



*“a way to sustainable and socially responsible growth”*

## **Output 6**

A manual for the development of student innovation labs

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## **Contents**

<b>Executive Summary</b>	<b>5</b>
<b>1 Introduction</b>	<b>6</b>
1.1 Background: Regional focus on crossover innovation	6
1.2 Missing link: a cross-sectoral co-creation platform	6
<b>2 InnoLabs as regional innovation accelerator</b>	<b>10</b>
2.1 InnoLabs Network	10
2.2 Working Method of InnoLabs	11
2.3 Three results: groundbreaking solutions, new knowledge, innovative professionals	11
2.4 InnoLabs Modules	12
<b>3 Module 1: Community</b>	<b>13</b>
3.1 Introduction - importance of the community	13
3.2 Types of partners	13
3.3 International network	13
3.4 Relationship with education	13
3.5 Relationship with companies	14
<b>4 Module 2: Social impact Projects</b>	<b>15</b>
4.1 Cross-sectoral, multidisciplinary, socially relevant	15
4.2 Ownership and type of funding	15
4.2.1 Private projects	15
4.2.2 Public projects	15
4.2.3 Public-Private projects	16
4.3 Who carries out the project (students, professionals, mix)	16
4.4 Thematic content / subject	16
4.5 Results of the innovation projects - what do they deliver	17
<b>5 Module 3: Physical environment: The Innovation Labs</b>	<b>18</b>
5.1 Innovation Lab Environment	18
5.1.1 Prototyping facilities	18
5.1.2 Teaching spaces and workshops	18
5.1.3 Open space	18
5.2 Infrastructure, equipment and material	19
<b>6 Module 4: Research / knowledge base</b>	<b>20</b>
6.1 Multi-disciplinary applied research	20
6.2 External cooperation quadruple helix partners	20
6.3 Principal Research Themes	20
6.3.1 Research Area 1: Smart Media	21
6.3.2 Research Area 2: Technology, products and services, systems	21
6.3.3 Research Area 3: Actors and networks, innovation systems	21
6.3.4 Research Area 4: InnoLabs Methodology and Toolbox	22

<b>7</b>	<b>Finances</b>	<b>23</b>
7.1	Budget	23
7.2	Business model and value creation	24
	7.2.1 InnoLabs and the International Community (1)	23
	7.2.2 Creating Value in the Social Impact Projects	23
	7.2.3 Investments in the physical environment Innovation Labs	24
	7.2.4 Valorization and acquisition of research	24
<b>8</b>	<b>InnoLabs Organization</b>	<b>25</b>
8.1	Collaboration	25
8.2	Alternative Management	25
8.3	Physical Basis	25
8.4	Network Organization	25
8.5	Core Team and Project Teams	25
8.6	Communication	26
<b>9</b>	<b>Roadmap</b>	<b>27</b>
<b>10</b>	<b>Results and impact InnoLabs</b>	<b>28</b>
<b>11</b>	<b>Critical success factors InnoLabs</b>	<b>29</b>
11.1	Success Factors	29
11.2	Reducing risks	30



## Executive Summary

The objective of the InnoLabs project is to facilitate cross-sectoral, multidisciplinary solutions to complex social problems in various European settings. InnoLabs are university-driven physical and/or organizational spaces that function as student innovation laboratories and operate as a local or regional “co-creation platform for sustainable solutions” to promote structural innovation. InnoLabs delivers three types of results: groundbreaking solutions, new knowledge and innovative professionals. In order to achieve this, the InnoLabs programme is founded on the following Modules:

The first module is the InnoLabs partnership, which can be identified in two ways. First, the partnership formed by a network of five European universities located in Cyprus, Denmark, Estonia, Latvia and the Netherlands. In this partnership, sharing knowledge and building on each other’s experiences function as a success factor. Despite the difference in operational context, a common success factor is the triple-helix collaboration between industry, government and education. This means that each laboratory provides a platform for the three sectors to meet and work together.

Module number two is formed by student projects. The projects that are facilitated by InnoLabs are expected to focus on the societal challenges in the respective regions. Another unique aspect of the projects is their cross-sectoral and multidisciplinary approach, where groundbreaking new products and services are being developed from a design-thinking perspective. Contributions from the industry partners play a crucial role in this. InnoLabs give the students the flexibility that design processes require and projects range from publicly financed to completely private. The priorities are determined in consultation with stakeholders and funders since many contextual differences are present based on the education system of different partner countries. A few sample projects will be described later in this document.

InnoLabs are recognizable places where parties can meet and interact. The physical environment is the third module of InnoLabs. Although each laboratory in partner countries are different from each other qua spatial use, the sharing-based culture, informality and flexibility of the arrangement are common artifacts. The innovation labs provide space for prototyping, education, research and project activities. Most of the labs are located within the university premises of partner institutions.

Research and knowledge development for and by the industry is the fourth module. Multidisciplinary results and methodological insights are translated into scientifically grounded decision support for industry and government. InnoLabs projects focus on multi- and trans-disciplinary research in which cross-sectoral collaboration and innovation can demonstrably contribute to sustainable socio-cultural and economic strengthening of partner regions, and what role practice-oriented living labs can fulfill during this process.

The organization of and within laboratories is characterized by intensive collaboration and orchestration of a complex interplay of activities. A compact core team is responsible for the coordination and implementation. The activities are embedded in the collaborating research and support entities within the participating institutions. Internal and external project managers coordinate the social impact program. The development of InnoLabs consists of three main phases: Start and design (the first one to two years), a development and growth phase of up to three years, and a consolidation and embedding phase of a further three to five years. The programme leads to robust results with a substantial social and scientific impact.

The InnoLabs project is developed for the 2014 call of Erasmus+ funds KA2- Cooperation and Innovation for Good Practices.

## 1 Introduction

This manual describes a proposal for the development of the InnoLabs. InnoLabs are physical and/or organizational environments where cross-sector innovation and multidisciplinary cooperation between professional practice, education and research take place. The results consist of new sustainable product and/or service designs, new business start-ups as well as new activity from existing businesses, in addition to generating new knowledge and skills for students, academia and professionals.

### 1.1 Background: Regional focus on crossover innovation

The development of the InnoLabs is focused on the four societal challenges, namely: 1) Health, demography and welfare, 2) Food security, sustainable agriculture and bio-economy, 3) Secure, clean and efficient energy, and 4) A clean, safe water supply.

The focus on crossovers stems from the observation that complex social issues and wicked problems cannot be resolved from a single perspective or sector. Addressing complex and widespread needs and their associated challenges need to be tackled comprehensively. It is precisely at the interface between sectors and developments where the most meaningful innovations emerge. In the first place, crossovers between the sectors, where in particular the cross-fertilization with (for example the creative) industry can provide an important innovation impulse.

The main idea behind the 'laboratory' concept is to translate the knowledge into solutions for complex social problems. This is accomplished through concrete new applications in practice where co-creation, exploration, experimentation and evaluation are fundamental. Laboratory findings that are used to boost innovation or to improve existing processes are first tried and their feasibility is tested in a realistic but small-scale context. If successful, results may then lead to scale-up, new businesses and products or new product-market combinations in existing companies. The premise of 'laboratory' is also to be able to fail small, however, be agile and scalable, replicable to succeed big.

