

GENERATING A DEVELOPING INNOVATION FOR SMEs

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Abstract:

This article describes a project about the capacity in the Danubian region to develop and innovate an ecology of services for SMEs.

The article focuses on one of the main challenges in Danube Area (especially in ex-communist countries): the weak capacity for innovation in general, and of the SMEs in special. But in order to develop the capacity to innovate in SMEs it is necessary, first of all, to constitute a diversity of knowledge intensive services for innovation, organized into an ecology of services to generate, support and develop the innovation in SMEs. In the actual technology, we want to support only the innovation for sustainability. Practically, the project will set up the core of a Danubian Collaborative Platform for Action-learning and Action-research Specialised in Regional Foresight (Danube-CoP4Futures) together with the networking enablers necessary for gearing the key actors of the development through sustainable businesses and social enterprises in the Danubian basin. This will contribute at filling the critical gap of key skills needed for a sustainable socio-economic development.

Keyword: development, innovation, ecology of services, Danubian region, sustainability.

Introduction

Innovation for sustainability is supported in this article by generating and developing ecologies of services for innovation (with focus on innovation in SMEs). Practically, we aim to support, for each country /region, the generation of a minimum effective (sub)ecology of knowledge intensive services for innovation and to develop a collaborative trans-Danube platform on which to develop regional foresight exercises, as well, needed especially for “sustainable innovative smart specialization in the Danube Region”.

Project main objective

Increase the abilities for innovation screening and foresight as key component of the strategic competence of public and business sectors

This means shaping and growing the capacity for anticipation and exploration of the future by Danubian regional foresight and business intelligence exercises to cover the knowledge-behavior-communication gaps, in order to support innovative sustainable development

The network will be built on an e-learning platform for collaboration in delocalised communities of practices, so to enable the foresight knowledge acquisition and sharing between:

region and global actors, intraregional actors and triple-helix local actors (entrepreneurs, researchers and authorities)

The network will contribute to the shaping and growing of the capacity (competences, relational capital, culture for innovative strategic entrepreneurship) for anticipation and exploring the future. A creative shaping of future means future advantage, a main component of competitive advantage.

Specific objectives

Specific objective 1. Employing an action-research and action-learning approach capable of generating, initiating and developing a trans-national collaborative network focused on the acquisition, sharing and the management of knowledge for regional foresight.

Specific objective 2. Increasing the capacity of public and private organizational actors to participate in the making of foresight exercises and to take and to use part of this knowledge to strategic design a sustainable development.

Specific objective 3. Employing the modern technology to facilitate collaboration and learning in specialized network-based info-infrastructure, capable to increase the effectiveness of screening and foresight, including reducing travel time and costs for participation in such activities.

Project main result

Improved management and specialised collaborative framework and info-infrastructure for acquisition and sharing of screening and foresight practices and knowledge at transnational level in the Danubian region.

Output indicators

Number of documented learning interactions in finalised operations

6 Face to face courses (5 in 5 regions NUTS2, 1 at regional level) for the preparation of the core target public.

1 International Conference: Screening and foresight challenges for sustainability in Danubian region.

1 thematic e-learning course adapted for info-infrastructures active users.

11 E-learning courses for special participants invited to the workshops

11 Screening and foresight workshops

5 awareness and networking visits in 5 regions at the main institutional stakeholders.

No of strategies for increasing competences of employees in the business sector and strengthening entrepreneurial spirit

1 development strategy of competencies and capacities for regional screening și foresight.

Number of tools for increasing competences of employees in the business sector and strengthening entrepreneurial spirit

1 e-learning platform to deliver courses in synchronous and asynchronous ways

1 Knowledge Base for screening and foresight specialized on the needs of Danubian region

1 collaborative platform for supporting workshops’ participation

1 collaborative platform for sharing experiences, knowledge and practices for screening și foresight.

1 dedicated application to ad-hoc forming of delocalized groups or teams for screening and/or foresight.

