



Innovators – Opinions – Perspectives

The HOTEL Project is designing and testing an “Innovation Support Model” (ISM), that means a different thing than an “Innovation Model”. We believe that Innovation, particularly in the field of TEL, may take very different forms than the classic paradigm that moves from research through prototypes to massive commercial exploitation.

While an innovation model conceptualises the different steps and processes that bring innovations to be generated, adopted, incorporated in use, scaled up and eventually exploited in commercial or institutional ways, an Innovation Support Model (ISM) refers to the way a "professional body" of analysts and stakeholders representing users categories, advisors, fund raisers, institutional and private investors, etc. can help innovators to succeed, or to succeed more quickly than they could do without this support. From this perspective, an ISM is essentially a relational model, linking innovators to their context through a structured set of interactions that, in the case of HoTEL, take place within and around the Exploratorium Labs.

The main purpose of HoTEL is therefore not to define a new model of TEL innovation, but to design, test, improve and propose an effective way to support innovators, which may correspond to different innovation models co-existing in the TEL field. In order to do this the project had select a set of innovators and innovations to be accompanied, for a period of time, through a series of interactions with experts, stakeholders’ representatives and other critical friends who, hopefully, will concretely contribute to strengthen the success prospective of these innovations and contextually reflect on the proposed support (content, process, outcomes and potential impact). Check all details in the [Exploratorium page](#).

Our Innovation Support Model should, after several iterations, accelerate mainstreaming of innovation into learning by:

- Providing policy and decision makers with an analytical framework to classify innovations, and properly understand their advantage/contribution within a pedagogical context
- Assisting decision-makers/funders to pick ‘winners’
- Helping innovators to: properly formulate their ideas in a way which aids introduction;
- Highlighting lacunae in their diffusion/adoption strategies; assist them in developing indicators to improve their diffusion/adoption.

This first version of the ISM is aimed to support the Exploratorium labs in their testing exercise of innovation in TEL at two levels:

- the level of the single innovation (the 7-10 innovations identified per Lab)



Innovators – Opinions – Perspectives

- at the “systemic” level of the ISM

As such, this current version of the ISM defines the framework of reference of the model as well as some key dimensions to be considered when carrying out the work. It is only based on the experience of the Labs that the final version of the ISM will be completed and validated by external experts.

Six “**structuring assumptions**” are taken as the basis of the HOTEL Innovation Support Model:

1. **Recognition of the diversity of innovation paths**, along with innovation channels, start points, contexts, expected outcomes, success criteria and, in general, every single step and factor of the support model and the setting.
2. **Recognition of an existent difficulty on measuring ‘success’ within a TEL innovation setting**. How is success defined? Do we use pedagogical, technological, socio-economic, business-economic, or other criteria to determine what can be considered as being a success?
3. **Embedded flexibility and adaptability** of the support model in order to match different stages of innovation development and different contexts and innovation paths. The support model must take the various key factors from every context, stakeholder, and user, to integrate them into the innovation, so that a unique experience is produced. This unique experience feeds every actor of the setting (i.e. Higher Education, Workplace learning, and Informal Learning in Networks), included the model and the innovation themselves, making a full iterative cycle.
4. The core concept in the support model is that of a “**multi-stakeholder ecosystem**” (with different stakeholder representatives according to the nature of the innovation proposed) that analyses and eventually tests the proposed innovation from a multi-perspective approach, identifying all the strengths and the weaknesses from each relevant stakeholder’s perspective. These tests might be either:
 - a) Practical, on the ground, with real users and in a real context-setting;
 - b) Theoretical, with a deep-thinking test bench by experts and qualified users
5. **Context-sensitivity of the analysis and support action proposed**, in order to distinguish transferable from non-transferable success factors, according to a well-defined set of criteria

In this context dealing with innovation in TEL implies the needs to consider:



Innovators – Opinions – Perspectives

- bottom-up innovation (coming from single grassroots innovators or groups thereof and addressing societal needs, or market needs, or consumer needs)
- top down innovation (coming from institutions and addressing societal needs)

In a way, the innovation support model of HOTEL could be consistent with the Open innovation model as it recognises the need of interaction between internal and external actors and R&D. In addition, it highlights the key role played by stakeholders in the innovation process.

In the field of Technology Enhanced Learning three main innovation **genesis models** are recognised by HoTEL:

1. **Technology and Industry-led**, in which the availability of a new technology, normally not specifically designed for learning, finds a number of educational or informal learning applications that may lead to large adoption out of massive industrial and commercial investment. For instance, the use of tablets within classrooms but even more importantly in informal learning corresponds to this model. It has been explored by HoTEL WP1 and by several studies on emerging technologies having an impact on learning.