### 1.2 Missing link: a cross-sectoral co-creation platform

The rise of the (creative) industry in implementing partner regions of InnoLabs project is late in comparison with other creative clusters in Europe. Creative capitals in Europe do not only have a strong embedded policy, but also a dynamic triple helix composition with up-and-coming companies, users as co-designers and knowledge institutions.

Studies offer a perspective on the unique future position of regions with strong creative industries, which are distinguished by:

- 1) balanced attention for rural areas and many smaller cities;
- 2) an application-oriented approach - versus the high-tech basis of other clusters; and
- 3) in the absence of many large companies, a strong focus on (creative) innovation in SMEs and the promotion of start-ups and new business activity from the knowledge institutions.

An important gap is evident within the planned developments. Many of the initiatives outlined are relatively mono-disciplinary in nature, aimed at one specific sector. What is missing is a connecting link, aimed specifically at the crossovers between different sectors (public and private) and the bridge-building within them. Particularly the mutual cross-fertilization between different domains - especially from the perspective of design and creation - is an important factor to accelerate regional innovation. We can describe this as the need for a regional "innovation engine" or a "passion-based co-creation platform" that encourages structural innovation and innovation ecosystem, facilitates synergy between the components, accelerates and where desired, adds new elements such as design and practice labs. Also a strong structural relationship between components of triple- or quadruple-helix model is missing in late-coming regions, albeit



crucial for reputation when participating in the innovative industries.

Below spatial and activity photos from experienced partners of InnoLabs project (NL & DK), implementing partners (CYP, EST, LAT) and other comparable institutions that have been inspirational qua methodology and identity are listed with pictures.



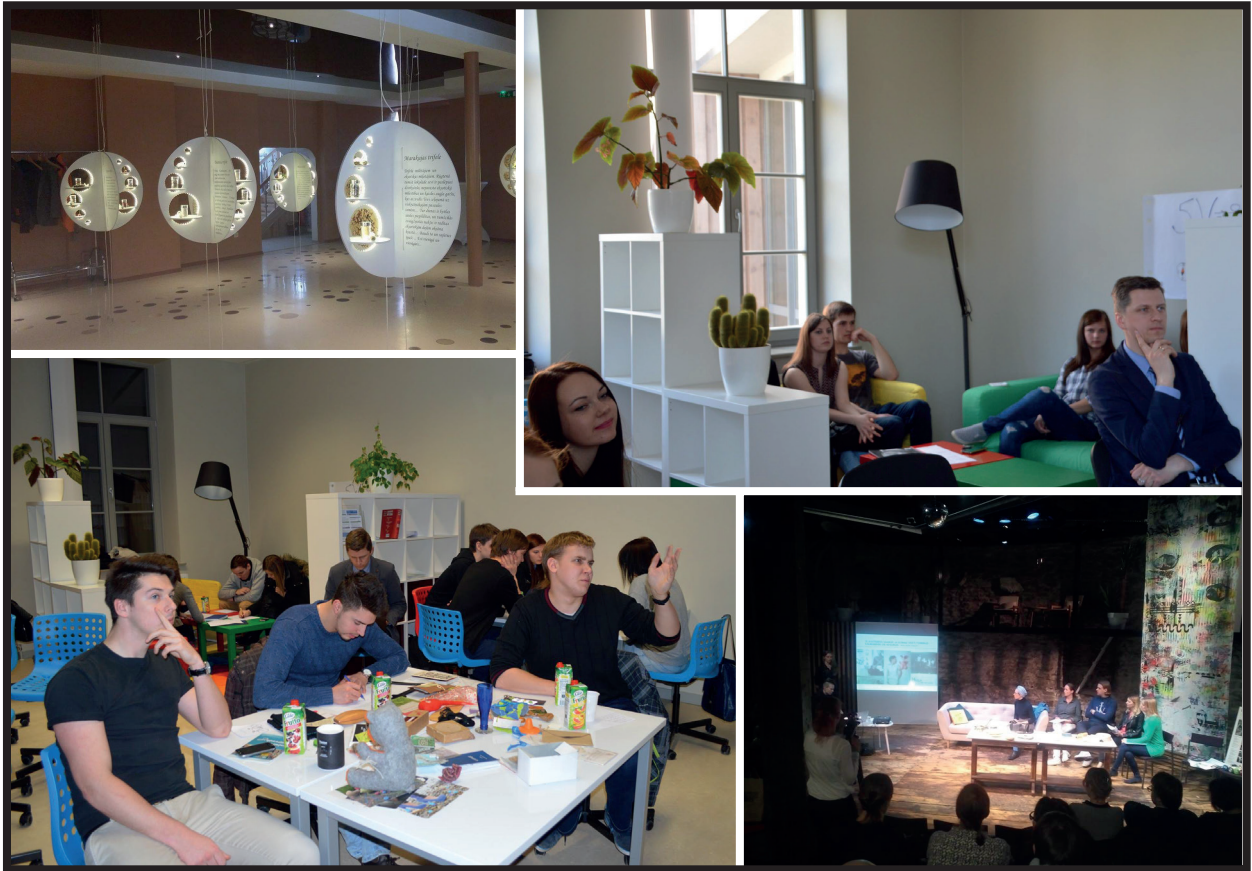
Aalto Design Factory - Finland is an inspirational examples for spatial quality and environment.



References: Frisian Design Factory at NHL University (NL) & Innolabs at Aalborg University (DK)







References: I-LAB at Vidzeme University (LAT) & Sustainable Design Lab Tallinn (EST)



## **2 InnoLabs as regional innovation accelerator**

### **2.1 InnoLabs Network**

In September 2014, the InnoLabs received an Erasmus+ grant with the project proposal developed by partners from five European countries: Foundation for Society (Latvia), Vidzeme University of Applied Sciences (Latvia), Aalborg University (Denmark), NHL University of Applied Sciences (The Netherlands), Cyprus University of Technology (Cyprus), Estonian Academy of Arts (Estonia) and Stockholm Environmental Institute (Estonia). The prospected result is a brand new facilitator of innovations, where the university, the business school and the art and design school were merged into one mutually reinforcing whole. To accelerate this process, two European universities that already have experience with innovation labs, NHL and Aalborg University, joined the group as 'experienced partners'. Therefore the project recognizes two types of partners: experienced partners and implementing partners. The network will share knowledge by collaborating on student projects across the boundaries of disciplines and institutions.

"InnoLab is a physical and/or mental platform devoted to creative, interdisciplinary, industry-engaged research and development. It is a unique collaboration environment for students, researchers and practitioners."

In addition to a physical environment and a specific way of working, the underlying values are particularly vital for the success of the InnoLabs approach. These can be borrowed from Design Factory concept and summarized in the "10 commandments of Design Factory's way of working" adapted from Bjorklund's script dating back to 2011.

- 1. Inspire by example.**
- 2. Attract people with helpful and proactive attitudes.**
- 3. Keep the community tight, but ensure open knowledge sharing.**
- 4. Keep things informal, avoid hierarchies and bureaucracy.**
- 5. Provide encouragement and practical support for development.**
- 6. Translate ideas into action fast.**
- 7. Be proactive, take initiative.**
- 8. Allow freedom in work.**
- 9. Provide a physical home base.**
- 10. Favor showcases, avoid showrooms.**

Experience shows that this collaboration and innovation concept can also be promising for both rural and urban regions that the partner universities represent, where the InnoLabs concept can help realize a regional role as facilitator, accelerator and networker - locally, regionally, nationally and internationally.

