

Living Labs and C2P Partnerships: A Participatory Solution or Just Another Buzz Concept for Regional and Local Development?

Roxana Voicu-Dorobanțu
The Bucharest University of Economic Studies
roxana.voicu@rei.ase.ro

Abstract

The paper presents the case of Living Labs, a systemic innovation approach with regional and "topical" reach, as a potential tool for regional and local development. The case of citizen-private—public (C2P) partnerships, also known as C3P, is presented conceptually, as an integrative, participatory possible solution for local issues, such as the fostering of a more innovative business ecosystem, or, to a much smaller scale, the user-centric improvement of local infrastructure. A mainly theoretical paper, as most research in the area of Living Labs is in the form of policy papers or case-study, the paper presents possible drivers for the creation of a Living Lab in Romania.

Key words: living labs, regional development, innovation

J.E.L. classification: D71, F63

1. Introduction

Regional development and innovation became in the past 10 years more than academic buzzwords and NGO-driven discourse. It has become a reality the fact that regions are more flexible than entire countries for introducing public policies for innovation, development and sustainability, they may act as pilot tests and create more tailor-made programs, in order to ensure a higher efficiency of actions.

Thus, any type of research that supports a higher level of engagement of stakeholders at regional level, a more integrated management of externalities (Bennett and Iossa, 2006, pp. 2143), becomes a solution for pushing the model forward. Living labs and citizen-public-private (C2P) partnerships, also known as C3P are becoming ways of engaging most of the stakeholders in this endeavor of growth.

2. Regional Development and the need for targeted innovation

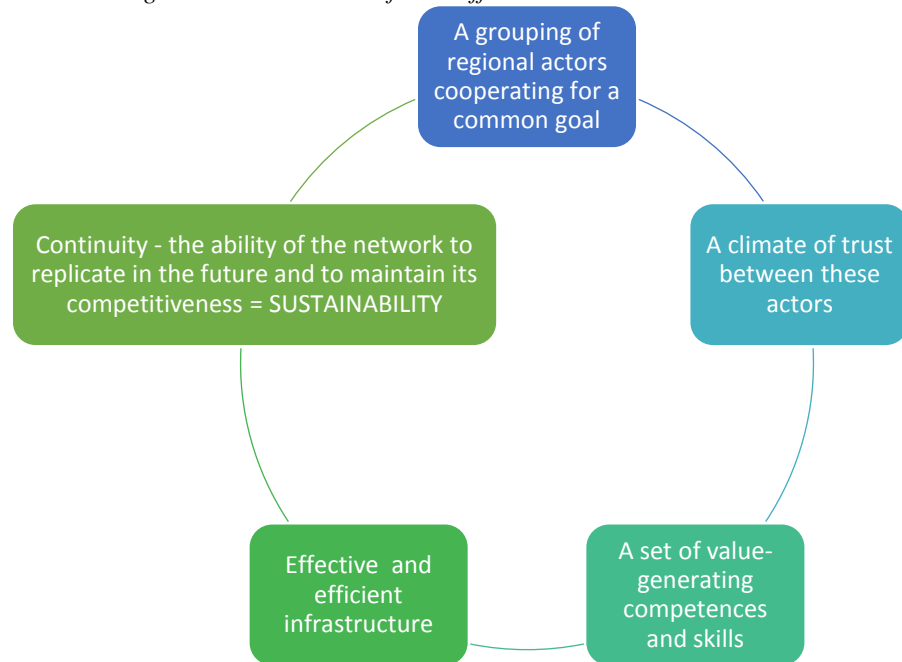
Considered in the Development Strategy of Romania in the next 20 years as an axiological norm (Zăman *et al* in Vlad (eds.), 2015, pp. 235), sustainable development is hampered by a number of negative trends among which an increase in regional disparities. If overall Romania is among the last countries in the European Union in terms of the impact of innovation, being considered a country rather efficiency-oriented than innovation-oriented, within the country there may be observed major disparities between the most developed region (Bucharest Ilfov) and the other „poor regions,, (Albu *et al* in Vlad (eds.), 2015, pp. 280). Therefore, the issue of regional development is evermore present, as the capital area cannot continuously be the driver to the entire economy, particularly in a very large country, such is the case of Romania.

