

# ECOS4IN

## VENETO REGION SWOT ANALYSIS

Deliverable D.T2.2.1

Final Version  
04/2020





## Instructions

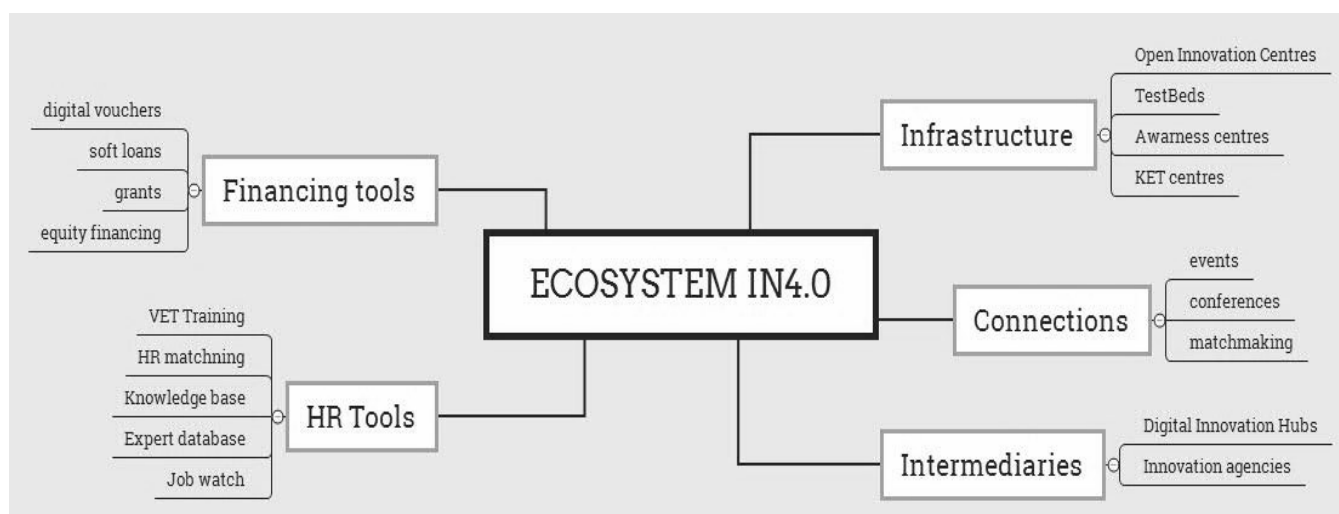
### 1. Reason

Each partner region will perform SWOT analysis, Deliverable T 2.2.1., delivery date 04/2020.

Analysis will provide more detailed information how the partner regions currently handle with Industry 4.0 transformation.

### 2. SWOT Structure

There is first simple ecosystem model. Deeper description will be available soon.



Please prepare SWOT analysis for each mind map branches, see templates below.

### 3. Templates: Veneto region SWOT analysis

#### 3.1. Infrastructure

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Presence of ICT companies</li> <li>• KIBS-rich region (knowledge-intensive business services)</li> <li>• Growth in the number of innovative start-ups</li> <li>• Presence of Live Demo and open days in companies that adopt innovative technologies to encourage imitation processes by other companies (eg "100 places in Industry 4.0", Live Demo at Padova Fiere)</li> <li>• Existing ecosystem of subjects at different levels (DIH, Competence Centers, Regional Innovation Networks)</li> </ul>	<ul style="list-style-type: none"> <li>• Shortage of large players: micro, small and medium-sized enterprises hardly have internal R&amp;D laboratories</li> <li>• Absence of coverage with ultra-wide band</li> <li>• Little use of ICT technologies in micro enterprises</li> <li>• Research activities far from business needs and low applied research rate</li> <li>• SMEs with low investment in research</li> <li>• Deep digital gaps in the territories</li> <li>• Poor "digital culture" in business and civil society</li> <li>• Low level of digitalization of Public Administration services for businesses and civil society</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Broadband coverage and free Wi-Fi enhancement</li> <li>• Start of open data initiatives</li> <li>• Activation of a continuous system of mapping, classification and analysis of the databases available in the regional context with the aim of creating a dedicated "observatory"</li> </ul>	<ul style="list-style-type: none"> <li>• Costs of research too high when viewed from an SME perspective. The small size of the economic realities of the territory entails a reduced investment capacity in research projects / activities.</li> <li>• The poor accessibility to research results hinders their application in the production and industrial fields.</li> </ul>



