

D.T. 1.3.3

SUMMARY REPORT OF REGIONAL ANALYSES - 1ST DRAFT OF THE TOOLBOX FOR BUSINESS ENGAGEMENT

Business Engagement TWG

March 2020





INVOLVED PARTNERS

ACRONYM	NATIONALITY
SI4LIFE	ITALY
BME	HUNGARY
MUL	POLAND
TUKE	SLOVAKIA
NOWA	AUSTRIA
SPEKTRA	CZECH REPUBLIC

ACRONYM

TWG	Transnational Working Group
BE	Business Engagement
WPT	Thematic Work Package
BP	Best Practise

GLOSSARY

The definition of common understanding of specific terms such as Innovation, Use Cases or Best Practices is available in the project glossary as part of the TWGs' supporting documents. TWG's supporting document are integral part of this deliverable.

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1. INTRODUCTION

This document describes tools that can support the engagement of businesses in the co-creation processes. National constraints and different businesses' needs can change the requirement for a tool or for a feature, for this reason we present a toolbox, i.e. a selection of tools that can support firms on different aspects of the co-creation in innovation.

Starting from the results of the regional analysis we propose an overview of the main conditions to be considered in the definitions of tools (**Section 2**). As result of the regional analysis some use cases have been designed and presented in **Section 3**. The aim of the use cases is to represent common features of best practises to support the selection and/or design of the tools for the toolbox. **Section 4** provides a detailed description of tools that respect the results described in Deliverable 1.3.2 *2 Regional Analysis of Opportunities for Efficient Engagement of Business*. Final conclusion and indication are proposed in **Section 5**.

2. SUMMARY REPORT OF REGIONAL ANALYSES

Results presented in Deliverable 1.3.2 *Regional Analysis of Opportunities for Efficient Engagement of Business* highlighted some main success factors to be considered in the development of design of any tool. In the regional analysis also some key barriers has been highlighted but many of them are a consequence of the lack of success factors.

2.1. BARRIERS

Barriers depend to the specific context in which businesses are working (market, dimension of the firm, regional support, and so on). Even if these specific condition common barriers have been identified and are:

1. **The lack of specific knowledge on co-creation.** This is a relevant barrier. In general, businesses are not aware about: (i) co-creation process, (ii) how to set up the proper conditions for co-creation and (iii) how to formalize collaborations. Some of the provided tools are able to overcome these problems.
2. **The lack of specific funds supporting innovation and co-creation.** Co-creation in innovation does not produce tangible incomes in a short period. National and Regional policies can support in overcoming this barrier, as well as structured information about the opportunities and advantages of co-innovation.
3. **The lack of trusted relationship.** At the time of this report, most of the businesses interact with other stakeholders through established collaboration/relationship or that has been introduced to them by other known stakeholders. The direct effect is, from one side the difficulties to reach all the actors of a co-creation process, and from the other side the difficulties of a new firm to being introduced in co-creation process. The trusted relationships are at the bases of the best practices and some of the provided tools address directly this barrier.
4. **The lack of public support for co-creation.** The bottom up approach adopted by many businesses in the co-creation process highlight better this condition. Firms can/can be involved by researchers and end-users, but it is difficult to engage “policy makers”. The involvement of all elements of the quadruple helix is necessary to overcome this barrier. In I-CARE SMART project, the creation of regional task forces is the method to implement this involvement.



5. **The lack of transversal competences and internal resources to cooperate directly with different actors.** Silver economy involves many market sectors as well as older adults have many different needs. To support the co-creation of innovative solution for the care (and health) of older adults it is important to know deeply the older adults' conditions, the market and the territory. These are transversal competences that can be provided by different subject; it is difficult for firms to have them inside their staff especially for the SME. Some of the tool of our BE toolbox provide transversal competences as a direct service or by matching the required competences with the offer.

