Interreg **CENTRAL EUROPE**
European Union
European Regional
Development Fund

SMART_watch

REGIONAL OBSERVATORIES FOR SUPPORTING THE DEVELOPMENT OF SMART SPECIALIZATION

demand | best practice | model

and let thy feet
millenniums hence
be set in midst of knowledge

Preface

This Minibook focuses on the demand side of Smart Specialisation implementation. The Minibook has the purpose to clarify the link between the Regional Innovation Strategies (RIS), their monitoring and the needs of Smart Specialisations (S3) of end users.

In fact, the project SMART_watch overall objective is to support innovation in regions of the Central Europe Programme, in the framework of regional innovation systems, enhancing the transfer of technologies as well as R&D results and improving skills for economic and social innovation of key players of innovation systems. As a consequence, the main purpose of the project is to increase the efficiency of Regional Observatories (ROs) and to equip them with tools needed to generate products (and services) corresponding to the real needs of end users. Therefore, functional business-model(s) for regional branch observatories of intelligent markets with effective tools corresponding to users' needs were developed within the framework of this project.

This Minibook deals with analysing, understanding and systematising the needs of S3 end users, to display their effective requirements and to feed the ROs' business model with services and products. An in-depth analysis of the S3 market was carried out, involving operators and practitioners in partner countries, identified and modelling good practices, and eventually using key actors' opinions to build up the ROs' operational and functional model. Stakeholders were identifyed (SMEs, R&D operators, regional and local autorities, representative bodies). Moreover, an investigation of existing tools and their usage (e.g. technological and economic trends monitoring, Technology Watch, Competitive Intelligence) was promoted.

This Minibook unfolds in four chapters that sum up the hard work done by SMART_watch consortium to analyse the demand side of the S3 market.

Introduction

The **Minibook 2** aims at bringing out the results of the activities realised by SMART_watch to investigate the demand side of the S3 market. In order to complement the supply side analysis introduced in Miniboook 1, it was necessary to involve stakeholders and key persons to explore existing practices and success cases in S3 implementation processes.

Highlights of contents

ABOUT MARKET:
Understanding the needs

The market requirements to strenghten the linkages within the innovation systems.

The **first chapter** is about the requirements of the market in terms of services and tools (at present and needed) and it focuses on the business of several different smart specialisations. This analysis was carried out using different techniques, such as workshops, country visits to excellent organisations and companies, good practices survey.

MORE AND BETTER:
From needs to solutions

Market requirements as the base for the tools of the demand side overlayer.

This **second chapter** introduces one outstanding result of the needs analysis: the demand side overlayer. Using the information from the workshops and the country visits, categorising and merging the data, the partnership enriched the c-map with with the demand side feature and the platform for the benchlearning.

BEST PRACTICES:
### Good practices to feed ROs' setting

Connecting supplied services and the market demand to design an operative model for the ROs.

The **third chapter** analyses the characteristics of the good practices emerging from the country visits in Styria and Piedmont.
Good practices' characteristics were systematised, modellised and presented to highlight the features that a RO for S3 implementation should have.

WORKING ABOUT:
SMART_watch model unveiled

An operative and functional model for ROs activity brings together supply and demand side of RIS 3 implementation.

The **last chapter** unveils the overall outcome of the analysis: the operational and functional model for ROs supporting the implementation of S3.
The model discusses was how ROs should be structured and applied. This result is also described as a Business Model Canvas.
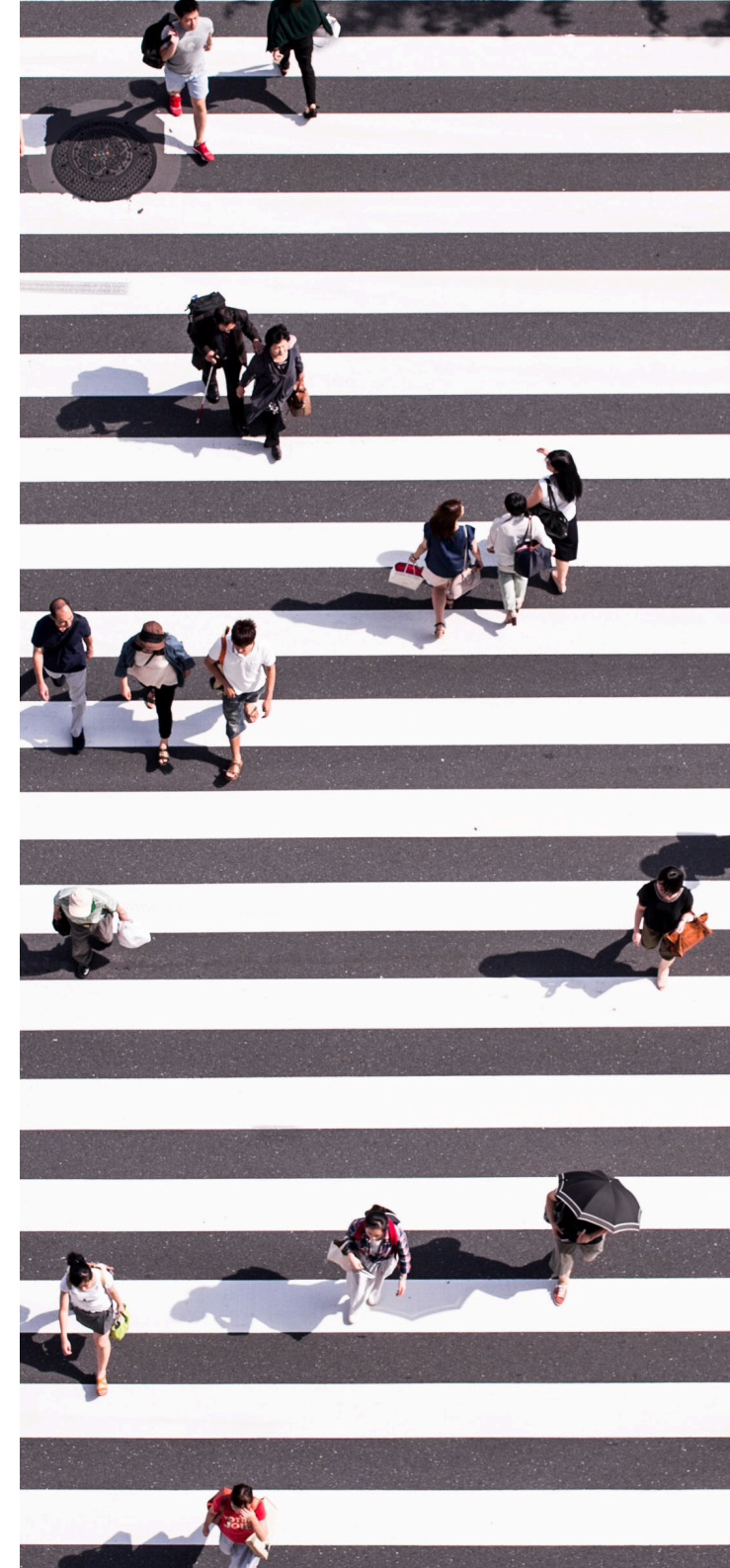
About market
understanding the needs