2 **Research-led**, in which learning theories search and find application in experimental learning settings that are created and monitored to check learning effectiveness, usability and other key features of both generic and learning-specific new technologic applications. This is model that is normally supported by national and European research programmes explored by HoTEL WP2.

3 **Practice-led**, spontaneous bottom up innovation emerging from individuals or communities of teachers and learners that find original ways of using technology to materialise new ideas about learning and teaching and are able to demonstrate their effectiveness in new contexts of use; this model was explored in HoTEL WP3.

One could argue that a fourth model exists, particularly in the field of school education (that we deliberately left out from the HoTEL field of action): **the Policy-led innovation**, materialised by the many national programmes launched since the 80s to diffuse ICT and its use in classrooms. In our views these policies gave support to one or the other of the existing three models, or a combination of those, without really establishing a different genesis model. Policies may become very relevant, on the contrary, in the subsequent steps of innovation life cycles, and notably adoption, scaling up and institutional exploitation.

Another observation that can be made is that each of the three genesis models of TEL innovation carries with it some strengths and some weaknesses, and that integration of



Innovators – Opinions – Perspectives

approaches is desirable: this is exactly what this section of the document tries to demonstrate, that integration is an important part of the Innovation Support Model that HoTEL is trying to build.

The stakeholders' ecosystem becomes key in the implementation of innovation in TEL, where top-down and bottom-up innovation co-lives, given that the TEL landscape is populated not only by single, "grassroots" innovators but also by market and institutional forces and where more than often innovation is a societal need.

If we look at the genesis of innovation, we can already understand how key becomes the involvement of different stakeholders in enhancing an innovation, depending on how it was generated.

In the table below, the three learning areas covered by HOTEL through its Exploratorium Labs are matched with the three genesis models of innovation in TEL.

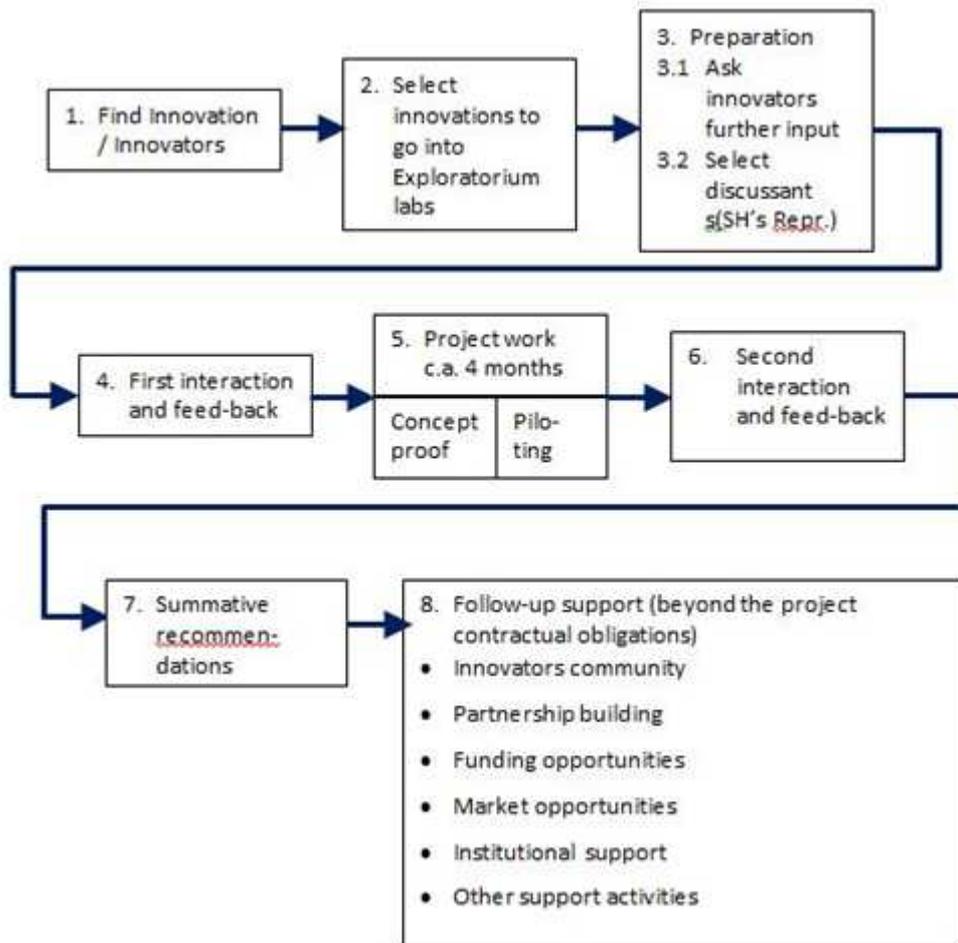
	Higher Education	Learning at work	Informal learning in professional networks
Technology and industry-led	□	■	■
Research-led	■	□	□
Practice-led	■	■	■