Combining local principles with the experience of the whole network will lead to the development of unique variants of InnoLabs, which can function as regional "innovation engines" or "passion-based co-creation platforms". Structural innovation will then be stimulated within this platform, at all levels of the regional innovation ecosystem. This includes, among other things, facilitating synergies between the various (existing) components of the regional innovation ecosystem, such as collaboration between fablabs (a fabrication laboratory is a small-scale workshop offering (personal) digital fabrication) where physical artifacts are created, and game studios where the corresponding software is developed. Besides connecting existing elements, each Innolab will also add its own unique innovation element, specifically focused on multidisciplinary, cross-sectoral issues and projects. A laboratory can thereby function as a physical and mental accelerator of innovation processes, across the interface between various sectors and areas of expertise. In summary, the development of InnoLabs leads to:

1) An internationally proven physical and/or mental model that can contribute to an additional impetus for regional development and the creation of new business activity, through facilitation and acceleration of (design-based) innovation. The foundation is a "lean and mean" approach, using existing elements of



2) A leap forward compared to other (creative) industry clusters in partner regions, where we can make use of the law of the stimulating backlog. This can lead to a significant improvement of the regional position and reputation within, among others, the top sector (creative) industry.

3) Excellent new access to international knowledge and partners, which in turn can provide a very good basis for the connection to other European programmes.

## **2.2 Working Method of InnoLabs**

The activities of the InnoLabs are primarily focused on the complex societal challenges within urgent fields such as health, demography, sustainable agriculture, clean and efficient energy or water supply.

The addition of InnoLabs on existing programs lies in the establishment of cross-links between these sectors and for example the (creative) industry. The report “Cross-Over Works” provides, among others, the example of the Netherlands based company Grendel Games, who in collaboration with local hospitals, is developing a training game for laparoscopic examination, based on a standard Nintendo Wii console; and the Aalborg based nCouraged, which together with KlimaLab at Aalborg University have developed a digital version of the serious game Broken Cities, a game about synergies and conflicts in climate change planning. These are two examples of a cross-link between the (creative) industry (in this case, gaming) and the other sectors.

The added value of InnoLabs arises at the time when the top technological industries have a need for groundbreaking solutions that are beyond the limits of their own expertise. For example, if there is a need for a new business model or service around a promising new water technology; or if, for example, there are issues in the health care sector which are beyond the expertise of the care specialist, such as the question of how older people can continue to live independently longer in remote villages; or when it comes to the question of how education can be guaranteed by a shrinking population. Mono-disciplinary knowledge in the field of health care or education is not sufficient to provide the necessary solutions, but promising solutions can be found at the interface of various knowledge areas, for example through the development of digital distance education where a single teacher can teach several classes simultaneously. Or through the development of a social media app that can help to enhance the mutual involvement of villagers.

## **2.3 Three results to be expected: groundbreaking solutions, new knowledge, innovative professionals**

InnoLabs provide three types of results: groundbreaking solutions, new knowledge, and innovative professionals. These three results help - each in their own way - to improve regional innovation strength and employment opportunities.

Firstly, InnoLabs projects result in groundbreaking innovative products, services and companies, which are developed on the basis of a cross-sectoral approach to design thinking. This involves linking the specific expertise of the (creative) industry to the questions and needs of the more traditional - not creative - sectors.

The emphasis is on the ideation and creation phase of the design process. This frequently involves solutions that can be implemented within existing organizations. In some cases, the idea may be so innovative that it can only be realized within a new organizational structure. In that case, a new organization will develop. Therefore, the developed solutions can, if desired, be divided into three categories: New products, new services/business and new businesses/startups.

Secondly, InnoLabs projects result in new knowledge for both universities and actors outside the university, through scientific reflection on the executed innovation activities. It is not only a practical innovation platform, but also a knowledge development platform. The focus is not necessarily on the development of specific knowledge within the various sectors, but on knowledge of how innovation can successfully contribute to the innovative strength of the region. InnoLabs are therefore not only actively carrying out innovation projects, but also reflect from a scientific perspective on how these innovation processes can effectively contribute to the innovation strength and the economic structural strengthening of partner regions. In other words scalability, replicability and institutionalisation are the key-measures of the projects.

The third result of InnoLabs projects is innovative professionals. Within InnoLabs, current and future professionals can master a new way of thinking, learning and working. InnoLabs are on one hand a place where existing creative and innovative professionals collaborate on the aforementioned solutions. Simultaneously, InnoLabs are places where not only “non-creative” professionals in more traditional sectors, but also professionals in training, can continue to develop. This involves students from the creative education programs, but explicitly also students from more traditional - or considered less creative - education programs such as the health care sector, the education sector and the economy & management sector. Ultimately, these are the professionals who will determine the economic future and vitality of the regions.

#### **2.4 InnoLabs Modules**

In order to achieve the above results, this proposal will distinguish between a number of modules or elements of InnoLabs approach. These are detailed in the following paragraphs:

- Module 1: Regional and international community (see section 3)
- Module 2: Social Innovation Projects (see section 4)
- Module 3: Physical environment & Innovation Labs (see section 5)
- Module 4: Unique own knowledge-base (see section 6)



### **3 Module 1: Community**

#### **3.1 Introduction - importance of the community**

The network of innovative individuals and organizations is the most important module, or building block, of the InnoLabs. The development of the labs ensures that partner regions can take better advantage of existing innovative parties. The project also contributes to the development of a new generation of innovative professionals (individuals) and organizations.

#### **3.2 Types of partners**

The InnoLabs community is made up of four different circles, which vary in the degree of cooperation.

First, there is a core community of devoted academics from partner universities. This core community consists of about twelve people from the five different universities/research institutions.

The second circle of actors forms the base community. It is formed by innovative parties and persons closely associated with the academic institutions, but without long-term formalization of this cooperation. The base community regularly works actively with lab projects and other activities. Many of the basic partners will be located in the partner regions, but this is absolutely not necessary. The most important criterion is the degree of cooperation in adjoining initiatives, which are worked with in a structural manner.

The third circle of actors is the network partners, with whom we work on a more ad-hoc basis. Each of the partners (i.e. the core community, the base community and the network partners), may be parties from industry, knowledge institutions, education or government. The expectation is that the InnoLabs may become the natural collaboration point for national programmes of partner regions emphasising business innovation within the sectors and challenges focused upon.

The fourth part of the InnoLabs community is the international network. In the project, strong structural relationships between international partners is a core aspect in order to enable activities to be tackled from an international perspective, insight and outreach. Thus, worldwide knowledge and skills can be employed for the InnoLabs projects and initiatives now and in the future.

#### **3.3 International network**

Developing connections to other Innovation Labs, provides an important added value in this context. This and other similar networks offer the possibility that some or all of Innolab partners become a part of a structured international community with similar initiatives. The shared insights and corresponding ways of working will ensure that partners can work effectively cross-culturally, and in this way bring about radical, groundbreaking innovations scalable and replicable in many contexts beyond the local.

Through the development of international cooperation projects, the InnoLabs contributes to the internationalization objectives of the partner regions. In the Netherlands, this is exemplified in the context of the development of Leeuwarden as European Capital of Culture in 2018. The InnoLabs can also function as an international platform for small business partners for this occasion. For many of these small businesses it is difficult to represent themselves internationally, but the collaborative platform makes it easier to take advantage of the various partners in the international network.

