

HARNESSING TALENT IN EUROPE'S REGIONS



HTP Working Groups **Good Practices Catalogue (Volume 1)**

18/06/2025

The information and perspectives presented in this document are the result of the work of the Working Groups and do not represent any official opinion of the European Commission.

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1. Introduction

This Good Practices Catalogue (Volume 1) presents 31 good practices identified through the collaborative efforts of the four dedicated [Working Groups](https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/working-groups_en)¹ (WGs), established by DG REGIO under the [Talent Booster Mechanism \(TBM\)](https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/talent-booster-mechanism_en)² and the related [Harnessing Talent Platform \(HTP\)](https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform_en)³. The Digital, R&I, Health, and Territorial WGs have selected and compiled the practices in close relation to the [Strategic Roadmaps](#)⁴, published in February 2025. These roadmaps define the focus areas and problems relevant for each WG, detailing the intermediary and final outputs along with a clear timeline for implementation. This Catalogue marks the first joint deliverable produced by the Working Groups.

The Catalogue brings together a variety of good practices and insights, offering initial reflections on their impact and potential for replication across different regional contexts. It was primarily developed by WG members, who identified, assessed, and provided expert perspectives into each good practice, drawing on their regional and sectoral experience. The HTP Secretariat supported the process by designing a common methodology, facilitating the data collection process, and compiling the final document.

The distinctive value of this Catalogue lies in the personalised insights and conclusions from the members of the Working Groups. Each good practice has been carefully selected by the WG members based on its relevance, impact, and potential for replication, but more importantly, it has been contextualised by experts who have first-hand experience in implementing these practices or in tackling the challenges they address across various Member States and sectors. This Catalogue aims to be a resource grounded in real-world applications and enriched by the direct involvement of practitioners who have actively addressed the issues at hand.

The Catalogue is primarily intended for **policymakers, regional actors, and local and national practitioners**, offering them **practical examples and reflections** on how to support skills development, talent retention, and innovation in different contexts across the EU in the discussed areas.

The good practices align with the Strategic Roadmaps of the Working Groups, which define priorities for addressing talent-related challenges in line with the EU's current political agenda. The cases included in this first volume cover a range of key thematic areas:

- **Digital transformation:** enhancing the digital skills of teaching and training staff, implementing strategic initiatives for digital skills enhancement, and improving digital public services.
- **Research and Innovation (R&I):** conducting skills needs assessments, developing place-based innovation strategies, and fostering talent utilisation in regional innovation ecosystems.
- **Healthcare sector:** promoting upskilling and reskilling of the healthcare workforce, improving working conditions and service delivery models, and addressing the challenges posed by an ageing population through innovative and inclusive practices.
- **Territorial cohesion:** strengthening talent development, supporting lifelong learning and innovation, and promoting gender equality, multiculturalism, and social inclusion, particularly in medium-sized and small cities, towns, and rural areas.

¹ https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/working-groups_en

² https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/talent-booster-mechanism_en

³ https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform_en

⁴ The Strategic Roadmaps are available at the [downloads](https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/working-groups_en) section of each of the Working Groups: https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/working-groups_en

By addressing these pressing issues, the Catalogue highlights practical solutions that are adaptable to a variety of regional and thematic contexts. The challenges targeted by these practices are deeply rooted in broader systemic, socioeconomic, and demographic drivers. **In the digital domain**, fragmented education pathways and infrastructure gaps hinder widespread adoption of essential skills and technologies, while demographic and cultural barriers exacerbate inequalities. **In the R&I area**, brain drain, skills mismatches, and insufficient stakeholder engagement call for more integrated, place-based approaches to align education and innovation ecosystems. **In the healthcare sector**, digital transformation, the green transition, and demographic shifts necessitate new occupational profiles, interprofessional training, and improved working conditions to mitigate workforce emigration and attract talent. **Territorial challenges** include regulatory, administrative and behavioural barriers, and underinvestment in regions caught in the development trap, requiring structural reforms and localised strategies to retain and attract talent.

The Catalogue is structured into four main parts:

- **Context:** Introduces the focus and scope of each Working Group, outlining the specific challenges they aim to address through the good practices.
- **Methodology:** Outlines the approach used to identify, select, and develop the good practices, including the criteria and processes applied throughout.
- **Good Practices Catalogue:** Features the 31 good practices, organised according to the [HTP Knowledge Hub](#)⁵ thematic areas—Quality of Life and Equal Access to Services, Jobs and Skills, Demographic Dynamics and Migration, Competitiveness and Innovation, Digital and Physical Connectivity, Better Governance, and Green and Just Transition. Each good practice includes personalised insights from WG members explaining the relevance of the practice, along with key information such as its origin, actors involved, timeline, funding, and results. Reflections on success factors, challenges encountered, and—where applicable—links to media materials (e.g. short videos) are also provided.
- **Key Takeaways:** Summarises the most important findings from the good practices, including WG-specific insights and cross-cutting lessons. This last part includes common themes, success factors, and implementation challenges, along with mitigation strategies applied by the cases.

As part of the broader mission of the HTP, this Catalogue supports **knowledge sharing and cross-regional learning**. It also serves as a **stepping stone** for the WGs in producing their final outputs, including guidelines and policy recommendations as outlined in their Strategic Roadmaps.

Collecting good practices is an **iterative process**, with a **Volume 2 of the Catalogue planned for 2026**. That second volume will expand on the current work by incorporating additional good practices gathered through further data collection, outreach activities, and continued WG engagement.

Beyond the Catalogue, the good practices are also featured on:

- 1) The [HTP knowledge hub](#)⁶, where they are categorised by thematic area and searchable by region, type, and topic.
- 2) **Accompanying media materials**, including **video testimonials from WG members**, aimed at increasing engagement. These are referenced within the good practices and linked to the Catalogue content.

⁵https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/knowledge-repository/knowledge-hub_en

⁶ https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/knowledge-repository/knowledge-hub_en

2. Context

Through this Catalogue, the WGs aimed at identifying and promoting effective practices that address various challenges related to harnessing talent across the EU countries and regions. This section aims to provide an overview of the context in which these good practices were identified, focusing on the scope of work of each WG and the specific issues they target. Each WG has dedicated its efforts on proposing solutions and ideas within their respective domains, aimed at enhancing the attractiveness of EU regions as places to live and work. Their respective scope of work and focus are summarised below, with further details available in the Strategic Roadmaps developed by each WG.

It is important to note, however, that this Catalogue does not attempt to exhaustively cover all the challenges outlined in the WGs Strategic Roadmaps. The practices presented here reflect a first set of shared priorities and areas of synergies across WGs. Additional themes and underexplored challenges will be addressed in Volume 2 of the Catalogue, planned for 2026, which will build on ongoing data collection, broader outreach activities, and the continued work of the WGs.

Digital WG

High-quality digital infrastructure and digital public services at the regional level act as significant factors for attracting and retaining talent. Given the rapid pace of digitalisation and the twin challenges of demographic shifts and the green transition, ensuring equitable and timely access to digital tools and services, even in remote areas, has become increasingly important. This calls for the exploration of innovative digital solutions and service delivery models that increase coverage while addressing disparities in digital access and improving working conditions. It also calls for a reassessment of skills' requirements in sectors heavily impacted by these transitions, to ensure that the workforce is adequately equipped to navigate and thrive in the evolving digital and green landscape.

The Digital WG has collected good practices that provide regional and cross-sectoral solutions to these challenges:

a) Gaps in digital skills of educators

Many teachers and trainers lack the competencies to integrate digital tools into education effectively. Thanks to foundational EU frameworks like [DigComp](#)⁷, there is a strong basis for further developing cohesive training opportunities. This presents a significant opportunity to enhance infrastructure and align education programs more closely with real-world digital needs, paving the way for progress and innovation. This is crucial to ensuring that educators can prepare students for the digital economy.

b) Inadequate digital skills training for the workforce

The Digital [Decade Policy Programme 2030](#)⁸ sets ambitious goals for increasing digital proficiency, but systemic barriers—including poor coordination between national and regional levels, lack of agile skills development strategies, and resource constraints for SMEs—hinder progress. Strategic initiatives must ensure that all workers, regardless of sector or background, have access to digital skills training.

⁷ The integrated DigComp 2.2 framework provides more than 250 new examples of knowledge, skills and attitudes that help citizens engage confidently, critically and safely with digital technologies, and new and emerging ones such as systems driven by artificial intelligence (AI). DigComp 2.2. is available at the following link:
<https://publications.jrc.ec.europa.eu/repository/handle/JRC128415>

⁸ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en

c) Unequal access to digital public services

While digitalisation improves quality of life and economic opportunities, rural and remote areas still lag behind in broadband access and digital services. High costs, funding constraints, and limited digital literacy prevent citizens and businesses from fully benefiting from eGovernment and online public services. Investing in infrastructure, training, and policy alignment is key to reducing regional disparities.

R&I WG

The R&I WG focuses on creating dynamic regional innovation ecosystems to attract and retain talent. The WG addresses the need for effective place-based innovation strategies and the advancement of knowledge valorisation.

The R&I WG has gathered good practices that offer regional and cross-sectoral solutions to these challenges:

a) Gaps in the integration of skills development in innovation strategies

Many EU regions, especially in the South and East, struggle to align workforce development with innovation policies. Existing strategies, like [Smart Specialisation Strategies \(S3\)](#)⁹, often overlook the talent dimension, prioritising investment and governance instead. Addressing these gaps is crucial to ensuring long-term regional competitiveness.

b) Weak knowledge valorisation and underutilised talent for innovation

Despite strong research output, many regions fail to convert innovation into commercial success, a challenge known as the *European paradox*. Weak knowledge valorisation leads to brain drain and underutilised talent, particularly in less innovative regions. Strengthening R&D-commercialisation links is key to retaining skilled professionals and boosting regional economies.

Health WG

The existence of high-quality healthcare services at a regional level can be considered as a major push or pull factor for attracting and retaining talent. In the light of an ageing population, easy and timely access to healthcare, even in remote areas, gains additional importance. This requires the exploration of innovative services and care models that allow better service coverage and improve working conditions. It also imposes the need to rethink skill requirements in a sector that is heavily exposed to demographic challenges, while also being required to go through a green and digital transition.

The Health WG has collected good practices that provide regional and cross-sectoral solutions to these challenges:

a) Skill gaps and workforce shortages in the healthcare sector

Rapid sector transformations, an ageing workforce, labour shortages, and difficult working conditions create urgent skills gaps. Training must go beyond clinical skills to include digital competencies, soft skills, and lifelong learning. Effective strategies balance workforce development with daily challenges, ensuring professional growth while preserving mental health and job satisfaction.

⁹ https://ec.europa.eu/regional_policy/policy/communities-and-networks/s3-community-of-practice/about_en

b) Strained healthcare systems and difficult working conditions

New innovative, efficient, and sustainable healthcare models are essential to address staff shortages and rising healthcare demands. Variability in healthcare systems across the EU, including differences in resources, capacities, and digital infrastructure (e.g., the presence or absence of centralised electronic health records), creates challenges for harmonisation, interoperability, and equitable access to innovation. Solutions include flexible work arrangements, digital transformation, and green practices to increase efficiency, expand service coverage, and enhance job satisfaction.

c) Underutilisation of an ageing workforce

With 30% of Europeans expected to be over 65 by 2050, harnessing the potential of older workers is crucial. Policies must support flexible retirement, workplace adaptations, reskilling, and combating age-related discrimination. Investing in long-term care services, healthcare access, and inclusive employment strategies will help older individuals remain active contributors to the workforce.

Territorial WG

The Territorial WG focuses on ensuring that all EU regions, with particular attention to their medium-sized and small cities, towns, and rural areas, have the tools and resources to remain attractive places to live and work. The WG investigates how to better explore and capitalise on the unique potential of these areas to tackle population and socioeconomic decline.

The Territorial WG has collected good practices that provide regional and cross-sectoral solutions to these challenges:

a) Social exclusion and limited access to essential services

Less developed regions face higher poverty and social exclusion rates, worsened by brain drain and limited access to essential services like education and healthcare. The WG promotes gender equality, multiculturalism, and social inclusion to foster diverse, innovative, and thriving communities. Addressing gender-selective migration and ensuring equal opportunities can help retain and attract talent.

b) Limited lifelong learning systems and innovation capacity

Economic disparities and low investment in skills development trap regions in low-growth cycles. The WG focuses on lifelong learning, upskilling, and regional innovation to align workforce skills with industry needs. Collaboration with education providers, SMEs, and vocational training helps create sustainable job opportunities and competitive local economies.

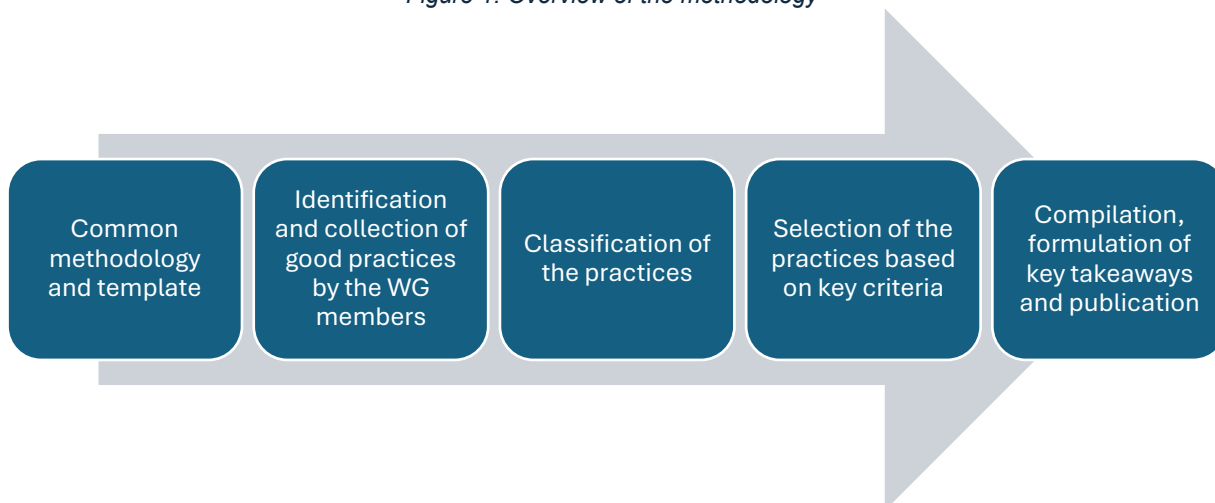
c) Brain drain and limited career opportunities in rural areas

Brain drain and limited career prospects in rural areas require targeted policies for talent retention and attraction. The WG promotes improved infrastructure, access to essential services, and entrepreneurial ecosystems to make these regions viable places to live and work. Improving digital connectivity is essential for sustaining regional economies, while supporting work-life balance can further enhance their attractiveness and resilience.

3. Methodology

This Catalogue was built based on the active contributions of WG members, who also consulted external stakeholders¹⁰ to gather diverse perspectives and insights. Its preparation was guided by a structured methodology to ensure the identification, collection, selection and presentation of high-quality good practices. This process began with the development of a standardised good practice template and was followed by systematic steps to collect, evaluate, and categorise practices, ensuring that they meet the defined criteria of relevance, effectiveness, transferability and the evidence base.

Figure 1: Overview of the methodology



Common methodology and template

A good practice was defined as ***“an initiative that effectively addresses a specific problem or achieves a desired goal while providing inspiration and potential solutions for other regions or contexts”***.

A good practice fiche template was then designed to capture comprehensive and comparable information about each practice, including its thematic focus, geographic context, institutional actors, funding mechanisms, and observed outcomes. Particular attention was given to ensure that the template facilitated an in-depth understanding of the context which led to each practice, the drivers behind its success, and the obstacles encountered during its implementation.

Moreover, the WG members have provided, in each fiche, insights on why they perceive this practice as particularly relevant. This included, for instance:

- First-hand experience with the practice – Members who were directly involved in, collaborated with, or closely observed the initiative shared reflections on its implementation, impact, and adaptability.
- Experience with similar challenges – Members reflected on how the practice aligned with their own experiences, drawing parallels to similar barriers and approaches encountered in their regional contexts.
- Group reflections on selection rationale – The WGs collectively assessed why the practice stood out, considering factors such as effectiveness and transferability.

¹⁰ These may include – for example – regional or local policymakers, practitioners, or individual experts who are active in areas relevant to the Working Group.

Identification and collection of good practices by the WG members

The subsequent phase focused on the collection of potential good practices. Following the methodology elaborated by the HTP Secretariat, this involved leveraging the expertise and networks of the WG members and conducting desk research.

