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RE-ACT Project: Main results with a focus on University of Macerata support to RIS3 review in Marche Region (Italy)

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l'umanesimo che innova

Self-reflection Tools for Smart Universities Acting Regionally

OUR STARTING POINT

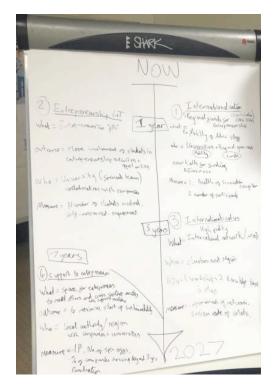
HEInnovate workshop in Ancona (2019) by Technopolis and Marche Region

The objective was to use the HEInnovate assessment tool to foster a structured discussion to identify strengths and common areas for action for the regional authorities, the four universities in the Marche Region and their business partners feeding into the development of the new strategy.

- SWOT ANALYSIS
- ACTION PLANNING (short-medium-long term)









Universities and regional development

Higher Education Institutions (**HEIs**) play a **key role** in innovation and place-based policies (Beer et al. 2020), including **RIS3** (Edwards et al. 2017; Larrea et al. 2019; Fonseca & Salomaa 2020).

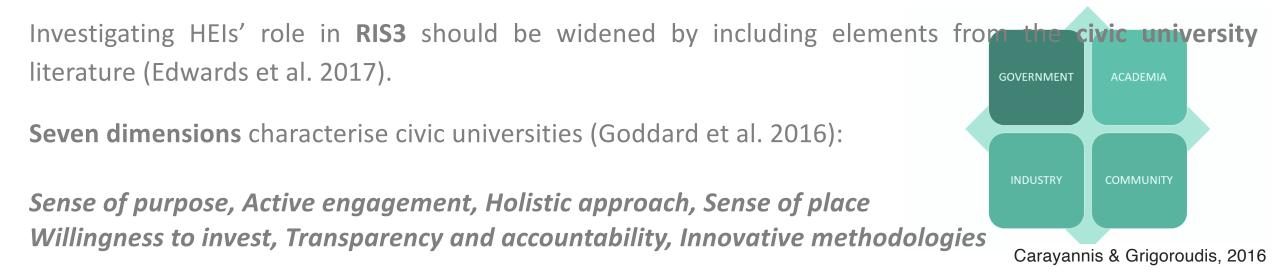
RIS3 relies on the concept of **smart specialisation** - a new approach towards regional development (McCann 2015) promoting a broader understanding of innovation and the **cooperation** between **quadruple helix** stakeholders, including HEIs (Foray et al. 2012). Stakeholder engagement becomes more relevant with the shift towards **smart specialisation strategies for sustainability** (Healey & Morgan 2012; JRC 2020, Veldhuizen 2020).

HEIs involvement in regional development can depend on **internal** and **external** factors like policy frameworks, internal institutional settings, and the territorial context, including industrial structures (Kempton et al. 2021).

Civic universities & smart specialisation

Are **embedded** in their **communities**, collaborate with other actors as part of the quadruple helix, with an important role in regional development, generating knowledge and innovation, to **solve societal challenges** (Goddard et al. 2016; Carayannis & Campbell 2006; 2009).

Compared to the concept of the "entrepreneurial university" (Etzkowitz, 2013), the concept of the civic university (Goddard, 2009; Goddard *et al.*, 2016) **has a stronger place-based dimension**, involving a broader commitment with the civil society.



Research context

Porto

Business

CORVINUS

UNIVERSITY of

BUDAPEST

/ University of Porto

School



of the European Union

One of the **Erasmus+** KA3 strategic projects.

Aim: to enhance the role played by universities in the context of smart specialisation through the development of an innovative tool, complementary to HEInnovate (HEInnovate for RIS3 with dimensions and statements) and by fostering quadruple helix cooperation.