#### **3.4 Relationship with education**

All InnoLabs are closely linked to the regional educational institutions. Students and their supervisors are essential elements of the base community, and provide the innovative thinking power and inspiration for

the lab's projects. The commitment of students can be viewed as a source of capacity, where students and teachers from all disciplines of the relevant educational institutions can be deployed in social impact projects (see module 2). InnoLabs therefore presents an inspiring learning environment, introducing students through a unique experience to a whole new way of learning and working. Case examples include WOFIE at Aalborg University, and the assigning of students from the Excellence Programme at NHL University - close to professional practice, yet at the same time acting at the interface of different sectors and areas of expertise. It is precisely this multidisciplinary and cross-sectoral approach, which is missing in the current curriculum of implementing partners, but also in many internships and business projects, because most organizations are still sectorized and mono-disciplinary in nature. InnoLabs contributes in this way to the development of a new type of "innovative professional", who, across the boundaries of their own expertise, can work on groundbreaking solutions to complex organizational and social issues. To encourage the mutual synergy between InnoLabs and education, the intent is to work with hybrid appointments, where teachers are partly employed in regular education, while also being active in InnoLabs projects.

### **3.5 Relationship with companies**

An InnoLab project will have several functions regarding the business sector. Firstly, issues and problems from existing businesses are tackled by and within InnoLabs. In this case, the business performs the function of problem owner/client. One of the methods applied involves "companies in residence". This is where one or more employees are given a semi-permanent place of work within the InnoLabs, to be inspired by practice and developments within the InnoLabs. Secondly, these mostly small, regionally based companies are part of the InnoLabs' base community. They are actively involved in the implementation of social innovation projects. Thirdly, InnoLabs is a breeding ground for new business activity in the form of start-ups that will result from the social innovation projects. So on the one hand, InnoLabs helps companies solve complex issues. Secondly, InnoLabs helps businesses to promote their products effectively. Thirdly, InnoLabs contributes to the development of entirely new business activity in the region.



## **4 Module 2: Social impact Projects**

### **4.1 Cross-sectoral, multidisciplinary, socially relevant**

Within the InnoLabs, various kinds of design and innovation projects are being implemented. The implemented innovation projects are cross-sectoral, which means that they take place across the borders of their defining sectors. Activities are therefore not limited to one specific application domain, but are meant to link together insights from various knowledge and application areas. Considerable added value can be found in the contribution that the (creative) industry (as a sector) can make to other sectors.

The innovation projects are multidisciplinary: Different kinds of expertise are deployed, that are mutually complementary. For example, technical knowledge, business knowledge, knowledge about communication or multimedia. Projects are complex and of challenging character, and aimed at creating social impact in the northern region. A further project-subdivision can be made according to the following themes, which will be described in more detail below:

- Ownership and type of funding
- Who carries out the project
- Thematic content / subject
- Type of outcome / output / what does it produce

### **4.2 Ownership and type of funding**

The projects of InnoLabs vary in problem-ownership and underlying financing. Three types of projects can be distinguished:

- Private projects, focused on business objectives, based on commercial financing
  - o Variant A) a project that can be completed by an existing company
  - o Variant B) a complex, cross-sectoral issue
- Public projects, focusing on social impact, on the basis of public funding
- Public-private projects, based on mixed funding from government and industry

#### **4.2.1 Private projects**

At one end of the spectrum there are the private projects. These are entirely paid by an interested company or social organization. Ownership of the results of these projects lies with the financing party. If an existing company can complete the project in question, then the InnoLabs will act as a mediator to connect supply and demand. This company can optionally make use of the facilities of the InnoLabs (= variant A). In the case of more complex projects, where different types of expertise are required, InnoLabs can act as general contractor and process facilitator of the project (= variant B). The role of InnoLabs can then be viewed as a kind of catalyst of the renewal process, while the ultimate aim is to - just like a catalyst in chemistry - avoid active involvement in the final product.

#### **4.2.2 Public projects**

At the other end of the spectrum there are public projects, which take place on the basis of a societal challenge or problem, where a problem owner cannot clearly be identified. Implementation of these projects will take place with the help of government funding. Results are collectively owned and are freely available to the public, e.g., using a creative commons license. Also in this case, the aim is that - just like a catalyst in chemistry - InnoLabs itself is not actively involved in the final product. The idea is that the actual realization of the developed concepts will be completed by one of the partners involved.

#### **4.2.3 Public-Private projects**

Different funding formulas are possible between the two extremes, with a mix of public funding, funding from education, and funding from businesses and community organizations.

#### **4.3 Who carries out the project (students, professionals, mix)**

Another way to differentiate between projects is with respect to the people who carry out the project. Three types of projects can be distinguished:

- **Professional projects:**

These are carried out under the responsibility of the professionals who are employed by InnoLabs itself, in cooperation with external creative experts from the InnoLabs network. Student involvement is modest, and especially operational in nature. Chance of successful outcome is high.

- **Student projects:**

These are primarily carried out under the responsibility of the students themselves. Coaching takes place by teachers of the program. The professionals from the InnoLabs network function mainly as client for the students, with a limited degree of coaching. These projects carry a high degree of enthusiasm, but the chances of a successful outcome are unpredictable. Some student groups will yield surprisingly good results, while others produce only a modest yield. Chance of successful outcome is unpredictable.

- **The student as a junior professional:**

These projects are under the responsibility of the InnoLabs professionals, but require a considerable commitment by students. The students are allowed to participate in these projects after a relatively difficult selection process, and operate in fact as junior staff in the team. Chance of successful outcome is good.

The relationship between the different types of students will be further elaborated during the development of InnoLabs. One possible view would be to more or less separate projects for students of different degree levels, each with its own specific emphasis. Another possibility is to develop more comprehensive projects, where the more abstract fact-finding mission during the fuzzy front end process may be better suited to PhD and Master's students, while the more concrete development and detailing would be actioned by lower degrees such as Bachelor students.

#### **4.4 Thematic content / subject**

A third way to distinguish the InnoLabs projects, is with regard to the specific application domain within which the work is done. These complex issues are used from a specific social domain as a starting point for the project, and a continuous program of knowledge and innovation will be developed around each of these domains. The approach within these programs is then emphatically cross-sectoral and multidisciplinary in nature, and in particular the contribution of the local sectors can be seen as a unique added value. It is certainly not going to be mono-disciplinary specialist research within these sectors themselves.

The joint stakeholders and funders of InnoLabs will determine a final decision on substantive trajectories. Current plans include five continuous knowledge and innovation tracks, all this in line with the earlier stated priorities. In addition to the four core sectors, an important role is played by a knowledge and innovation track that is linked to the development of the European region.

The alternative arrangement is according to the two main themes of the Innovatiepact Fryslân (IPF) provided by Netherlands-based partners of InnoLabs project. This relates to the question of vitality and livability in the rural regions and how regional companies can remain competitive among the rapid international developments (smart sustainable industry). A third theme can be found in the way the region can further develop its unique position around tourism, leisure and hospitality.





#### **4.5 Results of the innovation projects - what do they deliver**

The InnoLabs innovation projects focus on developing new, groundbreaking solutions to complex social issues. This frequently involves solutions that can be implemented within existing organizations. Sometimes a solution will be so innovative, however, that it can be better realized in a new organization, for example in the form of a start-up initiative. For the time being, the solutions to be developed can be divided into four categories:

- New products or services, to be commercialized by existing companies
- New services or business models that are developed within new networks, clusters and collaborations between existing organizations (“solution-oriented partnerships”).
- New business activity, to be developed in the context of new start-up companies and organizations
- Other results in the form of events, experiences, art projects, policy proposals, proposals for new regulations, etc.