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| <ul style="list-style-type: none"> <li>• Definition of rules, standards and organizational models to encourage the spread and use of the IoT in public and private contexts of the Veneto regional territory.</li> <li>• Strengthen the infrastructure offer of the Veneto research system and facilitate connections to the networks of European and international research infrastructures.</li> <li>• Support for the creation and strengthening of public-private laboratories and research infrastructures</li> <li>• Enhancement of data from different sources (for example institutional databases, IoT networks, social networks, etc.) through Big Data Analytics solutions Solutions for historical and predictive analyzes, shared between different ecosystems, must represent a new essential infrastructure for the development and governance of new digital services (e.g. MyData project, which concerns the creation of a data management platform for the main Venetian cities).</li> </ul> | <ul style="list-style-type: none"> <li>• Rapid obsolescence of the instrumental equipment of the research centers</li> </ul> |
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### 3.2. Connections - networks

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• High rate of informal relationships that allow you to take advantage of external knowledge to produce innovation</li> <li>• Region with a high district vocation and low-tech specialization</li> <li>• Presence of innovative regional</li> </ul>	<ul style="list-style-type: none"> <li>• Research centers not linked together</li> <li>• Poor dissemination and difficult attraction of research services for businesses</li> <li>• Districts and regional networks have difficulties in developing innovative</li> </ul>



<p>networks and districts (eg Improvenet, Smart &amp; Sustainable Living)</p> <ul style="list-style-type: none"> <li>• Presence of excellences and leading companies in the agri-food, fashion (clothing, tanning footwear, eyewear), furniture, construction, mechanical sectors</li> <li>• Presence of inter-network projects (inter-RIR)</li> </ul>	<p>projects;</p> <ul style="list-style-type: none"> <li>• Weak collaboration between businesses and research centers</li> <li>• Low propensity of companies to innovate through collaboration with others</li> <li>• Low vertical contamination (intra-sector)</li> <li>• Lack of information and knowledge by companies of the skills / excellence in research in the Veneto.</li> <li>• Researcher evaluation system which encourages the creation of scientific publications and only marginally rewards the development of research projects carried out in coordination with companies.</li> <li>• A tendency for businesses to refuse to see the competitive advantage gained through collaborations with researchers following the publication of the results of research projects.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Increase in the presence of innovative and technological companies</li> <li>• Adoption of Open Innovation models</li> <li>• Exploitation of complementarities of knowledge and specializations between different clusters, even beyond regional borders</li> <li>• Participation in national (national technology clusters) and international research projects</li> </ul>	<ul style="list-style-type: none"> <li>• Regional innovative networks with constraining governance model</li> <li>• Poor autonomy of regional networks, difficult participation in projects outside the region due to the lack of legal identity</li> <li>• Excessive bureaucracy for participation in joint research projects.</li> <li>• Average age of entrepreneurs is still high, comparative lack of young</li> </ul>

- Development and promotion of collaborative triple and quadruple helix models
- Design and management of pilot projects in individual ecosystems for the development of innovative services that use ICT solutions;
- Collaborations aimed at increasing the implementation capacity of research and innovation projects in micro / SMEs
- New legal instruments in favor of business combinations and networks
- Underutilized knowledge and skills available from university research
- Cross-networking and creation of vertical communities
- Increase in R&D investments both between companies and between companies and research subjects, promoting aggregation, transversal fertilization processes and the creation of long-lasting collaborative relationships.