The market requirements and the demand side of S3 needs were investigated by the SMART_ watch consortium by using a handful of techniques and methods. Stakeholders, practitioners, professionals and companies were involved in workshops, visits, good practice analysis, and in setting the base for the c-map and benchlearning platform overlayer. The main results are the stakeholders' involvement and referring to their interests and needs in terms of available services in support of a better implementation of respective regional Smart Specialisation.

The workshops

9 workshops were realised in the 7 partner countries, mobilising 176 organisations, most of which were companies. Through the workshops, a rigorous analysis of the demand side was carried out and the niches and gaps that need to be addressed by Technology and Policy Regional Observatories and other stakeholders of the ecosystem were brought out.

Evaluating the services of the RIS to support SMEs

Many ROs' existing services related to RIS implementation support the technology and knowledge transfer processes, or give information about the business and funding opportunities for SMEs.
Moreover, the involvement in research and innovation projects, thus allowing to be in touch with universities and research centres and direct cooperation with large companies, is seen as a huge plus a plus.

Developing services for the RIS to support SMEs

On the other hand, workshop participants highlighted many services and datasets that would increase the attraction of ROs' offering. These are expressed in terms of knowledge (e.g. knowledge and competence sharing), support (e.g. cooperation in product development or products' certification), access (e.g. to information or funding), training / education (e.g. certification of learning outcomes), communication (e.g. markets' benchmarking).

The most active and supportive ROs

Based on the workshops' results, most appreciated ROs are considered those which offer the following points:

- attention/support to network's participants and to network's participants external visibility, development and promotion;
- capacity to operate in favour of network members through both dedicated projects (at regional, national or EU levels) and ordinary mechanisms and processes;
- engagement and activation of the ROs at horizontal and vertical levels. The horizontal level encompasses the capacity to identify other channels and ways to foster and support innovation, while the vertical level is about the capacity to involve public institutions and second level aggregating bodies;
- capacity to have prompt answer to the specific demands of innovation of SMEs;
- support companies by relieving them of the bureaucracy and administrative complications that characterize the implementation of the development and research projects financed by public funds;
- collection of the needs expressed by companies in order to represent the interests of the business community to policy makers and stakeholders.

The visits and case studies

Study visits and case study analysis were realised in Styria and in Piedmont, with the purpose of learning more about S3 implementation and monitoring and to explore the demand side of organisations involved in S3 realisation.

Visits in **Piedmont** covered two main productive areas: environment and green energy production and agrifood.

Environment Park is a public joint-stock company that operates under a system of free competition. The Envi-Park vision considers the environmental sustainability as a driver for competitiveness and its mission is to become the reference for public and private stakeholders engaged in clean innovation processes.

Its work is based on three key words: a campus, to create favourable conditions for companies' settlement in the Technology Park; a catalyst of innovation for stakeholders looking at environmental sustainability as a driver for competitiveness; a technology platform, enabling the implementation of several clean innovations through specific know-how and experimental facilities.

EnviPark provides businesses and Public Administrations with solutions for energy saving, waste disposal, clean energy, new materials and fundraising, so that they may successfully revolutionise their personal modus operandi. Key data of the EnviPark are:

* The park with 74 companies operating in the following areas: Real estate; Proximity; Networking; Services and Shared spaces;
* It is a Managing Authority and a Competence Centre;
* The cluster and the over 200 companies use services for research and innovation access with dedicated funds from the regional authority.

