Living Labs as drivers of Regional Innovation and cross-border collaboration

SESSION 1. REGIONAL Innovation: LINKAGES, COLLABORATION AND ALLIANCES

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(European Network of Living Labs)
Chair of the ENoLL Council

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Overview

- Global Challenges
- Sustainable Solutions
- Living Labs
- European Network of Living Labs
- Globalization of the European Network of Living Labs
- Regional Living Labs and cross-border collaboration
- Living Labs cases
- Conclusions
Global Challenges

- Clean and renewable energy
- Climate changes
- Food and water sustainability
- Waste management
- Mobility
- Transparency and trust in the political systems. Open Government and accountability
- Trust in the public administration
- Demographic shifts management
- Wellbeing and assisted living. Health and ageing
- Social Innovation. Social inclusion
- Growth and jobs driven by Innovation
- Globalization
Sustainable Solutions

- Wicked problems call for diverse types of knowledge, resources, participation and collaboration.
- Behaviour transformation requires the motivation of millions of individuals and their communities; solutions cannot be pushed.
- New, distributed and highly participatory systems imply new roles for public and private spheres: demand/user/citizen driven open RDI enabled by ICT.

Living Labs
Open user driven eco-systems that engage and motivate all the innovation stakeholders, stimulate collaboration, create lead markets and enable behavior transformation
Living Lab Ecosystem

Public Administration
Incubators, Universities and Research Organisations
Funding and Financing
Enterprises SMEs

Living Lab

Users, Citizens

RDI Stakeholders (PPPP)
Co-creation
New Business Models
Social Innovation
Shared Leadership

Facilitation
Charisma
Trust
Emotion
Collaboration and Motivation

User Communities
Real
Virtual

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Living Labs Innovation
Co-design and Co-creation

PURPOSES

- To learn about users’ experiences of the service through large scale tests.
- To determine business opportunities of the service.
- To obtain input on the prototype.
- To learn more about the users.
- To further develop the prototype.
- Develop and educate developers.
- Co-create the service concept.
- To learn more about the user.
- To obtain input on predefined ideas.
- To obtain ideas for products and services.

COMMERCIALISATION

USER INVOLVEMENT

- Evaluation of the service added value.
- Feedback on business model.
- Evaluation of beta prototype.
- Obtaining feedback on business models.
- Co-developing concepts together with developers.
- Generating ideas together with other users and developers.
- Being a discussion partner on suggested concepts.
- Generate ideas for new products and services.
- Evaluate concepts.

DESIGN OF FINAL SOLUTION

- Design Final Solution
- Appreciate Opportunities
- Evaluate User Experience

PROTOTYPE DESIGN

- Design Prototype
- Appreciate Opportunities
- Evaluate Usability

CONCEPT DESIGN

- Design Concept
- Appreciate Opportunities
- Evaluate User Experience

PLANNING

Source: Form It

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Living Lab Methodologies (1/2)

• Listen and understand end-user/citizens needs and wishes
• Flexible and adaptive design process rooted in real-life experience with increased chances of succeeding with new products
• Shorter lead time from concept to market, promote viral adoption
• Better access to ideas outside the organization
• Better and more intensive use of internal ideas
• Acceleration of Innovation. Sharing good practices
• Usage of methodologies and tools for Co-creation
Living Lab Methodologies (2/2)

- Increased collaboration between public authorities, research centers, businesses and user communities
- Increased productivity of the RDI activities
- Creation and exploitation of new technologies, products, services and business models
- Improved cooperation in International Networks. ENoLL
- Stronger international positioning and privileged access to the markets
- Human capital development
- Increased sustainability culture
ENoLL and EU Presidencies

1st Wave
Finish Presidency, Autumn 2006

2nd Wave
Portuguese Presidency, Autumn 2007

3rd Wave
French Presidency, Autumn 2008

4th Wave
Spanish Presidency, Spring 2010

5th Wave
Hungarian Presidency, Spring 2011

6th Wave
Danish Presidency, Spring 2012

3rd Wave
French Presidency, Autumn 2008

4th Wave
Spanish Presidency, Spring 2010

5th Wave
Hungarian Presidency, Spring 2011

6th Wave
Danish Presidency, Spring 2012

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ENoLL Five Waves
274 Living Labs