WG members identified practices from their respective regions and sectors, drawing on their hands-on experience and access to relevant stakeholders. Desk research further expanded the pool of practices, incorporating insights from academic studies, policy reports, and databases maintained by national and regional agencies. Additionally, further consultations with other stakeholders are scheduled to contribute to Volume 2 of this Catalogue¹¹.

The practices were compiled into a shared repository (Excel file), which was distributed across all WG members. This centralised approach allowed for transparent collaboration and provided a platform where WG members could actively contribute. All members were encouraged to identify relevant practices, even if these practices pertained to themes outside their primary WG. This inclusivity ensured that the Catalogue captured a diverse range of good practices reflective of cross-sectoral expertise and perspectives.

Classification of the practices

Once collected, the practices were mapped to thematic areas defined by the [Knowledge Hub](#)¹² thematic areas¹³. These areas include:

- Quality of Life and Equal Access to Services,
- Jobs and Skills,
- Demographic Dynamics and Migration,
- Competitiveness and Innovation,
- Digital and Physical Connectivity,
- Better Governance, and
- Green and Just Transition.

Selection of the practices based on key criteria

The selection of good practices was guided by an evaluation process. Key criteria included:

- **Relevance** – defined as the extent to which the initiative's objectives align with the goals of the Harnessing Talent Platform (HTP), particularly in relation to talent development, attraction, and retention. This includes thematic relevance (e.g. addressing skills gaps, inclusion, or regional innovation) and alignment with the cross-cutting priorities identified in the Strategic Roadmaps.
- **Effectiveness** - assessed based on the main results and achievements of the initiative, particularly from the perspective of talent retention and development. This includes demonstrated outcomes such as improved service delivery, increased workforce participation, or enhanced skills matching, as well as the initiative's ability to tackle identified causes and problem drivers.

¹¹ Notably, the Health WG is preparing a detailed survey on working models and service conditions in the health sector to expand its scope of good practices related to upskilling and reskilling (survey planned for Q1 2025). Moreover, all WGs are planning consultations with a set of stakeholders (listed in their Strategic Roadmaps), which may be used to identify additional practices.

¹² https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/knowledge-repository/knowledge-hub_en

¹³ The thematic areas of the Knowledge Hub are core categories derived from the [Communication on Harnessing Talent in Europe's Regions](#) and the [Talent Booster Mechanism](#). They reflect key policy priorities and intervention fields under the EU Cohesion Policy and serve as the primary framework for organising knowledge and resources within the Knowledge Hub. Each thematic area captures a specific dimension of the talent development challenge and helps users explore related practices, tools, and strategies across different regional and policy contexts.

- **Transferability** - understood as the potential for the initiative to be adapted and successfully implemented in another regional, national, or thematic context. This includes the clarity of the model, the presence of enabling conditions (e.g. institutional support, funding mechanisms), and whether the approach has already been replicated elsewhere.
- **Evidence base** - reflecting the extent to which the initiative is supported by data, evaluations, or other forms of documentation demonstrating its success or impact. Practices with a stronger evidence base—such as published results, independent evaluations, or measurable outcomes—were prioritised.

The practices collected were scored and qualitatively assessed by WG members, with collaborative discussions held to refine the selection and ensure balanced representation across themes, regions, and institutional contexts.

Compilation, formulation of key takeaways and publication

Following the selection process, the practices were compiled into detailed fiches. These fiches not only present the core details of each practice but also offer critical reflections on their impact, challenges, and success factors.

For some selected practices, WG members developed media materials—such as video testimonials—to enhance engagement. These are referenced in the fiches and this Catalogue, and are accessible via the [Knowledge Hub](#)¹⁴, where practices can be filtered by thematic area. Finally, the analysis of the collected practices provided valuable insights into both WG-specific and common themes¹⁵, success factors and challenges. The HTP Secretariat conducted an initial review of all fiches to identify recurring issues and success factors within each WG, as well as commonalities across them. Based on this analysis, the Secretariat proposed a preliminary set of key takeaways, which were then shared with the WG members for further discussion and refinement. WG members contributed by validating the findings, providing additional insights based on their expertise and experiences, and refining the conclusions to ensure they accurately reflected the diversity of approaches and outcomes observed across different regions. The HTP Secretariat carefully reviewed each suggestion to refine and finalise the key takeaways, summarised in section 5. These takeaways will inform the development of the final outputs of the WGs, including policy recommendations and strategic frameworks.

¹⁴ https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/knowledge-repository/knowledge-hub_en

¹⁵ These themes are aligned with the cross-cutting issues identified in the [Working Groups Strategic Roadmaps](#), i.e. 1) skills, 2) inclusion, 3) innovation and 4) essential services and quality of life.

4. Good Practices Catalogue & WG members personalised insights

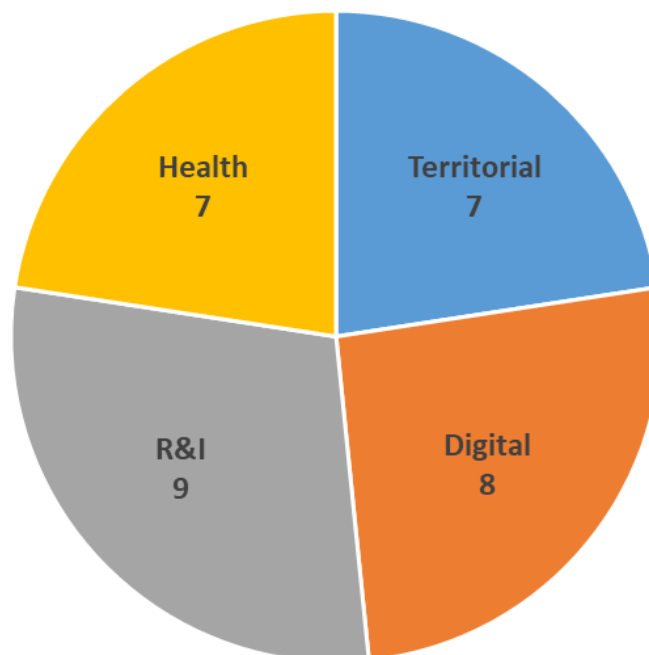
Overview

The **31 good practices** featured in this Catalogue reflect a diverse range of regional and thematic challenges across Europe. They show how different local, regional and national authorities across the EU are tackling shared challenges in creative and practical ways.

A key strength of this Catalogue is the **personal input from Working Group members**. Their insights shed light on the importance of each practice, the factors contributing to its success, and key considerations for peers looking to adopt similar solutions to their challenges. These reflections of the Working Group members are **based on their hands-on experience**, which adds a lot of value to the more technical information contained in the good practices.

The contributions of good practices by the 4 WGs are quite balanced: **The Digital WG showcased 8 practices** addressing digital skills, inclusion, and public service digitalisation; **the R&I WG selected 9 practices** focused on skills development, knowledge valorisation, and strengthening innovation ecosystems; **the Health WG selected 7 practices** aimed at healthcare workforce upskilling, service innovation, and ageing population challenges; and **the Territorial WG contributed with 7 practices** related to regional talent retention, entrepreneurship, and social inclusion.

Figure 2: Good practices selected - overview by WG

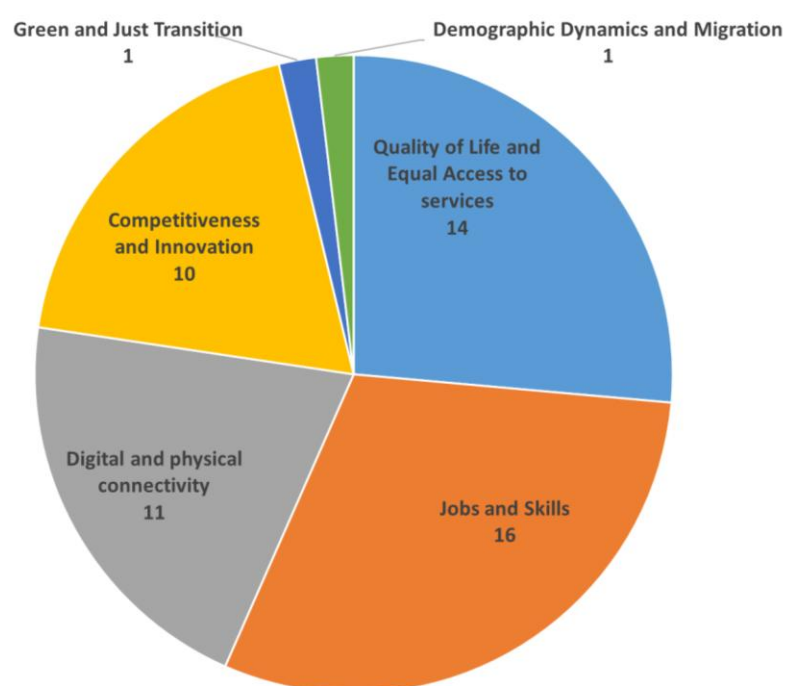


What makes this collection stand out is the variety of topics covered. Some practices focus on improving digital skills and inclusion, others on boosting innovation and supporting researchers, while others aim to strengthen healthcare systems or make rural areas more attractive places to live and work. From a thematic point of view, the practices align with key [Knowledge Hub](#)¹⁶ **thematic areas**, with a strong focus on Jobs and Skills (16), Quality of Life and Equal Access to services (14 practices), Digital and Physical Connectivity (11), and Competitiveness and Innovation (10). It is worth noting that the majority of the good practices are relevant to more than one of these thematic areas. For example, a digital skills project might also support healthcare workers or help people in rural areas access services. This shows how important it is to think across sectors and work together.

Those thematic areas most explored by the practices reflect the core challenges that the WGs prioritised for investigation as described in section 2, such as **social exclusion**, **skills gaps**, **digital divides**, and **fostering regional innovation**. These areas align with the WG's focus on addressing immediate issues affecting talent retention and attraction across EU regions.

In contrast, the Green and Just Transition and Demographic Dynamics and Migration themes were less represented, with only 1 practice each, as they were not initially planned for exploration by the WGs. These themes, along with Better Governance, may be addressed in Volume 2 of the Catalogue as part of ongoing research and future outreach.

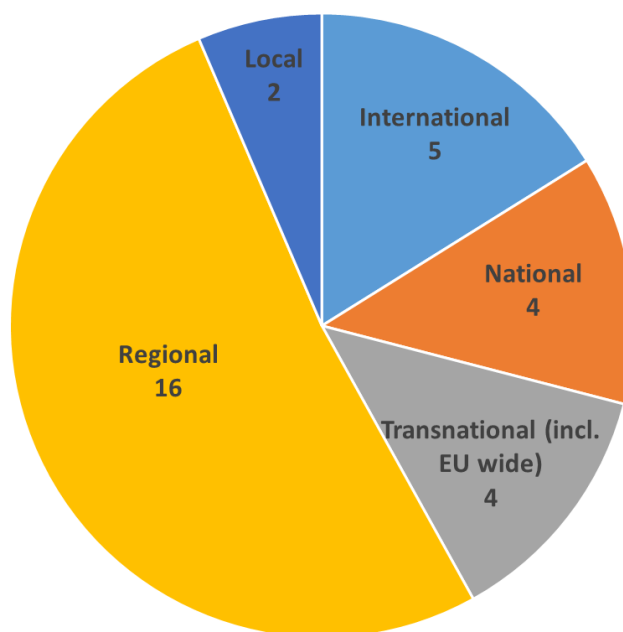
Figure 3: Good practices selected – overview by thematic areas of the Knowledge Hub



As concerns the **operational levels**, 5 practices are implemented at the international level, featuring collaboration between EU member states and non-EU countries (namely in the fields of health and research & innovation), 4 are transnational (intra-EU) practices (including 1 EU-wide practice), 4 practices are implemented at the national level, 16 are implemented at the regional level, and 2 at the local level. This reflects a diverse range of approaches, with a notable emphasis on regional initiatives. However, while each practice reflects the specific needs of its local, regional or national context(s), together they offer a wide range of ideas that others can learn from or adapt.

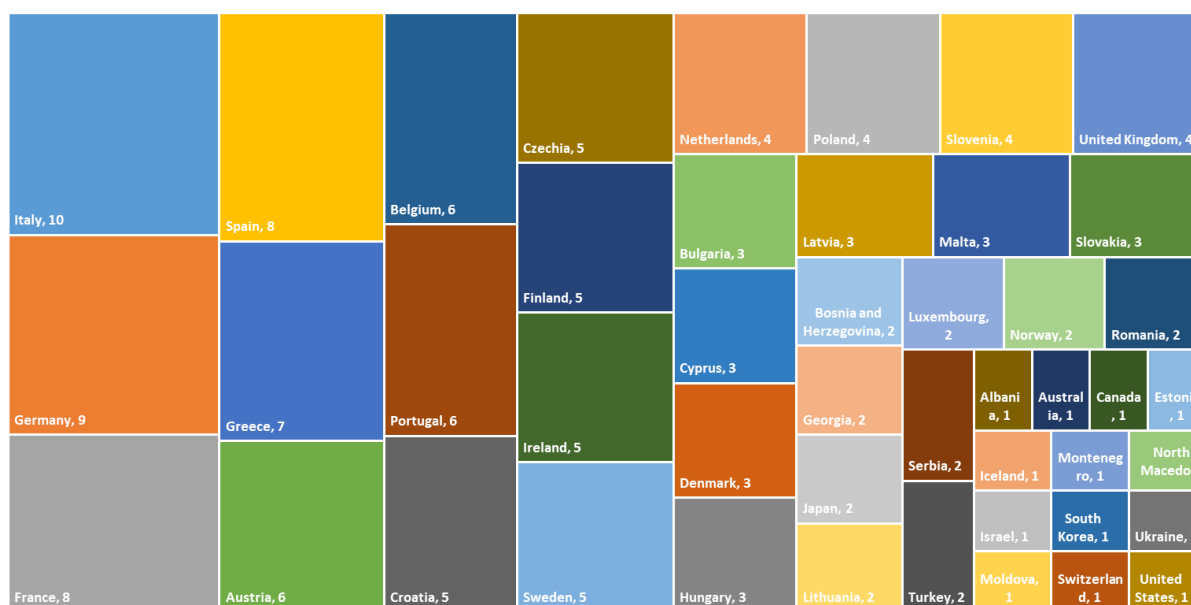
¹⁶https://ec.europa.eu/regional_policy/policy/communities-and-networks/harnessing-talent-platform/knowledge-repository/knowledge-hub_en

Figure 4: Good practices selected - operational level



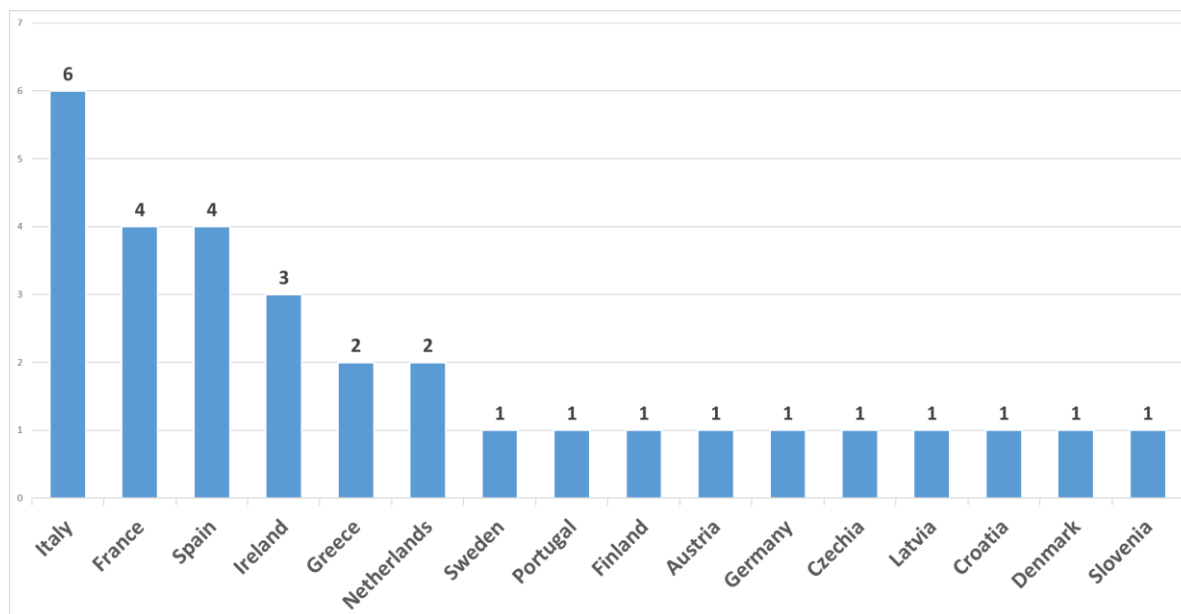
Geographically, the coverage of the good practices reflects the **diverse nationalities and operational levels of the WG members**, who come from various EU countries and work in different entities, ranging from national and EU-level to regional and local initiatives. It is important to mention that organisations from 46 different countries from all around the world have participated in the practices presented in this Catalogue.