In 2016, the Politecnico di Torino has launched the **Energy Center** Initiative (ECI) to support and stimulate series of actions and projects that provide support and advice to local, national and transnational authorities on energy policy and technology. The two pillars of the ECI are:

* the Energy Center House (EC-H), a new building on the Politecnico di Torino campus, that hosts companies, start-ups and public administrations who are active in the field of energy technology, R&D, management and policy;
* the Energy Center Lab (EC-L), the Interdipartimental Center for Energy, that gathers a multidisciplinary group of Politecnico faculty members who are devoted to discovering the best technical, economic, social and environmental solutions for a transition towards a more sustainable society.

The **University of Gastronomic Sciences** in Pollenzo, founded and promoted in 2004, is a private university legally recognized by the Italian state. Its goal is to create an international research and education center for those working on renewing farming methods, protecting biodiversity, and building an organic relationship between gastronomy and agricultural science. The university has also a very performing Research Department that aimed at increasing knowledge and promoting innovation in the field of gastronomic studies and is developed through collaborations at national and international level, with universities and research institutions.

Agrifood is one of the driving sectors of the Italian economy and a strategic asset for the country development. For this reason, it is really important to create a network that facilitates the collaboration between the farmers, the companies and possible research institutions.

In **Styria (Austria)**, the study visits included two main productive areas: production (with the presentation of the Styrian Business Promotion Agency and of the Silicon Alps Electronic Cluster) and visits to two productive companies. The second area was concerned with wood production and the visits dealt with the following organisations: Woodcluster Styria, HIZ - Holzinnovationszentrum, Pabst Holz.


The **Styrian Business Promotion Agency** (SFG) is the processing organisation for business development projects of Styria. The declared aim of Styrian economic policy is to consolidate the position of the federal state as a leading European region with above-average competitiveness and to shape the transition to a knowledge-based production and service society as well as to strengthen the digital skills of Styrian companies. For related projects, the Styrian business promotion agency SFG offers various services in the form of advice, information and direct project support or financing.


The **Silicon Alps** Electronic Cluster is a public-private partnership that brings together Austrian players from industry, science and public authorities to develop and position the electronics and microelectronics sector with a regional focus on the locations Carinthia and Styria. The Silicon Alps cluster regards itself as a long-term strategic alliance and a tool for cooperative, efficient and business-oriented location development. The Silicon Alps Cluster represents equally the interests of its partners and of the public in objective location development based on facts and opportunities. Their services are especially geared to SMEs, business founders and cooperation project developments.
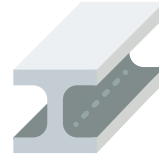
Böhler Schmiedetechnik GmbH (Voestalpine Group)
In its business segments, Voestalpine is a globally leading technology group with a unique combination of material and processing expertise. With its top-quality products and system solutions using steel and other metals, it is a leading partner for the automotive and consumer goods industries in Europe and to the aerospace, oil and gas industries worldwide. The Voestalpine Group is also the world market leader in turnout technology, special rails, tool steel, and special sections. The company is a global development partner and a leading supplier of high-performance dieforged parts made of titanium alloys, high-alloyed steels and nickel-base alloys. They act as a cutting-edge developer and manufacturer of customer-specific, safety-critical forgings, the company produces high-quality component parts for the aerospace industry and other high-tech branches of industry, supplying more than 200 technologically advanced customers worldwide.
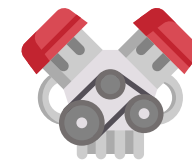
Pankl Racing Systems AG is a specialist in the development and manufacturing of engine and drive train systems for motorsport, for high performance vehicles and for the aerospace industry. Lightweight designs up to the limits of feasibility and high-end innovative materials characterize their products that resist extreme mechanical loads. Pankl relies on the latest manufacturing and surface treatment equipment as well as on the outstanding expertise of its process engineers, making it possible to fulfil even the strictest quality and process requirements of customers throughout the process chain.
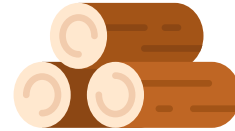
As for the **wood sector**, during the visits the tasks and objectives of the **Styrian Wood Cluster** were were discussed:

- As an "implementer of wood ideas", the Styrian Wood Cluster (HCS) makes ideas work, thereby increasing the added value of companies and extending their competitive advantages. In the industry, the HCS is a pioneer and implementer as well as an active innovation driver on a national and international level.
- The HCS positions and strengthens Styria as a high-tech wood country.
- It promotes the interregionalisation and internationalisation efforts of the Styrian forestry and timber industry.
- With its products, it creates an internationally competitive economic structure in the sector.
- It promotes future-oriented qualification structures in the forestry and timber industry.
- It increases wood consumption in Styria.

HIZ- Holzinnovationszentrum

The aim of the Wood Innovation Centre is to offer business and office space and, if required, the necessary infrastructure for modern production facilities, new wood application areas and hightech research and development efforts at a fair price-performance ratio.

The foundation of new companies with extensive settlement and cluster management is also supported.