Legend
- Total Number of Living Labs
- Scale: 1 Square = 1 Living Lab
- 1st Wave
- 2nd Wave
- 3rd Wave
- 4th Wave
- 5th Wave
- First Wave
- Second Wave
- Third Wave
- Fourth Wave
- Fifth Wave

1st Wave - 19
2nd Wave - 32
3rd Wave - 68
4th Wave - 93
5th Wave - 62
Total - 274

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ENoLL Today

• 236 EU Living Labs
• 38 Living Labs outside EU
• ENoLL Office headquarter in Brussels. Services to members, project facilitation, events, monthly newsletters, active presence in online and in Social Media, engaging in strategic projects). Regional offices under negotiation for Rio de Janeiro, Beijing and Pretoria.
• Supporting services including the Living Lab Summer Schools (Paris 2010, Barcelona 2011, Helsinki 2012). Living Lab Prize
• Globalization of ENoLL (in Brazil, in China and in Africa)
• Open Living Labs PPPP initiative
• 6th Call for ENoLL membership results to be announced on the 22nd of May 2012 by the Danish EU Presidency

www.openlivinglabs.eu
Thematic Networks of Living Labs

- Social Innovation. Social Inclusion
- Smart Cities. Future Internet. Internet of things
- Energy Efficiency. Sustainable Energy. Climate change
- Well Being and Health
- e-Government. e-Participation
- Creative Media. User driven contents. Social Networks. Web 2.0
- Thematic Tourism. Culture Services
- Territorial and rural development of Smart Specialization
- Sustainable Mobility
- Industrial and logistics development.
- Security
Globalization of ENoLL

ENoLL initiatives outside Europe

• Brazil Network of Living Labs (BNoLL)
• Africa Network of Living Labs (ANoLL)
• China Network of Living Labs (CNoLL)

ENoLL initiatives outside Europe (in progress)

• Taiwan
• Korea
• USA
• Australia

ENoLL Collaboration agreements

• World Bank
• FAO Food and Agricultural Organization of the UN (MoU and Action plan)
• United Forum Ubiquitous Network Industry and technology Development Forum (China)
• Beijing City Administration and Public Service Innovation – Information System and Equipment Center (CAISEC) China
• EBN Europe Business Network (In progress)
• ISPA International Science Park Association (In progress)
Brazilian Network of Living Labs

Existing Living Labs domains
• Social Innovation. Social Inclusion
• ICT applications. Mobile services.
• Environment Technologies. Sustainability
• Biotechnology. Biodiversity
• Sustainable Energy and Energy Efficiency
• Natural Products. Microbusiness.
• Culture preservation. Traditional Practices
• Creative IT Industries

Emerging Living Labs domain
• Internet of Things and Intelligent Logistics
• Automotive Industry
• Civil Aeronautics Industry
• Agrifood. Healthy Food
• Thematic Tourism (Eco-activities)
• Security
ENoLL in Brazil

- Amazon Living Lab - Fundação Feitosa (Manaus, Amazonas)
- Espírito Santo Cidadania Digital (Vitoria, Espírito Santo)
- Inova Unicamp Innovation Agency Living Lab (Campinas, São Paulo)
- Living Lab INdT - Well Being and Wealth Care LL (Manaus, Amazonas)
- Amazonas Living Lab (Manaus, Amazonas)
- BBILL (Belo Horizonte, Minas Gerais)
- EDP/Brasil Living Lab (São Paulo, São Paulo)
- Group Inter-Action Living Lab (Manaus, Amazonas)
- Habitat Living Lab (Vitoria, Espírito Santo)
- Rio Living Lab (Rio de Janeiro, Rio de Janeiro)
ENoLL in Africa