Number of pilot actions for increasing competences of employees in the business sector and strengthening

1 Pilot implementation of the ”Danube-CoP4Futures”- the Danubian network for action-learning and action-research specialised in regional screening and foresight”, addressed to all categories of stakeholders interested in increasing the effectiveness and sustainability of the regional strategies and action plans.

1 Pilot formation programme on training the trainers for screening and foresight at local and regional level.

Number of enterprises cooperating with research institutions (EU)

At the lectures and workshops for screening and foresight will be invited enterprises and research Institutions, which will create opportunities for collaboration. At this stage we can not yet appreciate the number of such collaborations!

Strategic relevance

The territorial need/challenge

Our project addresses one of the most important needs in the region – strategic innovation capacity. Seen from the future perspective, this need is in the same time a first and important challenge that every actor (private or public, small and big) should consider. We are in period of tremendous and disruptive changes, that willy-nilly, every actor will be, for better or for worse, affected. So the project will provide especially to the actors in the triple-helix innovation model (entrepreneurs – scientists – authorities) the knowledge, the skills and practices needed to generate and develop this strategic innovation capacity and the opportunity to practically experience it during the screening and foresight exercises.

Our project will primarily contribute to the main objectives of the Danube Transnational Programme by filling one of the most strategic knowledge-gap: strategic innovation capacity.

During a period of tremendous changes, “seeing the future and/or acting from the future” is one of the most important strategic capacities of any, public or private, small or big, actor.

In general the Danube Region (exception Germany’s Lands and Austria) is less developed. So to rapidly fulfill this development gap, we badly need a “strategic foresight approach to support a better strategic vision to generate a strategic innovation capacity”.

Practically the project will support the actors for a sustainable development in Danube Region to form and improve their strategic screening and foresight abilities and attitudes, then to help them to conceive better strategic vision, in order to support them to grow and develop their strategic innovation capacity.

The most important capability for conceiving and developing a Regional Research and Innovation Strategy for Smart Specialization, taking into account the societal challenges within the climate change context, is the strategic innovation capacity. But upstream you need first to develop strategic foresight and vision.

The methodology used to achieve the project objectives

An approach based on the action-research philosophy and methodologies and PMI

Any project which involves participation has a very high potential to be capitalized through action learning and action research if these methodologies are adopted explicitly. In this case, mutual learning processes become much more effective. That is why we adopted action-learning methodology at the core of our project. There is much to be learned from the different ways different people, organizations and institutions from different countries respond to issues addressed in the project. By working together, organizations from different regions can explore these differences and also identify similarities, moving towards practices and structures that can cross the borders and so to innovate the regional identity[1]. In all our workshops and courses we will use this methodology and also at the scale of the entire project. By instance, we will use it even in the case of establishing the requirements and of architecture for the Info-Infrastructure (for which we will impose suitable standards for e-learning and e-collaboration oriented towards enabling the experiential learning, as: Sharable Content Object Reference Model (SCORM) and mainly the Tin Can API- the "experience application program interface).

For the management of the project we shall use the PMI methodology[2]. Therefore, in each area of schedule, communication, risk, procurement, human resources, quality, and costs will be taken into consideration.

Methods for project coordination and progress in the implementation phase to be used: Work Breakdown Structure (WBS), Gantt chart, To Do list, minutes of meetings, videoconferences, progress reports.

Project monitoring will be done following three main areas of compliance with: costs in the budget; time needed for the achievements; in quality of provided services.

The policy and strategic background of project

The project has its roots in the UCB research project "Oltcultour – Research for Conception Of A Generic Network Platform Aiming to Enable the Development of the Cultural Tourism Market in Northern Oltenia using a action-research approach" (2008-2011 financed by Romanian National Plan for Research and Innovation). One of the research recommendations was the necessity to develop a regional foresight in national and European context. So the UCB developed its capacity to conceive and make foresight exercises using an action-research approach.

The ex-ante EU imperative for each nation and/or each region to conceive a Regional Research and Innovation Strategy for Smart Specialization imply the necessity to do also a regional screening and foresight exercises.

