



OO/UC3M/63- METHODOLOGICAL FRAMEWORK FOR IMPLEMENTING AND EVALUATING LIVING LABS

A Living Lab constitutes a research approach for innovation that challenges the whole research and innovation process in real-life conditions by human, social, cultural, organizational and institutional aspects having an impact on sustainable service, business and technology development. In this sense, Living Labs are experimentation and validation environments characterized by the early involvement of user communities, closely working together with developers and other stakeholders, and driving rapid cycles of ICT-based innovations.

There is a lack of formalized methods for implementing and evaluating Living Labs regarding how Living labs act as innovation environments and what is the impact of such Living labs in creating value for users, stakeholders in the setting where they are established.

This methodological framework contributes to the determination of the following issues:

- Determine and disseminate the efficient practices for creating and implementing Living Labs.
- Determine and assess the relative progress and impacts of living labs and understand the determining factors and processes.
- Understand how LL influence their rural and regional environments
- Understand the different development patterns of Living Labs and understand the determining factors
- Assess the performance of the Living labs as innovation methodology

Description and special features

The C@R Reference Model integrates all the different tasks to be performed in order to create and maintain effectively a Living Lab.

It proposes a common way to:

- determine the innovation strategy of a Living Lab,
- define the services to be provided in the scope of a Living Lab,
- manage the Living Lab investments, risks and technological infrastructure,
- develop the requirements of the software tools to be provided,
- deploy the base technological platforms required to develop the applications,
- perform the user roll out and provide the corresponding training, and
- Compile relevant information to evaluate and assess the Living Lab performance.

Overview of Living Labs Methodological Framework

- Living Lab Core Process Area.** The process area, Innovation Initiatives Management, gathers the essential practices that identify an initiative as a user-centric innovation approach named Living Lab. Each of the specific practices that are considered in this process area can be complemented, if needed, with other more detailed and focused process areas which are summarized below.
- Living Lab Strategic Management.** This group of process areas is related to the definition and maintenance of a Living Lab business model. The process areas considered in this group are:
 - Living Lab Strategic Planning
 - Living Lab Investment Management
 - Technological Infrastructure Assessment and Determination
 - Project Management
 - Living Lab Product/Service Definition
- Living Lab Technical Development.** This group of process areas considers all the activities related to the product/service definition, specification, design and development. The specific process areas considered in this group are:
 - Provide and Maintain Technological Infrastructure
 - Requirements Specification and Management
 - Services/Software Tools Design and Implementation
- Deployment and Operation of Living Lab Services.** The specific process areas considered in this group are:
 - Services/Software Tools Deployment



- Services/Software Tools Change and Configuration Management
- User Training and Education

e. **Assessment and Evaluation** - taking place during all the stages of the Living labs development. It is necessary to use adequate indicators, measures and sensing techniques for observation of key processes and outcomes. This also will enable us to compare and benchmark experiences and impacts across Living Labs environments. The specific process areas considered in this group are named Living Lab Assessment and Evaluation.

Innovative aspects

Monitoring and Assessment model support in determining the situation of the Living Lab as innovation environment and its impact on rural and regional development such as: improvement of ICT infrastructure, availability of collaborative tools, creation on new business models, creation of new business through incubators, productivity benefits, enhance of work coordination, building new networks of partnerships, improvement on quality of life, improvement on quality of collaboration process, impact on social relationships and improvement on education and learning.

Competitive advantages

At local and regional level, the fact of carrying out a Living Labs Reference Model will allow to establish a comparative of application experiences in particular contexts, which will be as reference to other Living Labs. It would determine the added value created for applying Open Innovation practices. Regarding businesses, it will allow to determine the productivity business, cost and time savings, improvement on businesses performance. At community level, it will allow to determine the approached setting rate for accessing ICT infrastructure.

Technology Keywords

Knowledge management, process management; Research and Innovation Management

Contact Person: María Dolores García-Plaza
Phone: + 34 916249016
E-mail: comercializacion@pcf.uc3m.es