In recent decades, however, from the general pattern of growth of Solow (proposed in 1956, refined in 2000) which speaks of exogenous factors in the literature on regional development, one can observe a tendency of concentrating on endogenous factors of growth. Regional development should be considered by the various stakeholders as both a process and a product (Blakely, 1994, p. 115), especially as it is difficult to reconcile the effects of development policies to the regional

processes that shape them (Stimson et al, 2006, pp. 4). This approach is hampered by the volatility of national and global business environment and the existence of national policies and strategies (and implicitly supra-regional) that may affect the aforementioned processes. Defined in Stimson *et al* (2006, pp. 6) as the application of business processes and available resources in a region resulting in its sustainable development and the achievement of the desired objectives, which respect the values and expectations of businesses, residents and visitors, regional development is considered as having a critical factor, namely competitiveness (Porter, 1990, pp. 84, Ohmae, 1995, pp.65). However, the theory of cumulative causation (Myrdal, 1957, p. 23, Krugman, 1997, p. 46) points out that this may lead to disparities, with processes that support the well-developed regions to further attract investors, funds, innovation, to the disadvantage of the less developed regions. The new theory of growth (de Groot *et al*, 2004, pp. 39) retains this concept of favorable or unfavorable processes, calling them self-consolidating processes of decline or increase.

Regional development is thus, nowadays, an important area of research, with academia and businesses, alongside policy makers, trying to identify the proper tools, processes maps and drivers in order to take the best decisions, foster the highest impact and target the most problem areas. One of the most talked about models is the regional business ecosystem model, which mainly draws a map of the way the region shapes itself in terms of businesses. Another tool for the analysis of the regional development, alongside the usual modelling of economic profiles of nations, adapted to regions, can be the BEN (*business enabling network*) model (Pikka, 2011, pp. 324), designed as a public policy decision-making model through 5 elements, as presented in the Figure below.

Figure no. 1. Conditions for an efficient BEN model



Source: (Pikka, 2011)

It is therefore extremely important to involve all stakeholders in this cycle of public policy decision making, as the common goal for all of them may be defined as the development of the region in which all of them function. One way in which these stakeholders may be involved is based on the idea of user-driven innovation, is a systemic innovation approach, bringing together citizens (as users of aforementioned innovation for regional development) with the public institutions and business environment, in an effort to leverage on the open source advantages. This allows for a more generous bank of knowledge, ideas and experiences, for an "out of the box" approach, coming from all actors involved and has been proven to boost innovative capabilities for companies and nations alike (see the use of open-source in ICT).

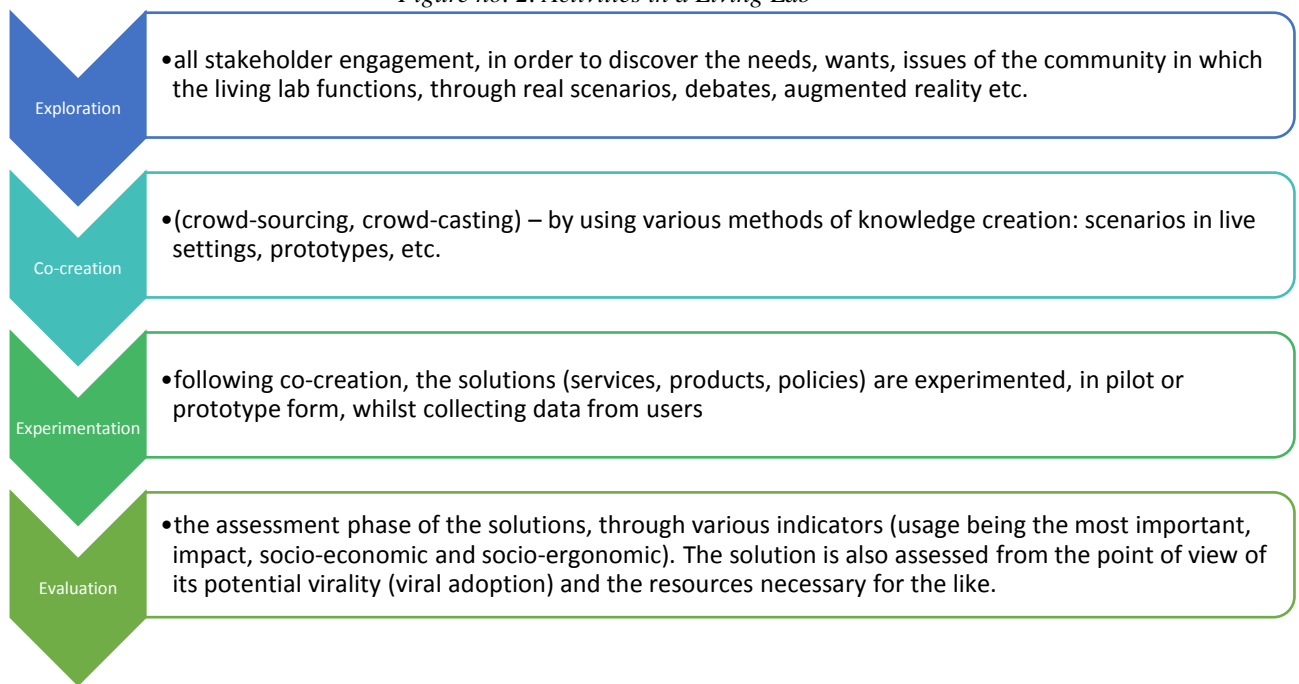
3. Living labs and C2P partnerships – basic concepts leading to impact in theory

