



# Interreg



Danube Transnational Programme

DA-SPACE



## Output 6.3

**Strategy to boost innovation and entrepreneurship**

**Developed by ISRTIA and ULM under the framework of WP6**



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#### 1. Context – Summary

The following strategy is created within the framework of the Interreg Danube Transnational programme DA-SPACE, funded by funds the European Union (ERDF, IPA). The Project started in January 2017 until June 2019. The aim is to create an open innovation ecosystem by piloting a model of open innovation labs, in which companies, public authorities, universities and the civil society can create fundamentals for innovation together with young talents. The results emerging from the pilot will lead to the development of a strategy to boost innovation and entrepreneurial skills in the Danube.

The experience and insides gained within the implementation of the project led to the following assumption on which the strategy s based.

#### 2. Open innovation and co-creation

The typical innovation work challenges organizations, there is the risk of execution over learning, the risk of working in silos and the risk of losing scalability. Therefore is important that there is a real impact on the things working on, innovation requires diverse teams and a new set of capabilities and furthermore there is a need for scalable participates for open co-creation [Source: Train-the-Trainer-Workshop, 24-26.5.17 by DEMOLA]

All the mentioned approaches lead to open innovation. The term of open innovation was defined by Henry Chesbrough in 2003.

*"Open Innovation is the opening of the innovation process. Once new products have been developed secretly and behind closed doors, today a targeted integration of customers, researchers, suppliers and partners into the innovation activities takes place."*  
[Source: <https://bit.ly/2ZIBT1R>]



By piloting the open innovation labs and bringing together young talents with companies, public authorities and higher education and research, we wanted to go from normal students projects to real innovation work by working in co-creation with experts in multidisciplinary teams. This means from having pre-defined problems and a clear target to go to a redefine and re-validate the scope of a project again and again and to gain small discoveries on the way.

By looking on the team profile, it is important within traditional projects paying attention to the efficiency and the professional track record of staff members. Focus within the open innovation approach lies especially on the diversity of the teams and also in the attitude and inspiration. Furthermore it is important to creating value for the user, by participating users and a multidisciplinary team in the development process it definitely will benefit this fact. Within traditional projects the focus lies on fulfilling specifications.

One of the main challenging things is the change of the thinking patterns. The aim is to achieve a differently thinking and to challenge assumptions [in comparison: Table 1]

Attribute	Traditional projects	Innovation work
<b>Scope</b>	Pre-defined problems Clear target	(Re)defined and validated scope during the project Small discoveries along the way
<b>Team</b>	Efficiency Professional track record	More diversity Attitude and inspiration
<b>Main quality factors</b>	Fulfilling specifications, re-usability of results	Creating value for the customer/user Re-usability of concept
<b>Thinking patterns</b>	Follow rules	Think differently and challenge assumptions

[Table 1: CHANGING LANDSCAPE OF REQUIRED CAPABILITIES; Source: Train-the-Trainer-Workshop, 24-26.5.17 by DEMOLA]



### 3. Our strategic priorities - goals

#### 3.1 Creation of a favorable environment to build skills of innovation and entrepreneurship

##### **Why open innovation and entrepreneurship are important?**

Companies operate in dynamic markets, which mean that they are subject to constant pressure and increasing is exposed to challenges. This is particularly evident in the rising and rapidly changing customer requirements, in technological innovations, but also in the social and political framework conditions. Accordingly, management must take into account a number of factors and schedule them. In order for this to succeed, a dynamic, innovative, adaptive and flexible corporate management is indispensable to ensure the continued existence of the company.

A method that addresses these challenges lies in the collaboration and co-creation of different institutions: civil society, higher education and research and economy.

How cooperation between these sectors can work successfully was tested within the DA-SPACE project: Open Innovation Laboratories. The aim is to create new open and innovative ecosystems that offer new ways for co-creation.

##### **What is the benefit?**

The use of open innovation promises many advantages for the various target groups:

In addition to target-group-specific goals, general positive influences can also be identified through the use of Open Innovation. Thus, a stronger motivation of all persons involved can be determined. This is the case when the participants bring along a corresponding interaction competence paired with self-management competence. Interaction competence is above all decisive for teamwork. It helps to prepare decisions in the team by organizing the work of a group.



Self-management competence is about how an actor deals with complexity internally. It is demanded that the actors motivate themselves, maintain their own sense of competence, regulate their emotions and generally adopt a flexible and reflected basic attitude.

Within the framework of the DA-SPACE Innovation Laboratories, this motivation was particularly evident among the participating solvers. Due to a high degree of creative freedom, the teams were also given a high degree of personal responsibility. However, it must also be stated that not all team members could always be equally highly motivated. The reasons for this included increasing tasks and a higher density of lectures, which allowed less time for joint teamwork. Depending on the design of the labs (e.g. whether compulsory or voluntary participation is required), it is possible to influence these factors and their motivation.