STARTU

EUROPE

REGIONS NETWORK

TECHNICKÁ

UNIVERZITA

V KOŠICIACH

Following the HEInnovate framework RE-ACT research activities relied on the concept of "entrepreneurial university".

www.ris3heinnovate.eu

Self-reflection Tools for Smart Universities Acting Regionally

Institutional characteristics of HEIs involved

Porto Business School / University of Porto	A private, non-profit institution that emerged from a collaboration between the University of Porto and large companies. It focuses not only on executive education (MBAs, masters, short programmes), but also on business intelligence. It is embedded in the business environment. Both RIS3 and HEInnovate experts are in the project team.
CORVINUS UNIVERSITY of B U D A P E S T	The best ranked economic university in Hungary. The HEI has good connections with local public administration, businesses, civil organisations and other actors of the quadruple helix. Both RIS3 and HEInnovate experts are involved in project implementation.
UNIVERSITATEA BABEȘ-BOLYAI	The oldest and best ranked public HEI in Romania with 22 faculties. It has experience in supply of regional development services and a long term cooperation with the regional (and national) RIS3 responsible organization. Both RIS3 and HEInnovate experts are in the project team.
TECHNICKÁ UNIVERZITA V KOŠICIACH	Is a public university-type higher education institution. It offers a wide range of study programmes of technical, economic and artistic orientation. The support of young innovators is provided by the University Science Park TECHNICOM. Both RIS3 and HEInnovate experts participate in the project team.
UNIVERSITÀ DI MACERATA I'umanesimo che innova	One of the oldest universities in Europe, established in 1290, mainly focusing on the humanities and social sciences. Both RIS3 and HEInnovate experts are in the project team. They have a strong experience in European funded projects, especially linked to stakeholder engagement and co-creation for innovation in several fields, including RIS3.

Research activities within the RE-ACT project

DELPHI

The questionnaires aimed at achieving a basis of a collective judgment, analysis and decision-making process around the added value HEINNOVATE can bring for RIS3 and the possible outline and content of an upgraded version of the self-assessment tool to support current and potential positioning of HEIs in this and other similar processes.

20 experts involved in the Delphi method (10 linked to HEINNOVATE and 10 to RIS3), three rounds.

INTERVIEWS

The interviews addressed topics such as the engagement and contributions of HEIs in previous RIS3 processes and expectations on their involvement in current and future RIS3 design, implementation and monitoring as well as other related processes. 25 interviews with public authorities leading RIS3 processes at regional and national level (5 carried out by each partner HEI).

VALIDATION WORKSHOP

Validation workshops were organised at the end of the research process for collecting additional feedback of key stakeholders on the research findings and key takeaways.

5 validation workshops with 75 regional key actors of the triple helix (15 per workshop, including 5 HEIs, 5 industry representatives and 5 local authorities/policy makers)

Research questions and methodological aspects

What are the **driving** and **hindering** factors of partner **HEIs ability** to **engage stakeholders** in RE-ACT project's research activities? - as a proxy for analysing their civic university profile in relation to placebased, external factors.

To what extent the **involvement** of HEIs in similar projects could be **beneficial** for further **developing** their **civic university** profile in different regional settings?

Method:

• Action research: testing civic university profile based on the ability of partner HEIs to perform research activities involving more and more stakeholders.

Stakeholder engagement in RE-ACT research activities

Delphi exercise: target 2 RIS3 and 2 HEInnovate experts from the region the HEI is situated in.

NUTS II	Partner	RIS3 expert from HEIs region	RIS3 expert national evel/from another region	HEInnovate expert from the region	HEInnovate expert from another region
Marche (IT)	UNIMC	1	2	1	-
Budapest (HU)	CUB	1	1	1	1
Východné Slovensko (SK)	TUKE	3	1	1	-
North-West (RO)	BBU	2	-	2	-
Norte (PT)	PBS	1	-	1	-

Interviews: target 5 experts from 5 different regional (and/or national) RIS3 responsible organisations

NUTS II	Partner	RIS3 expert from regional policy responsible organization	RIS3 expert from national policy responsible organization	RIS3 expert from another regional policy responsible organization	RIS3 expert from another organisation that the one responsible for the policy
Marche (IT)	UNIMC	1	-	4	-
Budapest (HU)	СИВ	-	5	-	-
Východné Slovensko (SK)	TUKE	2	1	3	-
North-West (RO)	BBU	1	-	4	-
Norte (PT)	PBS	-	-	-	2 Regional Coordination and Development Commission 1 mayor