- Living Lab Maputo (Mozambique)
- African Living Lab ISEG/UNIDAF (Senegal)
- Siyakhula Living Lab (South Africa)
- Sekhukhune Living Lab (South Africa)
- Egyptian-Dutch Agricultural LL (Egypt)
- Start-Up Systeme Tunisia (Tunisia)
- Egyptian School Education Living Labs (Egypt)
- Egyptian Retail Trade Development, Grocers/ Retail Traders Connection & Empowerment” Living Lab (Egypt)

African Living Labs Task Force
Regional Living Labs Impact

- Promote RDI in the regional context
- Foster Open Innovation at Regional level
- Increase inward RDI investment from big players
- Apply ICT RDI to issues of regional interest
- Promote diffusion of ICT co-design in target areas
- Stimulate **Social Innovation**
Regional Living Labs Implementation

• Identification of regional added value
  – Development issues of broader concern
  – Territorial knowledge capital
  – Network dynamics among citizens and local authorities and businesses

• Governance capacity
  – Engagement of stakeholders
  – Inter-departmental cooperation
  – Multi-level cooperation
Regional Living Labs Drivers

• Engage and motivate citizens as co-designers and co-creators (Sustainable communities)
• Understand and take ownership of local specificities: cultural heritage, local traditions...
• Value and promote authenticity
• Encourage experimentation
• Enrich real life experiences
• Use ICT enhanced learning
• Apply Social Networks and Web tools
Living Lab Cases

- SANJOTEC Living Lab
- FIAPAL Living Lab
- Save Energy
- Apollon
- Brazilian Living Labs
SANJOTEC Footwear Living Lab
Footwear Industry in Portugal

- Co-creation, co-engineering, co-production and co-distribution
- Involvement of all the stakeholders
- Engaged user communities. Social networks.

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SANJOTEC Living Lab

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12th April 2012
FERREIRA AVELAR E IRMÃO CALÇADO QUE ATRAI SARKOZY, RONALDO E MICHAEL BUBLÉ
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GUIA PARA COMPRAS VERDES NO SECTOR DO CALÇADO
94 marcas portuguesas de calçado na maior feira do mundo

Mais de 1600 exposidores, de aproximadamente 50 países, vão estar em Milão

Quarta-feira, 14 de Setembro, 2011

A todo, são 94 as marcas portuguesas de calçado que vão participar, a partir de domingo, na Micam, a mais importante feira de calçado do mundo, em Milão.

A presença no certame insere-se na estratégia promocional definida pela APICCAPS (Associação Portuguesa dos Industriais de Calçado, Componentes, Artigos de Pele e seus Sucedâneos) e pela AICEP (Agência para o Investimento e Comércio Externo de Portugal), com o apoio do Programa Compete, e visa consolidar a posição relativa do calçado português nos mercados externos, diversificar o destino das exportações, abordar novos mercados e possibilitar que novas empresas iniciem a exportação.

Artigos relacionados
- Café do Alentejo poderá entrar no mercado asiático
- Europcar entrega carros ao domicílio
- Ford oferece Fiesta com
FIAPAL Automotive Living Lab
Portuguese Industrial Policy for the Automotive Cluster

GOVERNMENT OFFICE - GAPIN

Facilitating environment
- Supporting infrastructure
- Pro-active facilitation

Added value chain
- Joint Ventures
- Enterprises modernisation
- New enterprises

AUTOMOTIVE INDUSTRY CLUSTER

Self-Sustained Added value
- Virtual Enterprises
- Networks
- Clubs of suppliers
- Market observatory
- Innovation Centers

Sustained competitiveness And employment
- Functions design and manufacturing
- Chared logistics
- New market opportunities

Green Car
- PHEV Car
- Mobi.e
- Future car concept
- User driven car design

PORTUGUESE MINISTRY OF INDUSTRY

1992

1995 AICIME

LIVING LAB PROJECTS

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FIAPAL Automotive Living Lab Policy Implementation

• Strong political support for the project (Vision, guidance, facilitation, etc at ministerial level)