The general advantage of interdisciplinary teamwork should also not be overlooked, because a team should not only be regarded as the sum of its members. By working together in a team, a "new wholeness" is created. [Kriz/Nöbauer (2006), p. 11.] This also includes, as an important factor, "dealing with different forms of heterogeneity within the group" [Döring-Seipel/Lantermann (2015), p. 19] (e.g. knowledge heterogeneity), as this has a positive effect on dealing with complex tasks. These assumptions can also be confirmed by the experiences of the DA-SPACE open innovation laboratories.

A further advantage lies in the development of user-concentrated outputs and the inclusion of new impulses. These advantages result on the one hand from the method itself and from the composition of the teams; see Table 1 in the previous section for details. In the Open Innovation Laboratories, we have accompanied the participants through the process within the framework of the training offered, from idea generation to idea evaluation, from the design of innovative business models to marketing and presentation techniques. By teaching different methods and tools, the participants were able to incorporate new impulses and new perspectives into the development of a solution. The interdisciplinary of the teams also created new impulses.



In addition to the general advantages, specific advantages for the different target groups can also be recorded within the framework of the Open Innovation Laboratories:

Using open innovation approach comes with various benefits for the economic sector. Employees are challenged for continuously experimentation through an open and agile co-creation process. The DA-SPACE open innovation labs supported the way of implementing a new mindset and a cultural change. As the open innovation labs gave the opportunity to test out the open innovation process in an easy and uncomplicated way. Furthermore there was given the opportunity for an transnational and multidisciplinary network.

Higher education and research institutions are important components of an innovation system consisting of public and private institutions. For these institutions, the active use of Open Innovation means further development, since the approach goes beyond the mere transfer of knowledge.

The close contact with innovative companies within the framework of the Open Innovation approach was particularly positive for the young talents. Working on real case studies is strength in the university environment. Combined with the entrepreneurship training offered, which accompanies the work phases in the open innovation laboratory, it offers not only practical input but also a scientific and theoretical basis. The methods and approaches of how complex challenges can be tackled are conveyed in the training courses.

#### **What is needed?**

In order to achieve a successful implementation of the open innovation laboratories combined with training for entrepreneurship, certain factors have to be given or achieved:

In universities and research institutions, as well as in all involved actors, a rethinking has to happen. Previous project structures have to be changed so that real innovation work can emerge. Table 1 shows which characteristics and changes should be achieved.



Furthermore, it is important that not only a pure exchange between talents and companies is organized within the laboratories, but that there is space within the laboratory for joint design and action. Within the framework of the DA-SPACE approach, mentors are determined in advance by the companies. The mentors work together with the talents and are contact persons at the same time.

In general, it can be said that the approach triggers a cultural change which must be accompanied by a change in the mindset of all the current employees involved. In the institutions, the structures and processes must be adapted to new working methods. Since such changes do not succeed overnight, opportunities to try out and test new methods are particularly helpful. The DA-SPACE approach offers a suitable opportunity for all actors to test the Open Innovation approach for themselves and their institutions in a protected framework. This also helps to reduce possible barriers.

### 3.2 Support synergies between relevant players

Numerous important activities have been undertaken, both from research and administrative perspectives that contribute to the establishment of links between the Public Authorities, Academics and the Economy. However, to get recognizable results, it is necessary to further strengthen the system with new initiatives but together with the support of all the relevant players involved. Communication and co-operation is still insufficient and so it is necessary to take measures to make it as concrete as possible.

#### **Improvement of the legislative framework for incentives for innovation fostering**

Looking at the internal, institutional context, it is evident that the fragmentation of the research space is still noticeable among the Partner countries. Although there are clearly visible significant positive trends and examples of good practice.





It has also been noticed that at the decision-making level there is no coordinated innovation management system in a sense of all levels of governance having the same defined tasks and duties. It is necessary to reduce or eliminate potential administrative barriers that sometimes challenge the exchange of good practices both nationally and internationally.

The purpose of this priority is to achieve the efficiency of the innovation system management by linking all factors of innovation policy, namely Public authorities, academics and business sector. All of the above mentioned have the same importance in offering suggestions for improving the existing system, each out of its perspective with the same relevance.

**First step** is in establishing a more encouraging ecosystem by promotion and popularization of innovation policies. In order to be able to have a functional innovational framework it is of highest importance in getting political support and involving the highest level of decision-making.

**Second step** for the future regional plans is the establishment of an efficient innovation system with pre-defined roles and responsibilities in accordance with legal competencies on each of the levels of governance.

**Third step** is the promotion of innovation policies. The practical experience in Partner countries has shown a need to establish a sort of online database/portal which would have all the important information in one place. This portal would also serve as a networking possibility but also synthesize all the important data. The promotion part should also focus in regular organization of information campaigns aimed at highlighting the importance of innovation, the means of informing on the topics could mainly be conferences, seminars and innovational exhibitions. This, not only has an importance in providing information and attracting interest but serve as a mediator in the much needed networking between the Public authorities, academics and business sector.