2.2. SUCCESS FACTORS

Networking

To be connected and to create trusted relationship with:

- End-users representatives → End-users are difficult to engage. Firms have personal contacts but, to better design the solutions, they need to reach more users.
- Customers → The end-users can be different to the customers. To involve customers in concept design of a product supports in answering market needs and to reduce the time-to-market.
- Other firms → to establish collaboration with other firms is important, especially for new born companies, to acquire/share knowledge and experience, to create critical mass and/or to have support on different topics.
- Researchers → to establish trusted partnership for projects.

Goal Oriented

Clear objective(s) of the tool and clear involvement rules are important key factors to support business engagement. Time spent in the identification of supporting tool is one of the main problems identified by firms. These key factors can also support firm in focusing on a specific type of target group. The diversity between the stakeholders can be too much spread to be managed in a single tool or required too much time for a firm in the identification of them.

Venture Capital /Financial Capital

To have the possibility to match investors, to get support in dealing with overcoming bureaucracy issues and to reach funds as well as to be accompanied in applications to calls is crucial for firms, in particular for SME.

Sharing ideas/problems

To have a trusted situation (regulated with clear rules) to share ideas with other firms or other representatives of the quadruple helix is considered an opportunity to improve solutions and reduce the time-to market. At the same time, it is the best way to establish collaboration and create partnership for future development or to access to funds.

2.3. DRIVEN FACTORS

National constraints and different businesses' needs can change the requirement for a tool, but not necessary the tool.

Tools supporting co-creation should have different functions addressing the different driven factor. This is a functional requirement and can be also used by a firm to decide between different tools.



The driven factors must be considered in the design of a tool, as well as goals and target group, because they can influence the targeted audience or the interaction design of the tool.

In this paragraph we describe three main driven factors that guide a firm in looking for collaboration to co-create/co-innovate.

1. THE IDEA

The idea for a new product/service or a new application of an existing product/service can be a driven factor for a firm¹. In this case a firm could look for relevant stakeholders for different reasons:

1. to discuss with customers/end-users and to involve them to verify the acceptability,
2. to involve experts/researchers for overcome implementation problems,
3. to identify collaboration to share market risks and, of course,
4. to search for investments.

The Idea can be the driven factor for all the elements of the quadruple helix (community, government, education, businesses).

2. THE NEED

The need is a cluster of driven factors such as:

- the market need for a specific product/service²
- the customer need for a specific product or service
- the need of a firm to increase its position on the market,
- the need of a firm to innovate
- the need of a society for new innovative solutions

As for the idea, also in this case the need implies the research of a new solution that can be found by collaborating with other representatives of the quadruple helix, such as customer to specify the requirements, other firms to overcome industrialization problems or to connect different expertise.

3. THE OPPORTUNITY

The opportunity driven factor intents to identify different example of collaboration, built to follow an opportunity of financing, an opportunity of networking, an opportunity of marketing and so on.

¹ This concept is a little bit different from the idea-driven model in economy that aims in to evaluate the value of ideas as the engine of long-run growth [Jones, 1995; Coe and Helpman, 1995].

² Market-driven product or market-driven strategy is a term used to identify a corporate strategy to follow the market trends and required to understand the market and the customers.



The opportunity driven factor can be considered as direct requirement for a co-creation tool that must highlight opportunities, but it can be also considered as consequence of the previous driven factors.

To be involved in networks that share ideas or needs, can support businesses in identifying different applications of its products/knowhow and set up collaboration for new products or services.

3. USE CASES

The research approach identified to support the definition of toolbox for business engagement (refers to DT1.3.1 for details), envisaged the design of few use cases representing theoretic tools characterized by common features extracted from the regional analysis.

Use cases have been defined in the glossary delivered by I-CARE-SMART project as TWGs' Supporting Documents. In addition, following the definition of Jacobson (2011), to design an use case it is necessary to identify (i) the actors, (ii) the functional requirement of the system - the tool in our case - and (iii) the goal of the interaction.