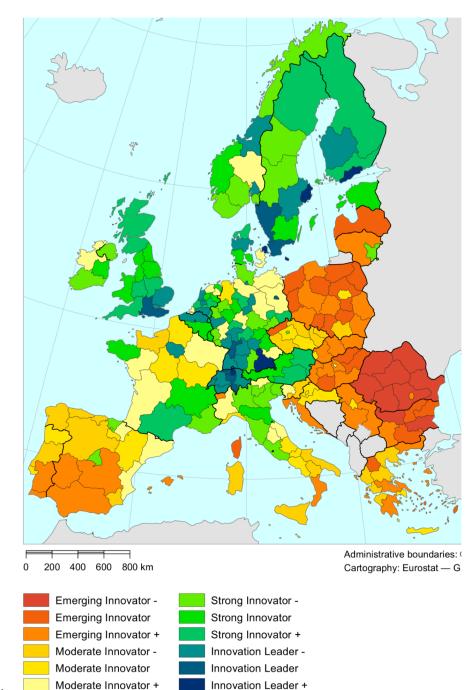
Validation WS: target 15 triple helix stakeholders from the region the HEI is situated in and additional participants from the fourth helix

NUTS II	Partner	RIS3 responsible organisations from HEIs region	National RIS3 responsibl e org.	RIS3 responsible org from another region	Local public administration from the HEIs region	HEI representative s from the HEIs region	Business representative s from the HEIs region	Civil society from the HEIs region
Marche (IT)	UNIMC	2	-	-	3	19	5	1
Budapest (HU)	CUB	-	4	-	-	8	2	-
Východné Slovensko (SK)	TUKE	2	-	2	1	6	2	2
North-West (RO)	BBU	1	-	-	3 + 1 giving feedback	5	4 +1 giving feedback	4
Norte (PT)	PBS	-	-	-	2	5	0	4

Territorial determinants & Policy context

NUTS II	RIS3	Туре (СР)	RIS 2021
Marche (IT)	national- regional	developed	moderate innovator
Budapest (HU)	national	developed	moderate innovator
Vychodne Slovensko (SK)	national (voluntary regional)	less developed	emerging innovator
North-West (RO)	national- regional	less developed (lagging)	emerging innovator
Norte (PT)	national- regional	less developed (lagging)	moderate innovator

Source: EU. Regional Innovation Scoreboard 2021.