## **5 Module 3: Physical environment: The Innovation Labs**

### **5.1 Innovation Lab Environment**

When establishing InnoLabs, it is important to distinguish between physical labs and virtual labs. Physical labs have dedicated space assigned, while virtual ones utilize a more digital and/or flexible environment. In respect to InnoLabs with a physical environment, these include a clearly visible and bordered area, which is suitable for various specific functions and activities. We can distinguish the following three primary functions:

- Prototyping facilities
- Teaching spaces and workshops
- Open Space

As an example, for the Lab developed at NHL, the total estimated required space is 3000 m<sup>2</sup>, of which 2000 m<sup>2</sup> is for prototyping and project activities and 1000 m<sup>2</sup> for education and project activities. Naturally, the sizes and exact usage depends on the partner institutions' premises and student group sizes. For instance, the labs for organizational projects at Aalborg University where students use less prototyping tools, different space dimensions are required.

#### **5.1.1. Prototyping facilities**

Prototyping at InnoLabs deviates from the usual innovation routine in companies and labs. Cross-sectoral, multidisciplinary product and service solutions, which are the target of implementing partners of InnoLabs, require development of "demonstrators". These are full-size, working prototypes of a new product or service system that can be tested in the complexity of the real context for which it was developed. InnoLabs facilities have been adapted for this purpose, and provide the opportunity for the construction and in-lab testing of these realistic prototypes. InnoLabs are alert to the potential of business development. Companies and organizations are involved at all stages of the prototyping and patents and start-up initiatives are identified and developed together and in a timely manner. Open innovation is the key word here. The demonstrator approach accelerates the launch of the product or service. Students, researchers and professionals are working together on the demonstrators in the InnoLabs prototyping labs, achieving practical and tangible results. They also generate relevant knowledge in cooperation with the InnoLabs research program. The physical environment of the InnoLab prototyping facilities exists alongside the existing modular units (metal, electro, modeling, wood and plastics, natural materials, multimedia, gaming and 3D printing) from flexible modules where the demonstrators can be developed, as needed.

#### **5.1.2. Teaching spaces and workshops**

All partners of InnoLabs already equip a flexible and multifunctional educational environment at their location. The InnoLabs are components of the existing facilities linked to new ones. These modular multipurpose spaces have room for individual and group work, design studios, rooms for workshops and assemblies, stages and multimedia facilities. The environment is expected to be refreshed every three months, suitable for the changing demands of education, projects and activities. InnoLabs focus on educational activities and the non-technical innovation project work in this breeding ground.

#### **5.1.3. Open Space**

InnoLabs project activities, meetings and smaller group meetings take place in an "Open Space" environment. Project staff, researchers and visitors of companies and organizations come together in a flexible and inspiring environment with space for exchanging ideas, project work and concentrated individual work. As the social projects and the research gradually crystallize, this will lead to specific dedicated Spaces, such as a Health Hub, Food Farm, Water Platform, City Space and Energy Link. The exact content and design of the spaces is yet to be determined, but a first designer's impression can be seen



InnoLabs will eventually develop a long-term strategic partnership with a number of external domain-specific practice labs. These are the responsibility of external partners, such as business, social organizations, government or knowledge institutions. The InnoLabs social innovation and research themes are always associated with one of these practice labs. This will result in long-term strategic cooperation, built of building blocks in the form of short-term innovation and research projects. Examples of this kind of collaborations from Netherlands based partners of InnoLabs can be the Dairy Campus, which is an initiative that applies academy-industry based collaborations and benefits from it.

### 5.3 Infrastructure, equipment and material

Existing infrastructure and equipment in the InnoLabs will be used wherever possible, for instance in case of Netherlands based partners, the gaming and motion capture facilities of Gameship will be open for collaboration. To facilitate the intended groundbreaking and unique product innovation through demonstration, prototyping, hardware and software for serious gaming, and modern arts & crafts instruments, a separate budget is needed for simple equipment and design in the central InnoLabs prototyping facilities. Once only, at the onset, a substantial material start-up budget is required, but in subsequent years it may be relatively modest in size.



Illustration: Artist impression of how an InnoLab facility might look like

## **6 Module 4: Research / knowledge base**

### **6.1 Multi-disciplinary applied research**

In addition to carrying out the more operational innovation projects itself, InnoLabs focuses particularly on research and reflection on how this cross-sectoral innovation approach (see Module 2) can actually be successful. This is therefore not mono-disciplinary research within a specific application domain (such as health care, energy, water), but rather multi- and trans-disciplinary, applied research into the way in which cross-sectoral collaboration and innovation can in fact function successfully. The research program addresses the following central research question:

*“How can a cross-sectoral approach to innovation demonstrably contribute to sustainable socio-cultural and economic strengthening of partner regions, and what role can practice-oriented innovation labs fulfill during this process?”*

The research is based on a multi-level system perspective, scrutinizing the problems outlined from various aggregation levels (social perspective, organizational perspective, business/service perspective, technological perspective). The intended result is the establishment of science-based insights on how different types of innovation processes may or may not proceed more effectively if the cross-links between various sectors are included in this process in a systematic manner.

The thus developed scientific insights will then be translated into practical innovation guidelines for business, government, knowledge institutions and social organizations. This will allow these regional actors to carry out their innovation processes more effectively and efficiently. From a social perspective, the focus is primarily on the complex social challenges of the rural regions (health, agriculture, energy, water and tourism). From an economic perspective, the focus is on the creation of new business activity in regions, where both existing and new organizations will make optimal use of the opportunities offered by a cross-sectoral approach.

### **6.2 External cooperation quadruple helix partners**

InnoLabs research takes place in the context of the networks in the quadruple helix of other knowledge institutions (outside partner universities), business sector and (creative) industries, government, and other partners in society. Where regional and international communities are established broadly and inclusively, InnoLabs research will work with a selection of partners who are open to multi-year research collaboration, have sufficient capacity and interest, are capable of making a meaningful contribution (data, technologies, infrastructure, networks and other means) and who can contribute to successful new research. Coordination and cooperation take place with existing knowledge institutions in the regions.

Not only existing businesses but also new businesses, initiated in InnoLabs impact projects, may be interesting research partners for the project. Experts, knowledge and data from the regions and municipalities are also important for InnoLabs research. Nationally, InnoLabs is seeking connections with research and networks in the (creative) industry. Internationally, the research institutes and partners of the Aalto Design Factory Global Network are the primary contacts. InnoLabs also collaborates with research partners from consortia of other European projects such as Smart City Labs.

### **6.3 Principal Research Themes**

Within the framework of InnoLabs - cross-sector innovation in priority sectors - internal and external analysis lead to a number of principal research themes. Partner institutions, based on the needs and priorities of all partner regions, determined these themes. For example for NHL partners, research into Smart Media is relevant because of the central role that the new media and data play in regional innovation processes at the moment. Research into new technologies, products and services directly reflects on the approach and results of the social impact projects in InnoLabs.



The cooperation within the complex innovation systems and networks largely determines the quality of innovation processes in InnoLabs. The development of smart tools and methods contributes to the continuation and expansion of the InnoLabs innovation approach.