It is important to highlight that to have a goal oriented tool is one of the main success factor identified in the regional analysis.

From the point of view of business engagement, the main actors are firms, looking for co-creation, driven by one of the three factors explained in Paragraph 2.3.

3.1. USE CASE 1

This use case describes a solution that combine an automatic system to reduce time spent in searching connection and co-creation opportunities, plus a physical meeting that seems to be the common aspect of the majority of the identified best practices.

SCENARIO

The CEO of *ScenA*, a SME specialized in the development of accessible interfaces, received an email announcing the next regional founding opportunities. The email provides a summary for each call but the only clear aspect for the CEO is that firms are invited to propose projects in partnership. The topic of the projects must be in the field of health and care for older people and the CEO thinks that *ScenA* products fits with the topic. The CEO makes a quick search to the web and finds news about an event to explain the call. It is organized by a regional hub and supported by the region. The website of the event is clear; there are three sections each of them related to a specific call. The calls are described in terms of (i) aims, (ii) conditions to be financed and (iii) type of grant. The CEO discovers in few minutes that one of the calls is suitable for *ScenA*. The event is organized in a way that one day is planned for each call. In the morning there is a presentation of the rules of the call. Then there is a section in which it is possible to present ideas. The afternoon is dedicated to matching. To participate in the event, it is necessary to fill an online form. The form is general, name, address, contact and so on. It is necessary to select the areas of competences of the firm and the topic of interest, accessible interface is not in the list but it is possible to add. The CEO does not propose *ScenA* for presenting an idea, but he is interested in the matching event. After selecting this option additional info is required, a brief description of the company and the preference for the meetings. After few days he receives a list of proposed companies and research teams interested in his expertise, as well as a list of companies that can be interesting for *ScenA*. Since the CEO is not available for the date of the event, to all communication he put in copy a staff member of *ScenA* that is in charge to plans the meetings.



USE CASE

The CEO of a firm informed about new calls for proposal, goes online to search for more information. An event is organized by local authorities to disseminate the call and to foster the engagement of companies. The website of the event provides, to the CEO, all the necessary info to support in the decision to attending or not and to decide the degree of involvement. Matching sections are on agenda and the CEO is able to candidate his firm.

Preconditions

A Region, a Hub or a Business must have the role of promotor.

Actors

Companies, Research centres and End-User representatives interested in work on project proposal.

Systems

Dissemination website

Registration form

Business profile

Ontology supporting matching

Goals

Increase business network. Co-create. Access to fund.

3.2. USE CASE 2

This use case describes an online solution. As anticipated in the concept paper the idea is to provide some use cases that can be implemented in the Silver Star Platform. Elements of the second use case are also feature of the tools.

SCENARIO

A researcher finds a platform, supported by her Region, aiming to create an innovation ecosystem in the field of health care for older people. Her research filed is the development of wearable sensor for monitoring the sleeping quality, so it matches perfectly. The platform is mainly oriented to local firms but she can register and define her expertise.

Once registered, she can see the list of registered firms, other research teams or individuals participating in the community. Each of them is characterized by a sentence and there is also an email contact.

In the portal there are some group of discussion about specific topic, some of them have restricted access, other are open to registered people. She identified an interest topic in a restricted group, so she asks to the moderator to enter. A repository is provided; it contains general documents, such as EU statistic report, EU market provision, regional documents and specific info-box supporting the forum.

The platform provides also information about public events with a clear identification of target groups and topic. There is the possibility to post messages and ideas in a common area named Area Café. Looking at these posts she discovers that some of the themes evolved in topics for group of discussion, for others bilateral meeting have been planned and others again left open questions to researchers.

It is similar to a virtual lab in which it is possible to discuss on common topic without being in the same place at the same time. In the meantime, she received the access to the group she asked for, the condition to be engaged is to sign a non-disclosure agreement that has been provided with the email.