Figure 5: Good practices selected – geographical coverage of participating organisations



Moreover, the practices are led by organisations from 15 EU countries. The highest number of cases come from Italy (6), France (4) and Spain (4), followed by Ireland (3), Greece (2) and Netherlands (2), Portugal (1), Latvia (1), Austria (1), Croatia (1), Denmark (1), Slovenia (1), Finland (1), Sweden (1), Germany (1), and Czechia (1).

Figure 6: Good practices selected – geographical coverage of lead organisations



Finally, most of the selected practices (26) are ongoing at the time of publication of this catalogue, while 5 are completed projects. Consequently, for the majority of the practices shown in this catalogue, only preliminary results are available, with longer-term outcomes and impacts not fully visible yet. Nevertheless, these practices were included due to the valuable insights they already offer regarding early results, making them noteworthy.

Here below, the 31 good practices are presented.

4.1. Renewing Vocational Education for Automotive Transformation (Berufliche Bildung erneuern für die automobile Transformation: BeaT)

Working Group:

Digital

Member State, Region:

Germany, Thuringia

Thematic areas:

- Green and Just Transition
- Jobs and Skills

Basic project details

Lead organisation:

Fraunhofer IKTS - Germany

Partner organisations:

- Friedrich Schiller University Jena
- Automotive Thüringen

Project duration:

- November 2021 - October 2024 (Project phase)
- January 2022 - December 2025 (Implementation phase)

Overview and objectives

The BeaT project responds to the significant challenges posed by the automotive industry's shift towards electric mobility and automation. This transformation has led to the need for new skills and competencies in vocational education and training (VET). The project specifically targets the Thuringia region in Germany, where the automotive sector is crucial to the local economy. BeaT aims to align vocational education with the evolving demands of the industry, ensuring that workers are adequately prepared for future roles in this rapidly changing environment. The main goal of the project is to renew vocational education to meet the changing demands of the automotive industry, especially in the context of e-mobility and the energy transition.

Context

The project addresses the need for updated qualifications and training in response to the shift towards battery-powered e-mobility.

Target groups

Employees in the automotive supply industry, vocational education providers, and industry stakeholders.

Actions

Qualitative empirical research, needs analysis, development of adaptation concepts, collaboration with industry and educational stakeholders.

Financial allocation

Total budget:

EUR 990 000

EU co-funding:

No

Sources of funding:

Energy Research Programme of the Federal Government of Germany

Working Group Insights

"Within this project, we have designed a new format - the Train the Trainer Workshop, because it puts companies in a position to manage and implement digital transformation and change in an existing work ecosystem. Its comprehensive approach in peer and blended learning and its practical plan, combined with stakeholder involvement and pilot tests, show the great potential for improving the quality and resilience of working environments in the automotive supply industry. The clear methodology and alignment with national and regional goals ensure sustainable and effective results.

By developing a company policy-aligned strategy and a systemic model (Train the Trainer Workshop) to improve digital skills, the project improved the skills and acceptance of automotive industry professionals to close the increasing skills gap due to digitalisation and transformation in the product and the production process of the automotive sector, thus improving the quality and resilience of the industrial sector in the Thuringian regions. This not only improved the quality of work and satisfaction of the companies involved but also made the regions more attractive for professionals and ensured long-term sustainability and growth".

Christoph Kellner, Policy Officer at the Representation of Thuringia to the EU

Results

The project provided a clear understanding of the current attitude and knowledge of automotive industry professionals towards transformation, change and product renewal. In addition, a format applicable to company-related skills was developed to improve employees' digital skills, which included necessary management and organisational changes. Third, recommendations were made for the introduction of peer and blended learning in automotive industry companies. Finally, a "Train the Trainer Workshop" practical plan for implementing a digital skills strategy was formulated and tested in selected pilot cases.

Success factors

Success factors include strong collaboration between research institutions, industry partners, and educational providers, as well as the development of targeted training programmes which were aligned with the evolving needs of the automotive sector.

Implementation challenges

Challenges include identifying specific qualification needs, aligning training programs with industry demands, and ensuring effective collaboration among stakeholders.

The conclusion of our expert Christoph Kellner, Policy Officer at the Representation of Thuringia to the EU.

“BeaT showed the way forward for allowing traditional industries to survive and thrive in a rapidly changing world. The focus is on a train-the-trainer program that teaches future-oriented skills such as adaptability, conflict management and communication to internal trainers and enables them to share these skills with their teams.”

Useful sources

Official website: <https://www.beat-learning.info/>

4.2. Digitální inkluze: Digital Inclusion Czechia

Working Group:

Digital

Member State:

Czechia

Thematic areas:

- Digital and Physical Connectivity
- Quality of Life and Equal Access to services

Basic project details

Implementing organisation:

Česko.Digital - Czechia

Initiative duration:

2023 – Ongoing

Overview and objectives

The Digital Inclusion Czechia initiative tackles digital exclusion by equipping social workers with essential digital skills through an educational platform. These trained professionals then support individuals with low or no digital literacy, empowering them to navigate online services, avoid digital fraud, and access opportunities in the digital economy. By fostering digital competency among both social workers and vulnerable citizens, the initiative bridges the digital divide and promotes broader social and economic inclusion, ensuring that everyone has equal access to services and the possibility to participate in the digital economy. The initiative contributed to talent retention by equipping social workers with essential digital skills, the initiative enhances their effectiveness, job satisfaction, and career prospects, thereby improving talent retention. Additionally, by increasing digital literacy among vulnerable groups, it expands the workforce, fostering long-term economic participation and inclusion.

The initiative strives to promote digital literacy and inclusion across all social groups. Its main objectives include empowering social workers and community facilitators, enhancing accessibility to digital services, and ensuring that disadvantaged individuals can confidently navigate digital tools and resources.

Context

The initiative addresses the digital divide by focusing on population segments that lack access to digital education and resources, mainly digitally excluded and vulnerable clients, who constitute 30% of the Czech population. A significant proportion of the Czech population either lacks digital literacy or has limited access to online services, preventing full participation in digital society.

Target groups

The initiative specifically targets social workers who engage with underserved communities, including three selected groups: children from excluded areas, socio-economically disadvantaged adults and the elderly. Through this approach, it creates a cascading effect where trained professionals pass on essential digital skills to those most in need.

Actions

The initiative conducts research and mapping to understand digital habits and skill gaps among vulnerable groups. It develops an educational platform with tailored learning modules and provides training programs for social workers to enhance their digital competencies. Community engagement is strengthened through collaboration with social service providers, data collection, and interviews to ensure interventions meet real needs. Additionally, the initiative creates educational resources and outreach initiatives to empower digitally excluded individuals and foster long-term digital inclusion.

Financial allocation

EU co-funding:

No

Sources of funding:

Česko.Digital has received support from several partners, including Google.org, NOTUM Technologies and the Avast Foundation. Additionally, Česko.Digital received 3,000,000 CZK (EUR 120 000) in funding from the PPF Foundation, as well as the support of Česká spořitelna's UX team and of dozens of volunteers.

Working Group Insights

"In agreement with the other members of the Digital WG, I selected this initiative because at Green Digital Innovation Hub, we have encountered similar challenges in digital inclusion. Key personnel, essential in bridging the gap between public services and community, often lack the digital skills required in an increasingly digital world. This initiative tackles the issue at its core - by empowering social workers, it creates a ripple effect of inclusion. Implementing a similar approach in our context could significantly enhance the reach and effectiveness of digital public services, ensuring no one is left behind."

This initiative aligns with our mission to develop digital skills, demonstrating how targeted upskilling can transform both professional capabilities and community impact. By equipping public servants with essential digital competencies, it enhances their effectiveness and career prospects, while strengthening the digital ecosystem by improving employability for marginalized groups. This mirrors Green Digital Innovation Hub services for companies and institutions with digital transformation strategies, ensuring that skills development leads to sustainable workforce integration and long-term social and economic benefits."

Ruxandra Miuti, Innovation Manager, Green Digital Innovation Hub

Results

The Digital Inclusion Czechia initiative strengthens the digital skills of social workers, enhancing talent retention and improving services for vulnerable groups. In the Czech Republic, 1.5 million people lack access to digital services, while another 1.4 million struggles with low digital literacy. Key challenges include mistrust in digital state services, vulnerability to online fraud, and the lack of digital skills among social service professionals. The initiative addresses these issues through the development of the online guide Pomáháme.Digital, which empowers social workers to support digitally excluded individuals.

Success factors

The initiative's success is driven by a well-researched, needs-based approach, strong collaboration with public institutions and NGOs, and financial support from key partners. The development of Pomáháme.Digital ensures sustainable impact by providing structured training and resources for social workers. Additionally, AI-driven tools enhance content accessibility and personalize learning experiences, making digital literacy training more effective. The initiative's systemic approach—bridging policy, education, and community engagement—ensures long-term success in tackling digital exclusion. The initiative ensured its continued impact by providing structured training and digital resources that remain accessible beyond the project's initial funding period.

Implementation challenges

Key challenges include engaging hard-to-reach vulnerable groups, sustaining long-term training programs, and ensuring continuous digital support for social workers and beneficiaries. Mistrust in digital state services and the risk of digital fraud further complicate adoption. Aligning the initiative with regional digital strategies, such as those in the AdCentric Business Plan, has helped address these obstacles, ensuring broader impact. Strengthening collaboration between public administration and NGOs remains crucial for scaling and maintaining long-term effectiveness.

The conclusion of our expert Ruxandra Miuti, Innovation Manager, Green Digital Innovation Hub

"This good practice's true strength lies in its cascading model of digital empowerment - by upskilling social workers, it creates a multiplier effect, ensuring that digital literacy reaches the most vulnerable populations. The use of a tailored educational platform, combined with its unique needs analysis method for personalised learning, makes it a scalable and adaptable solution for bridging the digital divide across different communities and contexts."

Useful sources

Official website: <https://en.cesko.digital/projekty/digitalni-inkluzi/home>
<https://en.cesko.digital/projekty/digitalni-inkluzi/o-projektu>
<https://www.pomahame.digital/>

4.3. Digitālā biznesa apmācības sievietēm: Digital Kick, assisting women to create digital businesses

Working Group:

Digital

Member State:

Latvia

Thematic areas:

- Digital and physical connectivity
- Jobs and Skills

Basic project details

Lead organisation:

DIGITAL INNOVATION PARK, Liepāja - Latvia

Partner organisations:

ATAST

Initiative duration:

5-30 April 2021

Overview and objectives

'Digital Kick' is an intensive training program that helped women to achieve their dream of creating their own business in the digital environment within four weeks. Informative sessions, lectures, and practical workshops under the guidance of knowledgeable and experienced professionals – this well-thought-out program served as a springboard for the start of your digital career. The goals of the activity were to: a) Empower women by providing them with digital skills training and support to enhance their employability and participation in the digital economy; and b) Bridge the gender digital divide and promote digital inclusion for women.

Context

The economic downturn caused by the COVID-19 pandemic disproportionately affected women, particularly in industries with high female representation, such as retail, hospitality, and arts. Many women lacked the capital to launch their own businesses. Many also lacked digital skills and business know-how to monetise their hobbies. Finally, a lack of confidence and exposure to entrepreneurship made it difficult for them to take the first step.

Target groups

Women of all ages, particularly those with limited digital skills.

Actions

Digital skills training, workshops, mentorship programs, and networking events.

Financial allocation

Total budget:

EUR 10 000

EU co-funding:

No

Sources of funding:

British Council “People to People Cultural Engagement Programme”

Working Group Insights

“This practice resonates with me because, in our region, many women struggle to transition into the digital economy due to limited digital skills and entrepreneurial knowledge. The Digital Kick initiative directly addresses this gap through structured training, mentorship, and practical workshops. By equipping participants with essential digital and business skills, it provides a strong foundation for professional development. I believe that adapting this model locally could help more women gain confidence and achieve economic independence in the digital space.

By offering targeted digital skills training, mentorship, and hands-on workshops, this initiative played a crucial role in talent development. It empowered women to turn their hobbies and ideas into viable digital businesses, fostering entrepreneurship and financial independence. The structured support system, coupled with guidance from experienced professionals, ensured participants not only acquired technical skills but also built confidence in navigating the digital economy. As a result, the program strengthened employability, supported long-term career growth, and contributed to a more inclusive entrepreneurial ecosystem in our region.

Linda Alksne, IT Service Management Process Manager, Liepāja Central Administration

Results

- 60 women from Latvia who were without a permanent job due to the pandemic had the opportunity to develop their hobby or passion from an idea into a digital business. Forty-five women successfully completed the programme.
- As part of the training, participants generated and refined their business ideas, validated them, gained knowledge about starting a business, and learned to use digital tools essential for business development and growth. These included social networks, website creation, photography, video production, and editing.
- During mentoring sessions, participants shared their progress, discussed how their business ideas were evolving, and received valuable insights from mentors. By the end of the sessions, participants acknowledged the significance of the knowledge and recommendations they had gained.

Success factors

The success factors of this initiative were the collaboration between public and private sectors, and the fact that it leveraged social networks, mentorship programmes, and accessible online materials to reach women seeking digital entrepreneurship opportunities.

Implementation challenges

Challenges include reaching and engaging women with limited digital skills, ensuring the accessibility of training programmes, and providing ongoing support.

The conclusion of our expert Linda Alksne, IT Service Management Process Manager, Liepāja Central Administration

"There are plenty of initiatives all over Europe that help women develop their entrepreneurial skills. What makes 'Digital Kick' unique is that it came at the right time—during the pandemic—when businesses had to find new ways to reach clients and operate online. It provided women, including young mums, with essential digital skills, ensuring they could adapt, grow professionally, and sustain their business activities in a rapidly changing world."

Useful sources

Official website: <https://www.digip.lv/digital-kick#par-apmacibam>

4.4. DIGITClue: Digital Inclusion in Teacher Education

Working Group:

Digital

Member States:

Austria, Croatia, Germany

Thematic areas:

- Digital and physical connectivity

Basic project details

Lead organisation:

Universität Wien - Austria

Partner organisations:

- DIU Dresden International University GMBH
- University Zadar

Project duration:

June 2021 - May 2023

Overview and objectives

DIGITClue aimed to equip teachers with the skills, knowledge, and tools to integrate ICT and e-learning into inclusive teaching. The project bridges research on inclusive pedagogy, ICT-based learning tools, and transcultural education to develop teacher education software. A key innovation is its commitment to inclusivity, actively involving teachers with special needs, multilingual backgrounds, or those in remote and marginalised areas throughout the development and delivery of educational materials, ensuring accessibility and effectiveness for diverse teaching environments. The goal of DIGITClue is to enhance digital literacy among teachers and promote inclusive education practices. The project aims to integrate digital inclusion into teacher education programmes, ensuring that future educators are equipped with the skills and knowledge to support all students in a digital learning environment.

Context

The project addresses the need for teacher education programs to include digital inclusion, ensuring that all students can benefit from digital learning tools.

Target groups

Teacher educators, pre-service teachers, and educational staff.

Actions

Training sessions, workshops, development of digital resources, and research projects.

Financial allocation

Total budget:

EUR 104 296

EU co-funding:

Yes

Sources of funding:

Erasmus+

Working Group Insights

"In agreement with the other members of the Digital WG, I selected this good practice because it addresses the critical challenge of integrating ICT into inclusive teaching, especially for teachers in remote, marginalised areas or with special needs. The project's innovative approach bridges research and practice, ensuring accessibility and effectiveness. The active involvement of diverse educators enhances digital teaching competencies and fosters inclusivity. The project's strong potential for scalability and impact convinced stakeholders of its value, making it a transformative model for modern, inclusive, and technology-driven education."

DIGITClue contributes to talent attraction, development, and retention by equipping teachers with essential digital skills, enhancing their professional growth and adaptability. The project fosters continuous learning, increasing job satisfaction and retention. Its emphasis on accessibility and innovation ensures that educators feel supported and valued, creating a more inclusive and skilled workforce, ultimately strengthening the education sector's talent pool".

**Robert Kelemen, Msc. Assistant Head for development programs,
Department for Education, Culture and Sport, Varazdin County**

Results

DIGITClue increased teacher empowerment, and the recognition/acknowledgement of diversity. It contributed to skills development, by developing a portfolio of concepts and didactical tools/handbooks.

