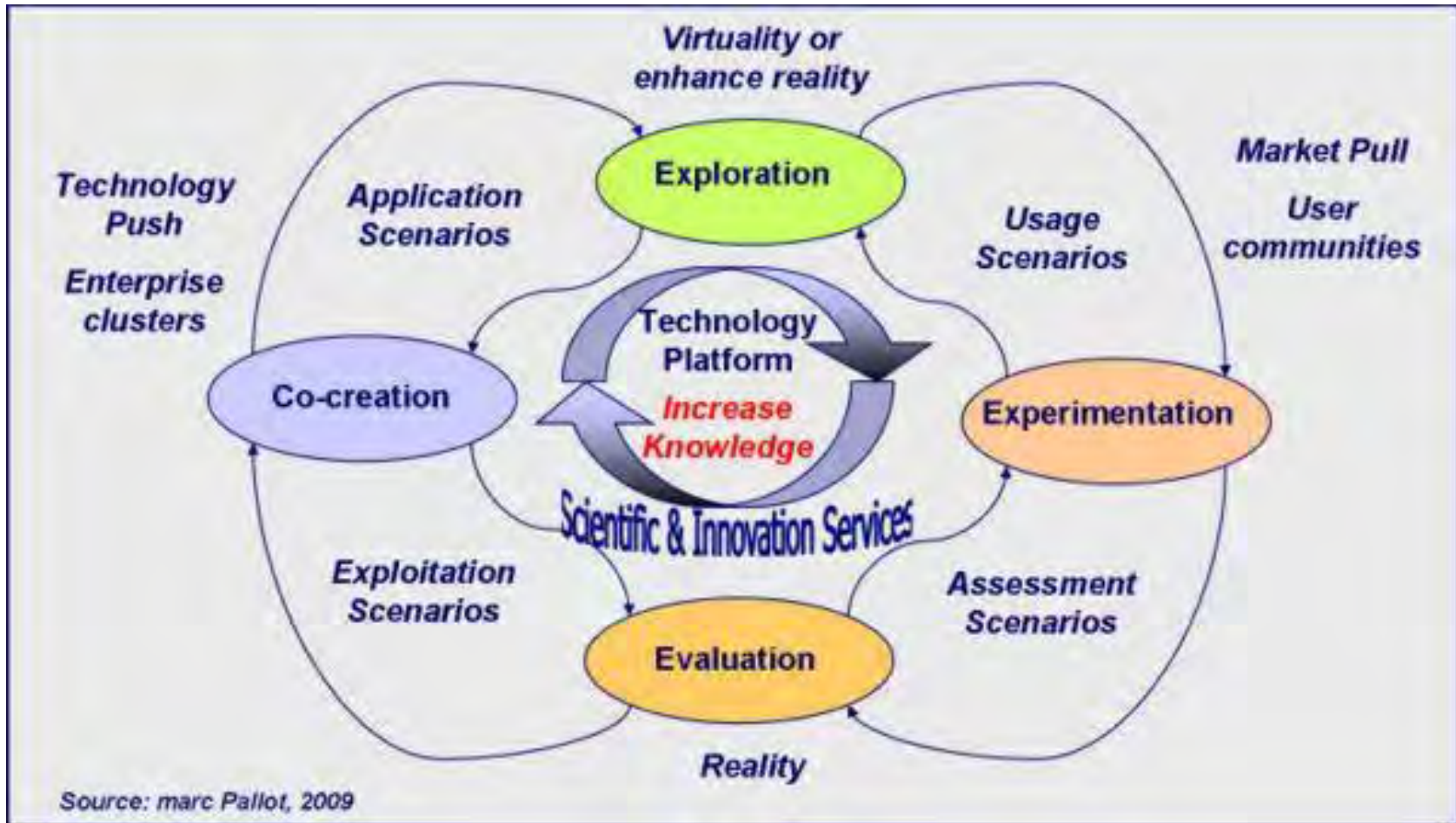
    - 4- Smart transport, mobility and parking
    - 5- Broadband, DSL, FTTH, wi-fi, embedded systems
    - 6- Energy saving / smart grid
    - 7- Environment monitoring, real time alert, safety

**Governance**

    - 8- Government services to citizens
    - 9- Decision making / participation / direct democracy
    - 10- Monitoring & measurement: The city as database
- **Peri-urban or Suburban Living Labs**

Fig. 1. Smart city key application areas

# Living Labs supporting innovation



## Input

- Problems
- Ideas
- Patents
- Technologies
- Services
- Businesses
- Products
- ...