### **6.3.1 Research Area 1: Smart Media**

The research program Smart Media focuses on research into the design, implementation, use and effects of smart media. We define Smart Media as media that:

- are creative in the sense of combinations of gamification, social, interactive, ambient, and multimedia,
- are learning in the sense of integrated use of “sensors”, “big data”, “metrics”, and use patterns,
- are valuable in terms of social, practical, economic, etc. meaning in the practices where they are deployed

We distinguish at least three sub-themes that contribute to the development of knowledge, understanding, M&T, and designing around smart media:

- Sensors and Big Data: it involves research into “physical” and “digital” sensors and the responsible and appropriate use of “big data”
- Designing Interactivity: this involves research into “man-machine” interactions, but also “man-machine-man” interactions
- The value of media: this involves research into the contribution made by media in the context of use

### **6.3.2 Research Area 2: Technology, products and services, systems**

InnoLabs creates and designs new solutions for cross-sectoral issues, many products and services. Technological innovations in IT, mechatronics, energy, life sciences, engineering and materials science are the driving force behind it and continuously increase the scope for innovation. Design processes are increasingly complex and focus on larger systems. The innovation cycle of technological innovation -> design of products and services -> systemic integration is the subject of research. Topics in this area are:

- Research into the technological development of innovation projects within the substantive tracks Health, Food, Energy, Water and Tourism

A number of sub-themes can serve as a model for the research to be programmed within this theme:

- Research into Smart Grids and new local energy systems and services
- Research into sustainable food concepts, services from and for prosumers (producing consumers)
- Research into innovative products and services from Arts & Crafts companies related to local amenities and tourism
- Research into data-rich portable devices and smart clothing for personal health and telemedicine
- Research into new urban water concepts in relation to new services for water supply, water tourism and climate resilience

### **6.3.3 Research Area 3: Actors and networks, innovation systems**

Cross-sectoral multidisciplinary innovation takes place in a complex innovation environment with different actors, multiple contexts and commercial, institutional, and societal interests. The orchestration of such innovations is an emergent process where a linear sequence of activities in an individual company will no longer result in a pre-formulated result. This is where a multi-stakeholder network recognizes the coherence and complexity, generating innovative solutions that are being created during this process and are being adjusted continuously.

A number of sub-themes can serve as examples of further programming research:

- Multi-stakeholder analysis of cross-sector innovation processes
- Research of management and success of complex, emergent innovation processes
- Research on Open Innovation concepts and applications

#### **6.3.4 Research Area 4: InnoLabs Methodology and Toolbox**

InnoLabs develops its own unique innovation methodology and toolbox, which will be tested and developed further over time. Each partner contributes a part of the toolbox, each according to his/her own expertise. In the research program, methods and tools are integrated and coordinated. Some important categories in the toolbox are:

- Design tools and methods for the integrated design of products and services in InnoLabs
- Tools for creative methods and new media use
- Tools for developing Demonstrators and knowledge and learning concepts within InnoLabs
- Strategic tools for vision development, road mapping and innovation management within InnoLabs
- Analytical tools for value chain analysis, materials and technology choices
- System tools for network analysis, ecosystem analysis and multi-actor analysis
- Tools for business development, incubation and acceleration of new enterprises, market analysis, and value creation by the (creative) industries.



## **7 Finances**

### **7.1 Budget**

The total budget required for InnoLabs are determined by costs that are distributed as below mentioned parts of the project:

- Management and organization, networking and support (Module 1, and overall management of the substantive modules)
- Implementation of the social impact projects (Module 2)
- Infrastructure, equipment and material (Module 3)
- Implementation of the research program (Module 4)

The estimated costs can be roughly divided as follows: the modules, people, resources and travel expenses.

### **7.2 Business model and value creation**

The business model of InnoLabs is based on the interconnected four Modules, where the basic funding creates a significant social value in the form of in-kind and in-cash contributions in InnoLabs-related activities by and through partners and networks, new activity with partners that are highly influenced by InnoLabs, and additional funding obtained by each InnoLabs partner itself. However due to changes in regional policies regarding university-industry collaborations in partner countries, the processes described below may differ.

#### **7.2.1 InnoLabs and the International Community (1)**

Funding for the Modules InnoLabs Community and International Community consists mainly of staff costs for the core team, as well as the cost of the deployment of the catalyst and management activities with the other Modules. The core team also takes the initiative in structuring the strong and innovative international community in which InnoLabs is embedded.

In addition, there is a significant financial contribution, especially in-kind, by the direct and indirect partners of the regional and international community. Their passion, knowledge and commitment are an essential element in these communities. Close cooperation will naturally first take place with education, particularly the local/regional educational institutions, as well as regional, national and international education and research partners. The function of InnoLabs as an inspiring learning environment has already been described in this proposal. Businesses and other social actors also provide an indispensable and active contribution to network development, not only directly involved in the network, but also supporting and facilitating joint activities, organization and sponsorship of meetings and conferences.

#### **7.2.2 Creating Value in the Social Impact Projects**

The different types of cross-sector design and innovation projects of InnoLabs Module 2 are associated with various financing and business models. Private projects are entirely or largely financed by businesses and social organizations, while InnoLabs contributes process management and/or use of facilities. Public projects are (largely) funded by the government, while the contribution InnoLabs is as a catalyst. In addition, the mix of funding will also depend on the type of implementation, ranging from the use of InnoLabs professionals, junior professionals to student projects with regular education efforts. The impact projects lead to significant value creation, besides investments, through IP rights and, where they create new business activity, attracting (venture) capital, innovation grants and other business financing. In addition, positive results from these projects initiate the formulation of new and follow-up projects.

### **7.2.3 Investments in the physical environment Innovation Labs**

Investments in its own physical environment of the InnoLabs, Module 3, for both non-recurring setup costs as well as ongoing annual costs are provided in the core financing. An amount of similar magnitude is spent on related investments in the external practice labs of our partners, with whom InnoLabs collaborates intensively in its innovation and research programs.

### **7.2.4 Valorization and acquisition of research**

The research in InnoLabs leads directly to knowledge and insight for the top sector (creative) industry in partner regions. Direct valorization consists among others of PhD premiums, scientific publications and potentially patents as well. Method development creates a unique toolbox, and from there new education material. The translation into practical innovation guidelines subsequently channels new initiatives with companies and actors. InnoLabs acquires additional regional, national and European research funding in consortia of various compositions, both inside and outside its own regional and international networks.





## **8 InnoLabs Organization**

### **8.1 Collaboration**

Partners in InnoLabs are collaborating intensively and ambitiously to establish a world-class center. In line with the international development of other similar networks, at its core is:

- InnoLabs has a proactive attitude of partners, focusing on rapid implementation and innovation
- Partners work closely and intensively with each other, and are constantly open to input from outside
- Knowledge is an important base of InnoLabs. Its contribution in projects leads to successful innovation
- The organization is informal, avoids hierarchy and keeps bureaucracy within limits
- The backyard of partners is the testing ground of InnoLabs - projects are carried out in a realistic context

### **8.2 Alternative Management**

InnoLabs is focused on crossover, multi-sector innovations in the (creative) industries of the partner regions. Investigating and innovating of these types of complex social topics requires a different way of management. Regulated top-down project and program management proves to be unwieldy with complex and systemic issues. The natural tendency to divide these into sub questions leads to less-than-optimal solutions. Complex problems have complex solutions. Complex solutions require a learning organization that moves boundaries, renews itself constantly and accepts uncertainty. InnoLabs orchestrates this process of creative integrated solutions that appear on the fly (“emergent solutions”), instead of managing and adjusting predetermined targets and outputs.