Initially defined as a "user-centric research methodology for sensing, prototyping, validating and refining complex solutions in multiple and evolving real life contexts" (William Mitchell), a living lab is more a research **and development** methodology in which solutions (services or products) are "created and validated in collaborative multi-contextual empirical real-world environments" (Eriksson *et al*, 2005, pp. 5). Aimed at supporting stakeholders with less power, such as SMEs or individuals, LLs are a solution that has been rather unexplored and definitely under-theorised. Most of the articles, even academic, on the subject are either case studies or frameworks for the development of such a methodology.

Past research (Almirall and Walham, 2011, pp. 87) has shown that LLs function best at the lower levels of innovation, are mostly considered to be technologically agnostic, equally focused on exploration and exploitation and a suitable solution for the usage of context-based experience in order to reveal/surface new meanings for services and products, thus they become extremely context dependent. This context dependence leads to the suitability of the LLs for the regional and local reach, on topical subjects, such as the products, services and policies for the smart cities, creative industries, healthcare, intelligent energy.

The living lab allows the individual to directly participate in the creation of a product, service or even policy designed for his or her use, as citizen, user/consumer or even worker. Thus, the living lab has four main activities in its operations, as evidenced in Figure 2.

Figure no. 2. Activities in a Living Lab

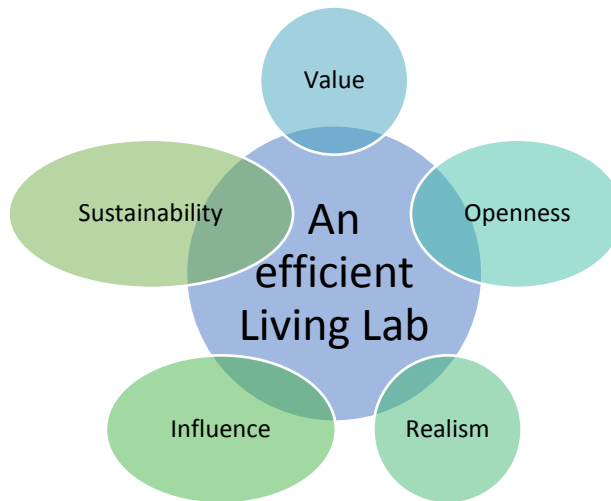


Source: (Schumacher, 2012)

A multi-faceted concept, the living lab may be the activity of monitoring "a living social system", the approach to involve multiple stakeholders (including citizens/users/consumers) in the development of product, service or policy, the innovation system, the organization which facilitates the innovation system or lastly, the European Union initiative from 2006 (Mulder and Stappers, 2009, slide 2 and onward, Folstad, 2008, pp. 100). Apart from its last form (the EU movement), the Living lab must follow a series of principles in order to provide real value to its enablers, users and participants. These five principles are directly related to the challenges that the Living Labs face. The first major challenge is knowledge asymmetry (a main issue of all participative and democratic procedures): stakeholders have different background, different ways of understating the issues presented and different manners of communicating the solutions they propose (for instance, public bodies, particularly of an European member states, may exhibit more bureaucratic behaviors than