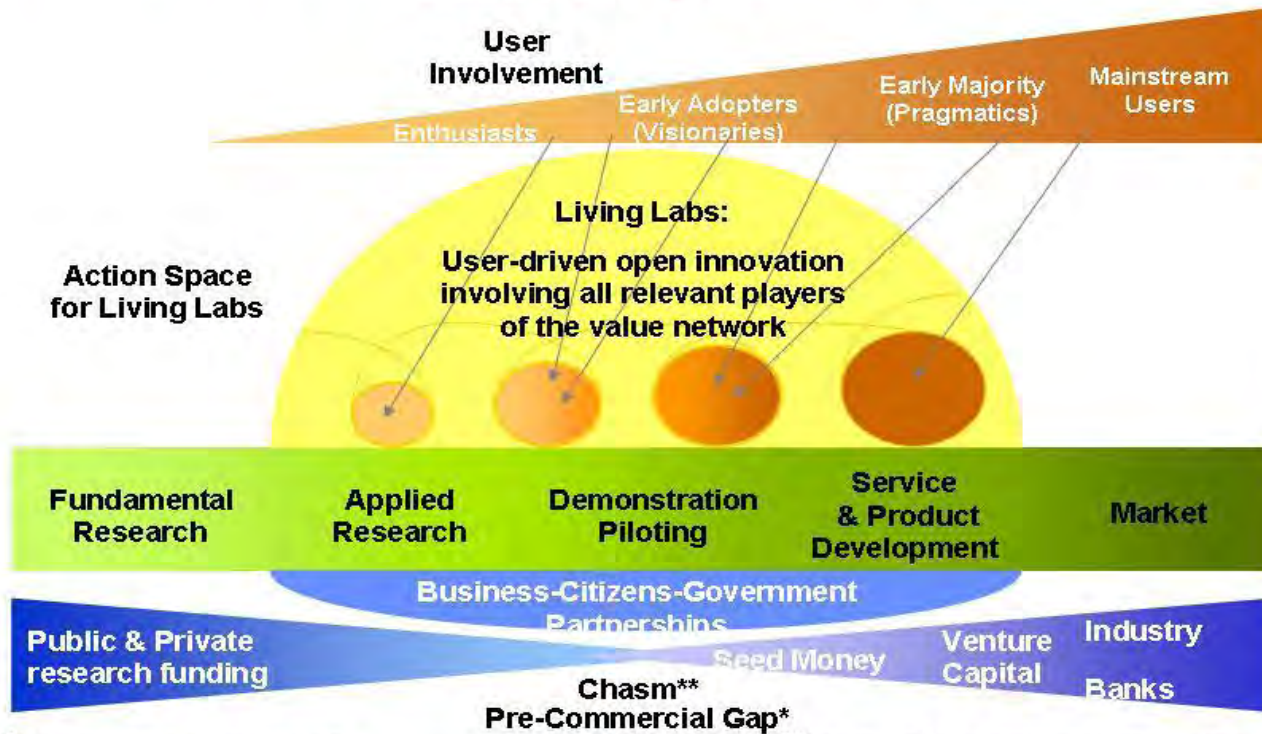
## Results

- New product ideas
- New service ideas
- New business ideas
- Ideas / patents
- Product improvements
- Market acceptance benchmarks
- ...