But unfortunately in Danube region there are little skills and no practice in doing foresight exercise at the regional level.

So the aim of this project is to fulfill this knowledge and competence gap and so to contribute to a better policy making by developing this strategic asset of "foresight for innovative sustainability"[3].

The benefits, advantages and added value of the transnational approach for the project

Foresight in general (and especially strategic foresight) can not be done based only on local/regional/national information and experiences. By itself it is multi-level complex and iterative activity.

In order to obtain viable foresight results, a valuable foresight exercise can be done only by using cross-disciplinary and/or cross-national and/or cross-sectorial approaches and an action-research approach. So, by itself, foresight has a transnational nature.

Also, it is a big advantage to generate and develop a Trans-Danubian foresight network, and so to easily bring together a critical mass of participants, with diversified local experience, traditions, professions, intentions, etc.

In a dynamic environment those that have information, intuition and understanding about the future, are better equipped to a better adaption to the future, and/or to a creative shaping of the future. So they will gain also the „future advantage” as a main component of the competitive advantage[4].

The proposal will ensure the durability and transferability of its results

Every region (nation) in the Danube Region needs an ex-ante screening and foresight exercises to prepare a better realization of Research and Innovation Smart Specialization Strategy in order to become more competitive. Taking into account the dynamic, rapid eco-socio-economic changes of the actual world, at every 3-4 years it is necessary to upgrade the foresight exercise.

So the need of foresight as „a systematic, participatory, future-intelligence-gathering and medium-to-long-term vision building process” (FOREN Practical Guide to Regional Foresight) aimed to help any decision maker to better prepare his/her decisions, remains a „periodic-permanent” need.

The practical knowledge obtained during the 5 pilot tests in 5 different and diverse regions, will be packed so to be easily transferable to any region in the Danube area, and not only.

By implementing the „Info-Infrastructure”, we have also at our disposal a „complex instrument” (knowledge base, e-learning platform, collaborative platform) that will be used also in the future screening and foresight exercises and in new contexts (other regions, other beneficiaries, etc.)

Also, a special work package (WP7) was conceived and design so that the transferability and viability of the content developed to be capitalized in other regions and contexts.

Finally it will be conceived a post-project initiative to further develop the outcomes and results into new projects to be finance by other EU programs and/or by other clients.

The target group(s) to whom this project is addressed

By the transdisciplinary nature and the trans-experiential character of the foresight, the target audience of the project should be more diverse (professional, cultural, lifestyle, age, nationality) and interested in sustainable development issues.

The main target group is composed by the actors as defined by the Triple Helix of university-industry-government model: researchers, entrepreneurs, and authorities, especially

at regional level. They, together with media & civil society actors, especially the creative class (quadruple helix model), constitute the core target group of our project.

As our perspective is „innovation for sustainability”, we take into account the representants and promoters of the natural environments” (eco-perspective) the quintuple helix model. The target group is composed by: entrepreneurs, top managers, clerks from institutions involved in regional and local development, professionals of knowledge intensive services, sectoral specialists, researchers, trainers, cadre didactice, civil society activists in environment and sustainable development, policy makers.

The leader of the project has already started a process to transform itself into a „regional entrepreneurial university”, and as the entrepreneurial university is a natural leader in academic ‘third mission’ - involvement in socio-economic development, next to the traditional missions of teaching research, the whole staff and students of the university become a secondary target group.

Conclusions

In this article, the fundamental challenge is „how to generate, or how to build the environment for the emergence of an entrepreneurial ecosystem.

The project will support the actors for a sustainable development in Danube Region to form and improve their strategic screening and foresight abilities and attitudes, then to help them to conceive better strategic vision, in order to support them to grow and develop their strategic innovation capacity.

Practically, we aim to support, for each country /region, the generation of a minimum effective (sub)ecology of knowledge intensive services for innovation and to develop a collaborative trans-Danube platform on which to develop regional foresight exercises, as well, needed especially for “sustainable innovative smart specialization in the Danube Region”.

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