Success factors

Success factors of this project included the collaboration with digital experts, and the development of inclusive digital resources. Strong partnerships between universities and stakeholders across regions ensured alignment of goals and resource sharing.

Implementation challenges

Challenges included integrating digital inclusion into existing teacher education curricula, providing ongoing support for educators, and ensuring the accessibility of digital resources.

The conclusion of our expert Robert Kelemen, Msc. Assistant Head for development programs, Department for Education, Culture and Sport, Varazdin County

"DIGITClue proves that digital inclusion - specially in remote and underserved regions- starts with teachers: empowering them with ICT skills ensures no student is left behind in the digital age."

Useful sources

Official website: <https://www.digitclue.net>

<https://erasmus-plus.ec.europa.eu/projects/search/details/2020-1-AT01-KA226-HE-092663>

4.5. Punti di Facilitazione Digitale: Regional network of digital facilitation services

Working Group:

Digital

Member State, Region:

Italy, Apulia

Thematic areas:

- Digital and physical connectivity
- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

Regione Puglia (Regional Council of Apulia) - Italy

Partner organisations:

- ANCI
- Economic Development Department of the Regional Council of Apulia
- 45 Social Territorial Areas in which the 257 Apulian Municipalities are aggregated
- Strategic regional agency for health and social care - AReSS Puglia
- Regional Agency for Active Labor Policies - ARPAL Puglia
- InnovaPuglia (operational management)

Initiative duration:

2024 – Ongoing (Until December 2025)

Overview and objectives

The initiative aims to encourage the use of online services by private individuals and public administrations, thus simplifying the relationship between citizens and the Public Administration. The initiative aims to promote digital skills and reduce the digital divide by providing digital facilitation services across the Apulia region. It focuses on creating "Punti di Facilitazione Digitale" (Digital Facilitation Points) where citizens can receive guidance and training on using digital services, thus allowing them to have equal access to services and improve their quality of life.

The initiative also aims to enhance digital literacy and ensure all citizens can access and use digital services. Digital facilitation services are individual and on-demand support activities for citizens in using the Internet and digital devices for operations that allow them to participate in social life (e.g. SPID, PagoPa, digital in common life) and training for an effective and pervasive national digital literacy.

Context

The initiative addresses the digital divide by providing accessible training and support to people with limited digital skills. In 2023, the share of citizens in Italy with at least basic digital skills was 45.7%, compared to 55.5% in Europe. Among 20-24-year-olds in Italy, 61.7% had basic digital skills, while this percentage dropped to 42.2% among 55-59-year-olds and 19.3% among those aged 65-74. At the regional level, a strong disparity emerges between the Centre-North and the South.

Target groups

All citizens, particularly those with limited digital skills, in particular adult citizens with no or low digital skills or who have not used the internet in the last 3 months, in particular the weakest sections of the population, at risk of digital exclusion.

Actions

The initiative is enhancing social inclusion through the establishment of digital facilitation points, training programs, one-on-one guidance, and support for using digital services. This support includes:

- Individual personalised training/assistance (so-called facilitation), by reservation or at the counter.
- Online training, also in self-learning and asynchronous mode, through independent access to materials already available in the catalogue of training resources on the website *Repubblica Digitale* or created ad hoc by promoting personalised paths.
- Training in groups (in person and with online channels) through micro-courses of applications/exercises, resolution of practical problems, any in-depth analysis, self-assessment tests.

Financial allocation

Total budget:

EUR 10 200 000

EU co-funding:

Yes

Sources of funding:

NextGenerationEU (100%)

Working Group Insights

“This initiative resonates with me because it directly addresses the challenge of digital inclusion in Apulia, helping to bridge the region’s lower performance in relation to DESI Index parameters. The success of the initiative demonstrates the strong willingness of Apulian people to become digital citizens. This has been achieved through a widespread training effort across the territory, increasing digital inclusion among citizens and optimising digital services provided by public administration. Additionally, it has strengthened connections with other innovation ecosystems and aligns with the approach our Regional Administration has tested over the past 10 years, fostering a growing open innovation model.

A comprehensive digital inclusion initiative could strengthen opportunities for talent attraction and retention, opening new market perspectives for digital SMEs and startups. This could be achieved both by bridging the digital divide in Apulia and by increasing demand for innovative public services among citizens. Digital Facilitation Points thus become the starting point of an information hyperspace, characterised by integration, interconnection and interactivity between multiple social, institutional and economic spaces, in line with a Data Economy model, as defined in the Mare a Sinistra Strategy.”

Gaetano Grasso – Responsible of Technology Monitoring Office/InnovaPuglia SpA in house ICT company of the Regional Council of Apulia, thanks to the insights provided by Vito Bavaro - Manager of Digital Growth of People, Territory and Business Section of the Regional Council of Apulia - Department of Economic Development

Results

Until February 2025, 121.856 citizens have been registered and involved in the 231 Facilitation Desks and 139.977 accesses to public services have taken place.

Success factors

Success factors include the establishment of accessible facilitation points, comprehensive training programs, and strong collaboration between different Public Entities (Municipalities, Health Agencies, Job public agencies etc.) These efforts target different social groups, particularly in the inner areas of the region, through the involvement of third-sector bodies and municipal social inclusion offices. Activities in these areas are managed by welfare and inclusion experts who understand the needs of the population and can effectively engage the most vulnerable socio-economic groups.

Implementation challenges

Challenges include reaching and engaging citizens with limited digital skills, ensuring the accessibility of facilitation points, and providing ongoing support and training by a pervasive communication work. A broad communication campaign and locally embedded facilitators helped increase outreach and trust among potential beneficiaries.

In line with the European Union’s Digital Decade 2030 strategy, the Regional Council of Apulia supports digital transformation as a means to enhance the competitiveness and attractiveness of the territory. The goal is to increase the number of citizens with adequate digital skills and achieve a highly qualified digitalisation of public services.

The conclusion of our expert Gaetano Grasso – Responsible of Technology Monitoring Office/InnovaPuglia SpA in house ICT company of the Regional Council of Apulia, thanks to the insights provided by Vito Bavaro - Manager of the Digital Growth of People, Territory & Business Section of the Regional Council of Apulia - Department of Economic Development

“What makes this practice unique is that by assisting citizens on how to access digital services through tailored training, 'Punti di Facilitazione Digitale' create opportunities for talent retention by job engagement, particularly in digital SMEs and startups thanks to digital public services offered by ARPAL, (Regional Agency for Active Labour Policies), such as "Lavoro per te Puglia" ("I work for you Apulia")

<https://arpal.regione.puglia.it/web/quest/servizi/persone/lavoroperte-puglia-persone> and like “GOL - Garanzia di occupabilità dei lavoratori” (“Employability guarantee for workers”) <https://arpal.regione.puglia.it/web/quest/opportunita/gol> that, supported by the digital facilitator action in collaboration with ARPAL, have been the main required services access at the 'Punti di Facilitazione Digitale' up today and taking in account that in Apulia, already at the second quarter of 2024 the employment rate for 15-64 year olds is increased +0.8% and the unemployment rate decreased (-1.8 percentage points) both compared to the second quarter of 2023”.

Useful sources

Official website: <https://www.regione.puglia.it/web/trasformazione-digitale/punti-di-facilitazione-digitale>

<https://innovazione.gov.it/italia-digitale-2026/attuazione-misure-pnrr/>

<https://www.regione.puglia.it/web/trasformazione-digitale/punti-di-facilitazione-digitale>

<https://www.regione.puglia.it/it/web/trasformazione-digitale/punti-di-facilitazione-digitale/notizie-dai-punti>

<https://www.regione.puglia.it/web/trasformazione-digitale/-/in-fiera-del-levante-il-primo-forum-della-rete-regionale-della-facilitazione-digitale?redirect=%2Fweb%2Ftrasformazione-digitale%2Fpunti-di-facilitazione-digitale>

<https://youtu.be/R-OEiXZiWIA>

4.6. Workshops for Digital Literacy of people of the third age

Working Group:

Digital

Member State, County:

Croatia, Varaždin County

Thematic areas:

- Demographic Dynamics and Migration
- Digital and physical connectivity
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

European Talent Centre Croatia – Centres of Excellence of the Varazdin County, adult education institution - Croatia

Partner organisations:

- Varaždin County
- University of Zagreb, Faculty of Organization and Informatics
- Federation of Pensioners' and Elderly Persons' Associations
- Towns and municipalities of Varaždin County

Initiative duration:

October 2024 - December 2026

Overview and objectives

The initiative consists of workshops designed to encourage the development of basic digital skills among the elderly. These include searching for information online, using email, navigating social networks, accessing the government's one-stop-shop portal (e-Citizen), using e-banking services, and ensuring safe Internet use.

The initiative aims to enhance digital literacy among elderly individuals by providing hands-on training, enabling them to participate more fully in the digital world. The goal of the initiative is to bridge the digital divide and enhance the digital skills of elderly individuals, promoting their social inclusion and independence, and allowing them to have equal access to services.

Context

The initiative addresses the digital divide among elderly individuals, many of whom may lack the skills and confidence to use digital technologies effectively.

Target groups

Elderly individuals, particularly those with limited digital skills.

Actions

Social inclusion: Mapping digital profiles, creating a platform for those who support seniors in building digital skills, developing a manual to enhance the digital competencies of social service workers, with the aim of enabling them to transfer these skills to digitally excluded and vulnerable seniors—and collecting ideas to improve the digital skills of elderly individuals.

Financial allocation**Total budget:**

EUR 40 000

EU co-funding:

No

Sources of funding:

- County Government: EUR 25 800
- Private funding: EUR 14 200

Working Group Insights

“In agreement with the other members of the Digital WG, I selected this good practice because it addresses the critical challenge of insufficient digital skills among people of the third age and vulnerable groups. Many seniors struggle with online services, thus limiting their access to essential resources. This practice offers a hands-on, practical approach with great potential to improve digital inclusion. It stands out as an innovative and scalable solution, equipping elderly individuals with critical skills. The initiative’s accessibility, real-world impact, and ability to foster independence is its real added value.”

Implementing this practice contributes to talent retention by empowering elderly individuals and vulnerable groups with digital skills, enabling them to stay active in society and the workforce. Bridging the digital divide enhances their ability to access services, communicate, and even pursue remote or part-time work. Digital literacy fosters lifelong learning and independence, reducing social isolation. The initiative’s inclusive approach supports an ageing yet capable population, allowing them to contribute their experience and skills, ultimately strengthening the local talent pool”.

**Robert Kelemen, Msc. Assistant Head for development programs,
Department for Education, Culture and Sport, Varazdin County**

Results

The initiative’s key outputs include workshops, educational materials, and a support network, equipping elderly individuals with essential digital skills. As a result, participants gain confidence in using online services, email, social networks, e-banking, and government portals like e-Citizen. These achievements reduce digital exclusion, enhance social inclusion, and promote lifelong learning. By fostering independence and digital empowerment, the initiative improves the quality of life for seniors, enabling them to stay connected, access vital resources, and actively participate in today’s digital society.

Success factors

Success factors include tailored training programmes that addressed the specific digital needs of elderly individuals, increasing confidence and digital participation. They also include strong community support, and collaboration with local organisations.

Implementation challenges

Engaging elderly individuals, ensuring accessibility of trainings, and providing ongoing support.

The conclusion of our expert Robert Kelemen, Msc. Assistant Head for development programs, Department for Education, Culture and Sport, Varazdin County

“This good practice proves that digital literacy is for everyone. Empowering seniors with digital skills fosters their independence, inclusion, and connection in today's world.”

Useful sources

Official website: <https://etch.hr>
https://glasila.hr/upload_data/site_files/svvz1623.pdf
<https://digitalnapismenost.com.hr/istrazivanja/>
<https://projects.foi.hr/projects/public/active/en/359>

4.7. Scuola Digitale Liguria: Liguria Digital School

Working Group:

Digital

Member State, Region:

Italy, Liguria

Thematic areas:

- Digital and physical connectivity
- Jobs and Skills

Basic project details

Lead organisation:

Regione Liguria (Liguria Region) - Italy

Partner organisations:

- Regional School Office
- EPICT Italia Association
- Liguria Digitale (operational management)

Project duration:

October 2016 – Ongoing

Overview and objectives

Scuola Digitale Liguria is a strategic project by the Liguria Region, funded with over €7 million from the European Social Fund, the European Social Fund +, and the European Regional Development Fund (ERDF). It is designed to support educators with tools and resources to foster innovative digital learning experiences. It aims to modernise educational institutions, enhance VET programmes, and promote digital skills for students. The project adopts a collaborative, participatory model, engaging stakeholders to create a forward-looking digital education ecosystem for the region. The project aims to support the integrated regional education system - including schools of all levels and Regional Institutes of Vocational Education and Training (IeFP) - in implementing innovation within schools in order to equip young people with specialised ICT skills demanded by the labour market and prepare them for digital citizenship, with a specific emphasis on addressing the gender gap. Additionally, the project seeks to establish role model schools that can serve as benchmarks for best practices in digital education and innovation.

Context

The project addresses the gap between the rapid digitalisation of society and the readiness of regional education systems to respond effectively. While students, as digital natives, rely increasingly on digital tools for communication, learning, and creating content, many schools face challenges in integrating digital technologies into curricula, supporting teachers in adopting innovative practices, and meeting labour market demands for specialised ICT skills.

Target groups

Scuola Digitale Liguria targets a diverse range of stakeholders within the regional education ecosystem, including teachers, educators, and school administrators across all levels, as well as students in primary, secondary, and vocational education. It also engages other key stakeholders, such as businesses and associations, to ensure alignment between education and the needs of the labour market.

Actions

- Workshops and events for educators and students focused on digital innovation and teaching methodologies.
- Tailored, free IT support for schools, providing services from hardware and software setup to guidance on digital tools.
- A mentorship programme, with a network of teacher ambassadors acting as local reference points for peers.
- STEAM (Science, Technology, Engineering, Arts, and Mathematics)-focused projects addressing the gender gap.
- Pathways for Transversal Skills and Orientation (PCTO) to connect students with digital careers.
- An online observatory to document and share innovative practices.

Financial allocation

Total budget:

EUR >7 000 000

EU co-funding:

Yes

Sources of funding:

- European Social Fund (2014-2020) / European Social Fund + (2021-2027)
- European Regional Development Fund (ERDF)

Working Group Insights

“This good practice demonstrates a scalable, regionally coordinated system innovation model to address the challenges that education and training systems face in preparing individuals for the digital economy and society. By accelerating the digital transformation of schools, equipping young people with specialised ICT skills, and preparing them for digital citizenship—particularly with a focus on addressing the gender gap—Scuola Digitale Liguria has successfully fostered knowledge exchange and resource pooling. This has been achieved through a multi-stakeholder approach, bringing together schools, educators, businesses, and associations to drive innovation in education.

By integrating hands-on learning opportunities (e.g., school-to-work transition and mentorship programs) to equip young people – especially girls - with ICT and STEAM skills, and offering professional development for educators, the project has contributed to developing digital talent in the region. Furthermore, by fostering connections between schools and local businesses through collaboration and co-working opportunities, it has facilitated pathways for students to remain and work within the region. Ultimately, Scuola Digitale Liguria has established a modern digital education ecosystem, potentially enhancing the region’s attractiveness to students and professionals.”

Miriam Lanzetta, Head of International Projects at Lascò

Results

- Creation of an online observatory to share over 5,350 innovative projects and best practices among schools.
- Direct engagement of more than 5,400 teachers and 3,800 students in digital education initiatives.

- Completion of over 1,830 interventions by the Digital Team, providing free technical and administrative support to schools.
- Organisation of more than 150 events, webinars, and workshops for knowledge exchange and capacity building targeted at teachers and students.
- Development of a toolkit and thematic webinars to encourage girls to pursue technical and scientific studies and careers.
- Establishment of a regional community of over 5,600 educators, fostering innovation and collaboration.

Success factors

They key success factor of the project is that it relied on partnerships with schools, educators, and businesses to develop a systemic approach to digital education, ensuring relevance and sustainability. The continuous collaboration and knowledge sharing enabled by tools like the observatory and territorial laboratories also contributed to the success of the project.

Implementation challenges

The main challenges included ensuring consistent and effective collaboration among the diverse range of stakeholders, including schools, educators, businesses, and associations. Additionally, integrating digital tools and methodologies into traditional educational settings required significant effort in terms of training and support for educators. Addressing the gender gap in ICT and STEAM fields also posed challenges, necessitating targeted initiatives and continuous engagement. Finally, maintaining the momentum of digital transformation and ensuring the sustainability of the project's outcomes were ongoing concerns.