### **8.3 Physical Basis**

The labs in partner universities are home bases for InnoLabs. These are the workplace of the core teams, researchers and students, the meeting place for project teams and the base of operations for new entrepreneurs. Network partners, regional and international, meet here. Cooperation with practice labs, companies and organizations starts here.

The interior of the Labs reflect the orientation of InnoLabs: open, flexible, modular, suitable for growth and shrinkage, and “walking the talk”: sustainable, innovative, creative, crossover.

### **8.4 Network Organization**

InnoLabs is a cross-linked organization. The core team (management, support) is responsible for all Modules. Within each of these, project teams are focused on their own activities and with their own tasks and process. The teams that implement the activities of Modules have a high degree of independence and self-direction. Experience shows that knowledge teams and creative teams obtain the best results in this way and find the most innovative solutions. Project leaders listen, encourage and facilitate.

The core team orchestrates the activities and tests them against the objectives, results and desired effects of the entire program. It integrates the activities and finds synergies with other initiatives, thus ensuring temporary and unique partnerships in the InnoLabs. The core team is also focused externally, on the quality of the communities, clients and other organizations of InnoLabs. It monitors and improves the core competencies of InnoLabs and its position in the market, thus ensuring a clear, common, external identity. In this way InnoLabs remains flexible and is able to rapidly adapt to changes, continuously renewing itself.

### **8.5 Core Team and Project Teams**

Five managers lead the core team of InnoLabs from five partner universities. They coordinate the scientific knowledge program, and the knowledge component of the social impact program. The core management team is also responsible for regional and international community development, the physical

infrastructure and the social impact program, and the administrative and financial management of InnoLabs. An advisory board that consists of regional experts assists them. The management directs project managers and scientific staff of InnoLabs. Support staff consists of employees in communication, administration and accounting. The knowledge program is guided by decentralized lecturers and professors from the knowledge institutions in the InnoLabs, who are usually involved part-time. They coordinate multidisciplinary research teams, and the PhD and postdoc projects involved. They and their researchers are also directly involved in relevant social impact projects. InnoLabs project managers coordinate the Social Impact Program. It is of diverse construction, with project teams as the base unit. These may be under the direct supervision of InnoLabs project leaders, or under external employees from co-labs or educational institutions who are on temporary hire, all depending on the nature of the projects.

### **8.6 Communication**

Communication within InnoLabs is open and non-hierarchical, and focusing more on dialog than discussion. Lab activities take place on many fronts and different locations, and communication flows are directed accordingly. Key words are: manage and coordinate within projects, enrich dialog between project groups, and inform and exchange in the wider organization. InnoLabs actively seeks out new media and communication methods and tries them out.



## 9 Roadmap

The InnoLabs development path has three phases. The first year is devoted to kick-starting many activities, building the InnoLabs organization and fast start of in particular the social impact projects. InnoLabs comes to full fruition in the next three years. This phase is focused on growth and implementation of all activities. The last year is characterized by the completion of activities, allowing new initiatives undertaken by InnoLabs to take hold, and the embedding of knowledge, expertise and results of InnoLabs in existing organizations and knowledge institutions.

	<b>START and DESIGN (year 1)</b>	<b>DEVELOPMENT and GROWTH (years 1-2)</b>	<b>COMPLETION and EMBEDDING (year 2 and on)</b>
<b>B1 – InnoLabs community</b>	<ul style="list-style-type: none"> <li>- structure of core team InnoLabs management team and support staff</li> <li>- develop community with direct partners, design collaboration</li> <li>- design and initiate communication and introduction activities, kick-off</li> </ul>	<ul style="list-style-type: none"> <li>- integration project organization InnoLabs and educational and research teams</li> <li>- expand community with businesses, indirect partners, multi-stakeholder settings</li> <li>- training activities and professional and innovation workshops</li> </ul>	<ul style="list-style-type: none"> <li>- transition from project organization tasks in existing organizations</li> <li>- perpetuate community and initiate public-private partnerships and business development</li> <li>- dissemination activities and continuation integration into mainstream education</li> </ul>
<b>B1 – International community</b>	<ul style="list-style-type: none"> <li>- integration into Design Factory Global Network (DFGN)</li> <li>- setting up national network with international connections</li> </ul>	<ul style="list-style-type: none"> <li>- exchange and collaborate within DFGN</li> <li>- setting up joint projects DFGN</li> <li>- activities international networks active in EU networks, local networks</li> </ul>	<ul style="list-style-type: none"> <li>- perpetuate international crosslinking, setting up joint bi/multinational centers</li> <li>- setting up long-term international platforms</li> </ul>
<b>B2 - Social impact projects</b>	<ul style="list-style-type: none"> <li>-prioritization and theme choice crossover impact projects</li> <li>-implementation of first batch projects</li> <li>preparation of presentation projects</li> <li>set up connection with incubators/business centers</li> </ul>	<ul style="list-style-type: none"> <li>-evaluation and adjustment initiate complex thematic projects</li> <li>- expansion, second and third batch projects</li> <li>- implementation impact projects</li> <li>- accompany first spin-offs/ spin-outs, incubation</li> </ul>	<ul style="list-style-type: none"> <li>- evaluation, social embedding completion and continuation</li> <li>- fourth and fifth batch completion and continuation of projects</li> <li>- continue marketing impact projects IP and patents set up</li> </ul>
<b>B3- Innovation Labs</b>	<ul style="list-style-type: none"> <li>- design and realization physical location InnoLabs</li> <li>- setting up base data/ knowledge infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>- coupling facilities to practice labs, joint investments</li> <li>- couple to external/international data infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>- commercialization and outreach knowledge infrastructure, spin-out</li> </ul>
<b>B4- Research</b>	<ul style="list-style-type: none"> <li>- setting up research program</li> <li>- appoint scientific staff start PhD/postdoc program</li> <li>- setting up InnoLabs methodology/tool box</li> </ul>	<ul style="list-style-type: none"> <li>- expand and adjust program</li> <li>- expansion, continuation PhD program</li> <li>- presentation and implementation InnoLabs methodology</li> </ul>	<ul style="list-style-type: none"> <li>- visitation and evaluation</li> <li>- conclusion first PhDs, continuation</li> <li>- continuation summer schools, conferences international DFGN graduate school</li> </ul>

## 10 Results and impact InnoLabs

Objectives, Modules and activities of InnoLabs are described earlier in this proposal, and are summarized below. This yields the following results, quantified where possible. Also included is a mostly qualitative assessment of the social and economic impact of InnoLabs.