[http://www.cairn.info/resume.php?ID\\_ARTICLE=PROJ\\_005\\_0011](http://www.cairn.info/resume.php?ID_ARTICLE=PROJ_005_0011)

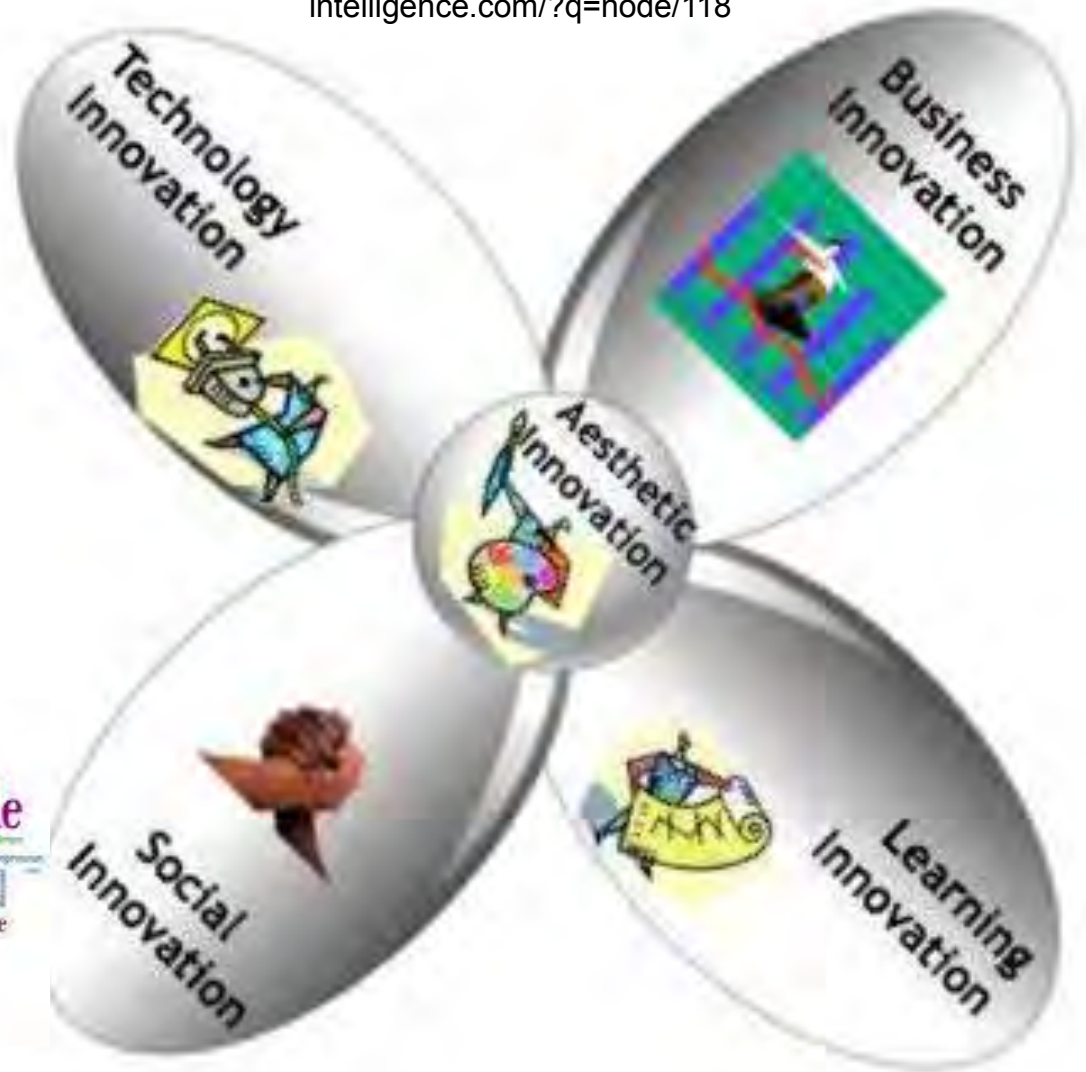
# LL supporting innovation

## Action space for Living Labs along the technology adaption cycle



\* MacDonald and Associates, 2004

\*\* Geoffrey A Moore: Crossing the Chasm, 1999





# Definition of „Social Innovation“ \*)

**„Social innovations are  
new concepts and measures  
to resolve societal challenges,  
adopted and utilised  
by social groups concerned.“**