USE CASE

A researcher found an interest platform supporting firms in building an innovation ecosystem in the field of her research. The platform has been developed for firms but it is also usable for other actors. There are many features that support the sharing of knowledge, the discussion, the networking, feature supporting virtual bilateral meeting and also the support for organizing events. It is possible to share documents and to have a look at some public discussions. Firms can create close groups of discussion that they directly moderate.

Preconditions

A Region, a Hub or a Business must have developed the platform, maintain and provide technical support.

Actors

Businesses, but also interested subjects, e.g. researchers or other actors of the quadruple helix.

Systems

Online platform

Registration form

Personal/Business profile

Virtual Community of Practice (VCoP) [Penfold, 2010]

Online meeting facilities

Goals

Increase business network. Co-create. Share knowledge.

3.3. USE CASE 3

This use case aims to target one of the main barriers for business engagement, i.e. the lack of knowledge of firms about the concept of co-creation. The skill gap of businesses is not addressed by the proposed tool as an instrument of formal learning, but as an example of non-formal learning [Werquin, 2007].

SCENARIO

The company C&C has developed a prototype of wearable solutions for home care monitoring systems and fall prevention but unfortunately it does not success in the test with users. The CEO of C&C during an event meets the representative of a living lab that describes the model and its purposes and pitches the service. During this meeting the CEO discovers that technology acceptability factors (such as approval by informal care givers, need of a visible wiring of the home and so on) have not been considered. Thanks to this meeting the CEO discovers that there are instruments that facilitate the involvement of end-users in the designing a solution (what the Living Lab provides). The CEO understood better the concept of co-creation and open innovation methodologies as well as the advantages of this approach. The CEO would like to foster the involvement of end-users; he is interested in deeper knowledge regarding-creation and to the added value of ae living lab. After this experience the C&C became member of the living lab, thanks to the opportunity for sharing the experience with other stakeholders, they acquire competences (informal learning) in co-creation.



USE CASE

A CEO understood that the last product of its company cannot be accepted by older adults because it does not consider the perspective of the elderly and their relatives. The opportunity to join a living lab gives the CEO the chance to understand the rules and relevance of co-creation to produce innovative successful products.

Preconditions

The representative of a Living Lab presenting the services in public events.

Actors

Businesses.

Goals

Increase awareness of co-creation processes.

4. TOOLBOX FOR BUSINESS ENGAGEMENT

According to the success factors, the driven factors and the identified use cases, in this section we present some tools for supporting business engagement in the co-creation.

4.1. PROCUREMENT FOR INNOVATION/ PRE-COMMERCIAL PROCUREMENT

Procurement, in general, refers to the function of purchasing goods or services from an outside body” (Arrowsmith, 2005). The most common procurements are Public Procurement when this function is performed by a public agency, but it can be done also by private firms following the procurement laws.

Innovation (or development) refers to the introduction of a new good, a new method of production or a new service, the opening of a new market and so on. The key point is that innovation should create an economic significance.

The Procurement for Innovation refers to the acquisition of knowledge collected by intellectual investigation services (R&D services) consisting of critical solution analysis, prototyping, field testing and small scale pre product/services development (National IST research Directors Forum Working Group (2006)).

This model gives an opportunity to a firm to develop an idea and, according to specific rules, to receive funding to proceed in its design.

From the point of view of the procurer it allows to have different ideas developed in parallel, to intervene in the selection of the most promising and eventually select some of them or commercial procurement.

Pre-Commercial Procurements is described in detail, for examples, by the European Commission in 2007 and are typically structured as following.

The *procurer* usually is a group of important stakeholders - such as hospitals, big corporates or public entities - that build a tender to identify a solution to a (shared) problem. This group of potential clients build a tender, i.e. a competition for innovative solution to solve their needs.

The participants to the tender are businesses interested to design, develop and commercialize the product/service required by the procurer. In most of cases the solution to the procurer problem requires different competences so participants are small consortium of firms with complementary knowledge.