Objectives	Resources / activities	Results / output	Effect / Impact
<b>Setting up regional InnoLabs community (Module 1)</b>	<ul style="list-style-type: none"> <li>- core team InnoLabs + board + advisory board</li> <li>- support team</li> <li>- project teams</li> <li>- research teams</li> <li>- industry / SME's</li> <li>- government involvement</li> <li>- meetings, workshops</li> <li>- guest lectures</li> </ul>	<ul style="list-style-type: none"> <li>- overall results: Groundbreaking solutions New knowledge Innovative professionals</li> <li>- collaboration of education and research institutions</li> <li>- Dissemination</li> <li>- Involvement of social and commercial parties</li> </ul>	<ul style="list-style-type: none"> <li>- regional leading brand for (creative) industry</li> <li>- (Inter)nationally respected center</li> <li>- New partners, arising from its own activities</li> <li>- Improved content</li> <li>- Long-term regional platform for (creative) industry</li> <li>- Quadruple Helix synergy</li> </ul>
<b>Setting up international community (Module 1)</b>	<ul style="list-style-type: none"> <li>- international involvement of multi-stakeholders</li> <li>- accreditation to DFGN</li> <li>- International networking</li> <li>- (contributing to) EU project proposals</li> </ul>	<ul style="list-style-type: none"> <li>- relevant partners in active network</li> <li>- exchange of international knowledge and experience</li> <li>- exchange of staff and students</li> <li>- partner in EU projects and networks</li> </ul>	<ul style="list-style-type: none"> <li>- influx of international knowledge</li> <li>- strengthening education and research through new insights</li> <li>- strengthening national position InnoLabs</li> <li>- strengthening the international position of regions</li> </ul>
<b>Social impact generated through projects (Module 2)</b>	<ul style="list-style-type: none"> <li>- learning projects</li> <li>- professional projects</li> <li>- mix projects</li> <li>- public, private, PPP financing</li> <li>- innovation tracks</li> <li>- link to education</li> <li>- events and experiences</li> </ul>	<ul style="list-style-type: none"> <li>- innovative products</li> <li>- innovative services</li> <li>- new business</li> <li>- graduate positions</li> <li>- practice locations</li> <li>- practice books, reports</li> <li>- policy recommendations</li> </ul>	<ul style="list-style-type: none"> <li>- market success products and services</li> <li>- IP, patents</li> <li>- employment opportunities</li> <li>- strengthening (creative) industry region</li> <li>- co-funding from industry</li> <li>- InnoLabs long term continuation</li> </ul>
<b>Realizing Innovation Lab (Module 3)</b>	<ul style="list-style-type: none"> <li>- build own physical InnoLabs Lab</li> <li>- exploit Lab</li> <li>- setting up technical staff</li> </ul>	<ul style="list-style-type: none"> <li>- fitted labs at partner universities</li> <li>- internal and linked data systems</li> </ul>	<ul style="list-style-type: none"> <li>- natural home InnoLabs</li> <li>- stable factor in future development</li> </ul>
<b>Increase knowledge about cross-sector innovation approach (Module 3)</b>	<ul style="list-style-type: none"> <li>-scientific staff:</li> <li>- lecturers/professors;</li> <li>- postdocs/PhD</li> <li>- scientific projects</li> <li>- project proposals NWO, EU etc.</li> </ul>	<ul style="list-style-type: none"> <li>- PhD theses</li> <li>- Journal&amp; conf.papers</li> <li>- special issue journals</li> <li>- international book InnoLabs toolbox</li> <li>- regional &amp; national workshops</li> <li>- new projects NWO, EU etc</li> </ul>	<ul style="list-style-type: none"> <li>- contribution to scientific theory</li> <li>- contribution to practice</li> <li>- strengthening research position</li> <li>- increased number of knowledge workers in the region</li> <li>- continued reinforcement InnoLabs</li> </ul>



## 11 Critical success factors InnoLabs

Initiating an innovative, experimental center such as InnoLabs always entails risks. Several inherent factors render success plausible for InnoLabs. In addition, recognizing the risk factors and taking early appropriate actions can prevent problems.

### 11.1 Success Factors

#### **Strong regional community:**

Partner universities as the initiators and main partners, have a strong position in the regional knowledge clusters. There are strong links with the (creative) industry in the region, and with other SMEs and large companies. The outlined “lean and mean” approach of the InnoLabs ensures substantial involvement with the regional community.

#### **Need cross-sectoral co-creation platform for groundbreaking innovations;**

The outlined dynamic, positive developments in the partner regions reinforce the necessity for a cross-sectoral innovation initiative such as the InnoLabs, and provide a good breeding ground and embedding for it. The current backlog of partner regions in the (creative) industry demands action, and the InnoLabs provides its own unique path for this.

#### **Current opportunity within emerging international platform of Design Factory:**

The timing is perfect for intensive cooperation within the Design Factory Global Network. Joining this growing and successful network means access to international expertise and partners, European programs and global initiatives.

#### **Inspired and experienced MT and presence of professionals in the region:**

The core team of InnoLabs is fully focused on the three core results of InnoLabs - groundbreaking solutions, new knowledge, innovative professionals - and accomplishes this through passion, experience and an ongoing commitment to local values. The new professionals within InnoLabs are the impetus for the future and economic vitality of the northern region.

#### **Attendance 20,000 students, potential new business activity:**

Basis for success are the current and future students in higher education, totaling more than 12,000 only in the Netherlands part of the project. They can develop into creative and innovative professionals and entrepreneurs of the regions.

#### **Attractive physical design center:**

The experience of Aalto Design Factory shows the appeal of a physical design center. An innovation laboratory within all partner universities is the focal point of the entire program. From here, InnoLabs collaborates with partners, locally and internationally.

## 11.2 Reducing risks

The following table describes a number of identified risks, along with the measures to prevent or reduce their effects.

Risk	Action
<p>Onset Companies are risk-averse and reject innovative ideas; InnoLabs accepts this attitude.</p>	<p>Importance of out of the box In the vision, strategy and execution, InnoLabs underlines the importance of innovative and radical solutions and proves their positive impact in the short and medium term.</p>
<p>Brain drain Students/young professionals do not stay involved after the completion of projects.</p>	<p>Create conditions InnoLabs encourages direct collaboration between students and potential employers.</p>
<p>No interest in impact projects Companies and organizations are too focused on mono-disciplinary and short-term issues and show little or no interest in InnoLabs projects.</p>	<p>Network deployment InnoLabs makes good use of current regional and international partners and contacts to propagate the concept and to identify “champions” within companies who recognize the need and are actively involved.</p>
<p>Little connection between research and practice Because of its own dynamics and its own turnaround times for research and the impact of projects, there is little/decreasing connection.</p>	<p>Fine-tuning InnoLabs provides continuous fine-tuning between the program elements and seeks mutual benefits. Selection Weighing experience and affinity for applied research in the selection of academic staff. Considering potential for contribution to research when selecting for impact projects.</p>
<p>Not enough interested students/young entrepreneurs</p>	<p>Branding Communicating the “brands” InnoLabs and the international context of DFGN will be timely and up to date. Preparation Within the partnership, the connection with education-related activities of InnoLabs will be well coordinated. Sound agreements on cooperation with incubators for the (creative) industry are made in a timely manner, and support/access to funding for start-ups is arranged in advance.</p>
<p>Program consistency Consistency of impact projects is limited; focus is within each of the individual projects, with little exchange.</p>	<p>Program management InnoLabs provides active program management, emphasizes synergy between projects and is continuously looking for opportunities of connection and collaboration</p>
<p>No cooperation with other labs - competition Other practice labs see InnoLabs as a competitor and avoid collaboration or hinder initiatives.</p>	<p>Good agreements Extensive consultations with practice labs. Building confidence Mutual trust also becomes part of the foundation.</p>



Photos: Innolabs core-team during Leeuwarden and Paphos meetings.

# INNO💡LABS

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