**\*) Zentrum für Soziale Innovation (Centre for Social Innovation) 2008:  
„Stimulating Social Development“ (p. 2), available for download at  
<http://www.zsi.at/de/publikationen/346/5056.html>**



# Living Labs in Southern Africa network

- Living Labs in Southern Africa Network (LLiSA) emerged from 2006 until its formal launch in 2009 was funded by Department of Science and Technology (DST) and the Ministry of Foreign Affairs, Finland under the COFISA and SAFIPA Programmes, hosted by the Meraka Institute, CSIR
- Primarily focused on building capacity, facilitating collaboration, establishing and developing Living Lab activities and supporting existing and emerging Living Labs in Southern Africa
  - Opportunities for co-creation of innovation and collaboration to offer/develop new ideas of innovation
  - Multistakeholder
    - **Government** (Department of Science and Technology, Telkom Centers of Excellence, COFISA, SAFIPA, Limpopo Provincial government);
    - **Research** (CSIR, Rhodes University, Fort Hare University, Cape Peninsula University of Technology, Venda University, University of Free State, North West University, UKZN, NMMU);
    - **Industry** (Nokia/Siemens, Intel, SAP, Motorola, First National Bank, Vodacom, SAINe, Telkom) and
    - **Civil Society**
- Established a commonly owned vision for the goals and objectives of the Network through engagement and a co-creation process with all key stakeholders
- Provide support in relation to monitoring and evaluation
- Successful model and experience which can be transferred to other regions

# African Living Labs Profiled

Source: Supporting the Evolution of Sustainable Living Labs and Living Labs Networks in Africa, IST-Africa & LLISA, 2011