An important role in promoting innovation policy, aside from the public administration bodies will have the business support organizations, which showed their role during the project duration. They were included in all of the Open Innovation Laboratories and showed great interest in the topic. Usually those organizations have a less strict organizational structure and showed to be very open towards the concept of open innovation and co-creation.

Aside from the above mentioned, an crucial role in the innovation fostering is mostly divided between the innovational research centres, clusters and competences centres which showed to be the leaders of an innovative way of thinking.

**Fourth step** would be the fiscal framework for innovation fostering. Fostering innovation development through the system of financial contribution towards using innovative methods and methodologies. In a long term idea this could be done through the tax system, either to relieve a certain percentage of taxes for investment in technology development, research and innovation. This would have the highest impact on the SME's as it would, to some extent, cut their steady costs and enable them to invest more into their specific projects. Also, some sort of tax incentives can be offered towards the newly established innovative companies.

#### **Fostering collaboration and knowledge exchange between public authorities, academics and business sector**

Innovations can arise in different aspects of business and social activity. They are mostly a result of the knowledge gained, especially in the case of technological innovations, through the research process. Looking at the internal, institutional context, it is evident that the fragmentation between the Public Authorities, Academics and the Economy is still noticeable among the Partner countries. Although there are clearly visible significant positive trends and examples of good practice. The majority of academics, Public authorities and SME's still do not engage in a cross-disciplinary and transnational cooperation among different stakeholders. This limited engagement is reducing the labour



market relevance and the possibilities to foster innovational way of thinking.

The purpose of this priority is to work towards creating a strong long-term partnerships and networks between the Public Authorities, Academics and the Economy but also to enable the easier flow of good practices exchange on all the levels. For all processes in the innovation chain, that have the goal in commercial use it is important to have a steady and functional link between all the levels of stakeholders.

**First step** in this case, is to direct resources and capacities in the direction of meeting certain purposes in industry and practice through defining development directions along with priority sectors. Defining development directions encourages specialization and meaningful application of results as one of the basic indicators of innovation is the successful transformation of innovative ideas into a commercial product.

**Second step** are socially useful innovations. Socially useful innovations are those who have the direct influence in bettering the society. They focus on addressing social challenges such as ecology, climate change, sustainable transport, etc. The focus of solving supranational interests and problems creates a culture of cooperation and partnerships which directly offers a chance to forming multiple connectivity and cooperation within the international consortiums.

**Third step** is the application of innovation in the public and service sectors. Although it is clear that the industry is of the utmost importance for a successful economy and most of the innovative methods are used there in practice, it largely depends on the functionality of other sectors, both public and service sectors. In this aspect, there are positive changes visible in the past several years through the introduction of e-services which facilitate everyday life of citizens.

**Fourth step** is strengthening human resources in the field of innovation. This step has the aim in strengthening human resources in the business, public and academic sectors specifically focused on the innovational capacities and to foster the development of skills and knowledge in the field of innovative methods and approaches. The most straightforward



method is to adapt the educational system that happens through education strategies at the state level and the involvement of all relevant actors in the curriculum adaptation. Other options are encouraging the development of new skills for research and innovation which focuses on capacity building in the existing business community

#### 4. Recommendations

##### 1. Long term cooperation initiatives

Focus in finding a longer term funding of the initiative. This recommendation allows the needed stability and ne time needed for the project's continuation but also to disseminate the results. Having a long term cooperation offers a chance to adapt the findings according to the needs of the specific ecosystem but also offers reliable partnerships based on mutual benefit. This has the aim to further encourage, accelerate and improve communication between stakeholders in the innovation system

##### 2. Strategic dissemination of good practices

Joining a wide range of collaborative consortiums both nationally and internationally in order to exchange good practices but also skills and technology. This requires the development of the necessary infrastructure for research, development and innovation through a network of innovation centers in which more stages of innovation development would be developed

##### 3. Cooperation in redesigning the curricula

Provide support to redesign or modernization of the existing curricula, the agenda needs to establish strong connection with the local context but also taking in account the global context. Incorporating the academics, Public authorities and SME's in creating the curricula is a prerequisite for survival in today's extremely competitive space.



#### **4. Creating institutional mechanisms in order to support innovation and entrepreneurship - policy integration**

Public authorities and government institutions are often very stiffly structured and often lack adequate adaptability.

Taking in account the difference between the ecosystems and adapting the concept to the national and regional strategies the countries will have to find their own pathways towards integrating the concept in their own regional plans.

In order to reach a successful policy integration of our concept it has to be done in structured stages with an in depth structural understanding of its importance.

#### **5. Human resources adaptation and effectiveness**

Strategic human resources management has to be one of the core importances of the research and innovation future. Investing in human potential, especially in the rigid and strict Public Administration sector puts the emphasis on fostering innovation and flexibility.

#### **6. Role of the Universities**

In addition to the traditional social and educational role, contemporary universities take responsibility in the area of technology transfer and innovation development as a „modern“ social role. Countries that have established an efficient innovation system, are trying to develop good models of transferring knowledge from the academic community to the business sector and, finally, society as a whole.