The Holzinnovationszentrum Zeltweg thus offers a professional basis for cooperation in all aspects of woodworking and wood processing. The aim is to promote these synergies and to make joint use of the enormous market opportunities offered by wood as a raw material.

Pabst Holz offers an extensive range of domestic wood products, a large selection of special equipments and many different services - from consulting, planning and manufacturing to the complete assembly of interior and exterior wood construction projects.

Instead of relocating abroad, the company has consciously decided to stay in the region and invest in the future of Styria. Thus, Zeltweg is home to a large site focussing entirely on manufacturing their products.

More and Better
from needs to solutions

The **second chapter** focuses on the construction of a demand side **overlayer** to design the **c-map** and **the platform for the benchlearning.** The data and information for designing the overlayer was gathered from the workshops and the visits, merging and categorising them.

The competence map was updated with a demand side feature and a benchlearning tool. The benchlearning tool was created to offer the possibility of:

1. identifying the needs of SMEs (demand side overlayer) and
2. maximizing the learning effect (benchlearning) in RIS ecosystems.

The tool developed by SMART_watch displays the needs of SMEs gathered during the workshops. The reported needs are clustered by smart specializations and by regions. The tool was set up as a ready-to-use interactive ICT-based form. The feedback collected under this tool can be further used to help maintain/upgrade the business model of Regional Observatories as well as to improve the policy-making process when dealing with RIS measures.

As one of the main goals for the c-map and for the benchlearning platform is the comparison between ROs and regions, the demand side overlayer encompassed the calculation of two indicators: the similarity between regions, based on the workshop data and the indicator on how well the Business Support Organisation meet the expectations of SMEs.

The concept of similarity

In order to make ROs comparable per region, the matching of the results of the demand side with the data gathered in the audits should be seized and - to do so - a similarity measurement has been put up.
Similarity measures are defined for measuring the similarity between different objects. However, it is not a measure in the mathematical sense; the term refers exclusively to the measurement of a specific quantity. Similarity measures are used for nominal or ordinal scaled variables.

How the overlayer works

The overlayer allows to filter for categories (build up from the workshops' results) regions and areas of S3. The information contained in workshops' results (i.e. the demand side) is matched with the data gathered in the audits (i.e. the supply side).
For each region there is a diagram with the amount visible in the benchlearning platform within the section overlayer. On the left of the diagrams there are different filters for categories, region and areas of S3.

Figure n.1 *The service overlayer, benchlearning platform*

Figure n.2 *The service overlayer, c-map*

Source: SMART_watch

Source: SMART_watch

As for the c-map, filtering can be done using categories, regions and areas of S3, as Figure 2 shows.
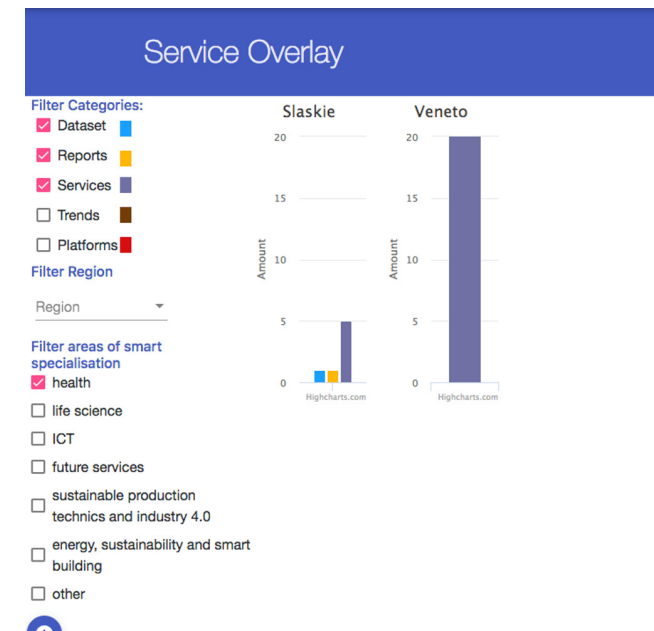
The overlayer allows the comparison between ROs and territories. More in detail, when the "Service Section" is accessed, the first page shows an overview of all observatories, that are compared with the demand of their region. When the "Region View" is selected, the diagram shows how well all observatories of that region together fulfill the demand of their own region.
It is also possible to visualize the result of each obser-

vatory and check which observatory fits best the demand of the selected region.

In addition, is also possible to compare one selected observatory with ROs in all regions.

The goal of offering demand-side overlayer was multipurpose. As for the ROs, it should motivate them in tailoring and mastering services demanded by SMEs or discuss the quality/volume of services offered.
The more ROs know about the demand, the better they

can fit their business models. The SMEs get a unique opportunity to to tell about opportunities they see with regards to niches in desired services/datasets. In many cases, it is not the single, business driven approach but rather a more business environment-based, be it technical or market, request.

Finally, the benchlearning tool is a support to policymakers and other regional stakeholders acting as ecosystem responsible for the monitoring of RIS implementation.

Best Practices
good practices to feed RO's setting

The identification, modelisation and sharing of good practices has been for years an effective way through which European countries have reinforced their cooperation. In fact, although the policies to manage many sectors (e.g. education and training, social inclusion, etc.) are still up to member States, the EU supports the definition of common objectives and of a reciprocal learning process in the same thematic areas. This collaboration between EU and States has been favoured for several years by a working method called Open Coordination Method (OCM), through which common objectives, shared indicators to measure progress and a common frame to evaluate performance and identify good practices have been developed.