In the tender procurer describes the need, the context of application of the solution - usually in terms of scenarios - and the requirements in terms of efficacy of the solution, benchmark and any other possible measure supporting the validation of the proposal.

The tender, is (frequently) organized in phases:

1. Phase 1. It involves pre-study or exploratory solutions to the topic. Procurer ask to the participant to design a solution for the problem according to the request, i.e. the boundaries, the required outcome, the required time-to-market and so on.
2. Phase 2. The ideas coming from phase one and judged most promising, are economically supported for prototyping the solution. In the design of the prototype, procurer can be directly involved.
3. Phase 3. Once tests are finished the procurer can select one or more prototypes for commercial roll-up.

Main characteristics:

- The procurer finances the R&D activities, directly or with public found.
- The procurer shares his/her knowledge with the selected participant since the first phase.
- Participants to the tenders must share progress with the procurer.
- Participants to the tenders usually are small group of firms (2-3) and can include a research team. Since the objective is to obtain a product the involvement of researchers is frequently limited.
- Frequently the IPR are shared between procurer and participants but the rules are described in the tender.
- The procurer obtains the product or services for free at the end of the process if he/she supports also the commercial roll-up.

MAIN ACTORS	DRIVEN FACTOR
The procurer, i.e. stakeholders that share a need	The need
The firms that participate in the identification of a solution	The opportunity

4.1.1. EXAMPLES AND LINKS

European call for PCP

<https://ec.europa.eu/digital-single-market/en/pre-commercial-procurement>

Horizon 2020 offers funding opportunities for consortia of procurers, and consequently for applicant to tenders. These opportunities provide (i) to consortia of procurers to satisfy a concrete need with solutions design with them and (ii) to consortia of applicants the opportunity to introduce a new product sharing the market risks.

Italian pre-commercial procurement

https://www.regione.vda.it/Portale_impresa/Ricerca_e_innovazione/Strumenti_di_finanziamento/appalto_pre-commerciale_i.aspx

This is an example of regional pre-commercial procurement performed by Regione Valle d'Aosta. It aims to identify solutions for 4 different topics, one is related to Telemedicine.



Pre-Commercial Procurement in Slovakia

In Slovakia public institutions can apply pre-commercial procurement process which is named as “Innovative partnership” and it is described in the Law 343/2015 about public procurement. Helpful could be “Methodological guideline for the application of the INNOVATIVE PUBLIC PROCUREMENT principles in the framework of contracts co-financed by resources Operational Program Research and Innovation under the responsibility of the Ministry of Economy” available at: https://www.opvai.sk/media/100984/metodicka-pomocka-k-io-ver-10_na-zverejnenie.pdf

4.2. MATCHING (R&D EVENTS)

This model usually refers to business matching, i.e. an event or activity in which businesses find other firms to collaborate.

There are examples of f2f speed meetings supported by chambers of commerce or regional entities that aim to support SMEs in promoting their solutions to big companies.

For the purpose of business engagement in co-creation the matching is partially overlapped with this context. The matching model for business engagement is an instrument for supporting the co-development of concrete projects that foster new solutions within specific topics.

A matcher event - both physical and/or virtual - must be periodical but, especially for the physical one, not frequently. The event must be focused on a single topic or few of them in order to avoid too many overlaps. It is necessary to identify the main actors that are typically investors, important customers, or businesses. It is also possible to involve research centres interested in collaboration. Before the event it is important to collect detailed information about everyone’s cooperation wishes, expressing what they are looking for and have to offer and make possible to identify and bring together (match) the right meeting partners.