NGOs or citizens, etc). This is the main reason of the Openness principles, the Living Lab being required to a certain extent to have one or more facilitators, in order to ensure a hedging of the knowledge asymmetry. The second challenge is the ethical interaction amongst participants, all stakeholders involved taking place in the Living lab under no constraints, and under the principle of informed consent. That is the main reason for the realism and value principles, as no data collection from a large number of actors makes sense without a realistic value added to the community. A third challenge refers to the attractiveness of a like setting for users: why would they want to get involved in a Living Lab, and the answer to this conundrum may be the central goal of the grouping of actors, in the case presented in the paper, regional growth.

Figure no. 3. Principles for an efficient Living Lab operations



Source: (Ståhlbröst, 2012)

According to Leminen *et al* (2012, pp.3), there are four types of living labs: utilizer-driven, enabler-driven, provider-driven and user-driver. The characteristics of each of these are presented in Table 1.

Table no. 1. Types of Living Labs

Characteristic	Type of Living Labs			
	Utilizer-Driven	Enabler-Driven	Provider-Driven	User-Driven
Purpose	Strategic R&D activity with preset objectives	Strategy development through action	Operations development through increased knowledge	Problem solving by collaborative accomplishments
Organization	Network forms around an utilizer, who organizes action for rapid knowledge result	Network forms around a region (regional development) or a funded project (e.g. public funding)	Network forms around a provider organization (s)	Network initiated by users lack formal coordination mechanisms
Action	Utilizer guides information collection from the user and promotes knowledge	Information is collected and used together and knowledge is co-created in the network	Information is collected for immediate or postponed use; new knowledge is based on the information	Information is not collected formally and builds upon users interests; knowledge is

	creation that supports the achievement of preset goals.		that provider gets from the others	utilized in the network to help the user community
<i>Outcomes</i>	New knowledge for product and business development	Guided strategy change into a predicted direction	New knowledge supporting operations development	Solutions to users everyday life problems
<i>Lifespan</i>	Short	Short/Medium/Long	Short/Medium/Long	Long

Source: (Leminen et al, 2012)

From Table 1, it is easily noticeable that the Living Lab which is enabler-driven is more suitable for strategies related to regional development. In this case the enabler may be a public institution, a NGO, a municipality, a university or a regional organization, which has the declared objective to solve societal problems and/or provide community improvements. So far, based on research by Leminen *et al* (2012, pp. 4), this type of LL has seen minimal business environment involvement, as the clear cut value added for the companies is not easily communicated, even if knowledge creation is, as mentioned by the cited authors, longer-lasting than other types of living labs.

4. Conclusions

Recent phenomena, Living Labs have been pushed as a research solution in the European Union by the creation in 2006 of Corelabs and Clocks, pilot projects meant to foster innovation systems within the EU based on this innovative approach. These pilot projects were followed in the same year by a pan-European network of 19 LLs (ENOLL), which nowadays (2016) comprises of more than 120 bodies, meant to tackle societal issue as well as competitiveness challenges within the Union. There is a continued need for more research on the subject, as development is most times hampered by communication issues, lack of political involvement (particularly in enabler-driven LLs), lack of user involvement (particularly in utilizer or provider-driven LLs). There is a clear need for a proper methodology for each of the LL types, as it exists solely for provider//utilizer driven (FormIT – with 3 theoretical streams: Soft Systems Thinking, Appreciative Inquiry, and Need Finding.)

Moreover, it is relevant to look into the potential of artificial communities, such as student campuses, as a potential, already in place, living lab, as students are early adopters of new technology, and have a higher sense of community involvement. That is the main reason for a framework to create a local living lab at Bucharest level (a university city, with a large academic community, and citizens used to participatory decision-making. This may very-well become the first enabler-driven LL in Romania, which only has listed in ENOLL a single (inactive as of May 2016) Living Lab, ARCHES. The success of a Bucharest LL remains to be seen and shall constitute another case study in the plethora of related research of the same type.

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