This **third chapter** is about the **good practices** that have been identified and analysed by SMART_watch partners, in order to investigate the demand side of RIS 3 services and to prepare the design of a functional and operative model for the ROs.

The good practices refer to **four productive sectors: wood, energy, agro-food and production.** The practices have been studied and visited in order to get quality elements on the operative structure, the functions, the offering and the service delivery. For each good practice a SWOT analysis has been carried out, so as to investigate the strong points and the improvable issues.
The characteristics of visited organisations have already been exposed in chapter one of this Minibook ("Visits"). This chapter deals with the components of the practices that have been used to design the functional model for the ROs.

HOLZCLUSTER
steiermark

The **Wood cluster in Styria** (Holzcluster Steiermark) is one of Europe's largest clusters. Founded in 2001, the company develops and implements projects along the entire value-added chain of the wood industry – and focuses most of its work on timber construction. Wood cluster Styria sees its role in facilitating networking between business, science and politics, in promoting internationalisation efforts primarily in South East Europe and in providing services for companies in the forest sector and wood industry.

The Wood cluster has a twofold aim: on one hand to address the core target of the sector (owners, economic policy actors, opinion makers, industry companies). On the other hand, to operate as an actor of the economic public policy. The aims of the Styrian Wood cluster are:

- Networking of the forestry and timber industry with companies, training and further education institutions, R & D institutions and politics;
- Increasing R&D activities in the forestry and wood industries;
- Driving forward innovative thinking in the wood industry and thus increasing added value;
- Elaborating measures to qualify and support companies in internationalization.

The range of services that the Styrian Wood cluster offers to SMEs referring to S3 encompasses the support to innovation, training and qualification, support to internationalisation, strategic planning and participation to international projects.

The functional and operational model of the Styrian wood cluster has many strong points, such as the commitment of companies in industrial development, the presence of industry know-how across the entire value chain, the relative stability of the reference market. Among the weaknesses, the good practice showed the significance of the wood sector at political level, the lack of communication, the perception of the wood industry as an "old" economy.

As for opportunities, they encompass a role to promote ecology and CO2 reduction, the growing trend to internationalisation and the promotion of energy as a relevant value-added issue for companies.
Threats include resource scarcity in public's perception and low financing of innovation projects.
As a conclusion, the Styrian wood cluster offers already a quite high number of different services like knowledge sharing and networking about technologies. Its public ownership makes the cluster well anchored in the regional policy landscape and its operational model guarantees a well standing as a basis to offer well accepted services for companies of the wood sector.

A **second good practice** was identified in Italy in Piedmont region. It operates in the agrofood sector and is named **University of Gastronomic Sciences** (UNISG). This organisation has been selected for its services and policies aimed at introducing innovation in industrial processes with a particular attention to environmental and social sustainability. UNISG is a private non-profit institution, an international research and education cen-

tre for those operators working on renewing farming methods, protecting biodiversity and building an organic relationship between gastronomy and agricultural science.

The university has an operational model that foresees the concentration on key topics: to improve the conditions of food production, processing, distribution and consumption; to implement environmental and social sustainability and full food sovereignty; to promote ethical, social and political responsibility at every level through the implementation of its main axis of activities, i.e education and research.
UNISG has an extended network of more than 150 companies and is well linked with research centers, science parks, laboratories and associations active in the food sector.

Its functional model foresees the delivery of services in three areas: **teaching and learning, research and innovation and the third mission** (i.e. services for the community, food producers and civil society as a whole). In the field of **teaching**, the aim to promote learning and methods based on critical thought, awareness, creativity and responsibility, providing an academic education in the specific field of Gastronomic Sciences, i.e. interdisciplinary sciences related to food, food culture and its various forms. Currently, there are about 500 students with courses dedicated to research and teaching in all subjects related to production and consumption of food. The aim of **Research** activities is to promote specialized research in the service of humanity's well-being, celebrating difference as a value and equal dignity for scientific knowledge, the wisdom of traditional societies and local communities, and providing possible solutions to the global environmental crisis.

Moreover, the companies that belong to the network can make **specific requests** relating to projects, ideas and challenges, which will be worked on by a team of UNISG researchers and instructors, who will come up with an innovative solutions, which are then tested in practice.
The functional and operative models of UNISG have many strong points, such as the multidisciplinary ap-

proach, the excellent technical skills of the staff, the strong reputation - both national and international - in the field of food and agriculture, and an excellent sharing knowledge strategy. On the other hand, the only weakness seems to be the high building maintenance costs.

As for opportunities, UNISG is relevant for the good positioning of the Piedmont Universities in the national and international rankings. It is also worth mentioning that the "Made In" is a S3 area and that agrifood is a regional innovation cluster.

Regarding threats one may notice the low incidence of public regional expenditure on R&D, the poor concentration of policies and resources devoted to environmental sustainability.