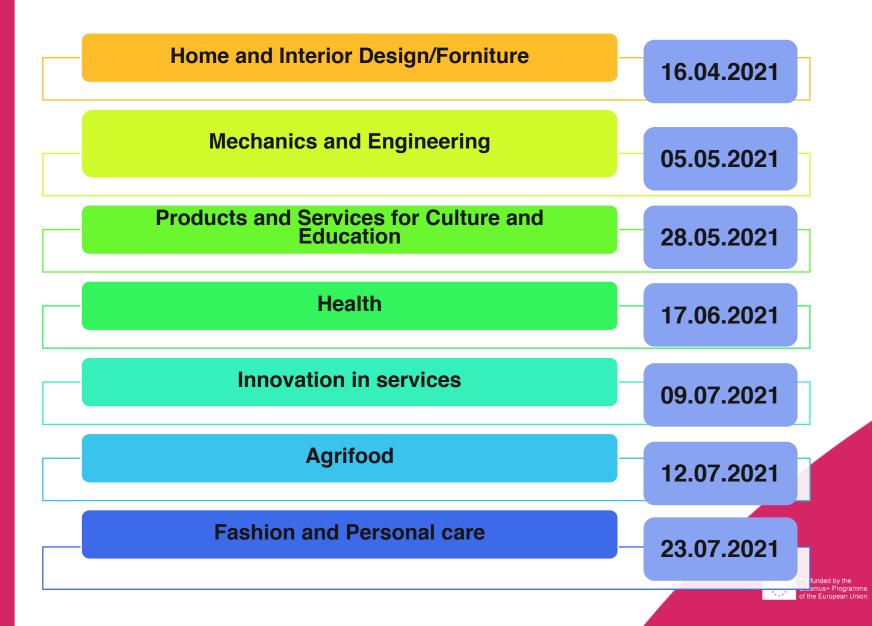


Institutional development driven by RE-ACT

Porto Business School / University of Porto	Participation in the project enabled PBS to engage with other HEIs to co-create solutions for divers, especially RIS3 related challenges. It also leveraged the connection with public actors, in line with PBSs strategic objective. Future opportunities also open for regional projects in areas such as health and tourism, new, emerging areas in Norte RIS3.	
CORVINUS UNIVERSITY of B U D A P E S T	The team widened the HEI's connections with other HEIs and the organisation responsible for RIS3. The project also strengthened the HEI's presence in its regional campus, providing with further contribution to the development of CUB's entrepreneurial profile.	
UNIVERSITATEA BABEȘ-BOLYAI	The team supported the HEI for the attraction of funds through new projects, that will contribute to further strengthening entrepreneurial/civic university profile. Strengthened cooperation with RIS3 responsible organization and other stakeholders at regional level.	
TECHNICKÁ UNIVERZITA V KOŠICIACH	The Results of the project were reflected in the design of the Košice Self-Governing Region's RIS3. The timing of the project activities and the development of the new RIS was an advantage. HEInnovate for RIS3 was also used in the preparation of a project in the Ulyseuss University Alliance.	
UNIVERSITÀ DI MACERATA I'umanesimo che innova	The team supported Marche Region (Italy) official stakeholder engagement activities on RIS3 revision. UNIMC moderated the discussion among regional innovation eco-system's stakeholders from each RIS3 priority area, by also investigating the civic/entrepreneurial role of HEIs in this context, based on RE- ACT's framework.	

OUR PATH WITH MARCHE REGION





TECHNICAL ROUNDTABLES FOR RIS3 REVISION

le European Commission support for the production of this publication does not contribute an endosement of a contents, which reflects the viewe only of the authors, and the Commissionsament be had responsible for y use which may be made of the information contained therein. (Project N = 612903-EPP-1-2019-1-PT-PPK2A-P1-FORWARD)

METHODOLOGY

FOR EACH TABLE:

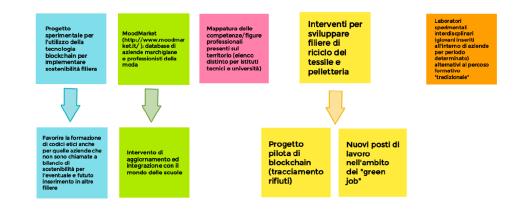
- Online meetings (TEAMS), use of Jamboard and Sli.do;
- Sharing and discussing the results of the questionnaire (from the registration form) about proposals for actions on identified innovation trajectories;
- Discussion on proposals for new innovation trajectories and re-organization of the existing ones (keeping/removing trajectories/identifying transversal ones)
- Discussion about LEARNING NEEDS and related ACTIONS/PROJECTS







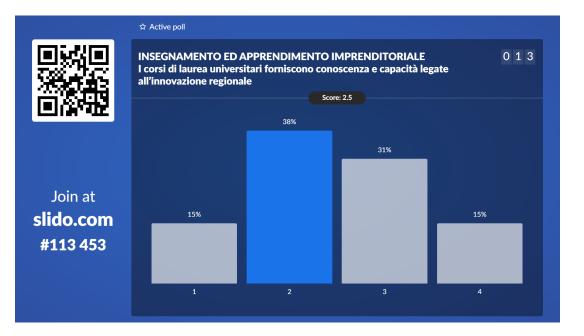
Partendo dal tuo settore, quali PROGETTI specifici porteresti avanti per migliorare il livello di innovazione sul territorio?

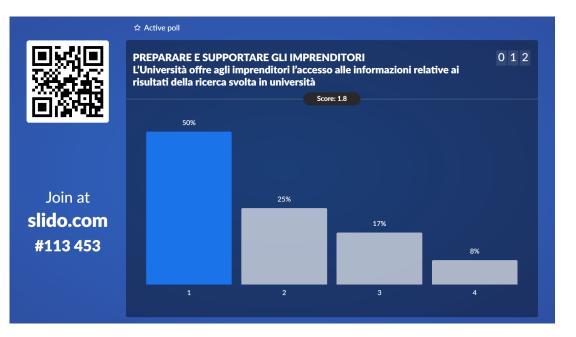


METHODOLOGY (2)