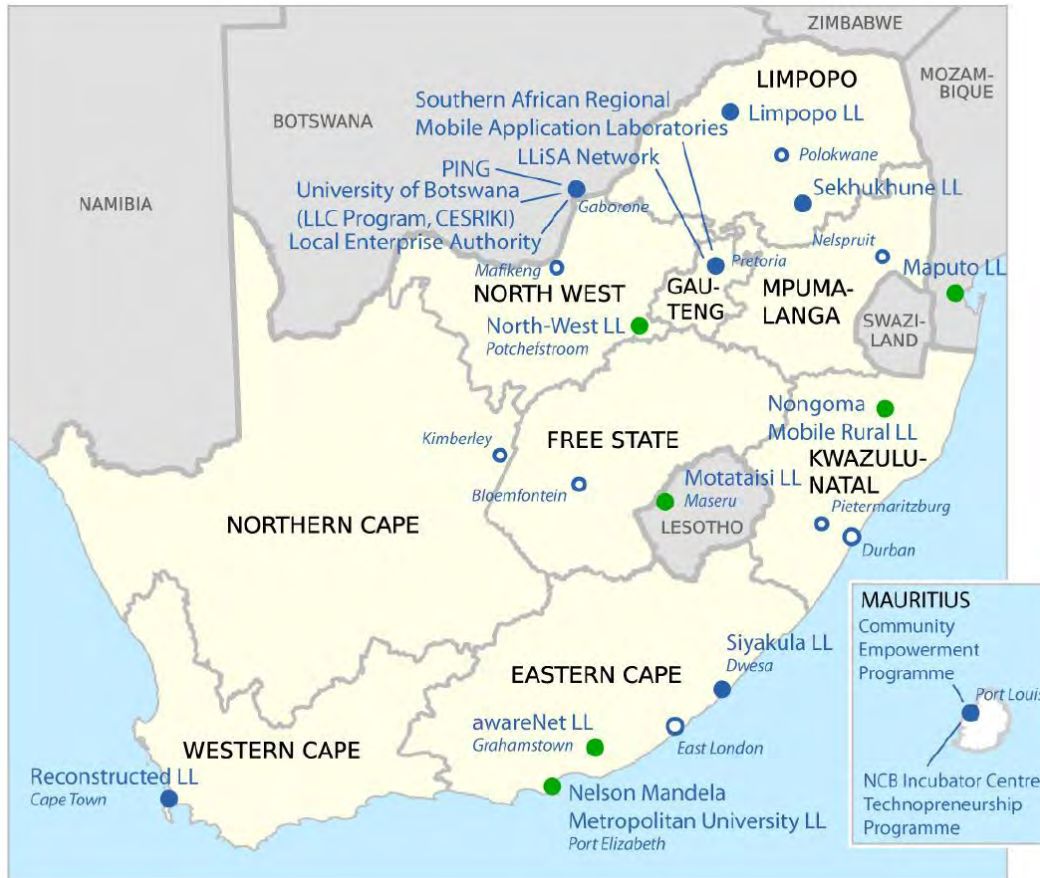


Diagram 13 – Living Labs in Southern Africa

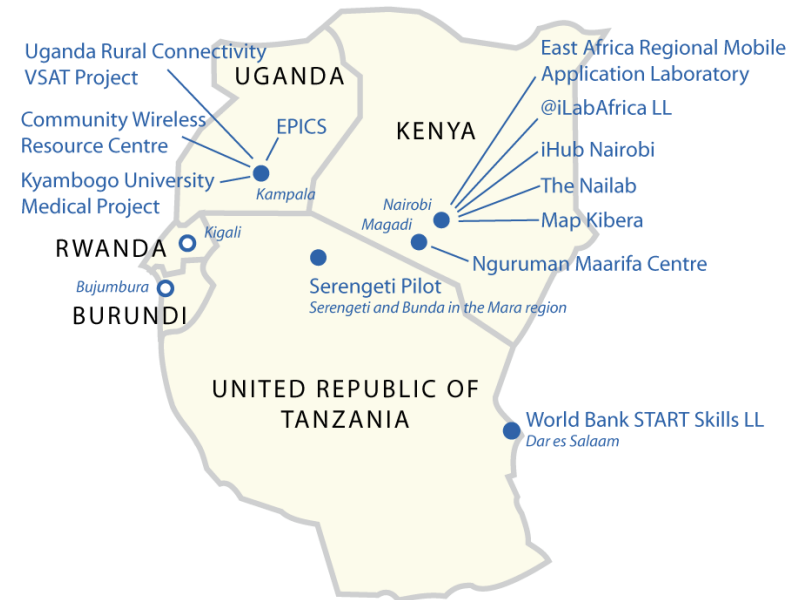


Diagram 14 – Living Labs in East Africa



**LLiSA**  
Living Labs in Southern Africa

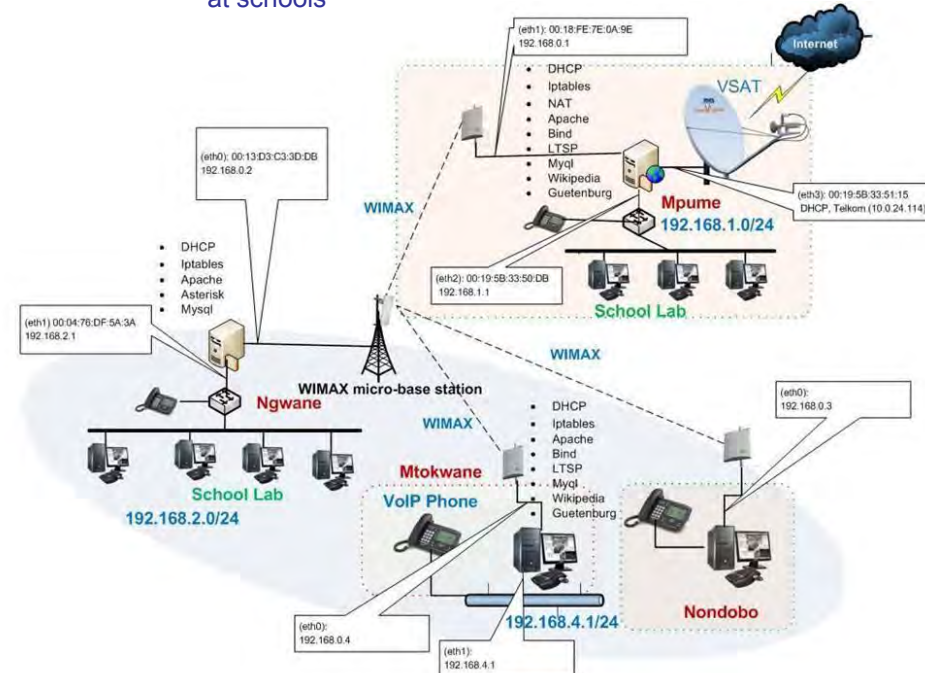
# Overview of Focus of some South African Living Labs