To conclude, UNISG is a real excellence at regional and national level in the field of Gastronomic Sciences. Concerning its functional and operative model, UNISG adopts an original and innovative teaching model whose aim is to support gastronomic and culinary passion, with great attention to sustainability and creativity. Modern technologies and multidisciplinary skills are an added value.

A **third good practice** bring us back to Austria again, to the **Styrian Business Promotion Agency** (SFG). This organisation is of public ownership (it belongs to the Province of Styria) and it offers a wide range of different services, like funding dedicated to innovation, networking, knowledge sharing and brokering. SFG is responsible for the entire operative area of economic development, which is focussed on three key themes: mobility, gre-

en tech and health tech and which is articulated in the following core strategies: location development, location management, innovation and R&D promotion, entrepreneurship and growth of young companies, qualification and human potential, internationalisation of companies. SFG is also very active in managing projects to promote the regional economy and in animating clusters and network initiatives. As for its functional model, SFG offers services in the following fields: location development and management; support for innovation; entrepreneurship and growth of young enterprises.

SFG operative and functional models have several strong points, such as the strict relationship with companies and stakeholders, the reputation for innovation, the excellent staff with strong knowledge of economical support measures. Weaknesses limit to lack in international activities and to the need to increase contacts with companies which are not a direct target group.

As for opportunities, SFG could exploit more funding programmes, thus increasing the number of companies that need to be financed. Threats limit to the competitiveness with other national organisations which have access to funding programmes with more attractive funding rules.

The broad portfolio of services and the support to the regional innovation system make the SFG a best practice in terms of operational and functional model.

The **last good practice** dealt with is about two realities in Northern Italy: the Environment Park (a Science and Technology Park specialized in clean technologies and sustainability), and the Energy Center of the Polytechnic of Turin, which supports local, national and transnational autorities on energy policy and technology.

Environment Park is a public joint-stock company that hosts more than 60 companies. It is articulated in two business units, one about innovation and development and the other on Real Estate Services. The EP works as an innovation accelerator for companies looking to use eco-efficient solutions to expand their markets. Offered services range from partnership in European projects and international cooperation, to the creation of business associations in order to bid on and take part in international contracts and competitions.

The EP also manages CLEVER, that is one of the 7 Innovation Clusters of the Piedmont Region and is composed of 250 members (SMEs, innovative start-ups, research bodies). Through CLEVER the EP offers infrastructures and high added value services, knowledge sharing, and supports the convergence of investments in innovative products and services.
The EP functional model encompasses innovation services related to clean innovation technical consultancy, R&D project design, and technological facilities for experimental services. Moreover, the functional model includes technology foresights for companies, B2B and networking activities, training and activation of industrial research projects. EP functional and operational models have many strong points, such as the excellent technical skills of the staff, the good relationship with companies, and the strong network. Weaknesses include high staff costs and high building maintenance costs. Referring to opportunities, one may quote the possibility to expand the network of companies and research bodies at international level, and the expansion of the demand for qualified skills in highly innovative sectors. Threats refer to the low incidence of public spending on R&D, the poor concentration of policies and resources devoted to environmental sustainability and the low positioning in European innovation rankings.

The **Energy Center** has as a main activity the building of national and European networks that are active in developing new entrepreneurial activities in the energy sector. Moreover, it promotes the creation of new business ventures in the energy sector and supports the analysis of the policy scenario in the field of environmental sustainability, sustainable mobility and circular economy. The EC functional model includes the support to companies and Public administrations in the field of energy technology and the analysis of the best techno-economic, social and environmental solutions for a transition towards a more sustainable society.

The operational and functional models of the EC have many strengths, such as the environmental context driven by innovation, the multidisciplinary approach and the ability to create new enterprises and to support start-ups. Among the open issues, the most perceived urgency is need for additional spaces to accomodate all the interested stakeholders (especially from the public administration sector). Opportunities are linked to the ever-increasing regional, national and international demand for energy-saving, clean energy solutions and circular economy and the significant investments to support the ability of companies to develop research and produce innovation. Finally, threats include a too slow adjustment of the national and regional legislation with respect to the progress of research and a growing competition in the saving energy sector.

The **pilot actions** (i.e. workshops, study visits and the good practice analysis as described in the previous chapters) have been the basis for the investigation on the demand side of RIS implementation.

The most important result of this analysis is a **model for a RIS observatory** that describes the possible content of this observatory, its functions, its values; the model also offers an operational model for the RO, in terms of design and structure. It is important to mention that the model is not a one-for-all solution: it has to be adapted to local conditions, territories and, above all, to local S3. Whatever the case, here is a synthesis of the functional and operational model.