The conclusion of our expert Miriam Lanzetta, Head of International Projects at Lascò

“The most successful characteristics of this project are the creation of a forward-looking digital education ecosystem for the region, which brings together schools, educators, businesses, and associations to drive innovation in education, and the creation of an online observatory that allows this ecosystem to document and share innovative practices”.

Useful sources

Official website: <https://www.scuoladigitaleliguria.it/>
<https://www.scuoladigitaleliguria.it/attachments/article/45/Brochure%20Scuola%20Digitale%20Liguria.pdf>
<https://www.facebook.com/scuoladigitaleliguria/>
<https://www.linkedin.com/company/scuoladigitaleliguria/>
<https://www.instagram.com/scuoladigitaleliguria/>

4.8. Psykosociale gruppeforløb MindSpring: A digital platform for mental health support and training

Working Group:

Digital

Member State:

Denmark

Thematic areas:

- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

Danish Refugees Council - Denmark

Partner organisations:

Local municipalities (about two-thirds of the country's municipalities are members of the network), educational institutions, social housing projects.

Initiative duration:

2016 – ongoing

Overview and objectives

MindSpring is a digital platform that offers mental health support and training to vulnerable populations, such as refugees and immigrants, using culturally tailored programmes. The initiative includes peer-to-peer workshops, online resources, and digital tools to empower users in managing their mental health and integrating into Danish society. The courses are held in all Danish regions depending on local demand. Typically, a course will take place in, for example, housing social areas, in schools, youth institutions, etc. A course is established in collaboration between a local host (e.g. a municipality or housing social master plan) and MindSpring Competence Center. The main goal of the initiative is to provide accessible, culturally sensitive mental health resources to vulnerable populations, promoting inclusion, empowerment, and well-being, thus improving their quality of life.

Context

The lack of culturally sensitive mental health resources and tools, which hinders vulnerable populations' ability to access care, integrate into society, and thrive. Refugees and immigrants often face significant barriers, including language challenges, cultural stigmas around mental health, and limited access to traditional healthcare. These factors exacerbate mental health issues and reduce opportunities for successful integration.

Target groups

MindSpring is for both newly arrived refugees and those who have lived in Denmark for several years as well as people with ethnic minority backgrounds. In the framework of MindSpring, manuals have been developed for children, young people, parents and seniors, in 4 languages: Danish, English, Arabic and Russian.

Actions

- Peer-to-peer mental health workshops
- Digital tools for self-help and community building
- Training for healthcare professionals in cultural competence

Financial allocation

Total budget:

EUR 112 000 (2023)

EU co-funding:

No

Sources of funding:

- DRC Danish Refugee Council
- The Obel Family Foundation

Working Group Insights

"In agreement with the other members of the Digital WG, I selected the MindSpring programme as a good practice, because it supports digital inclusion by promoting digital access, skills, and participation among refugees and ethnic minorities, helping them better integrate into digital society. Participants are introduced to digital public services (e.g., NemID/MitID, Borger.dk) to help them navigate healthcare, job applications, and social services.

By supporting digital inclusion and social integration, the programme helps create a more inclusive labour market, enabling refugee and minority talents to contribute to the workforce. Participants gain communication, teamwork, and problem-solving skills, which are valuable in the job market."

Jakob Lindmark Frier, COO and Stakeholder Relations, Digital Hub Denmark

Results

- Strengthened collaboration between municipalities and NGOs, creating meaningful roles for mental health professionals and peer supporters.
- Empowered marginalised groups to better integrate into the workforce, improving their social and economic contributions.
- Many participants become volunteers, helping new arrivals and contributing to a more inclusive society.
- Participants not only integrate into society but also contribute to making it more inclusive, diverse, and vibrant. The program helps them transition from recipients of support to active contributors within their communities.

Success factors

The initiative's success lies in its ability to balance digital tools with human connection through peer support groups. Its culturally tailored approach ensures relevance and trust among target populations, leading to higher engagement and better outcomes. Additionally, it features:

- A strong focus on cultural competence and user-centred design.
- Partnerships between NGOs, municipalities, and healthcare providers.
- Integration of digital tools with community-based approaches.

Implementation challenges

The initiative initially faced difficulties in replicating its peer-support model across different municipalities. Standardised training materials and collaboration agreements with local authorities helped scale the initiative more effectively. The initiative also faced language barriers and cultural mistrust within migrant communities. To address this, the initiative developed peer-led workshops, ensuring cultural relevance and improving engagement levels.

The conclusion of our expert Jakob Lindmark Frier, COO and Stakeholder Relations, Digital Hub Denmark

“The unique characteristic of MindSpring is the fact that its courses are not centrally developed and then simply delivered. The courses are always established in collaboration between a local host (e.g. a municipality or housing social master plan) and the MindSpring Competence Center. This allows MindSpring to provide tailored, accessible, and culturally sensitive resources to vulnerable populations.”

Useful sources

Official website: <https://integration.drc.ngo/vores-arbejde/mindspring/>
<https://nordicwelfare.org/integration-norden/exempel/mindspring/>
https://drc.ngo/media/govozt1e/annual-report-2023_drc_final-08-05-2024.pdf
<https://vimeo.com/872488708>

4.9. Deeptech Entrepreneurship Curriculum: Bridging the gap between Deeptech research and market applications in Alsace

Working Group:

Research & Innovation (R&I)

Member State, Region:

France, Alsace

Thematic areas:

Competitiveness and Innovation

Basic project details

Lead organisation:

Pépité ETENA - la communauté d'ÉTudiants-ENtrepreneurs en Alsace - France

Partner organisations:

- Faculty of Economics and Management of the University of Strasbourg
- QuestForChange regional incubator
- SATT Conectus Alsace Technology Transfer Office (TTO)

Project duration:

2020 – Ongoing

Overview and objectives

The Deeptech Entrepreneurship curriculum aims to support future managers in developing start-ups, spin-offs, or Deeptech companies. It targets scientists, Deeptech project leaders, PhDs and engineers. The program includes comprehensive training on various aspects of entrepreneurship and innovation.

The main objective is to stimulate the emergence of innovation projects in research laboratories, support the creation of Deeptech start-ups, strengthen the founding teams of these start-ups and accelerate their access to the market. Along with that, the program also aims to apprehend diverse contemporary issues, such as health and climate change, and their interlink with innovation. Understanding organisations and innovation culture, learning key steps for launching and developing a Deeptech start-up are also included in the aims of the program.

Context

The project was developed to address a critical gap between advanced scientific research and its practical market applications. It responds to the growing need for entrepreneurial training among scientists, engineers, and PhD students.

Target groups

The target groups of the project are future managers, scientists, Deeptech project leaders, PhDs, and engineers.

Actions

The project's actions include lectures, interactive workshops, hackathons, the Autumn School in Creativity Management (CreaSXB), and individual project work. The Deeptech Entrepreneurship training is offered as a Master 2 or a lifelong learning university certificate at the University of Strasbourg, which was designed by Pépite ETENA (the community for students-entrepreneurs in Alsace), the QuestForChange regional incubator, the Technology Transfer Office (TTO) SATT Conectus Alsace and the Faculty of Economics and Management of the University of Strasbourg.

Financial allocation

Total budget:

EUR 1 100 000

EU co-funding:

Yes

Sources of funding:

European Regional Development Fund (2021-2027 Programme)

Working Group Insights

“In agreement with the other members of the R&I WG, we selected this good practice because it is a good example of how to strengthen the innovation ecosystem by helping create viable innovative businesses. The development of comprehensive training on various aspects of entrepreneurship for researchers is essential to create effective businesses and to bridge the gap between research and the market. It is also a practice which is easy to replicate in other regions.

By offering new Deeptech focused programmes, the project has trained 12 students over the last two years, with all participants continuing to contribute to research and innovation in the regional ecosystem. Six of them are leading the creation of five new spin-offs.”

**Luciana Farlea, Head of the Regional Planning Department, ADR Vest,
and Marius Niculae, Head of the Department for Internationalisation and SME Support**

Results

This university curriculum offers the development and training of entrepreneurial skills among STEM students and researchers, enabling them to contribute to the growth of the innovation ecosystem and/or to create their own startup. The participants appreciated several aspects of the course. For example, it was entirely taught in English and is designed to support and train Deeptech experts to develop project-oriented teaching method.

Success factors

Success factors of the programme include the well-designed curriculum which targets innovation and provides skills and knowledge that are relevant to the needs of the Deeptech sector. They also include the strong institutional support, enabling the programme to directly target Deeptech entrepreneurship and support the enrolled students. Finally, effective collaboration with industry experts, results in the opportunity for students to directly learn from relevant actors in the industry who can provide real-world insights.

Implementation challenges

The major challenge was to ensure an effective networking and collaboration with industry experts, and to create the conditions for them to share and exchange their knowledge.

**The conclusion of our expert Luciana Farlea, Head of the Regional Planning
Department, ADR Vest, and Marius Niculae, Head of the Department for
Internationalisation and SME Support**

*“Bridging the gap between research and market, the Deeptech curriculum equips
Deeptech experts with entrepreneurial skills—an easily replicable model for fostering
innovation ecosystems.”*

Useful sources

<https://www.interregeurope.eu/good-practices/deeptech-entrepreneurship-curriculum-0>

Graduate Programme: <https://sfc.unistra.fr/formation-continue-de-luniversite-de-strasbourg/nos-formations/?search=master%20%20deeptech%20entrepreneurship>

Undergraduate Programme: <https://sfc.unistra.fr/formation-continue-de-luniversite-de-strasbourg/nos>

4.10. Mature Your PhD (MyPhD): A challenge for testing potential R&D tech transfer project

Working Group:

Research & Innovation (R&I)

Member State, Region:

France, Alsace

Thematic areas:

Competitiveness and Innovation

Basic project details

Lead organisation:

SATT Conectus Alsace Technology Transfer Office (TTO) - France

Partner organisations:

- ETENA
- University of Strasbourg
- University of Haute-Alsace
- CNRS
- INSERM
- INSA Strasbourg
- ENGEES
- bpiFrance
- Addat
- France 2030
- i-PhD
- i-Lab
- Starthèse

Project duration:

2019 – Ongoing

Overview and objectives

The 'Mature Your PhD' challenge aims to help PhD students turn their theses into R&D tech transfer projects. It provides support for market analysis, intellectual property advice, and entrepreneurship training, with the potential for funding post-doctorate and proof of concept projects. Since their theses often hold hidden potential for tech transfer development the advantage is twofold: first, the 'Mature Your PhD' helps identifying both innovative research results and young researchers open to business applications; second, it increases the volume of projects Conectus can transfer. Along with the goal of transforming PhD theses into professional opportunities and spin-offs, the project also identifies innovative research results and tech transfer. Conectus is one of the 13 French SATTs (Sociétés d'Accélération du Transfert de Technologies), which were created within the framework of the PIA (Programme d'investissements d'avenir). They finance the technological development of innovations stemming from French public research, thanks to an exclusive €856 million investment fund. Local and trusted players, SATTs have access to the skills and inventions of local researchers. They detect, evaluate, protect and bring these inventions to market by entrusting them to an existing company or a future start-up.

Context

The project was developed to help PhD students transform their research into real-world R&D tech transfer projects. It responds to the growing need for early-stage support in market analysis, intellectual property, and entrepreneurship training, enabling young researchers to explore the business potential of their theses and contribute to regional innovation.

Target groups

The target groups of the project are PhD students in their 2nd or 3rd year, registered in Alsatian universities.

Actions

‘Mature Your PhD’ is an open call where young researchers with innovative ideas and promising results are offered support for tech transfer. If selected, researchers win a specific support by Conectus and its innovation partners in several areas such as market analyses linked to the thesis project, personalized intellectual property advice and training on entrepreneurship to map out their tech project, career and business plan. Additionally, if the criteria of technological development and personal career choice are met, Conectus also offers to invest in a maturation project.

Financial allocation

Total budget:

EUR 1 700 000 (2019-2025)

EU co-funding:

No

Sources of funding:

The project is using a mix of public and private funds from the ecosystem of partners presented above. The TTO Conectus (publicly funded private company) made the initial investment. Since then, various stakeholders from the above-described ecosystem contribute every year.

Working Group Insights

“In agreement with the other members of the R&I WG, I selected this practice because of two important reasons. First, it directly addresses the issue of retaining talents in the region, by helping young researchers with innovative ideas in the 2nd or 3rd year of doctoral studies to transform their research into viable tech projects. Second, it addresses the issue of meeting regional market needs by transferring new, innovative academic results into viable businesses that could elevate the innovation potential of the regions.

By supporting PhD students in their market analysis, providing intellectual property advice and entrepreneurship training, the project contributed to successfully supporting PhD students in transforming their research into viable tech transfer projects, creating professional opportunities and fostering innovation. It maintains contact between Conectus and young researchers, and opens the doors of new labs, facilitating detection of innovative research results.”

**Luciana Farlea, Head of the Regional Planning Department, ADR Vest,
and Marius Niculae, Head of the Department for Internationalisation and SME Support**

Results

The 'Mature Your PhD' challenge was novel and original when launched back in 2018. As it improves valorisation education of the new generation of researchers, it has inspired other similar practices in France. While most detection actions target established researchers, the challenge is tapping into the tech transfer potential of PhD theses. It is linked with a support and training system for the students, and thus doubles as a professional opportunity action. It also connects research results to the regional ecosystem through the involvement of companies. A total of six editions have been organised until now, with 5 to 8 laureates per year. Two spin-offs (Albupad and La Turbine Française -for which additional information can be found in the Useful sources section) have emerged from MyPhD, and two more are in development. Seven laureates have successfully found employment in the private sector.

Success factors

Success factors include:

- Targeted support for market analysis and intellectual property, supporting the PhD students in setting-up their businesses or being successfully employed by other businesses.
- Comprehensive entrepreneurship training, which helped the PhD students to gain valuable skills for the process of setting up their own businesses.
- Potential for funding to advance tech transfer projects, facilitating the realisation of projects and supporting the initial inception stages of the PhD students' businesses.

Implementation challenges

For many of the winners of 'Mature Your PhD', the lack of knowledge exchange was a challenge in the process of starting new businesses for the supported PhD students, due to intellectual property rights and ownership regulations. Mature Your PhD also faced difficulties in ensuring PhD students had access to relevant industry networks. Dedicated networking events and mentorship programs were introduced to facilitate knowledge exchange and provide access to the networks.

The conclusion of our expert Luciana Farlea, Head of the Regional Planning Department, ADR Vest, and Marius Niculae, Head of the Department for Internationalisation and SME Support

"Helping PhD students turn research into real-world solutions, this project is a great model for bridging academia and business together, while retaining talent in the region."

Useful sources

Official website: <https://challenge-myphd.com/en/>
<https://www.linkedin.com/company/satt-conectus/>
<https://www.satt.fr/en/societe-acceleration-transfert-technologies/>
<https://albupad.fr/about-us>
<https://www.monreseaudeau.fr/societe/ltf-la-turbine-francaise/>

4.11. Team-To-Market programme: Better recruitment of business managers for the creation of spin-offs

Working Group:

Research & Innovation (R&I)

Member State, Region:

France, Alsace

Thematic areas:

Competitiveness and Innovation

Basic project details

Lead organisation:

SATT Conectus Alsace Technology Transfer Office (TTO) - France

Partner organisations:

- SATT Sayens, SATT Nord, Grand Est Region, SATT AxLR, Toulouse Tech Transfer
- Occitanie Region

Initiative duration:

2018 – Ongoing

Overview and objectives

Team-To-Market pairs researchers who have a business idea but lack business skills, with C-level executives and business leaders to help launch start-ups. It identifies projects that require team structuring, advertises opportunities through various channels, matches business professionals with scientific teams, initiates collaboration by providing funding for consultancy work and facilitates the creation of spin-offs. The main goal of this initiative is to introduce business managers to researchers to complement their scientific visions and help them make a successful transition to the market.

Context

The complexity of mobilising experienced project leaders and forming solid business teams alongside scientific teams is one of the causes which this initiative aims to tackle.

Target groups

Researchers, inventors, business managers, market managers.

Actions

The initiative's actions include identifying projects that need team structuring (such as start-ups or “orphan” projects). It then helps advertise these projects and the skills they need through websites, LinkedIn, and specialist media. The initiative matches these projects with suitable candidates by selecting and introducing them to the scientific team. Finally, it supports the collaboration by providing up to EUR 20,000 for a consultancy assignment lasting 3 to 6 months before the start-up is officially created.

Financial allocation

Total budget:

EUR 500 000

EU co-funding:

No

Sources of funding:

Regional funding (Region grant of EUR 10 000 to EUR 20 000 per consultancy assignment)

Working Group Insights

"In agreement with the other members of the R&I WG, I selected this practice because it is a very good example of how to ensure a long-term impact on the local innovation ecosystem and how to efficiently use and retain a highly skilled workforce. Such initiatives can help keep the talent in the region, by supporting both researchers with innovative ideas and skilled business managers who come together to build strong innovative companies.