• Attractive environment (Business opportunities, research, engineering, training, etc. – GAPIN reporting directly to the Minister)

• Funding and fiscal mechanisms.
• Stimulate the value of open innovation and added value products.
• Facilitate the liaison to technological and professional networks
• Support the development of global business strategies and networked enterprises.
• Stimulate the internationalization strategy.
• Support and motivate new networking initiatives.
• Improve the environment for service companies
FIAPAL Automotive Living Lab Activities (2/2)

• Manage large samples of customers / citizens in the co-creation and testing processes
• Develop creative environment. Facilitate interactive creation process.
• Facilitate and enable collaborative value added activities in an open concurrent enterprise environment. Extended enterprises (Virtual 1st tier suppliers). Design, prototyping, testing complex assemblies.
• Promote innovative projects and disruptive Innovation.
• Portugal as a Living Lab for electric mobility (Mobi.E)
• Testing environment for new models
Added Value Networks
Extended Enterprises

Portuguese Automotive Industry

Plastics
Metal
Electronic
Etc.

Components
Modules
Systems

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FIAPAL Living Lab Ecosystem

- Research:
  - MIT
  - IPA
  - Other Research Organizations

- Technological Centers:
  - CENTIMFE
  - CEIIA
  - Other Technological Centers

- Associations and Training:
  - AFIA
  - Other Associations

- Research, Engineering, Innovation, Training

- Market Users

- Financial Funding

- Automotive Cluster of Suppliers
  - OEM 1
  - OEM N
  - Sn-1
  - Sn
  - Sn-2
  - S1

- ALL-Net "Y"

- FIAPAL

- ALL-Net "X"
# FIAPAL Living Lab Evolution

<table>
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<th>OEM</th>
<th>AUTOEUROPA, GM, PSA</th>
<th>AUTOEUROPA, GM, PSA</th>
<th>AUTOEUROPA PSA, Others</th>
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<td>Suppliers</td>
<td>10</td>
<td>50</td>
<td>120</td>
<td>180</td>
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<tr>
<td>Networking</td>
<td>Non-existent</td>
<td>Clubs of Suppliers</td>
<td>Added Value Networks (LL Methodology)</td>
<td>Innovation Networks (FIAPAL Living Lab)</td>
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<td>Turnover</td>
<td>500 M€</td>
<td>1.5 Billion Euros</td>
<td>4 Billion Euros</td>
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SAVE ENERGY Living Lab

Goals:

- Smart ICT Energy Efficiency model and platform achieved an average of 25%
- Serious Game focused on Energy Efficiency at Public Spaces
- User behavior transformation. Living Lab methodology
- Pilots committed to extend results beyond project completion
- European wide dissemination of results
- Policy Recommendations to the EU Commission

5 Energy Efficiency Pilots located at public buildings supplying services to the public
Helsinki Save Energy LL
Co-Design and Co-Creation

Users: Teachers, pupils
Technical Experts
Historical Data: Made Energy Audits
Supporting Companies

Ideas, Proposals
Action Plan
Project Plan
Investment Plan

Evaluation
Evaluation

Implementation of the Pilots and Game

Source SAVE ENERGY Technical Meeting Helsinki; Arne Gylling & Asko kippo
Energy Living Lab (ISaLL)
International collaboration

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SAVE ENERGY

Opening new Energy Efficiency and ICT Markets for SMEs

SAVE ENERGY Initial Vision

New Business Partnership

Global Energy Efficiency Market

APOLLON Project

ICT for Energy Efficiency

PreCo Project

SAVE ENERGY Pilots

Helsinki

Lisbon

Leiden

Manchester

Luleå

ICT Energy Efficiency tools and services

New Business Models

Behaviour Transformation

French Pilot (10.000 users)

Portuguese Pilot (50.000 users)

Brazilian Pilot São Paulo (10.000 users)

China Beijing (10.000 users)

Others

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APOLLON Project
Cross Border Collaboration

- 14 Pilot Cases
- Cross Border Methodologies
- Best Practices
- Thematic Domain Networks