Table n.1 *The functional model*

SERVICES OF RO	MUST HAVE	NICE TO HAVE
Funding and financing opportunities for companies (proof of concept, innovation projects, internationalisation projects, etc.)	Information	Offering it themselves as well
Management and strategic support for companies (audits)	Information	Offering short term management themselves
Innovation support for companies, maybe using existing Innovation Management tools	Information	Doing innovation audits and offering innovation experts to companies
Technology and knowledge transfer processes	Information	Offering participation/ access in/to transfer and innovation projects
Support on legal issues like Intellectual property issues	Information	Offering consultancy on legal issues
Access to international/national/regional networks like clusters, EEN, Infrastructure (fablabs, innovation labs, incubators, etc.)	Information	Offering those networks or infrastructure themselves

Source: *FH JOANNEUM, SMART_watch partner*

Table n.2 *The operational model*
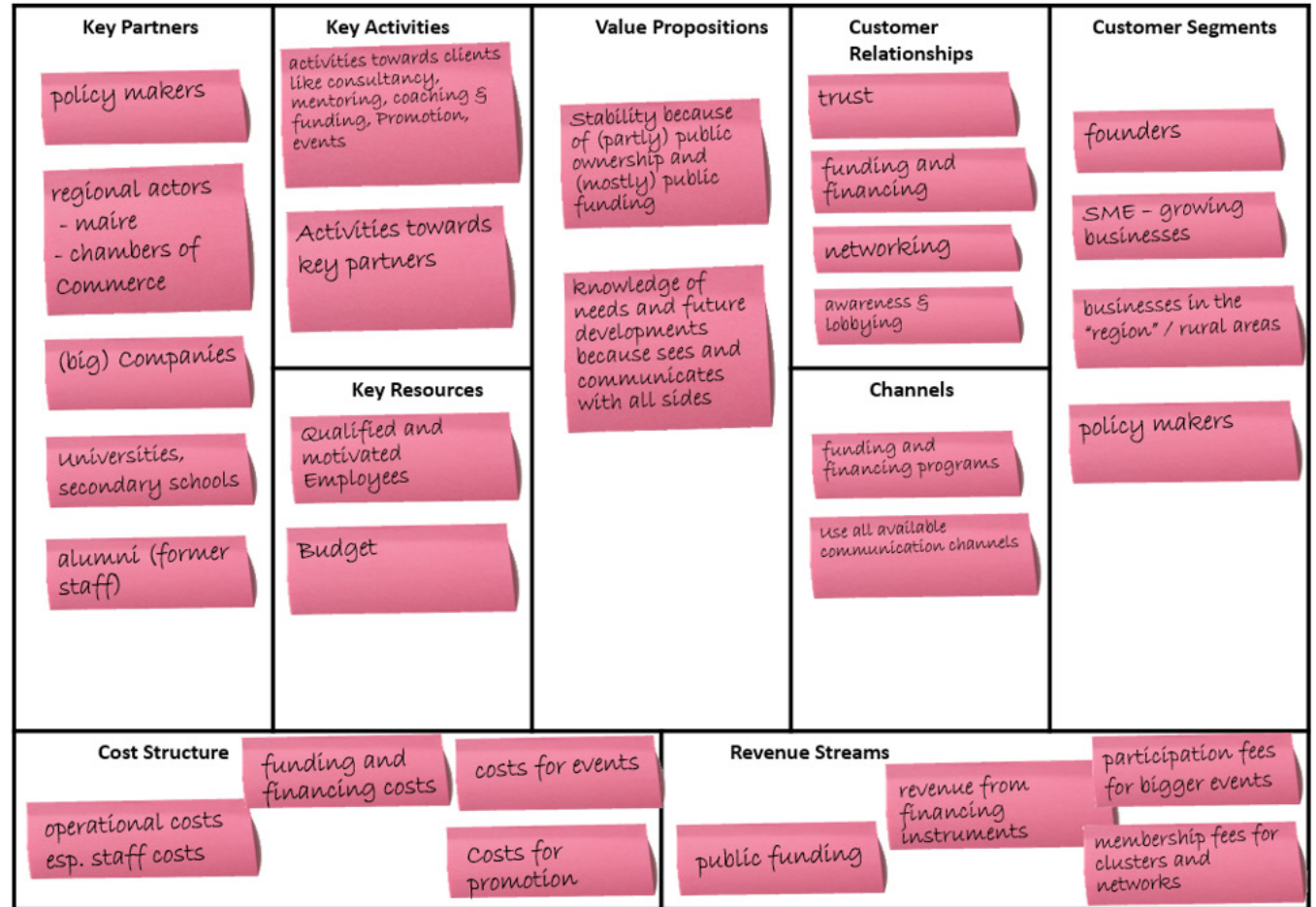
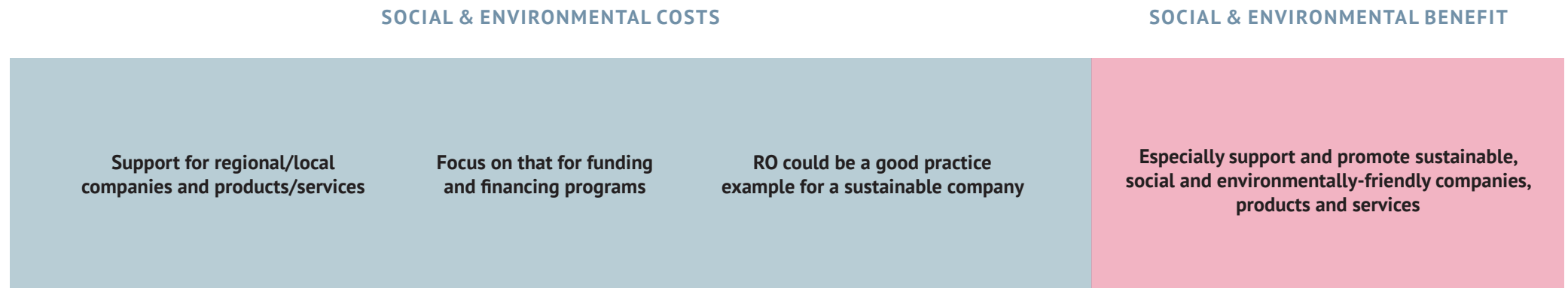| WHAT	HOW	WHY
Legal Form of the RO	Limited/Public	Easy to establish, clear structure and given processes
Owners and stakeholders	Public (national, regional, local) or Private/Public Partnerships with companies (big players) and/or educational sector (Universities)	The broader the better
Participation	Board, Advisory Board, Steering Committee, involvement via social media	Involvement of politics, interest groups and maybe even the civil society
Internationalisation	Via Participation (above) or Projects	To tackle the issue of globalisation more efficiently
Mission	Public Mission, public interest	Variable - more on the public side
Source of Fundings/Financing	Mostly public funds	Variable - (mostly) public funding is expected (till now)
Transparency/Communication	Public reports (detailed, correct, informative, understandable, consistent)	Important for outside activities like policy makers, the public (tax payer) as well as internally for consistent work, for anti-corruption measure etc.
Relation with customers	Contract/notice	Both ways are viable
Support Programs	Public calls	Best use of the limited (public) budget, getting the most for the tax payers
Remedy	Civil court/public path	Both ways are viable
Legal and Liability	Insurance/Public	Both ways are viable
Supervision and Audits	First and second level controls, Audit and/or monitoring bodies, Court of Audits, Parliament(s), through ownership/boards, media (social media)	Sufficient control according to means