By always featuring 4 to 10 spin-offs that are at an early stage of development and are looking for C-level staff: CEO, Business Manager, Business Planner or Business Developer, on the Team-to-Market website, the programme contributed to carrying out 15 successful spin-offs matches which led to the creation of 12 startups since 2018. Along with that, the program has successfully matched C-level candidates with scientific teams, leading to the creation of startups and enhancing the entrepreneurial ecosystem."

**Luciana Farlea, Head of the Regional Planning Department, ADR Vest,
and Marius Niculae, Head of the Department for Internationalisation and SME Support**

Results

The programme has facilitated 15 successful matches, leading to the creation of 12 start-ups since 2018. Team-to-Market has been replicated in other French regions and has inspired French national initiatives. The initiative is particularly relevant for regions with strong public research labs, a vibrant regional entrepreneurial ecosystem, a competent TTO, and experience in supporting the development of spin-offs.

Success factors

Effective sourcing and matching of candidates with researchers ensured the effectiveness of the services provided through the initiative. This matching allowed all participants to receive the best fitting support and service to produce new Spin-offs and market initiatives from the research. Strong support from regional partners helped the initiative to reach many researchers and organisations to facilitate the success of the programme. Funding for consultancy assignments helped the initiative to continue advising and helped the started businesses to move forward in entering the market while receiving the support they need.

Implementation challenges

Key challenges during the implementation of the initiative included networking and knowledge exchange to create partnership opportunities for spin-offs. Mobilizing experienced project leaders and forming strong business teams alongside scientific teams was another challenge. Financial difficulties in attracting experienced business leaders for spin-offs were also significant. To address this, a structured consultancy funding model was introduced to better match business leaders with innovative research projects.

The conclusion of our expert Luciana Farlea, Head of the Regional Planning Department, ADR Vest, and Marius Niculae, Head of the Department for Internationalisation and SME Support

“Building a strong team is key to success—this initiative shows how connecting researchers with skilled business leaders can turn ideas into thriving startups.”

Useful sources

Official website: <https://www.conectus.fr/en/node/407>

<https://www.interregeurope.eu/good-practices/team-to-market-programme-better-recruitment-of-business-managers-for-the-creation-of-spin-offs>

<https://www.team-to-market.fr/>

4.12. Extremadura Tech Talent: Attracting highly qualified talent

Working Group:

Research & Innovation (R&I)

Member State, Region:

Spain, Extremadura

Thematic areas:

Jobs and Skills

Basic project details

Lead organisation:

Foundation FUNDECYT Science and Technology Park of Extremadura - Spain

Partner organisations:

- Oficina para la Innovación
- Extremadura en el Mundo
- Junta de Extremadura

Project duration:

2021 – Ongoing

Overview and objectives

Emigration has meant not only reducing the number of inhabitants in Extremadura, but also losing highly qualified people who, once graduated from the University of Extremadura, have left the region to find a job more suitable to their profile. Currently, regional companies demand a greater number of scientific-technological profiles that respond to the need to grow and develop their activity in the region. The project seeks to bring closer and make visible to the people from Extremadura (who are living and developing professionally abroad) the possibilities that the regional innovation ecosystem can offer them and facilitate their return, as well as to interconnect companies with this supply of talent. The Extremadura Tech Talent project aims to attract highly qualified talent to innovative technology-based companies in Extremadura. Its goal is to address the issue of emigration by connecting Extremaduran professionals living abroad with job opportunities in the region, thereby supporting the growth and development of local companies.

Context

The project addresses the issue of brain drain and the need for highly qualified professionals in the region's growing science and technology sector.

Target groups

Highly qualified professionals from the science and technology sectors who are living and working outside the region.

Actions

The Extremadura Tech Talent Programme is based on the development of actions to offer new scientific-technological employment opportunities. This is carried out through continuous intermediate work between the demands of regional companies' profiles and the search for candidates for these demands. A web platform was created to communicate employment opportunities and to ensure better management of the talent, while generating a community of scientific and technological talent interested in working in the region. With the close collaboration of *Extremadura in the world*, the project also undertakes actions to facilitate and encourage the return of Extremadurans that live abroad, offering them an information and advisory service that accompanies them in their return initiatives.

Financial allocation

Total budget:

EUR 25 000 per year

EU co-funding:

Yes

Sources of funding:

European Regional Development Fund (ERDF 2021-2027)

Working Group Insights

"In agreement with the other members of the R&I WG, I selected this good practice because the programme has established itself in the region as a benchmark for the search for jobs in science, technology and innovation, with a high impact in the main regional general and national media. The technological labour market in Extremadura has been overwhelmed by the need to access highly qualified profiles, almost immediately, together with the brain drain that the region has suffered historically. Intermediation between companies that require these profiles, and the appropriate candidates has been vital.

By successfully connecting numerous professionals with job opportunities in Extremadura, contributing to the region's innovation ecosystem, the project has contributed to the development of numerous benefits, including the development of a methodology for the programme, development of a community of technology companies, generation of a community of Extremadura talent based abroad and interested in returning to the region, Implementation of a new regional intermediation and search service for profiles and candidates for innovative companies, increase in the number of innovation projects between companies and research centres through the incorporation of talent, and the attraction of new companies to Extremadura."

**Lucila Castro Rovillard, thanks to the insights provided by Eva Blanco Roque,
project manager of Extremadura Tech Talent**

Results

The project resulted in several significant tangible and intangible outcomes. 113 tech companies and 2588 candidates participated in the program, out of which, 653 were outside of Extremadura. 367 successful matches were documented, which demonstrates that the project has successfully connected numerous professionals with job opportunities in Extremadura, contributing to the development of the region's innovative ecosystem.

Success factors

Success factors include the strong regional support, as the project enjoys a tight-knit support network of regional companies and institutions to aid the attraction and retention of talent in the region. The use of digital platforms for job matching helps the involved actors to easily identify potential candidates and match their needs with the profiles of incoming talent regardless of geographical location. Continuous engagement with the target group through numerous events (see agenda under the *Useful sources* section) ensures large visibility of the project, aiding its effectiveness and support.

Implementation challenges

Challenges encountered within the project include maintaining sustained engagement from professionals abroad, ensuring the availability of suitable job opportunities, and aligning the skills of returning professionals with regional needs. These challenges are overcome through the maintaining of the initiative's partner network and the continuous updating of the initiative's online presence, to ensure that all involved actors are reached and informed about job opportunities.

The conclusion of our expert Lucila Castro Rovillard, thanks to the insights provided by Eva Blanco Roque, project manager of Extremadura Tech Talent

"The key element of the practice is the effective use of digital platforms for job matching which helps successfully connecting numerous professionals with job opportunities. This regional intermediation between companies that are looking for suitable profiles and the appropriate candidates has been vital".

Useful sources

Official website: <https://techtalent.oficinaparalainnovacion.es/>
<https://techtalent.oficinaparalainnovacion.es/informe-talento-extremadura/>
https://techtalent.oficinaparalainnovacion.es/wp-content/uploads/Informe_Datos_ExtremaduraTechTalent.pdf
<https://techtalent.oficinaparalainnovacion.es/agenda/>
<https://extremaduraenelmundo.juntaex.es/>

4.13. I-Form: The Research Ireland Centre for Advanced Manufacturing

Working Group:

Research & Innovation (R&I)

Member State:

Ireland

Thematic areas:

Competitiveness and Innovation

Basic project details

Lead organisation:

University College Dublin - Ireland

Partner organisations:

- Dublin City University
- South East Technological University
- National University of Ireland Galway
- Maynooth University
- Trinity College Dublin
- National Institute for Bioprocessing Research and Training
- Atlantic Technological University
- University of Limerick, Institute of Technology Sligo
- Waterford Institute of Technology

Project duration:

2017 – Ongoing

Overview and objectives

I-Form aims to shape the future of manufacturing through high-impact research into the application of digital technologies to materials processing. The centre has a particular focus on Additive Manufacturing (3D printing) and collaborates with industry to design new products and manufacture high-value components with enhanced material performance, reduced processing times, and improved process reliability. The main goals of the project are: to deliver scientific excellence in additive manufacturing research; improve the competitiveness of Irish manufacturing through research partnerships; provide a talent pipeline of PhD and postdoc graduates with engineering and AI skills; increase the international profile of Irish manufacturing research, and improve the perception of manufacturing careers in education systems with a particular focus on developing a diverse and inclusive long-term talent pipeline.

Context

The project addresses the need for advanced manufacturing capabilities and the integration of digital technologies to enhance process efficiency and competitiveness. The programme also addresses the need for an increased supply of PhD level graduates that are required to embed R&D capabilities in manufacturing companies. The problem of under-representation of females in manufacturing, as a career is also tackled through schools and mentorship projects.

Target groups

PhD and postdoc graduates, industry professionals, and students at various educational levels.

Actions

The project's actions included core research in experimentation, modelling, and AI applications for additive manufacturing; collaborative research projects with industry; CAD and 3D printing training and competitions for students; teacher training in 3D printing; postgraduate training in data analytics and AI; and upskilling and reskilling programs.

Financial allocation

Total budget:

EUR 33 500 000

EU co-funding:

Yes

Sources of funding:

- Research Ireland
- European Regional Development Fund (ERDF 2014-2020 and 2021-2027)

Working Group Insights

"In agreement with the other members of the R&I WG, I selected this good practice because of its significant impact on place-based Research & Innovation. It engages all education levels across the country in Science, Technology, Engineering, and Mathematics (STEM) and additive manufacturing, while actively involving the private sector. By securing co-funding from companies, it bridges education and industry through technology transfer, provides PhDs to industry, and strengthens Ireland's industrial research footprint. This multilevel approach fosters innovation, collaboration, and long-term growth in both education and the private sector.

By supporting collaborative research projects and connecting research with industry, the project contributed to the engagement of over 12 200 primary and secondary school students and training of over 130 PhD and postdoc graduates to date, contributing to talent retention and development in the manufacturing sector. The industry partner motivation for engaging with the Centre on research projects is strongly linked to the post graduate talent pipeline, which possesses a combination digital, materials and engineering expertise."

Paola Fantini, Education and Innovation expert at the University of Naples Federico II

Results

The project not only involves and impacts on all education levels in the whole country on STEM and additive manufacturing but also it impacts the private sector. It manages to acquire co-funding from companies and generates multilevel results in research, tech-transfer, talent development and new investments. Under this project, 130 PhD/Post Doc researchers have been trained among which 55% moved to industry as first destination. 19 Commercialisation projects and 10 technology licenses to industry have been generated along with 3 start-ups. 467 journal publications with FWCI of 1.95 - demonstrating scientific excellence in advanced manufacturing research have been generated. Last but not the least, schools manufacturing programs reached 600 teachers, 12 000 pupils across 5 countries (supported by EIT-M).

Success factors

- Strong industry collaboration, creating partnerships for emerging research and innovation in the STEM fields to facilitate the knowledge transfer from research to businesses.
- Comprehensive training programs, equipping the individuals in the targeted sectors with the needed skills to push forward innovation and knowledge valorisation.
- Focus on cutting-edge research in digital technologies and materials processing.

Implementation challenges

- Skills mismatch addressing advanced manufacturing needs particularly within SME's (40% of I-Form partner companies).
- Lack of integration between skills strategies and industry strategies: surveying of industry partners indicated a requirement for bespoke solutions for upskilling and reskilling whereas generic training modules were mostly available.

The conclusion of Paola Fantini, Education and Innovation expert at the University of Naples Federico II

" Bridging research and industry is key. This initiative shows how strong partnerships and talent development can drive manufacturing innovation and competitiveness in a territory."

Useful sources

Official website: www.i-form.ie

<https://www.linkedin.com/company/i-form-advanced-manufacturing/>

https://x.com/I_Form_Centre

I-Form - www.pemcentre.ie

4.14. LCAMP: Learner Centric Advanced Manufacturing Platform

Working Group:

Research & Innovation (R&I)

Member States and other countries:

Belgium, Canada, France, Germany, Malta, Netherlands, Slovenia, Spain, Sweden, Turkey, United Kingdom

Thematic areas:

Jobs and Skills

Basic project details

Lead organisation:

TKNIKA - Basque VET Research Centre - Spain

Partner organisations:

The LCAMP consortium is composed of 20 full partners from 11 countries, of which 9 are educational organisations, 7 are industrial companies and 4 are VET and industrial associations. LCAMP is also supported by 60 associated partners. The full partners are:

Department of Education of the Basque Government, AFM, DHBW, FORCAM, CMQ, MECANIC VALLEE, DA VINCI COLLEGE, KIC, MADE, AFIL, EARLALL, KPDONE, GEBKIM VET, GEBKIM OIZ, CNG, SIMUMATIK, TSCMB, SKUPNOST VSŠ, CAMOSUN COLLEGE.

Project duration:

2022 – Ongoing

Overview and objectives

LCAMP aims to become the European reference platform for knowledge generation, exchange, collaboration, and service provision for VET/HVET centres and companies within the advanced manufacturing sector across the EU. It promotes collaboration and networking between VET/HVET centres and companies to reduce skill gaps and transfer knowledge. The main goal of this project is to reduce skill gaps in the Advanced Manufacturing sector and transfer knowledge between VET centres and companies.

Context

The need to address skill gaps in the Advanced Manufacturing sector and improve collaboration between educational institutions and companies. It also aims at improving regional growth and development in those territories where Advanced Manufacturing is a key sector.

Target groups

VET/HVET centres, companies, company associations, VET learners, public authorities.

Actions

The LCAMP platform centres around six actions:

- **LCAMP Alliance:** The LCAMP Alliance is a network for collaboration between organisations involved in Advanced Manufacturing and Vocational Education and Training. It aims to address challenges such as the limited VET capacity, lack of awareness of existing strategies, inflexibility, and insufficient integration of soft skills in the VET system.
- **Skills and Jobs Observatory:** An observatory that provides up-to-date and user-friendly information on current skills trends, gaps and skills predictions for Advanced Manufacturing.
- **Open Innovation Community:** An open community that aims to promote applied research development projects. The efforts focus mainly on the interaction between Centres of Vocational Excellence and Small and Medium Enterprises.
- **Learner-Centric Training:** The Learner-Centric Training aims to launch and revise existing micro-credential programmes for learners and workers in the Advanced Manufacturing Industry. The action also creates a skills assessment tool, launches a course database and identifies future learning pathways.
- **Collaborative Learning Factories (CLFs):** This is a concept to bring together the principles of collaborative learning and the structure of a factory-like environment. This is to enhance the learning experience and is the first Collaborative Learning Factory in Advanced Manufacturing at the EU level.
- **SME-VET Connection:** LCAMP acts as a link between digital transformation journeys on SMEs and the training delivery from VET centres to accelerate the delivery of training delivered on advanced manufacturing.

Financial allocation

Total budget:

EUR 5 000 000

EU co-funding:

Yes

Sources of funding:

Erasmus+

Working Group Insights

"In agreement with the other members of the R&I WG, I selected this good practice because LCAMP exemplifies how strategic partnerships, and lifelong learning can drive innovation and regional development. It is designed to bridge skill gaps, enhance knowledge transfer and provide training opportunities to ensure a skilled workforce that meets evolving industry needs.

By providing training and a platform with an overview of training opportunities, jobs and a community for innovation, the project contributes to enhancing talent retention and attraction by fostering collaboration among educational institutions, industries, and policymakers to bridge skill gaps, enhance knowledge transfer, and provide cutting-edge training opportunities, ensuring a skilled workforce that meets evolving industry needs. This project enhances collaboration and networking between VET/HVET centres and companies, through which it helps reducing skill gaps and improved knowledge transfer."

Noelia Cantero, Director, EARLALL

European Association of Regional & Local Authorities for Lifelong Learning

Results

One of the main outputs generated through this project is the creation of a 'Skills and Jobs Observatory'. So far, 10 regional observatories have been established to which 40 experts have contributed input and data. An Open Innovation Community has also been formed, as well as an LCAMP alliance with 30 members. The LCAMP Alliance is a collaborative network for organisations involved in Advanced Manufacturing and Vocational Education and Training (VET). Its goal is to address challenges like limited VET capacity, lack of awareness of strategies, inflexibility, and insufficient integration of soft skills in VET systems. In the Learner-Centred Training section, LCAMP developed new (and revised existing) micro-credential programmes for learners and workers in Advanced Manufacturing, created a skills assessment tool where 1000 skill profiles have been assessed, launched a course database, and identified future learning pathways. The course database currently consists of more than 500 upskilling and reskilling learning opportunities centred on industry 4.0, with 75 sector-specific courses at EQF level 3-6 /100 micro-credential courses available (EQF levels 3 to 6). 500 micro-credentials have also been issued for upskilling.