Living Lab	Purpose	Process (approach/model)	Products/services	Evaluation
<b><i>Siyakhula LL</i></b>	Multi-dimensional ICT initiative	Quadruple helix model	Research, development and training	Towards continuous evaluation and impact assessment
<b><i>Limpopo LL</i></b>	Innovative business and technology solutions through multi-stakeholder relationships	Model supporting MDGs and WSIS	ICT, business and community-based services/products	Future impact analyses
<b><i>North-West LL</i></b>	Community-based research and development from a wellness perspective	Eclectic wellness approach to conducting research	Research and interventions	Client feedback and internal evaluation
<b><i>SAP Research LLs</i></b>	Project-based LL: Technologies for emerging economies	User-centred model driven by strategic research focus/ mission	Enterprise resource planning research	Evaluation based on four dimensions of LL definition
<b><i>RLabs</i></b>	Innovative solutions to community problems on a global scale	Value-based model	Social media, innovation-driven products/services	Continuous evaluation through online feedback

Source: LLISA Case Study Report: Living Labs in South Africa, Hendri Coetzee & Ina-Mari du Toit, July 2011

# Siyakula Living Lab, South Africa

Distributed community telecommunication infrastructure at schools



Stakeholders from

- **Academia** (i.e. Rhodes University and the University of Fort Hare's Telkom Centres of Excellence)
- **Industry** (i.e. Telkom, Saab Grintek, Tellabs, Comverse and Easttel)
- **Government** (DTI THRIP Programme, DST and Finland Partnerships) and
- the **Dwesa community**

- Established in 2005 in the Eastern Cape
- Integrated research, development and training approach to address the communications and accessibility challenges experienced by remote rural communities (e.g. e-business and basic Internet connectivity, access via GSM & WiMAX, VSAT and Digital Access Nodes)
- Rolling out communication services and IT training at local schools, used as points of-presence for the community's IT needs
- Spinoff technology provider (Reed House Systems) established in 2010

- Aims to replicate implementation of the e-business/telecommunications platform (Teleweaver) tested in the Siyakula Living Lab in other marginalized communities

- Funded by Telkom Centres of Excellence in Universities of Fort Hares and Rhodes, COFISA and SAFIPA Programmes (MFA Finland & DST)

# Reconstructed Living Lab, South Africa



- Established in 2007 in disadvantaged part of Cape Town
- Focused on Social Innovation supported by Technology
  - Community Transformation, Up-Skilling & Empowerment
  - Value-based Model to develop and train people in use of ICT and Social Media to address social problems in communities
- Activities include
  - RLabs Academy – Web Literacy Training Programme
    - Active involvement of community in training users
  - Innovation Incubator
  - RLabs Research Institute – access to grass roots communities to carry out research and development for government, industry, academia, foundations
  - RLabs Products and Services – licensing social media consulting and online services (JamiiX Platform)
- Stakeholders
  - Government - Ministry of Foreign Affairs, Finland and Department of Science and Technology, South Africa
  - Industry – VodaCom
  - Research – Cape Pensinula University of Technology
  - Civil Society – Communities, Cell-Life (NGO)

# BUS493: SOCIAL INNOVATION

Summer 2009 - instructor: graham dover

# SOCIAL PROBLEMS

who defines problems?  
who is to blame?  
what benefits?