<table>
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<th>Domain</th>
<th>Homecare and Independent Living</th>
<th>Energy Efficiency</th>
<th>eParticipation</th>
<th>Manufacturing</th>
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<td>Number of Living Labs</td>
<td>4 Living Labs</td>
<td>4 Living Labs</td>
<td>4 Living Labs</td>
<td>2 Living Labs</td>
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Amazonia Living Lab

Driven by Nature Innovation

- Biodiversity (a)
- Ecotourism
- Sustainable Energy
- Other Services
- ICT Assisted Learning
- Culture Preservation (b)
- Digital Inclusion
- Others

Amazonia Living Lab (c)

Well Being Health

Partners:

AM State Government
AmazonasTur
SUFRAMA
EMBRAPA
FAPEAM
SEBRAE
CIEAM
FIEAM
UFAM
CETA
INPA
SECT
INdT
UEA
others

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Amazonia Living Lab
Living Lab of Living Labs

• Common vision and mission.
• Coordination of platforms and initiatives. More effective realization
• Stimulation and facilitation of synergies
• Reinforcement of fund raising capacity
• Increase capacity of available results
• Larger critical mass
• Easier access to global markets
Rio de Janeiro Living Lab

Driven by Olympics Spirit

Social Inclusion, e-Participation
Healthy Living, Sports
Smart Cities, Urban Renewal
Culture, Entertainment, Lifestyle

Energy and Environment, Sustainability

Arts, Design, Fashion

Digital Production, Publishing, TV
Thematic Tourism

Others

Rio de Janeiro Well Being Living Lab

Partners:
- RJ State Government
- Olympic Committee
- Genesis Institute
- Porto Maravilha Municipality
- Sociology Design
- FUNDARPE
- QuickMind
- Milestone
- EduWeb
- PUC-Rio
- SEBRAE
- RioFilm
- Affero
- Globo
- FINEP
- SECRJ
- Others

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Rio de Janeiro Living Lab

“Driven by Olympic Spirit”

- Social Innovation. Social Inclusion. (“Favelas”)
- e-Participation
- Smart City. Urban Requalification
- Digital Production. Interactive TV (NGA).
- Thematic Tourism
- Art, Design and Fashion
- Energy and Environment, Sustainability
- Healthy Living Sports
- Culture. Entertainment. Lifestyles
- Experimenting new ways of learning (Serious Games). Entrepreneurship, talent sourcing, new values, etc
Smart Cities as Urban Living Labs

Future Internet PPP

FI PPP Use Case Projects

ENoLL / World Bank

Concord

Connected Smart Cities Network

Smart Cities

Africa, Asia and Brazil

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Conclusions (1/2)

• **Regions** have the greatest share of resources for promoting Territorial Innovation and are where the benefits of **Innovation Policies** can be most visible.

• **Regions** can take a leading, demand-driven role in introducing transversal **Innovation Policies**, mixing technical and non-technical participation and linking Creative Region strategies to Territorial Innovation (**Living Labs**).

• **Living Labs** co-creation of innovation address all dimensions of **Regional Development Policies**

Living Labs policies provide regional, cross-border and trans-national integration
Conclusions

The big global challenges of our time demand mass participation of users/consumers/citizens. Finding solutions requires pooling of diverse types of knowledge and resources, and harnessing the motivation of millions of individuals and their communities.

- **Technologies are not sufficient** to solve the global challenges in a sustainable way, user behaviour transformation is required and this can be enabled by the Living Lab methodologies.
- **Living Labs** co-creation of innovation address all dimensions of Regional Innovation Policies
- Future Internet technologies, Living Labs and Social Innovation convergence enables **Smart Regions, Smart Cities and cross-border initiatives** to implement Innovation ecosystems where co-design and co-creation by all the stakeholders, including the citizens, lead to a sense of belonging and identity, wellbeing and togetherness, basis for a better sustainable World and a Happier Society.
Thank you!

www.openlivinglabs.eu

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