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Spain

Good Practice Case Study

Library Living Lab

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PROJECT PARTNERS

GENERAL INFORMATION

Title of the case	Library Living Lab (LLL)
Sales pitch	Exploring how technology transforms the cultural experience of people. The systemic change for public libraries in the digital transformation.
Organisations	• UAB • CVC • Sant Cugat Municipality • Barcelona Provincial Council • Association of Neighbours of Volpelleres
Country	Spain
Authors	• Konstantinos Kourkoutas • Fernando Vilariño • Dimosthenis Karatzas
Nature of interaction	Academic, students, business, city challenge; City Lab, Libraries, Citizen Science
Level of mechanism	☑ Government policy (e.g. law, funding framework) ☑ Organisational strategy (e.g. university/business/agency) ☑ Structural element (e.g. centre, lab, office) ☑ Operational level (e.g. activity or programme)

Length of programme

Not specified	Formality	Informal

Curricula-bound, co or extra-curricular?	Co-curricula	Level of initiative	Cross-disciplinary

Summary

The Library Living Lab is a 4-helix implementation project exploring how technology transforms the cultural experience of people. It envisions a systemic transformation of public libraries, as meeting points of communities of knowledge and experimentation spaces, providing a path to the democratization of knowledge access and innovation. It was materialized in a pilot demonstration at the public library in the Vollpelleres district of the Sant Cugat Municipality. The UAB played a key role, supporting and co-financing the creation of the lab and collaborating with the rest of the stakeholders to achieve the long-term sustainability of the project. The LLL was the first living lab that the UAB was participating in and it served as a good experience for evaluating living labs as instruments for knowledge transfer, as well as for research and innovation.

CASE STUDY PROFILE

BACKGROUND

New models of governance advance towards participatory schemes, in which citizens are an active, alive part of the decision-making processes and also a part of the processes of definition and introduction of new products and services. In parallel, technological innovations, and the new horizons of creativity that they allow, open a huge range of options to innovation in all areas of society, particularly in the cultural field. Under these two premises- participation and innovation- the Library Living Lab initiative was born at the Public Library of Miquel Batllori Volpelleres in Sant Cugat del Vallès, Barcelona, Spain. It is a space that gathers all stakeholders involved with the Public Library with the aim of exploring new methods and tools that allow us to enjoy culture as individuals and also as a collective. This case-study provides an example on how technology can become an enabling factor in a project that was born originally from a citizen initiative. The project implements a complete model of inter-institutional collaboration with all relevant actors around the Living Lab work group. Specific challenges of an open, flexible and inter-connected space are developed here, and the interaction dynamics based on a Challenge-Action-Return methodology definition are described through practical examples.

CONTEXT

The Library of Living Lab project is a successful example of a grassroots initiative that has taken the combined efforts of all participants, and that is born from a necessity-based push of local residents of the municipality Volpelleres Sant Cugat del Vallès, Barcelona. Due to strong demand for homes in Sant Cugat in the late nineties, the Council agreed to the development of the northern municipality. From 2000 to 2006, the first 3,352 planned dwellings were developed. Unfortunately, the bursting of the housing bubble in 2007 and 2008 halted the consolidation of the newly created district, populated mainly by young couples who had seen San Cugat as the ideal place to raise their families.

The economic crisis left half of the district under development, and much of the projected equipment not built. In this context, some neighbours worried about their present and future, and decided to organize themselves. They founded the Association of Residents of the Neighbourhood of Volpelleres (AVBV, in their Catalan acronym). The district then had a population full of vitality, deeply rooted in information technology and communications, in a well-connected area, on the edge of a major concentration of universities and research centres, as well as a variety of major companies. However, there was a lack of promised services with one exception: within the Sant Cugat's main plan for libraries, there was planned the construction of a public library, although with a finish date yet undetermined. This possibility was taken forward by the AVBV, which began to work on a proposal for orienting this potential future library towards a technological profile. This initiative -though formless at the time- arrived at the Computer Vision Centre (CVC), a joint partnership of the Government of Catalonia and the Autonomous University of Barcelona (UAB). The CVC is a research centre leader in image analysis and video, with a strong commitment to local and international projects in different fields of application. At that time, the CVC was implementing a strategic bet oriented towards the application of its core technologies in the field of culture, while questioning novel paradigms of rapid transfer of research outcomes to the public.