- a condition threatening well-being of society
- a process
  - about disagreement - about values
  - about something - various possibilities
  - about somebody - widespread
- located in time and space
- often result of past social conditions
- not static
- actions needed - change possible



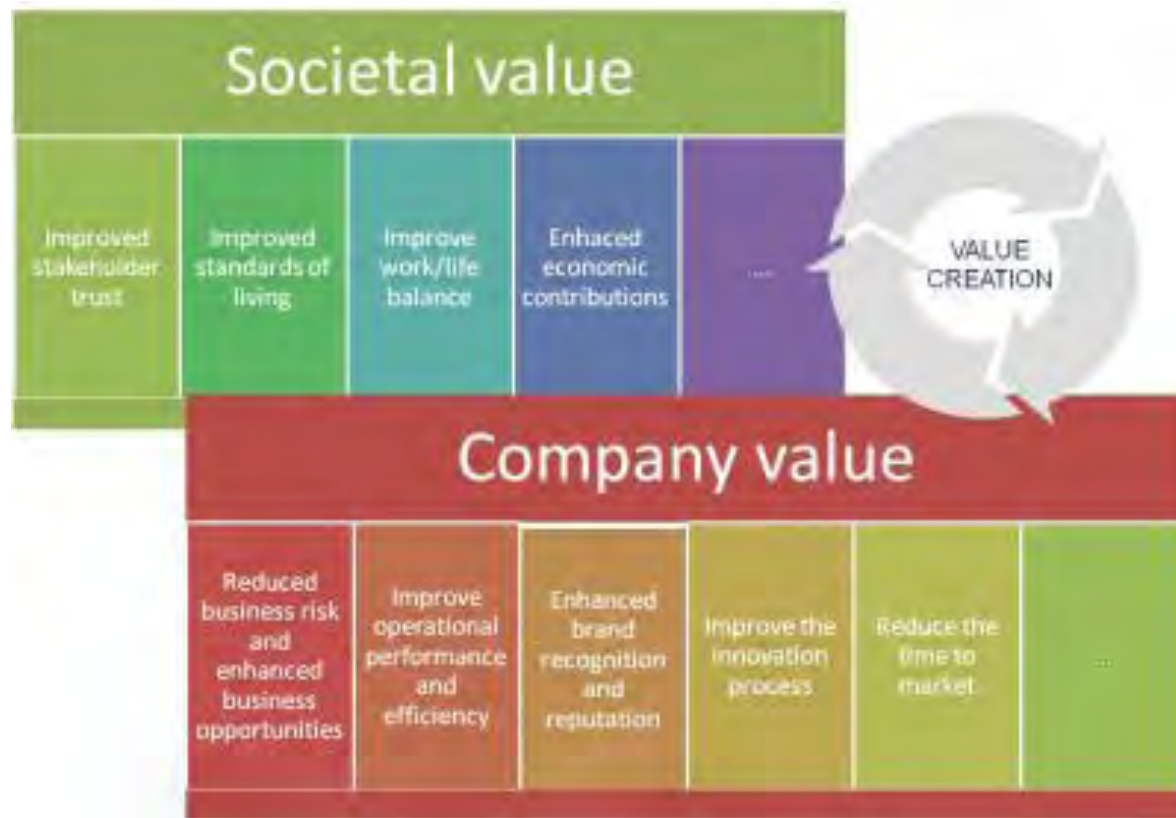
what is novel?  
fill these special people who can do it?



- Who?
- Nonprofits
  - Social entrepreneurs
  - Social enterprises
  - Philanthro-capitalists
  - Businesses
  - Public Agencies
  - Coalitions
  - You



by Afia Erian  
www.multipointthinking.com



[http://wiki.agroknow.gr/ruralinclusion/images/thumb/9/9c/Focus\\_on\\_value\\_creation.png/400px-Focus\\_on\\_value\\_creation.png](http://wiki.agroknow.gr/ruralinclusion/images/thumb/9/9c/Focus_on_value_creation.png/400px-Focus_on_value_creation.png)



# Thank You



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URLs:

[www.meraka.org.za](http://www.meraka.org.za)

<http://www.llisa.net>