Success factors

Strong collaboration between partners strengthens the support base of the project, allowing it to have a large outreach and effect. The effective use of the LCAMP platform, and the platforms' focus on learner-centric training and innovation also contributes to the success of the project in attracting and retaining talent.

Implementation challenges

One of the main challenges that the project faced was the coordination of the large and diverse consortium spanning multiple countries, sectors, and organisational types. Ensuring effective communication and alignment of goals among educational institutions, industrial companies, and associations required significant effort. Adapting micro-credential programmes and

training tools to different regional and national contexts was also a challenge. Finally, sustaining engagement from SMEs and guaranteeing the long-term integration of new skills and innovations into existing VET systems has been quite challenging as well.

The conclusion of our expert Noelia Cantero, Director of EARLALL (European Association of Regional & Local Authorities for Lifelong Learning)

"The key elements of this good practice are undeniably the setting-up of the Skills and Jobs Observatory, which provides up-to-date and user-friendly information on current skills trends, gaps, and skills prediction in Advanced Manufacturing, as well as the development of Collaborative Learning Factories—an innovative concept of cooperation between training providers and companies from different regions in Europe."

Useful sources

Official website: <https://lcamp.eu/>

https://x.com/LCAMP_CoVEs

<https://lcamp.eu/activities/course-catalogue/>

[LCAMP: responding to Advanced Manufacturing skills needs by putting learners first](#)

4.15. Pathways to Innovation & Entrepreneurship

Working Group:

Research & Innovation (R&I)

Member State, Region:

Italy, Campania

Thematic areas:

Competitiveness and Innovation

Basic project details

Lead organisation:

University of Naples Federico II - Italy

Partner organisations:

- Dipartimento di Eccellenza
- JACOBS Technion-Cornell Institute
- EECOLE
- YOUBIQUO
- SEI

Initiative duration:

2023 – Ongoing

Overview and objectives

The initiative leverages collaboration between universities and businesses to share a culture of Responsible Research and Innovation (RR&I) along with promoting opportunities for applied research and skilled employment. This non-traditional training initiative provides a platform for sharing knowledge, ideas, and experiences among researchers, professionals, and emerging

and established entrepreneurs. The main goal of this program is to build a network of SMEs and universities in rural areas of Italy and in the US, attract and engage talents, develop R&D collaborations, and create business opportunities between US and Italian companies.

Context

The initiative was based on the need to address the skill gaps and promote innovation and entrepreneurship in the Campania region.

Target groups

Young researchers (including graduate students, PhD candidates, post-docs, start uppers), SMEs in space economy, electronics/robotics/AI, bioeconomy/agri-business/pharma, tourism/cultural heritage conservation & valorisation.

Actions

The initiative's actions include: a) In-field training sessions, consisting of Networking sessions, R&D collaborations, Matchmaking between companies, Roundtables with entrepreneurs and knowledge sharing, b) Online meetings c) Summer course for participants in New York.

Financial allocation

Total budget:

USD 50 000 (approximately EUR 47 940)

EU co-funding:

No

Sources of funding:

Project funded by the US Embassy in Italy

Working Group Insights

"In agreement with the other members of the R&I WG, I selected this good practice because of its innovative approach despite a limited budget. The initiative brought together students from diverse fields to address real challenges in a rural area, collaborating with local SMEs and stakeholders. The initiative fostered Italian-USA collaboration by connecting students with New York's innovation ecosystem. This low-cost initiative enhanced students' skills, emphasizing RR&I and interdisciplinary collaboration, and demonstrated that impactful results can be achieved through purposeful, cross-cultural, and resource-efficient activities. By providing in-field training, networking opportunities and fostering the collaboration between industry and academia, the initiative contributed to building a network of SMEs and universities, attracted talents, and developed R&D collaborations. The feedback from the participants also outlined that they identified essential steps for transforming research and innovation into marketable products or services as well as they learned about social innovation."

Paola Fantini, Education and Innovation expert at the University of Naples Federico II

Results

This small-scale initiative united students from diverse backgrounds to tackle the challenge of responsible research and innovation. By engaging with local SMEs and stakeholders while connecting with international experts from New York, the initiative offered students the

opportunity to develop their skills by learning from USA innovators. The learning outcomes underscore the importance of Responsible Research & Innovation as participants become able to:

- Derive from macroeconomic outlooks, collaboration programs, and networks, examples of identifying challenges and opportunities for their own business across regions.
- Analyse complex social, cultural, and political environments, and identify opportunities and possible pathways towards social innovation in their activity.
- Identify business opportunities for research results.
- Co-create models to support multi-stakeholder planning and governance, encompassing a systemic perspective, uncertainty, sustainability, and ethics.
- Develop a framework for impact investments.
- Adapt and use assessment frameworks to evaluate the societal impact of a project/initiative.
- Evaluate sustainability goals and results. Start meaningful conversations with stakeholders (policymakers, associations, financiers, etc.) to explore future collaboration on new projects/initiatives.

Moreover, the initiative fostered a shift in students' mindsets, promoting a more collaborative and purpose-driven approach to research, facilitating the collaboration between universities and businesses in Campania, promoting innovation in production and entrepreneurial skills among researchers, and addressing the region's unique challenges and opportunities. In 2023, nine young researchers with different backgrounds, from Social Innovation, Industrial Engineering, and Chemical Sciences, have participated in the project, presenting their research, ranging from drones and marine microalgae to anti-cancer agents and artificial intelligence for predictive maintenance, as well as studies on the socioeconomic impact of performing arts and policies to combat educational poverty. The young researchers have interacted with business managers and CEOs from aerospace, electronics, agri-food, and arts and culture.

Success factors

Success factors for the initiative include strong collaboration between universities and businesses, effective knowledge sharing which contributes to knowledge valorisation, and providing students with practical tools to continue their journey in the dynamic innovation environment.

Implementation challenges

Despite its strong concept, the project faced two implementation challenges, namely the limited financial resources which posed constraints on the scale and continuity of activities, and the challenging engagement of SMEs and stakeholders in both Italy and the US, which demanded significant coordination efforts, especially given the geographical, cultural and time differences.

The conclusion of Paola Fantini, Education and Innovation expert at the University of Naples Federico II

"This initiative proves that with strong partnerships and a hands-on approach, in Moderate Innovator regions even a small budget can create big opportunities for innovation, skills development, and cross-border collaboration."

Useful sources

Official website: <https://www.pathwaystoinnovationentrepreneurship.eu/>

4.16. TF-CC: Teaching Factory Competence Centre

Working Group:

Research & Innovation (R&I)

Member State, Region:

Greece, Region of Western Greece

Thematic areas:

Competitiveness and Innovation

Basic project details

Lead organisation:

Laboratory for Manufacturing Systems and Automation, University of Patras LMS - Greece

Partner organisations:

- Sidenor Steel Industry S.A.
- BAZIGOS
- GIZELIS S.A.
- Calpak
- CASP
- Emphasis DigiWorld
- ELVALHALCOR HELLENIC COPPER AND ALUMINIUM INDUSTRY S.A.

Project duration:

July 2021 - December 2023

Overview and objectives

The Teaching Factory – Competence Centre (TF-CC) is an innovative approach to interconnect educational institutes and the manufacturing industry on a global scale, providing multiple benefits for students and industry. It aims to enable knowledge sharing among academia and industry, integrate innovative Industry 4.0 technologies in manufacturing, exploit research results towards industrial applicability, and create added value for manufacturing companies through innovative technologies and research activities.

Context

The project aimed to address the need for effective interconnection between educational institutes and the manufacturing industry to address the challenges of Industry 4.0. Moreover, the provision of high-tech training to industries has a significant impact on the familiarisation of industries' employees with new technologies.

Target groups

The target groups of the project include students, manufacturing industry professionals, researchers, and production engineers.

Actions

The project's actions include:

- Training services: The Teaching Factory Competence Centre supports the implementation of technical services by training professionals on best practices for manufacturing. All members of the competence centre have access to knowledge database which include

materials such as documents, technical studies, datasheets, presentations etc.) about the research on technological applications.

- **Technical Services:** These services are oriented in technical support of manufacturing industries aiming to upgrade the manufacturing products and services. This is achieved via the development and optimisation of manufacturing processes, production lines and integration of high efficiency informatics technologies.
- **Consulting Services:** Consulting services of Teaching Factory Competence support production engineers and individuals to upgrade and expand their business activities.
- **“EIT Manufacturing” services,** which include interconnection with EIT Manufacturing for educational and training services. EIT Manufacturing is a public-private partnership, co-funded by the European Union and established in 2019. EIT Manufacturing is one of the nine Knowledge and Innovation Communities (KIC) supported by the European Institute of Innovation and Technology (EIT).

Financial allocation

Total budget:

EUR 1 000 000

EU co-funding:

Yes

Sources of funding:

European Regional Development Fund (ERDF 2021-2027)

Working Group Insights

“In agreement with the other members of the R&I WG, I selected this good practice because TF-CC is oriented on providing education and innovation services to the manufacturing industry. Its mission is to enable the knowledge sharing among the academia and the national industry, to integrate innovative Industry 4.0 technologies in manufacturing, to exploit research results towards industrial applicability and to create added value for the services and products of manufacturing companies, through innovative technologies and research activities performed by academia. For this purpose, TF-CC provides a set of Learning Services and Innovative Technical Services to their customers aiming to the interdisciplinary learning, research & experimentation and to exploit of research results towards industrial applicability.

By offering tailor-made training and technical services, the project improved knowledge sharing, integration of Industry 4.0 technologies, and creation of added value for manufacturing companies. TF-CC is boosting the local workforce primarily by retaining the highly skilled. The Laboratory for Manufacturing System and Automations (LMS), partner of TF-CC, actively collaborates with European industries and academia or RTOs in the context of European projects. As an outcome of this collaboration, up to date training and technical challenges are transferred to the TF-CC. Accordingly, TF-CC designs and deploys high-tech services based on the emerging challenges of European industrial ecosystems as well as the regional ones. Moreover, graduates from LMS are working part time in TF-CC and eventually, through this process high-skilled persons find employment in the local or regional industry. This is particularly important for the region where the TF-CC is located, given that the Region of Western Greece has a high brain drain. In parallel, through the technical and consulting services and the focus on innovation in the entire value chain, the TF-CC enhances the ability of the manufacturing industry to attract.”

Ioulia Kondyli, Expert in Special Service for the Coordination of Regional Programmes at the National Coordination Authority of the Partnership Agreement, Greek Ministry of Economy and Finance

Results

TF-CC creates an effective connection among academia and companies seeking innovative solutions, lowering the barriers for companies to access the most innovative solutions and competences developed by academia. Under this project, several tangible and intangible results have been achieved. For example, 20+ training services were implemented with 230+ trainees. 15+ cooperations have been provided in B2B projects under this project. A partnership was set up between 1 university and 7 companies, leading to the participation in over 10 R&D projects with 70 partners, thus contributing to a broader ecosystem and ensuring the quality of services provided by the TF-CC.

Success factors

Success factors for the project include the collaboration between academia and industry, contributing knowledge valorisation and the transfer of innovations from research to the market via the commercialisation of mature research results in 4 fields: a) Robotic Assembly Cell Related services, b) Robotic Handling Cell Related services, c) Additive Manufacturing Cell Related services, and d) AR-based Robotic Cell Related services. Comprehensive tailor-made training and technical services enable the programme participants to gain valuable skills for contributing to finding innovative solutions. The effective use of innovative technologies within the programme allowed for targeted IT support and the direct engagement of participants with new technologies to gain insights into the progress of innovative technologies.

Implementation challenges

The key challenge encountered during the implementation of the project include was to ensure the financial sustainability of the project beyond the project phase. The project overcame this challenge through national and international partnerships, the creation of a successful membership scheme and the participation in international research projects.

The conclusion of our expert Ioulia Kondyli, Expert in Special Service for the Coordination of Regional Programmes at the National Coordination Authority of the Partnership Agreement, Greek Ministry of Economy and Finance

“The unique strength of the Teaching Factory, is the creation of an interconnection between academia and the entire value chain of the manufacturing industry (end-user, manufacturers, machine builders, system integrators and software providers), offering innovative solutions to address Industry 4.0 challenges and in parallel identifying gaps and addressing skills mismatches through the upskilling and reskilling of professionals”.

Useful sources

Official website: <https://teachingfactory-cc.eu>

<https://www.linkedin.com/company/teaching-factory-competence-center/posts/?feedView=all>

4.17. EBA: The European Battery Alliance Academy

Working Group:

Research & Innovation (R&I)

Member State:

27 EU countries

Thematic areas:

Jobs and Skills

Basic project details**Lead organisation:**

InnoEnergy Skills Institute - Netherlands

Partner organisations:

EBA is a collaborative network of more than 800 participants, covering the entire battery value chain.

Project duration:

February 2022 – January 2025

Overview and objectives

The EBA Academy was a 36-month project on re-/ upskilling employees within and across the full battery value chain, which is one core industry for a green and sustainable future. Launched by the InnoEnergy Skills Institute, following a mandate from the European Commission, the Academy coordinated the re-skilling and up-skilling efforts at European level and provided high-quality training across Member States. It served as a re-/upskilling instrument in the shape of a “training services platform” for governments, associated training providers and industry, having trained more than 100 000 learners directly, and benefited 700 000 indirectly. The InnoEnergy Skills Institute is actively involved in a variety of initiatives to address the skills gap in the European battery sector. The Institute is a part of EIT InnoEnergy, whose broader mission is to support Europe’s transition to a sustainable energy future.

Context

The rapid development and investment in e-mobility are creating skill gaps across the European battery value chain. This project tackled this skill mismatch problem through re-/upskilling of the employees within and across the value chain.

Target groups

Employees within the battery value chain, training providers, and industry professionals.

Actions

Inspired by the dynamic sustainable energy ecosystem of EIT InnoEnergy, the EBA Academy empowered professionals and businesses worldwide with the knowledge and skills vital for building a net zero economy. It specialised in skills intelligence, modular training, and industry-recognised qualifications and certifications. The Academy delivered tailored solutions, empowering individuals and businesses with the essential skills for success in the ever-evolving sustainable energy landscape.

Financial allocation**Total budget:**

EUR 10 000 000

EU co-funding:

Yes

Sources of funding:

Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU)

Working Group Insights

"In agreement with the other members of the R&I WG, I selected this good practice because this project combines a strong European foundation with a deep local impact. By leveraging knowledge and expertise from across the continent, it has developed an academy that collaborates closely with regional actors to tailor its approach to specific local needs and conditions. To date, 13 Memoranda of Understanding (MoUs) have been signed with Member States to ensure effective local deployment, engaging top-tier training providers in each region. This action is tightly aligned with the European strategy, supporting the EU's Green Transition policy and already integrated into the EU Skills Agenda and the Pact for Skills. Its design and execution reflect a commitment to addressing both regional and pan-European priorities, ensuring relevance, impact, and sustainability.

By providing training to reskill and upskill employees within and across the full battery value chain, the project improved the skills of 100,000 learners who have been reached directly through this program and a goal has been set to train 800,000 workers by 2025. Hence, on one hand, a new cohort of talent has been trained and on the other hand, upskilling and retention of skilled workforce has been ensured. The strategic public-private partnership and MoU signing with member states has laid ground for longer term national collaboration. An extensive curriculum has also been developed to ensure that graduates remain industry relevant."

Paola Fantini, Education and Innovation expert at University of Naples Federico II

Results

The project produced several significant outcomes. First, it laid ground for long-term international collaboration through strategic engagement with the Member States. Second, an extensive curriculum for over 60 courses has been developed. Additionally, over 100 000 learners have been trained.

Success factors

Success factors for the project include strong collaboration with industry partners, contributing to a strong support base for the programme and the establishment of close ties between the local academia and the businesses. Comprehensive training programs enable the students to gain a large set of highly relevant skills for innovation, while alignment with EU policies and priorities on green energy and industrial innovation ensures long-term funding and cross-border cooperation, contributing to the success of the established partnerships and resulting innovation projects.

Implementation challenges

Coordinating activities across a wide range of Member States and aligning them with both EU-wide priorities and specific regional needs proved complex, requiring intensive stakeholder engagement and thorough consultations. Ensuring consistency and high quality across a decentralised network of training providers was another major challenge, especially given the varying levels of existing expertise and infrastructure across regions. Scaling up rapidly to meet the ambitious targets (training 800,000 workers) placed significant demands on the development and delivery of training modules. Furthermore, keeping the curriculum constantly updated to match the fast-evolving needs of the battery value chain and securing continuous industry involvement were critical but demanding aspects throughout the project's implementation.