These two realities were face to face, and when AVBV explained to CVC that they wanted something innovative for the new public library, the CVC proposed to create the first Library Living Lab. The proposal was crafted in 2011 and it was jointly submitted by AVBV to the mayor of Sant Cugat, who received it positively and gave it institutional support. The result was that the Volpelleres Library project was prioritised by the municipality. UAB took this project as part of its strategic plan, and immediately a task force was constituted within a work group including representatives from the municipality, provincial government, CVC, UAB and AVBV (definition phase). In 2014, the agreements for the implementation of the project were signed, and the Library opened doors in May 2015 (implementation phase). In the summer of that same year the Library Living Lab was accepted in the European Network of Living Labs (ENoLL) and in October of that same year, the neighbours themselves would make the presentation of the activities to the library users in an event that was a great opening party. This pilot ran until 2018 when the final model of governance was defined and the sustainability model was agreed (consolidation phase).

One of the most important questions about an innovation space is the design of the space itself, as a poor design jeopardizes the functionality of the project. In the case of the Library Living

Lab, the specific area consists of 110m2 placed at the Public Library of Volpelleres. However, although limited and confined to this area, the presence of the Living Lab transforms the whole library, inspiring a character of innovation, shared by every corner and all of the working staff. During the formation phase of the project, the members of the Working Group had the opportunity to engage directly with the team of architects in the design of the Library Living Lab in order to implement a space with three fundamental characteristics: open, flexible and inter-connected.

The spirit of the design of this space is, in short, one of an infrastructure that makes it possible to live new experiences in a comfortable way. This enables rapid changes ranging from activity to activity and allowing for the possibility of using diverse electronic devices connected to the network without limitations.

OBJECTIVES AND MOTIVATIONS

The objectives of the project include:

1. Exploration of technology as a disruptive factor that makes new experiences possible and adds transformative value to existing services.
2. Facilitation of on-going research on the role of public space, in broader terms, in contemporary society, and as a stage for open innovation where all citizens are potential actors.

STAKEHOLDERS

The Permanent Working Group (Figure 1) has been the engine of the specific definition of the project and it brought together representatives of the five participating institutions, each one with different roles, plans of action and objectives:

1) **City of Sant Cugat del Vallès**: Library Service Manager and responsible for municipal allocations.
2) **Provincial Council of Barcelona**: Manager of the Network of Libraries. Service provider (*DiBa 2016*).
3) **Universitat Autònoma de Barcelona**: Research institution. Extension of the university influence to the territory.
4) **Computer Vision Centre**: Research and technology transfer. Catalyst and leader of the project.
5) **Association of Neighbours of Volpelleres**: Final recipients of services. Instigator of the initiative.

PROCESS

INPUT

The stakeholders have formed a working group comprised of different specialties and positions/interests. The aim of the working group was the alignment of all these various

objectives for the definition of the master lines of work. The group was gathered during three years in bi-monthly meetings and its first task, and perhaps the most important one, was the definition of a common language between all institutions. This was done by learning to talk between all members, fixing terminology and procedures, and defining a new field of common knowledge. A key feature of such a group is that all the actors are directly involved in decision making, which is always based on the needs and opportunities.

ACTIVITIES

Innovation processes share common dynamics that are tailored to specific contexts. These dynamics crystallize in the Library Living Lab in three distinct stages: identification of a social challenge, design and implementation of a specific action, and definition of a return.

1. **Social challenge**: In order to guarantee social impact, it is essential for the activities of the Library Living Lab to be designed to advance in the resolution of some of the challenges currently faced by our society. These challenges must be identified within the Working Group, which will prioritize them according to the values and convergent interests of the various actors. This ensures real gain for all participants in the terms described above.
2. **Action**: Having identified a challenge, it is necessary to define a concrete action for the process of innovation, the typology of which must be specifically adapted and suited to the chosen challenge. No general action scheme, but the possibility of selecting the best fitted solution guarantees an efficient tackling of the proposed challenges.
3. **Return**: Finally, it is essential to define a specific and objectively verifiable return, which is obtained as a result of the innovation action. This return is the commitment that the actors have towards the participants, and the way in which the benefits of participation are identified for all of the Library Living Lab experiences.

Thus, the triplet *Challenge-Action-Return* must be present for each activity in the laboratory and should be communicated efficiently to all actors, by guaranteeing an informed and responsible knowledge base.