A matcher is not a tool to support networking, but it can help to increase the network. The typical steps of a matching are:

1. Register and profile the firm
2. Browse and matching profiles
3. Communication
4. Meetings (f2f or virtual)

Main characteristics:

- Clear topic;
- Clear participating rules;
- Clear dissemination rules, i.e. which part of the profile is shared with the other firms.
- Well defined protocol for communication, how you are contacted by others and how you can contact other registered entities.
- Well defined form to describe the firms

MAIN ACTORS	DRIVEN FACTOR
The organizer	The idea



The main stakeholders	The need
The firms	The opportunity/ the Idea

4.2.1. EXAMPLES AND LINKS

Enterprise Europe Network

<https://een.ec.europa.eu/>

The Enterprise Europe Network helps businesses innovate and grow on an international scale. It is the world's largest support network for small and medium-sized enterprises (SMEs) with international ambitions.

The Network is active in more than 60 countries worldwide. It brings together 3,000 experts from more than 600 member organisations - all renowned for their excellence in business support.

Matcher

<https://www.match-er.com/>

MATCHER generates business matching between corporations (big enterprises) and the most promising start-ups from all over the World. Corporation launch a call for ideas and the selected start-up meets the representatives of the corporation for three days, in order to identify how to industrialize the products.

Online network of business In Poland

Links: <https://wspieram.to/>; <https://polakpotrafi.pl/>; <https://www.wspolnyprojekt.pl/>

The opportunity to benefit from the ideas, needs, expectations and experiences of potential consumers by sharing ideas by businesses online. Together, problems are solved and innovative solutions are developed. Many times combined with external financing. Communication takes place online and the initiators are the enterprises themselves.

Czech businesses networks

Links: <http://www.podporastartupu.cz/>; <https://www.cvut.cz/informace-pro-partnery>

Start-up companies are supported here by consultations, financing, marketing, legal protection and technical and expert cooperation with specialised faculties/departments. For business there is an opportunity to benefit from ideas, needs and experiences through cooperation and sharing which can be combined with external financing. The initiators are the enterprises themselves.

4.3. NETWORK FACILITATORS MODEL

A facilitator is a professional figure aiming at supporting teams to work together. For the purpose of the tools identified for business engagement, we refer to the network facilitators as defined by Franz (2009):

“In the framework of networks a facilitator is a person with specific competencies who is directed to develop trust to facilitate co-operation between organisations (in our case mainly SMEs) in a given regional or industrial context, despite and beyond their ongoing competition. [...]

More specifically, network facilitators are those professionals involved in supporting and valorising aggregation processes of SMEs by promoting and making easier (i.e. facilitating) networking activities and animation of local expert communities, and within this framework, activities of inter-organisational non-formal and informal learning.”



Even if the definition refers to a person, the network facilitator model required many competencies such as:

- (1) A deep knowledge about the topic and the market sector
- (2) Contacts with businesses, researchers, end users representatives, i.e. heterogenic network
- (3) Knowledge about funding opportunities
- (4) Knowledge in management
- (5) Competences in create collaboration and collaborative relationships
- (6) Competences in problem solving

The objective of a network facilitator is to create the conditions to share knowledge and set up the bases for innovation and co-creation supporting businesses in meeting other firms or actors of quadruple helix, with similar aims and complementary competences.

Differently from matching the network facilitator can contact the firms every time in case there is an opportunity of co-creation that fits with their needs

Part of the above-mentioned activities can be supported by on-line tools, such as newsletters, forums, and so on. Instead, the a-priory knowledge about the involved firms, it is difficult to be managed by an on-line tool. Some automatic solutions use ontologies and/or machine learning to this purpose, but some firms prefer the face to face interaction.

Main characteristics:

- Deep knowledge about firms;
- Possibility to be involved in interesting co-creation process, without to spend time looking for collaborations.
- Support in searching opportunities for funding.
- To be connected on different network of actors.

MAIN ACTORS	DRIVEN FACTOR
The firms or Different type of stakeholder	The opportunity

4.3.1. EXAMPLES AND LINKS

Ideentriebwerk

<https://www.ideentriebwerk.com/>

This network facilitator is focused to start-ups. It provides support in networking, in promoting activities, pitching and in acquiring know how on different topics by organizing specific events/meetings.

