

# Foundations on the Living Lab approach



### Introduction

The Living Lab methodology is a well-known approach for achieving open innovation. There are many aspects to consider when setting up a Living Lab or applying this approach to your specific context. To use this guide, you must not necessarily have or aim to establish a formal Living Lab. Instead, we share key insights into the approach and tips on how to foster citizen engagement throughout your citizen-focused project.

The tips in this guide come from experts with hands-on experience in applying the Living Lab approach in their own communities. While this guide focuses on urban living labs operating in cities and addressing digital solutions, the methodology can be adapted to other contexts, such as rural environments.

Keep in mind that Living Labs involve experimentation in real-life settings, embedded within the environments they aim to impact.

### **Understanding the Living Lab approach**

Urban living labs have been shaped into a form of collective urban governance and experimentation to address challenges and opportunities arising due to urbanisation. Simultaneously, citizens have been increasingly involved in city development procedures and decisions to ensure that changes are suitable to their needs as the main beneficiaries and end users, and social problems are prevented (Juujärvi & Pesso, 2013). Urban areas are considered natural places to develop living labs, especially in newly constructed areas where there are opportunities to implement novel infrastructure and conduct research studies while enforcing co-creational practices with the users are easily enabled.

According to the work of Voytenko et al. (2016), there are five key characteristics of urban living labs. These are:

- 1. geographical embeddedness
- 2. experimentation and learning
- 3. participation and user involvement
- 4. leadership and ownership
- 5. evaluation and refinement

From another perspective, complementary to the above (Juujärvi & Pesso, 2013), there are at least three types of urban living labs:

a) Cities as technology-assisted research environments: users provide feedback on products and services. The goal is to improve the local environment or the services provided to the citizens (e.g. housing).

b) Cities urban artifacts and local services being co-created: communal yards, garden allotments, or daycare services are designed and developed by the citizens themselves.

c) Novel urban planning through new tools and processes with the engagement of citizens: a vision-making of the area and planning procedures are being facilitated, to increase the access and mutual learning of stakeholders.

Thus, a living lab is in itself a platform for all interested parties to actively be part in a city's planning initiatives and decision making.

## Citizen engagement

Citizens can be involved in many different levels and intensities in urban living labs. These can be categorised as per the work of lves and Olson, (1984) on user involvement, as below.

No engagement is when the citizens are unwilling or have not been invited to engage.

**Symbolic engagement** is when citizens have been requested to engage but their input is then ignored.

**Engagement by advice** is when citizens' advice is solicited through interviews and questionnaires.

**Engagement by weak control** is when citizens have a 'sign-off' responsibility at each stage of the solution development process.

**Engagement by doing** is when citizens are active participants in the solution development process and influence the process in all stages.

**Engagement by strong control** is when citizens have the power of decision-making during the solution development process, and the outcome will be highly affected by their ideas, needs and expectations.



#### Tips to achieve citizen engagement

These tips should be put into perspective and adjusted based on your own topic for which you are seeking a solution through citizen engagement.

- 1. Citizen engagement must be voluntary.
- 2. Attempt to have representatives from a diverse background to ensure that all target groups get a voice.
- 3. Be inclusive to account for the differences among user categories.

- 4. Engage citizens who are flexible toward change and have strong social competence. Sometimes one single person can destroy the process of solution development.
- 5. According to your target group, consider achieving a balanced gender distribution.
- 6. Citizen selection should be on the citizens who are in different levels of knowledge about the areas of the challenge we are seeking a solution for.
- 7. Choose the stakeholders from a qualitative perspective depending on the aim of the urban living lab. Avoid exclusivity.

#### **Keeping participants motivated**

- 1. Spend enough time to investigate an innovation's functionality before engaging citizens on a larger scale
- 2. Enforce clear and on-time communication and interaction with the citizens
- 3. Make sure that the citizens know and feel the importance of their contribution
- 4. Manage citizens' expectations
- 5. Ensure flexible and appropriate timing of their engagement
- 6. Avoid prolonging the engagement activities and divide bigger tasks into micro tasks where applicable
- 7. Consider an appropriate financial reward or a small gift for their engagement
- 8. Do not forget to receive the consent of the participants and take precautions to ensure ethical interactions



The content of this guide was adapted from the Living Lab Handbook for Urban Living Labs Developing Nature-Based Solutions (Abdolrasoul Habibipour, Anna Ståhlbröst, Spela Zalokar, Ines Vaittinen).

#### **Resources**:

Juujärvi, S., Pesso, K. (2013) Actor Roles in an Urban Living Lab: What Can We Learn from Suurpelto, Finland? (November 2013). Technology Innovation Management Review, 3(11): 22-27. URL: <u>https://timreview.ca/article/742</u>

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Blake Ives, Margrethe H. Olson, (1984) User Involvement and MIS Success: A Review of Research. Management Science 30(5):586-603. <u>https://doi.org/10.1287/mnsc.30.5.586</u>

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