

SYSTEMATIC THOUGHT LEADERSHIP FOR INNOVATIVE BUSINESS



# Living Labs

Collaboration platforms for open innovation

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# Living Labs – available definitions



**"co-creation environment for human-centric research and innovation“<sup>1</sup>**

**"a more efficient innovative system as an open co-creation in natural daily life/work environment together with engaged citizens/users, closing the gap between needs/ideas and business/user valid solutions“<sup>1</sup>**

**“originates from the MIT, Boston, Prof William Mitchell, MediaLab and School of Architecture and city planning. ‘Living Labs as a research methodology for sensing, prototyping, validating and refining complex solutions in multiple and evolving real life contexts.’<sup>2</sup>**

**“a "living lab" is neither a traditional research lab nor a testbed (functionality and usability tests) but rather an "innovation platform" that brings together and involve, or in stronger word, engage all stakeholders such as end-users, researchers, industrialists, policy makers, and so on at the earlier stage of the innovation process in order to experiment breakthrough concepts and potential value for both the society (citizens) and users that will lead to breakthrough innovations.”<sup>3</sup>**

**„A Living Lab is a system for building future economy, in which real-life user-centric research and innovation will be a normal co-creation technique for new products, services and societal infrastructures.“<sup>1</sup>**

<sup>1</sup> CORELABS, <sup>2</sup> MIT MediaLab, Boston, <sup>3</sup> AMI@WORK community

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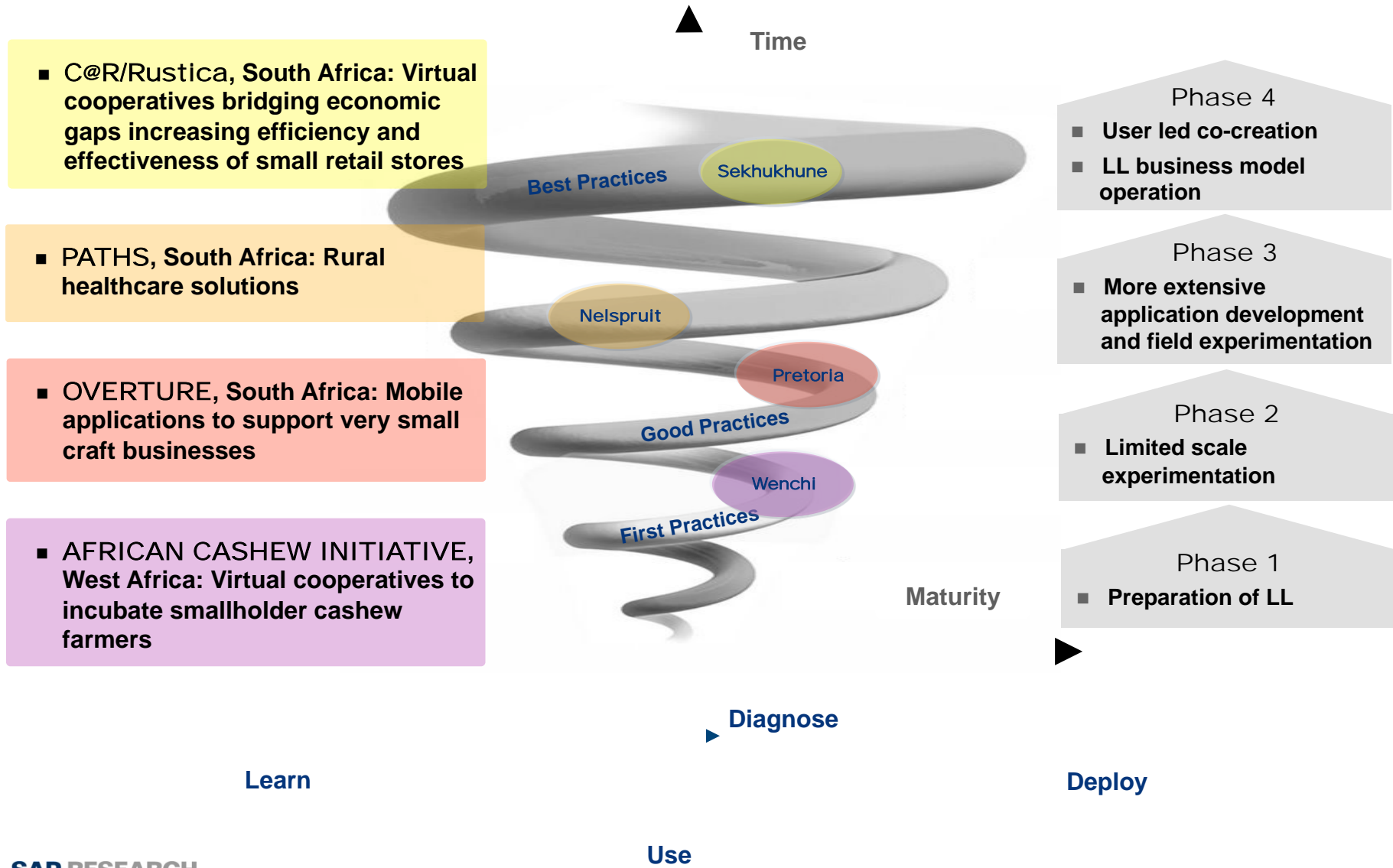
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# African Living Labs Evolution