RE-ACT's application to the context:

- Presentation of the RE-ACT project during the meetings: objectives and activities;
- Use of live polls on slido.com;
- Testing and validating statements for the new "HEInnovate for RIS3" tool with participants from the meetings;
- Selection of statements from the most feasible HEInnovate dimension/area applied to the context (e.g. Entrepreneurial Teaching and Learning; Supporting Entrepreneurs; Digital Transformation and Capability...)
- Sharing and discussing the results of the live polls: proposals of actions for HEI's improvement







Transversal topics emerged in all focus groups

Business/research cooperation

- importance of industrial doctorates;
- mapping of:
 - competences on the territory in the specific fields
 - training needs of companies;
 - services provided by universities that are useful for companies;
 - skills in programmes taught in HEIs;
 - research areas developed at university level for the creation of databases aimed at sharing research results in relation to company needs and to avoid training overlaps between universities but also to facilitate transdisciplinarity;

- Companies/universities clusters. Hub of competences to draw upon in order to innovate > a continuous meeting point. Innovation brokers able to intercept the needs of the companies themselves;

- Digital innovation hubs (Marche Innovation Hub) and competence centres as tools to raise awareness in the area and support local businesses in launching innovative projects.



Transversal topics emerged in all focus groups

Innovation in training

- already delivered vocational training courses to be aligned with regional innovation trajectories and to be considered for possible follow-up (avoiding overlapping with new training proposals);
- importance of training new professional figures able to apply digital technologies at various company levels process/production/organisation (e.g.: digital marketing, artificial intelligence, remote management, interaction design, etc.);
- need for vocational training of craftsmen and technical professionals in combination with the use of technologies (also in ITS or IFTS courses);
- training for the development of digital skills in companies and in the operators of public bodies;
- training for the induction of young people engaged in design/training in the legal field.

Innovation in processes

- concept of One Health (in relation to Health, Food, Agrifood and enhancement of excellence);
- importance of product/process certifications linked to sustainability (link with blockchain);
- use of open data for R&D;
- importance of investment in supply chains (various areas);
- focus on blockchain in various areas;
- centralised high-tech platforms that support businesses in various areas;
- circular economy/reduction of waste and sustainable use of resources;
- strengthening of existing technology centres.



WIN-WIN STRATEGY

- From the methodology proposed by UNIMC, Marche Region gained support for the revision of the RIS3 (2021-2027) by making use of reports and insights from the meetings for the design of the new strategy;
- UNIMC and the RE-ACT consortium gained further insights for the implementation of the "HEInnovate for RIS3" tool and for the next steps of the project and, moreover, for the contribution HEIs could give to the regional innovation ecosystem.

TRANSVERSAL RESULTS FROM THE MEETINGS

Training and Education (of PhD students as a bridge between firms and university – R&D; new professional figures with digital skills; technical/artisanal professional figures; new professional figures trained for project design and management and legal issues)

Mapping competences, services, learning needs and research interests (to increase University-Business collaboration)

Investments on Open data/Supply-Value chain and traceability (e.g.: blockchain)



RESULTS

5. Il processo di scoperta imprenditoriale: le fasi che conducono all'individuazione delle traiettorie di innovazione per ogni ambito produttivo

Il processo di scoperta imprenditoriale è stato realizzato attraverso momenti di partecipazione e coinvolgimento di tutti gli attori del territorio (mondo accademico, imprese, enti locali, associazioni di categoria, investitori Istituzionali). Sono stati organizzati incontri in presenza e on line innescando un processo di self-discovery delle diverse potenzialità del territorio e del potenziale tecnologico che la Regione può sviluppare in un contesto nazionale ed internazionale.

Il processo di scoperta imprenditoriale si articola in tre fasi: 1) fase di ascolto, 2) fase di co-progettazione, 3) fase di restituzione dei risultati.