entrepreneurs

### 3.3. Intermediaries

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Presence of centers of excellence in research and laboratories on nano- and biotechnology, biomedical engineering, construction technology and glass;</li> <li>• Presence of technology parks, incubators and regional bodies responsible for technology transfer and innovation</li> <li>• Presence of different types of</li> </ul>	<ul style="list-style-type: none"> <li>• Not enough exploitation of the networks of members of regional/industry institutes for networking purposes and still insufficient vertical contamination;</li> <li>• Low propensity of Veneto businesses to innovate through collaboration with outsiders (innovation carried out mainly in-house)</li> <li>• Incorrect perception of companies</li> </ul>



intermediaries: incubators, crowdsourcing platforms, accelerators, DIH, competence centers, universities (eg contamination lab)	that research activities carried out by public bodies must be substantially lower than market costs
Opportunities	Threats
<ul style="list-style-type: none"> <li>• More active involvement of intermediaries aimed at excluded sections of the population (eg specific "intermediate bodies" (for example associations of pensioners) etc - which must be designed and managed to minimize digital exclusions in Veneto</li> <li>• Cross Fertilization: interception, mapping and networking of obvious and hidden excellence and specializations, in order to overcome isolation and increase the opportunity for innovation.</li> <li>• Increase in networking / planning opportunities shared by members of trade / sector associations</li> <li>• Enhancement and promotion of solutions and best practices.</li> </ul>	

### 3.4. HR tools

Strengths	Weaknesses
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<ul style="list-style-type: none"> <li>• Excellent positioning of Veneto universities, especially in scientific subjects;</li> <li>• High density of universities</li> <li>• High level training for young people</li> <li>• Good level of human capital specialized in science and high-tech, and in high manufacturing</li> <li>• Presence of training in Industry 4.0 / ICT already in Higher Education Institutes</li> </ul>	<ul style="list-style-type: none"> <li>• Low availability of training for transversal skills</li> <li>• Shortage of scholarships from universities</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Encourage the entry into companies of research figures through tools to support hiring or collaboration</li> <li>• Planning of regional strategies for employment and continuous training that encourage a meeting between research and companies already during the studies (eg: innovative teaching with mixed university / company / accredited pathways through experiments such as bootcamp and project-based learning, industrial doctorates, coaching activities, etc.).</li> <li>• Acculturation and diffusion of knowledge towards the various stakeholders of the territory through for example seminars, events, institutional communication etc;</li> <li>• Promote support actions for specialist training / employment related to innovation, both in the world of research and production.</li> <li>• Design and promotion of targeted empowerment activities for citizens</li> </ul>	<ul style="list-style-type: none"> <li>• Lasting economic crisis</li> <li>• Population aging</li> <li>• Little use of available resources and knowledge from companies</li> <li>• Information fragmented and difficult to find</li> <li>• Risk of exclusion of some categories of population (eg elderly, unemployed, foreigners etc.)</li> <li>• Difficulty in attracting qualified personnel from micro enterprises / SMEs</li> <li>• Loss of Venetian competitiveness in emerging sectors linked to technological innovation</li> <li>• Loss of manufacturing skills by specialized districts</li> <li>• Rapid obsolescence of the instrumental equipment of the research centers</li> </ul>





and businesses (eg digital acculturation)

- Design and promotion of user involvement activities in the co-creation and co-design phases of the new digital public services

- Brain-drain

### 3.5. Financial tools

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Presence of regional laws and initiatives to support investments in innovation / aggregation</li> </ul>	<ul style="list-style-type: none"> <li>• Financial instruments not always usable by micro enterprises / SMEs</li> <li>• Difficulty of companies to directly intercept financing opportunities and access to credit</li> <li>• The relatively small scale of research projects commissioned by the PMI is not in itself capable of guaranteeing continuity of funding for the research activities carried out.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Participation in national (national technology clusters) and international research projects</li> <li>• Collaboration and financial support from large to small businesses</li> <li>• Active participation by banks and credit institutions (dedicated resources, access to credit)</li> </ul>	<ul style="list-style-type: none"> <li>• In some sectors, regulations are still unclear or outdated hinder experimentation and research;</li> <li>• Reduction of public resources for the university</li> </ul>

### MAIN SOURCES:



- **VENETO SMART SPECIALIZATION STRATEGY (RIS3, AUGUST 2015)**
- **VENETO REGIONAL STRATEGIC PLAN FOR SCIENTIFIC RESEARCH, TECHNOLOGY DEVELOPMENT, AND INNOVATION (PIANO STRATEGICO REGIONALE PER LA RICERCA SCIENTIFICA, LO SVILUPPO TECNOLOGICO E L'INNOVAZIONE 2016-2018, REGIONAL LAW MAY 18TH, 2007, N. 9, ART. 11)**