# Sekhukhune Living Lab, South Africa – Virtual Buying Cooperatives



- Watch the entire 8 min video at <http://www.sap-tv.com/?a=3813&l=1>



# Living Lab Methodology - End User Interaction



## Focus Groups

- Local **informal economy participants** and opinion formers
  - Small and micro enterprises
- Community of **practitioners** – Infopreneurs
  - Formal and informal economy intermediaries
  - Information service providers
  - Social entrepreneurs (micro franchisees)
- **Established economy players** with a current or future interest in engaging in business activities with the informal economy

## End user co-design

- **Use case** and **process** design
- Co-identified use cases reflect expressed **priorities and feasibility** considerations
- **Usability** improvements - “to be improved” tasks, e.g. a paper based catalogue (SMS) versus electronic catalogue (browser application)
- **Functional** design - UI elements and functional requirements, e.g. GIS navigation pattern
- **Scope** of real life implementation, e.g. overlap of delivery areas (as of today) with Infopreneur serviced areas

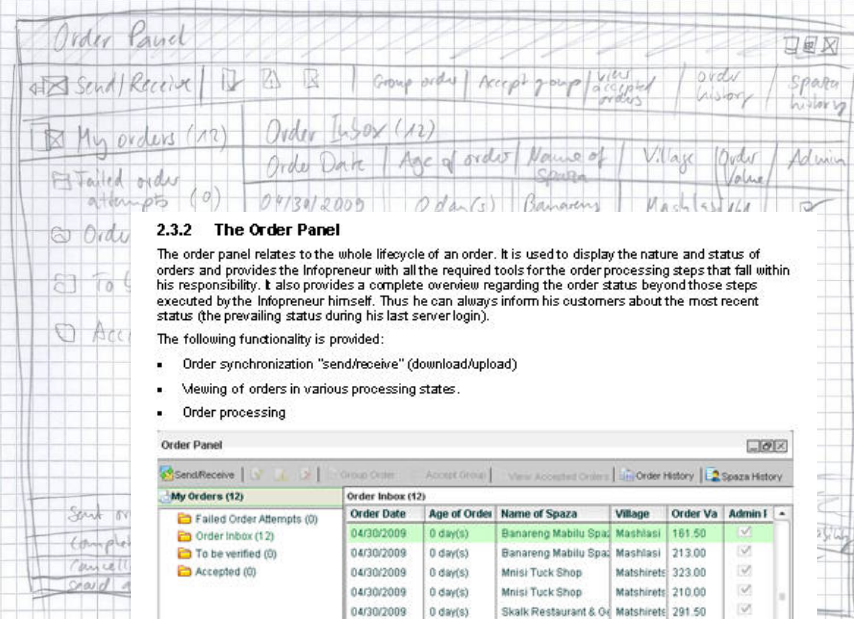
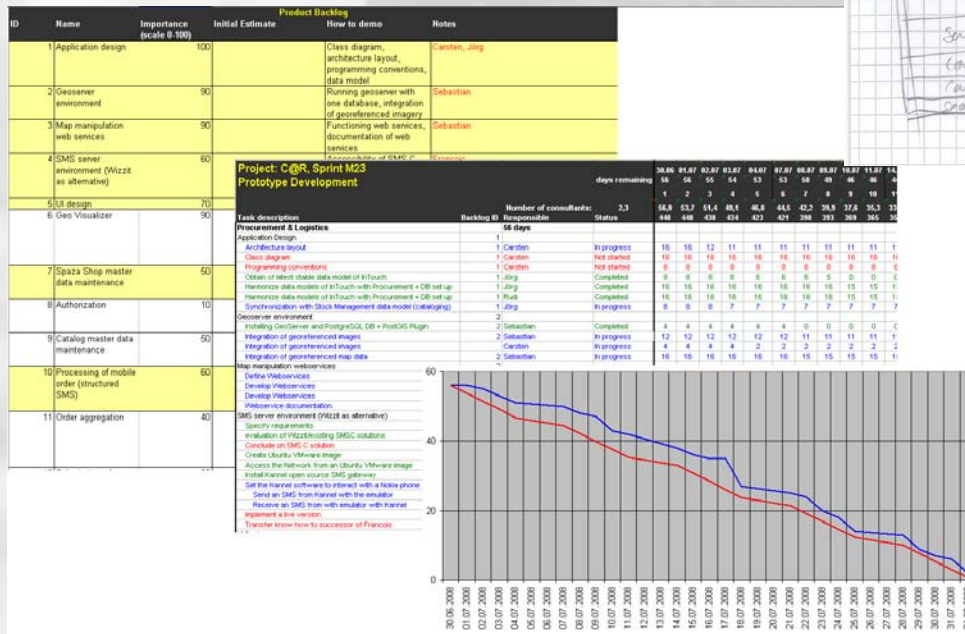