Polo ligure scienze della vita

<https://www.polopslv.liguriadigitale.it/it/il-polo/614-mission.html>

This network facilitator supports the transfer of knowledge and co-creation between companies, research bodies, hospitals and healthcare facilities and third sector operators, which share the common objectives of:



- to promote the development of culture, research and scientific, technological and organisational innovation in the fields of health and life sciences, with particular reference to the Ligurian territory;
- to provide advice and support to regional policies on research, innovation, economic development, health and higher education;
- In order to develop the full potential of the public-private system of research, production, services and to promote the quality of life of citizens.

DEMOLA network

<https://www.demola.net/>

In the Demola framework, multidisciplinary groups of university students co-create with corporate managers to solve innovation challenges that the corporations face. In this framework, Demola builds long-term relationships with its corporate partners over a course of several semesters. This process is often a trial-and-error business development process where the corporate learns to understand the value of Demola projects over a course of several semesters as the outcomes and organizational impact of Demola projects is often unexpected. For this reason, the Demola service is marketed to these corporates as a “subscription” service, not in a pay-per-project basis. In this business model, the corporates are engaged by the opportunity to get as many projects as possible.

Demola is a trans-European network. The Demola network is applied slightly differently in each node so business engagement processes differ as well, however, there is some quality control over the co-creation and business engagement methods by the Finnish headquarters. All in all, Demola nodes benefit from the facilitative function of the Finnish headquarter by flying in Finnish executives of Demola for local Demola sales meetings.

4.4. LIVING LAB MODEL.

Living Labs have emerged as a new research concept in which users become co-creators of an innovation process. The user centred approach allows reaching sustainable answer in many contexts and also in real life.

Many methodologies put end-users in the centre of their process, such as UCD, AGILE and so on. The Living Lab distinguishes from the others because:

- It is not focused at one single products or services, but to a research topic. Its aim is the evaluation of ideas, scenarios, concepts and related technological artefacts in real life use cases.
- It mainly works on a territorial context - such as regions.
- It allows informal learning for firms, researchers but also for end-users.
- It combines user-centred research with open innovation

A firm involved in a Living Lab has the opportunity to collaborate with other stakeholders since the first design of the idea and to test it before producing prototypes.

Main characteristics:

- It engages all stakeholders with a special focus to end-users
- It supports innovation through research
- It is based on experimentation of prototypes in real context
- It can require physical space to involve end-users



MAIN ACTORS	DRIVEN FACTOR
The firms, end-users, policy makers and other stakeholder of the quadruple helix	The idea/ The need

4.4.1. EXAMPLES AND LINKS

Stadtlabor Graz

<http://www.stadtlaborgraz.at/>

It is a part of the European Network of Living Labs (ENoLL). The Stadtlabor Graz stands for more cooperation in the development and transformation of cities into liveable places for people. In this sense, they work at the interface between city administration, developers, utilities, local businesses and institutions as well as citizens and promote a new culture of cooperation and co-creation of ideas and solutions.

4.5. BUSINESS INCUBATOR MODEL

The aim of business incubator is to accelerate the growth of new-born firms providing services such as:

- Physical space and common services below-market rates;
- Coaching and guidance;
- Consultancies with experts, usually for market plan, business development, innovation processes;
- Fund raising;
- Networking;

Companies typically spend an average of two years in a business incubator, during this time they often share telephone, administrative staff and production equipment expenses with other start-ups companies, to reduce everyone's overhead and operational costs.

Some of the business incubators are focused on a market sector or a technology, this provides the bases for the firms to share space with other companies with similar interests. This offers the opportunity for entrepreneurs to share ideas and problems with other firms of the same sector.

Business incubators can be public or private. Examples of private start-ups are available in Europe, even if the most famous are in US, in these cases a group of corporations, a venture capital firm finance the incubator and provide services to them. The advantage for them is to monitor new ideas/products/services since their beginning.