SMART_watch partners, with the purpose to describe and documenting the RO model as a business model, produced a Business Canvas version of it (see Minibook 1 for more details on the Business Canvas Model).

Figure n.3 *Business Model Canvas for a good practice Model RO*

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
policy makers	activities towards clients like consultancy, mentoring, coaching & funding, Promotion, events	Stability because of (partly) public ownership and (mostly) public funding	trust	founders
regional actors - maire - chambers of Commerce	Activities towards key partners		funding and financing	SME – growing businesses
(big) Companies		knowledge of needs and future developments because sees and communicates with all sides	networking	businesses in the "region" / rural areas
	Key Resources		awareness & lobbying	
Universities, secondary schools	Qualified and motivated Employees		**Channels**	policy makers
alumni (former staff)	Budget		funding and financing programs	
			use all available communication channels	

Cost Structure	Revenue Streams
funding and financing costs / costs for events / operational costs esp. staff costs / Costs for promotion	participation fees for bigger events / revenue from financing instruments / public funding / membership fees for clusters and networks

Source: SMART_watch

Figure n.4 *Business Model Canvas for a good practice Model RO - extended*

SOCIAL & ENVIRONMENTAL COSTS			SOCIAL & ENVIRONMENTAL BENEFIT
Support for regional/local companies and products/services	Focus on that for funding and financing programs	RO could be a good practice example for a sustainable company	Especially support and promote sustainable, social and environmentally-friendly companies, products and services

Source: *SMART_watch*

KEY PARTNERS are those that will help the RO with the implementation of S3.

The **KEY ACTIVITIES** can be grouped as operational activities that are mostly supportive, activities towards clients like funding and financing activities and consultancy, coaching, mentoring, training, expert analysis as well as networking and promotional activities.

KEY RESOURCES are twofold: on the one hand it is the staff of a RO, so human resources, on the other hand, the financial means are vital, therefore a solid budget.

VALUE PROPOSITION answers the question "what is the RO offering?".

CUSTOMER RELATIONSHIP describes how the RO will communicate with their customers, that are entrepreneurs of all types like start ups, spin offs, growing companies, especially in the selected fields.

CHANNELS shows the ways in which customers will be attracted and how the measures will be delivered to them and to a wider public.

CUSTOMER SEGMENTATION will be necessary because it is impossible to support each and every company in a country/region.

The **COST STRUCTURE** shows the kind of costs that the implementation involves, the available budget.

This has to correlate with the **REVENUE STREAMS** that make clear where the money comes from. The extended version also takes into account the social & environmental costs and benefits

Conclusions and outlook

This Minibook 2 investigated the demand side of the S3 market. SMART_watch partners extensively involved stakeholders (companies, practitioners, representative bodies) by organising workshops to analyse the needs in terms of services, information and tools.
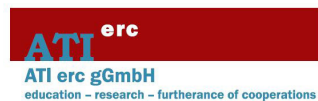
This "picture" was enriched through the realisation of visits that the consortium payed to outstanding realities which provide services in support of a better implementation of regional Smart Specialisation.
Apart form visits, case studies and good practices were in Styria (Austria) and Piedmont: as a result, SMART_watch partners set the base for the c-map and benchlearning

platform overlayer, which combines the supply and the demand sides of RIS implementation.

Summing up the results of the demand side analysis, partners designed a model of an ideal regional observatory supporting ecosystems of the smart specialisation markets. The model - that is flexible and adaptable to local S3 - describes the characteristics of the observatory, its values, its organisational features.

Above all, the model outlines the functions of the ROs to support companies (especially SMEs) in the Smart Specialisation implementation.

Partners