# Living Lab Methodology - Agile Development



## SCRUM, iterative prototyping

- 3-monthly action research cycles
  - Diagnose – Deploy – Use - Learn
- 4-6 weeks lasting sprints
- Product backlog item definition
- Priorities, Tasks, Efforts, Responsibilities
- Daily synchronization

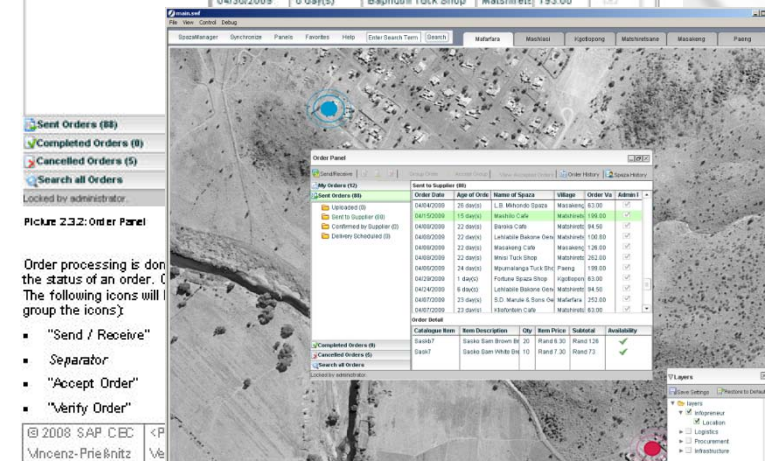


### 2.3.2 The Order Panel

The order panel relates to the whole lifecycle of an order. It is used to display the nature and status of orders and provides the Infopreneur with all the required steps that fall within his responsibility. It also provides a complete overview regarding the order status beyond those steps executed by the Infopreneur himself. Thus he can always inform his customers about the most recent status (the prevailing status during his last server login).

The following functionality is provided:

- Order synchronization "send/receive" (download/upload)
- Viewing of orders in various processing states.
- Order processing