Main characteristics:

- Provide a support for start-ups in terms of services;
- Provide a support for start-ups in terms of business development and market model;
- Provide a support for start-ups to identify investors.
- Facilitate networking for co-creation.



MAIN ACTORS	DRIVEN FACTOR
The firms	The need / the Idea

4.5.1. EXAMPLES AND LINKS

Next incubator

<https://next-incubator.com/en/>

It supports Companies, startups and public institutions who want to advance their innovative ideas. It provides all services from startup scouting and screening to collaboration and support, services that push a raw idea through in-depth market research and an initial concept for a first proof-of-concept through to market maturity.

The Business Incubator of the Medical University of Lod

<http://ciitt.umed.pl/inkubator-przedsiębiorczosci/o-nas/>

It supports the development of local business entities and entities of the economic and social environment, including the academic one. The main goals of the incubator include: creating a center that generates conditions for the development of enterprise innovativeness, increasing the competitiveness of enterprises on the local market, assistance in establishing business contacts and associating companies, creating innovative production and service ventures on the local market, and creating a platform for cooperation between entrepreneurs starting their business and existing ones, as well as between business and universities.

Startup centre TUKE and Incubator TUKE

<https://www.startupcentrum.tuke.sk/about-us/about-incubator/>

The Technical University of Košice developed a Business Acceleration Program as an integrated system supporting development of innovative projects, mainly based on the R&D results and networking innovators and potential investors under the leadership of the Start-Up Center TUKE and TUKE Incubator program. Business Acceleration Program provides complex services for innovation development, transfer of technology and knowledge and business development. The concrete services enable the teams working on their start-up ideas to have an office in the Start-Up Center of the university.

The Startup centre TUKE looking for new, innovative projects by a competition. The incubator provides an incubation environment to ensure the acceleration process for the establishment and development of small and medium-sized “Hi-Tech” companies.

Digital tree

<https://digitaltree.ai/>

If focused to innovative start-ups in the ICT area. It supports innovative start up from the idea to the product, providing space and related services, consultant for business models and business plan, in the networking and in crowdfunding. Start-ups are periodically identified through a competition.

ZWI Graz

<https://www.zwi-graz.at/>



ZWI is providing space for innovators. The aim is to create a hub for entrepreneurship and innovation in the heart of the city, fuelled by the power of university research and harnessing the momentum of entrepreneurial activity. A focus will be on Modern Aging and Demographic Change.

5. CONCLUSION

In this document we provide an overview of the main results of the regional analysis on business engagement in co-creation of innovative solutions for older adults' health care.

Results are provided in terms of:

- Barriers
- Success factors
- Driven factors

The combination of the above-mentioned factors has been used to identify a set of tools that support the engagement of business in co-creation.

This toolbox is released to support the definition of I-CARE-SMART pilot actions.

6. REFERENCES

- Jones, Charles I. (1995), "R&D-Based Models of Economic Growth." *Journal of Political Economy*, 103 (4): 759-784.
- Coe, David T. and Elhanan Helpman (1995). "International R&D spillovers", *European Economic Review*, 39 (5): 859-887.
- Jacobson Ivar, Spence I., Bittner K. (2011) "Use Case 2.0: The Guide to Succeeding with Use Cases" IJI SA.
- P. Penfold, "Virtual Communities of Practice: Collaborative Learning and Knowledge Management," 2010 Third International Conference on Knowledge Discovery and Data Mining, Phuket, 2010, pp. 482-485.
- Rolfstam Max, (2013) "Public Procurement and Innovation. The role of Institutions", E.Elgar. ISBN 9781849802871
- Franz HW., Sarcina R (2009) The functions and roles of network facilitators. In: Franz HW., Sarcina R. (eds) *Building Leadership in Project and Network Management*. Springer, Berlin, Heidelberg.
- Werquin, P. (2007). Terms, Concepts and Models for Analysing the Value of Recognition Programmes: RNFIL - Third Meeting of National Representatives and International Organizations. Retrieved from <http://www.oecd.org>