It is evident that each model implies the need to involve different stakeholders to guarantee the successful implementation of the innovation: being innovation in Higher Education (generally) research and practice-led (■), the support of stakeholders representing TEL industry (□) will be necessary to support the innovation adoption and scaling. In the case of corporate training (learning at work), as innovations usually come from industry, the support of stakeholders representing the research world as well as practitioners will be needed. Finally, as concerns professional networks, being at the crossroad between the industry world and the practitioners world, they usually generate innovations that are either technology and industry-led or practice-led and will need therefore to seek support by research stakeholders.

At the moment the HOTEL Labs are supporting innovation following the operational steps presented in the diagram below;



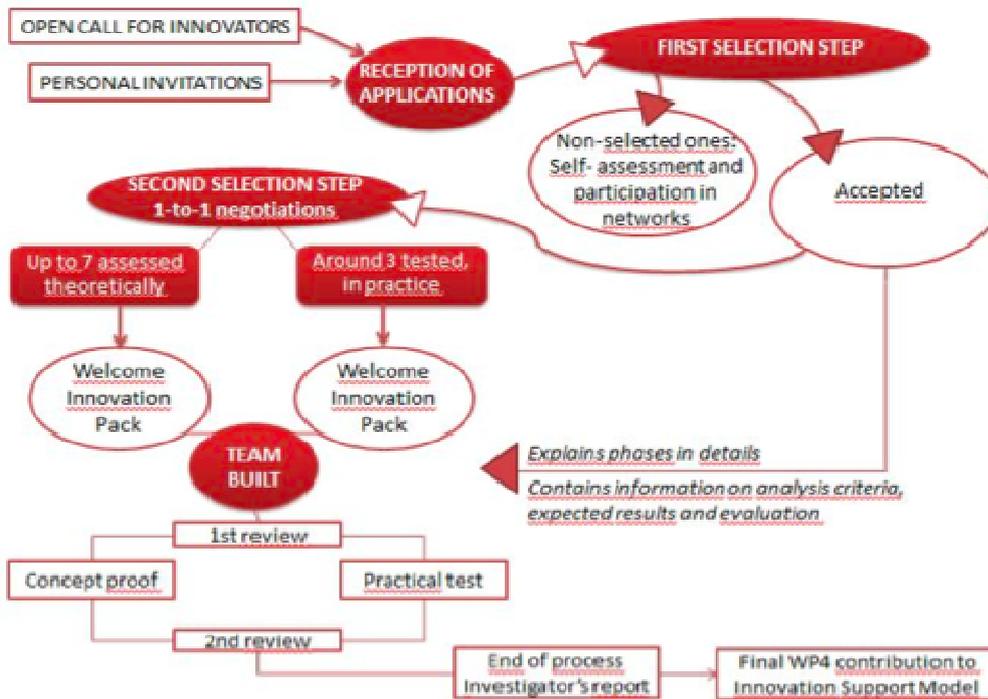
Innovators – Opinions – Perspectives



The below representation clarifies the process of innovations “processing” (identification, selection, analysis, support) into the Labs



Innovators – Opinions – Perspectives



Classification of innovations has happened taking into consideration a wide set of dimensions, such as:

- 1) Kind of innovation addressed (are we talking about a product, a service, a process?).
- 2) Nature of the innovation (disruptive, radical, incremental).
- 3) Lifecycle stage of the innovation (development; pilot; scale; mainstream).
- 4) Territorial level addressed (Local, Regional/national, EU).
- 5) Target groups dimension addressed (Individual actors; multiple actors, wide range of actors).
- 6) Potential impact of the innovation (It will improve the range of technological products/services available in the field; It will have an impact on the learning processes; It will contribute to organisational change).
- 7) Stakeholders to be activated to support the innovation implementation.

A battery of tools supports the monitoring and evaluation of the ISM (concept, services, tools, outcomes, impact) and will be published after testing and validation of the ISM within the Exploratorium labs.