Fase di ascolto

Sono stati organizzati diversi incontri in presenza con l'obiettivo di privilegiare innanzitutto la fase di ascolto del territorio. Gli incontri si sono svolti presso aziende e altre location pubbliche proprio per testimoniare la volontà della Regione di rinsaldare la collaborazione tra gli attori della tripla elica (università, imprese, istituzioni). I tavoli di ascolto sono stati pubblicizzati sui siti e sui canali social e sono stati organizzati per ogni ambito di specializzazione e, in alcuni casi, su richiesta del territorio, sono stati organizzati anche ulteriori incontri su specifici settori produttivi. Tutti gli incontri sono stati organizzati in diretta streaming e le relative registrazioni sono state pubblicate in vari siti istituzionali, tra cui il sito Marchelnnovazione. Ai tavoli hanno partecipato i membri dell'Osservatorio regionale per la S3, le imprese individuate dalle associazioni di categoria e tutti coloro che si sono autonomamente registrati.

Fase di co-progettazione

Per ogni tavolo organizzato in presenza si è svolto anche un "Laboratorio" on line con l'obiettivo di condividere o far emergere nuove traiettorie di innovazione e nuove progettualità di eccellenza e possibili contaminazioni con altri ambiti. La partecipazione ai Laboratori è stata rivolta a tutti i soggetti invitati nella fase di ascolto e a tutti i soggetti che, dietro semplice richiesta alla struttura incaricata di gestire gli incontri, hanno manifestato la volontà di partecipare agli incontri on line.

Per la gestione di guesti Laboratori la Regione ha potuto utilizzare le competenze sviluppate nel territorio grazie al progetto europeo "RE-ACT - Strumenti di auto-riflessione per le università smart impegnate a livello regionale" co-finanziato dal programma ERASMUS+ 15 . Grazie alla collaborazione avviata con l'Università degli Studi di Macerata, partner del progetto RE-ACT, la Regione si è avvalsa per la gestione e mediazione di questi incontri, del supporto di un Facilitatore e di un Team di esperti¹⁶ in strumenti di auto-riflessione per la progettazione e realizzazione delle strategie di ricerca e innovazione per le RIS 3 regionali. RE-ACT è un progetto che mette in pratica quanto sperimentato con "HEInnovate" strumento di auto valutazione realizzato da OCSE e Commissione Europea nel 2013¹⁷, che mira a sperimentare l'utilizzo di un approccio metodologico interattivo per la progettazione e l'implementazione delle strategie di specializzazione intelligenti regionali. L'incontro con il Facilitatore del progetto RE-ACT è avvenuto grazie all'invito della Commissione Europea - accolto dalla Regione Marche - ad organizzare, nell'ambito dell'iniziativa HEInnovate, una giornata di confronto con le quattro Università regionali sul tema della SCOPERTA IMPRENDITORIALE 18 che si è tenuta il 30 settembre 2019.

Il coinvolgimento del Facilitatore del progetto RE-ACT e del suo team di supporto si è rivelato strategico per la gestione di questi Laboratori. La Regione infatti ha potuto sperimentare strumenti di confronto on line molto innovativi che hanno permesso non solo di intercettare e sistematizzare tutti gli input ricevuti dai «The involvement of the RE-ACT project Facilitator and its support team proved to be strategic for the management of these Workshops. In fact, the Region has been able to experiment very innovative online reflection tools that have allowed not only to intercept and systematise all the inputs received from the participants in the meetings, but also to receive further feedbacks thanks to the use of online consultation tools, on issues such as education and training, always with reference to the entrepreneurial discovery process.

Results feedback phase

Thanks to the support of the RE-ACT project, it was possible to share with all participants the outcomes of the meetings through synthetic reports of the inputs that emerged and their translation into trajectories of innovation with reference to each specific area of specialisation dealt with. In addition, the results of the various surveys conducted during the workshops were published. All the documents are available on the Marchelnnovazione website»

REGIONE MARCHE



La Strategia di Specializzazione Intelligente 2021-2027



Regione Marche

¹⁵ http://ris3heinnovate.eu/

¹⁶ Facilitatore: Prof. Alessio Cavicchi, ordinario Agribusiness, Sviluppo Rurale e Marketing – Università degli Studi di Macerata: Team del progetto React: Chiara Aleffi, Sabrina Tommasi, Concetta Ferrara. 17 https://heinnovate.eu/en

¹⁸ HEInnovate Workshop – lunedi 30 settembre 2019, Palazzo Leopardi, Regione Marche 30



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THANKS!

Self-reflection Tools for Smart Universities Acting Regionally

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