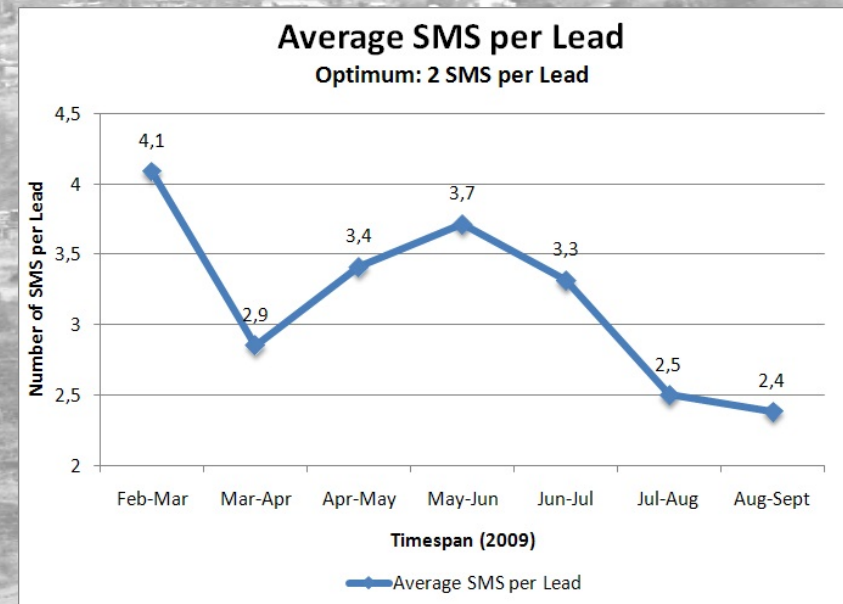
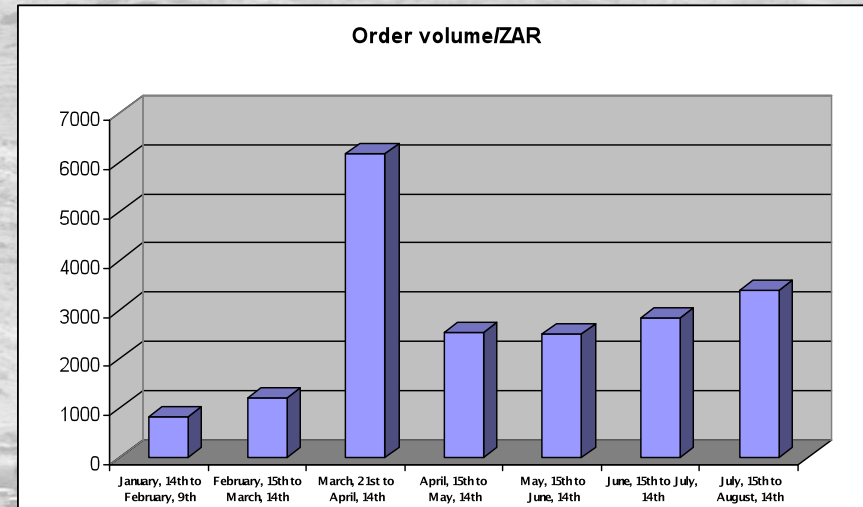
Order processing is done on the status of an order. The following icons will I group the icons)

- "Send / Receive"
- Separator
- "Accept Order"
- "Verify Order"

# Living Lab Methodology – Real Life Experimentation



- **System availability 7x24**
- **Real incentives, live business transactions**
- **Regular change management and end user interaction most important**
- **Be prepared for unexpected stakeholder behaviour**
- **Keep it simple**
- **Prepare a pilot properly and adapt continuously**
- **Ask for regular feedback from all involved parties**
- **Chose a phased approach and be open towards use case changes**
- **Clearly identify the main innovation and make sure it remains part of your first real life implementation**
- **Choose your focus group stakeholders carefully - in the case of business partners: give preference to established and successful partners**
- **Use as little as possible technology and only as much as necessary**



## BRICS countries may by

- 2035 – Match the G6 countries in terms of GDP
- 2035 - India could surpass Japan to be number 3
- 2050 - account for 40 % of the world population
- 2050 - hold a combined GDP of >\$ 400,000,000,000,000

## Implications

- Change in global production, trade & consumption patterns
- Change in world monetary, and perhaps social order
- Dynamic socioeconomic structures with rapidly changing policy and business conditions
- Localized solutions necessary to leverage growth potential

# Living Labs in the Developing World – Value Add and Future Needs



## Value Add

- Local presence and interaction with end users and stakeholders **cope with extraordinary** policies, business and cultural **conditions**
- Established **trusted user communities** for mid and long term cooperation, e.g. internet of services
- Real life experimentation extremely important for **commercialization preparation**, in particular in emerging markets reflecting social and cultural diversity
- Open innovation environments are beneficial for **collaborative software engineering** in an ecosystem of ISVs (Independent Software Vendors), e.g. on open platforms
- **Accelerated** product and service **development** (early evaluation & demonstration , i.e. “concept cars”)
- **Closed gap** between end user requirements and product and service offering

## Future Needs

- Widespread Living Lab establishment to **validate technology advancements** in an environment that does not allow to simply being extrapolated form state of the art (European) technology
- Living Labs as a methodology in developing countries or emerging economies to **guide the design and development** of appropriate/relevant technologies (in Europe) for deployment in emerging economies
- **Increase “technology research”** (in contrast to road-mapping and dissemination) in emerging economies to build up human research capacity and a sound technology skills base in these regions
- Dedicated **calls reflecting emerging markets** for European industry in emerging and developing economies
- **Cooperation** between Living Labs leveraging synergies across domains