- periodic activities
- workshops
- prototypes
- scientific experiments
- debates

A list of the realised activities can be seen in the following link:

http://librarylivinglab.cvc.uab.cat/home/que-hacemos/?lang=en#periodical_activities

☑ OUTCOMES AND IMPACT

OUTPUTS

The outputs of the project for each project stakeholder is presented as below:

1) **City of Sant Cugat del Vallès**: The City of Sant Cugat del Vallès won a new innovative space for its residents; a meeting place and a space where cultural projects with the participation of all the social segments of the city can occur. It allows the city government to experiment and advance on the design of new models of governance with a special focus on citizen participation.
2) **Provincial Council of Barcelona** (Manager of the Network of Libraries): The LLL endows the Library Network of Provincial Council of Barcelona with a testbed to locate and identify the challenges that arise on a day-to-day basis, to explore fitted solutions, to test prototype proposals and to propose answers and solutions, all by-with-and-for the users. The scalability of the solutions produced is guaranteed by transferring the validated ones obtained in the LLL to the rest of the libraries of the network.
3) **Universitat Autònoma de Barcelona (UAB)**: The LLL serves as a physical extension of the university to its adjacent territory. The Universitat Autònoma de Barcelona implements through the LLL its own policy of RRI in the territory, and at the same time provides its scientific community with a space to work with citizen science.
4) **Computer Vision Centre (CVC-UAB)**: (Research Centre) The Computer Vision Centre gets a place of experimentation and validation of technologies with a high added value, and an implementation space for rapid technology transfer to society through fast prototyping.
5) **Association of Neighbours of Volpelleres**: Are the final recipients of services and the instigators of the initiative. The Association achieves a strong revitalization and dynamization of the neighbourhood, a collection of innovative activities, and a place to enjoy culture through the latest technological tools.

IMPACTS

The existence of the Living Lab enriches the library day by day. The continued presence of people with various profiles, e.g. scientists, artists, entrepreneurs, who are also "new" library users- provide novel entry points of knowledge and potential opportunities for multidisciplinary exchange among all participants. This ranges from the library users to the professionals who provide the services. On the other hand, there is a direct impact in terms of inclusion. The new range of experiences broadens the scope of the library users, even by attracting people who otherwise would not visit the library, and by increasing the possibility of user participation in joint projects with rich profiles.

At the institutional level, the presence of this genuine innovation ecosystem effectively implements the role of public space as a meeting place for all stakeholders. This fosters the approach of small and large companies to the public and cultural sphere and promotes their participation in public initiatives. The local library expands its area of action and this allows multiple projects of not only local, but also regional and international reach. The library is thus transformed into a place where every day something that was not planned can happen, but that

being the result not of improvisation, but of a collaborative work ensemble with models more open and flexible for programming.

SUPPORTING MECHANISMS

- UAB RRI Policy – an opportunity for the university to produce knowledge transfer while also initiating projects of responsible research and innovation in its territory.
- BIBLIOCAT – Province-wide program to introduce innovation spaces within existing libraries of the network.
- ENoLL – Active member of the European network of Living Labs
- Citizen-led interest groups – around specific themes, (3d printing, 3d scanning, cultural interest etc.)

BARRIERS AND DRIVERS

Barriers

- Transformation of the traditional library model. Libraries are experiencing a model transformation passing from an archival role to a knowledge manager one. Their physical spaces and human staff will need to adopt to this new paradigm. The LLL works with this idea by installing itself inside a public library.
- Overcoming administrative barriers and established modus operandi.
- Limited Attraction of the industry sector to the innovation spaces and co-creation processes. Big industries move with different rates and criteria in their everyday functioning making spaces, such as the LLL, hard to understand and hard to collaborate.
- Limited public funding resources. The project had to be co-financed between different public administrations and organizations. Difficulties in subsequent funding raised problems related to staff and supervision of the lab.

Drivers:

- University entrepreneurship ecosystem, as described earlier
- The commitment of the organizing team/working group. University, Research centre and Business, Municipality and Local Neighbour Association

💼 LESSONS LEARNED

CHALLENGES

- Ensure citizen participation and active engagement

- Devise and implement new innovative organizational and governance models that ensure future sustainability
- Identify monitoring and protection mechanisms of the innovation outcomes

KEY SUCCESS FACTORS

- A citizen-led initiative
- Enthusiastic researchers that wanted to reach out to the community
- University implication and funding
- Successful Triple Helix scheme implementation

FURTHER INFORMATION

AWARDS AND RECOGNITION

• Barcelona Mobile Week Award 2017 for @BrossaInedit project

• Selected by the UE Parliament for InSite exhibition #Codeweek 2017

• Premi "Medi Ambient de la Generalitat de Catalunya" Project Plant*tes 2017

• Selected as "Best 20 Living Lab Projects" by ENoLL 2017, 2019.

TRANSFERABILITY

The LLL, on a local level, is being used as a model to be replicated in the remaining libraries of the Barcelona province through the Bibliolab initiative. On an international level, through the ENoLL, LLL has achieved further and extensive impact. It has provided the SYSTEMIC CHANGE in the network of libraries.

LINKS

http://librarylivinglab.com/

https://timreview.ca/article/1202

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