The conclusion of Paola Fantini, Education and Innovation expert at the University of Naples Federico II

"This good practice showcases the power of joining forces at both the EU and local levels to address skills gaps, by creating tailored, impactful training programs that align with both regional needs and pan-European goals."

Useful sources

Official website: <https://www.innoenergy.com/skillsinstitute/services/battery/>
<https://www.eba250.com/eba-academy/?cn-reloaded=1>
<https://www.eba250.com/about-eba250/network/>
https://single-market-economy.ec.europa.eu/news/european-battery-alliance-moves-ahead-new-european-battery-academy-launched-boost-skills-fast-2022-02-23_en
<https://eit.europa.eu/news-events/news/launching-european-battery-academy-reskill-thousands-industry-workers>
<https://innoenergy.com/news-resources/innoenergy-skills-institute-trains-100000-workers-for-europes-battery-sector/>

4.18. Digital skills to increase quality and resilience of the health system in Italy

Working Group:
Health

Member State, Regions:
Italy, all the 19 Italian regions and the 2 Italian Autonomous Provinces

Thematic areas:

- Digital and physical connectivity
- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:
ProMIS (Programma Mattone Internazionale Salute) - Italy

Partner organisations:

- Italian Ministry of Health
- Department for Digital Transformation of the Italian Government
- Italian regions including Marche, Campania, Friuli Venezia Giulia, Liguria, Lombardia, Piemonte, Puglia, Toscana, Veneto, PA di Bolzano, PA di Trento, Basilicata, Sicilia
- AGENAS (Agenzia Nazionale per i Servizi Sanitari Regionali)

Project duration:

- November 2022 – February 2024 (Design phase)
- June 2024 – December 2026 (Implementation phase)

Overview and objectives

The project aimed to enhance the digital skills of Italian healthcare professionals to improve the quality and resilience of the healthcare system. The design phase was funded by the Technical Support Instrument (TSI) 2021, which is the EU programme that provides tailor-made technical expertise to EU Member States to design and implement reforms. The design phase involved understanding current ICT competencies, developing a strategy for skill improvement, and implementing an action plan. Deliverables included inception reports, analysis of current skills, guidelines for Electronic Health Records (EHR), a National Strategy for Digital Skills Improvement, and a roadmap for implementation. The implementation phase was funded with national funds and was inserted in a Large-Scale Regional Partnership under the Pact for Skills – the EU initiative, which aims to support public and private organisations with maximising the impact of their investment in upskilling and reskilling, so they can thrive through the green and digital transitions.

The project's key goals included supporting structural reforms in Italy by enhancing digital upskilling programs for the healthcare workforce. It provided guidelines, methods, and resources for stakeholders at central and regional levels to improve these programs. Additionally, the project aimed to support regional upskilling initiatives, define KPIs for monitoring, increase EHR adoption, and create a national EHR communication strategy. The main deliverables were EHR 2.0 guidelines and a strategy for improving digital skills, including pilot projects to validate the approach. The overall goal was to improve the quality and safety of healthcare services through better digital competence.

Context

The need behind the project was the insufficient digital skills among Italian healthcare professionals. This lack of digital competence hindered the effective adoption and use of ICT solutions, such as EHRs, in the healthcare sector. Consequently, this gap affected the quality and safety of healthcare services. The project aimed to develop a comprehensive strategy to enhance digital skills, ensuring healthcare professionals could provide high-quality, safe care.

Target groups

The target groups of the project were Italian healthcare workers and Italian health authorities and stakeholders.

Actions

The project's actions included mapping current national and regional initiatives, examining international best practices, and engaging stakeholders through workshops and seminars. The project also involved understanding current digital competencies, developing a digital skills strategy, creating guidelines for electronic health records (EHR) adoption, and implementing an action plan to test these strategies in pilot cases.

Financial allocation

Total budget:

EUR 700 000 (Design phase)

EU co-funding:

Yes

Sources of funding:

- TSI – Technical Support Instrument 2021 (Design phase): 100%
- Pact for Skills (Implementation phase)

Working Group Insights

“In agreement with the other members of the Health WG, I selected this practice given its potential as an EU funded collaborative projects focused on reforming health systems with the specific focus on digital skills. For this very nature, it has objective and potential of future replicability to other settings. Although the governance systems may not seamlessly fit diverse local contexts across Europe, some of the tools developed offer the potential for reuse with minimal adjustment. Such tools include general theoretical methodologies, digital skills catalogues and assessment tool that are not directly tied to specific governance structures or national contexts. The final report of the project lists several key elements that can be replicated.

By developing a clear strategy and action plan for digital skill improvement, the project enhances digital skills among healthcare professionals to fill the increasing skills gap that comes with the digitalisation of the health sector and thus improve the quality and resilience of the healthcare system in the Italian Regions. This not only improves the quality, the accessibility and the equity of healthcare services but also makes the regions more attractive to skilled professionals, ensuring long-term sustainability and growth.”

Paolo Michelutti, project manager at Programma Mattone Internazionale Salute (ProMIS) – Italy and Health Workforce expert for the Italian Ministry of Health

Results

The project produced several significant outcomes. First, it provided a clear understanding of the current ICT skills of Italian healthcare professionals. Additionally, a strategy was developed to enhance digital skills, which included necessary managerial and organizational changes. Third, guidelines for the adoption of electronic health records (EHR) were created. Finally, an action plan for implementing a digital skills strategy was formulated and tested in selected pilot cases.

Success factors

Success factors for the project included the engagement of stakeholders and the development of a clear and comprehensive strategy for digital skills. The project was integrated into Italy's national digital transformation strategy, ensuring institutional commitment and regional implementation. Effective implementation and monitoring of action plans were also crucial, along with a clear definition of stakeholders' expectations. The engagement of institutional directors ensured political support, while contextualizing project suggestions to regional settings enhanced relevance. An active involvement of regional stakeholders in a co-creation process further contributed to the project's success.

Implementation challenges

Key challenges encountered during the implementation of the project included managing potential delays and feedback from multiple stakeholders. Ensuring the alignment of national and regional objectives was also a significant challenge. To mitigate this, the initiative created a co-governance model, engaging key regional authorities in the design and implementation process. Additionally, ensuring consistent and high-quality training across different regions and healthcare systems proved to be complicated due to the varying levels of existing digital infrastructure and resources among regions. Additionally, differences in regional governance structures and healthcare policies made it challenging to standardise training programs and ensure uniform implementation.

The conclusion of our expert Paolo Michelutti, project manager at Programma Mattone Internazionale Salute (ProMIS) – Italy and Health Workforce expert for the Italian Ministry of Health

“The methodology, digital skills catalogues and assessment tool developed under this programme are not directly tied to specific governance structures or national contexts. They can therefore be easily reused by other countries with minimal adjustment”.

Useful sources

Official website: <https://promisalute.it/iniziativa-di-sistem/tsi-digital-skill/>
https://reform-support.ec.europa.eu/document/download/32fe47c4-b63e-42a0-a713-d74b1ff6212f_en?filename=20240521_TSI%20Digital%20Skills_Final%20Report_publicazione.pdf&prefLang=el
https://promisalute.it/wp-content/uploads/2024/01/Scheda-iniziativa-di-sistema_TSI-Digital-Skills.pdf

4.19. ENHANCE: European curriculum for family and Community nurses

Working Group:
Health

Member States:
Belgium, Finland, Germany, Greece, Italy, Poland, Portugal

Thematic areas:

- Competitiveness and Innovation
- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:
Consiglio Nazionale delle Ricerche (CNR) - Italy

Partner organisations:

- Akademie für Wirtschaft und Verwaltung GmbH
- European Association of Service providers for Persons with Disabilities
- SI4LIFE - Scienza e Impresa per migliorare la qualità della vita delle Persone Fragili
- Alisa- Azienda sanitaria della Regione Liguria
- EUROCARERS, ENOSI NOSILEYTON/NOSILEYTRION ELLADOS
- Università degli Studi di Genova
- Itä-Suomen yliopisto, Future Balloons Unipessoal Lda

Project duration:
January 2018 - May 2021

Overview and objectives

The project focused on increasing the specialisation level of nurses working in Primary Health Care (PHC), aiming to develop a European curriculum for Family and Community Nurses (FCNs) to address the mismatch between the skills offered by nurses and those demanded by the healthcare sector. This included developing a formalised EU profile for FCNs based on WHO and EU recommendations, implementing pilot courses in Italy, Finland, and Greece, and training 150 graduate nurses according to the EU Curriculum, with more than 30 already employed.

Moreover, the project aimed to foster the development of FCN curricula based on a formalised EU profile drawing on WHO and EU recommendations. Another goal was to enhance the shift from old PHC models to new ones. Ultimately, it aimed to improve healthcare quality and reduce costs by empowering nurses with specialised skills, thus improving access to medical services for patients.

Context

The ENhANCE project intended to tackle the existing mismatch between the skills offered by nurses working in Primary Health Care (PHC) and those actually demanded by the healthcare sector. This mismatch was exacerbated by the recent pandemic, highlighting the need for Family and Community Nurses (FCNs) to decentralise PHC on the territory.

Target groups

Nurses working in Primary Health Care (PHC) who needed to specialise in Family and Community Nursing skills, VET providers and teachers across Europe who could offer innovative and standardised training for Family and Community Nurses (FCNs), and nurse professional associations and regulatory bodies across Europe that could benefit from the EU Professional Profile for recognition and mobility of the profession.

Actions

The types of actions included the development of an EU Professional Profile for Family and Community Nurses (FCNs), the creation of an EU Curriculum for FCNs, and providing guidelines to support VET designers and teachers in designing effective training for FCNs.

Additionally, the project involved the development of an Open Online Tool to support practice sharing for FCNs, the implementation of a European e-learning platform for VET teachers in the field of nursing, and the creation of free open content targeting VET teachers. It also included the design and implementation of three localised curricula in Italy, Finland, and Greece, as well as conducting of three pilot courses in these countries.

Financial allocation

Total budget:

EUR 1 000 000

EU co-funding:

Yes

Sources of funding:

Erasmus+

Working Group Insights

“The ENhANCE project was selected as a good practice for creating a standardised European Curriculum for Family and Community Nurses (FCNs), which addresses a significant skills gap in Primary Health Care (PHC). The curriculum is designed to be modular and flexible, making it easily adaptable to various national contexts, as shown by pilot courses conducted in Italy, Finland, and Greece. This flexibility ensures that its results can be applied to other areas, including those experiencing health workforce shortages, maldistribution, lack of equity and accessibility.

One of the main benefits of ENhANCE is the creation of a formal curriculum for FCNs, which helps to solidify the professional identity of community health roles. By clearly outlining the necessary competencies, it aids in targeted workforce development, making PHC roles more appealing. This is crucial for regions that have difficulty recruiting and retaining healthcare professionals, as it fosters career development pathways that align with local health needs. Therefore, ENhANCE provides a scalable model for enhancing healthcare workforce capacity and equity throughout Europe”.

Paolo Michelutti, project manager at Programma Mattone Internazionale Salute (ProMIS) – Italy and Health Workforce expert for the Italian Ministry of Health

Results

The ENhANCE project achieved several important outputs and results. These included the development of an EU Professional Profile for Family and Community Nurses (FCNs), the creation of an EU Curriculum for FCNs, and the provision of guidelines to support VET designers and teachers in designing effective training for FCNs. Additionally, the project developed an Open Online Tool to support practice sharing for FCNs, implemented a European e-learning platform for VET teachers in the field of nursing, and created free open content targeting VET teachers. It also designed three localised curricula in Italy, Finland, and Greece, implemented three pilot courses in these countries, and trained 150 graduate nurses according to the EU Curriculum, with more than 30 already employed.

Success factors

The success factors for the ENhANCE project included strong collaboration among multiple European partners, such as academic institutions, healthcare organisations, and professional associations. The development of a standardised EU Professional Profile and Curriculum for Family and Community Nurses (FCNs) ensured consistency and quality across different countries. The implementation of pilot courses in multiple countries allowed for testing and refinement of the curriculum. Comprehensive guidelines and tools for VET designers and teachers facilitated the adoption and localisation of the curriculum. The use of technology-enhanced learning tools, such as the Open Online Tool and e-learning platform, supported practice sharing and training. Finally, the project focused on addressing the skills mismatch in Primary Health Care (PHC) by increasing the specialisation level of nurses in Family and Community Nursing skills.

Implementation challenges

Key challenges encountered included ensuring consistent and high-quality training across different countries and healthcare systems. The project worked closely with policymakers to standardise qualifications, facilitating mobility and career progression for trained professionals.

The conclusion of our expert Paolo Michelutti, project manager at Programma Mattone Internazionale Salute (ProMIS) – Italy and Health Workforce expert for the Italian Ministry of Health

“The standardised European Curriculum for Family and Community Nurses, which was created by this project, is modular, flexible, and can be easily adapted to the needs of other countries who -like us- experience health workforce shortages”.

Useful sources

Official website: <https://erasmus-plus.ec.europa.eu/projects/search/details/591946-EPP-1-2017-1-IT-EPPKA2-SSA>

<https://enhance-fcn.eu/index.html>

4.20. IntegrAGE: Integrating older generations into the labour market

Working Group:

Health

Member States and other countries:

Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Germany, Hungary, Serbia, Slovakia, Slovenia

Thematic areas:

- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

BSC, Business support Center Ltd, Kranj - Slovenia

Partner organisations:

- Inovační centrum Ústeckého kraje, z. s, Društvo Jasa
- JU “Razvojna agencija Unsko-sanskog kantona” Bihać
- TREXIMA Bratislava, spol. s r.o.
- Univerzita Jana Evangelisty Purkyně v Ústí nad Labem
- Pannon Novum Nyugat-dunántúli Regionális Innovációs Nonprofit Kft
- Privredna komora Srbije, Poduzetnički inkubator BIOS Osijek
- Sdruzhenie Bulgarska Targovsko-Promishlena Palata
- Humán Innovációs Csoport Nonprofit Kft.
- Schirmacher GmbH, Udruga za kreativni razvoj Slap
- Klaster socijalnog preduzetništva Vojvodine
- ipcenter.at GmbH

Project duration:

January 2024 - June 2026

Overview and objectives

The IntegrAGE project aims to support the healthy integration of older working generations (55+) into the labour market by capitalising on their knowledge and assisting them in adapting to new ways of working. By strengthening their special skills and competences, IntegrAGE aims to retain their knowledge and accumulated experiences in the economy, either by providing tutoring within their own company or through mentoring even outside of their organisation.

The ultimate goal of the IntegrAGE project is to address skilled workforce shortages by leveraging the expertise of older workers and promoting an age-adapted, healthy work-life balance. Additionally, the project seeks to foster intergenerational cooperation, create supportive work environments, and enhance older workers participation, avoiding undesired early retirement, extending their productive life and ultimately improving their quality of life.

Context

The project intended to tackle the underutilisation of older workers in the labour market, which leads to early retirement and a loss of valuable skills and experience. This issue is exacerbated by imbalanced labour mobility and a shortage of skilled professionals in certain regions. The project aims to address these challenges by promoting age management strategies, enhancing the employability of workers aged 55+, and fostering a healthy work-life balance to retain their expertise and support regional economic growth.

Target groups

The target groups of the IntegrAGE project are primarily older working generations and policy actors and stakeholders such as government agencies, international organisations, NGOs, employers' organisations, and trade unions.

Actions

The IntegrAGE project will undertake several key actions, including conducting country analyses to identify challenges in 55+ employment and drafting national policy recommendations. It will create a joint Strategy & Action Plan and conduct an awareness campaign.

The project will also facilitate age management training for companies, develop self-assessment tools for older workers, and establish a train-the-mentor program. Additionally, it will promote intergenerational learning and mentoring through "living learning labs" and provide holistic empowerment guidance to support a healthy work-life balance.

Financial allocation

Total budget:
EUR 2 300 000

EU co-funding:
Yes

Sources of funding:
2021-2027 Interreg VI-B Danube

Working Group Insights

“The InterAGE project was selected as a promising ongoing project which tackles both the opportunities and challenges that come with an aging population. The project is being conducted within the Danube region and focuses on the issue of shrinking workforce which is an obstacle faced by several EU regions. The project’s innovative approach comes from its focus on both individuals but also on the development of practical tools and resources that can be adapted to help countries implement age-friendly practices and empowers them to adopt age management strategies.

Although the project is in its early stages, it shows promise in addressing workforce shortages by promoting age management strategies and a healthy work-life environment. It creates a supportive and inclusive framework for older workers and helps retain their valuable knowledge and experience through skill development and mentoring. Although IntegrAGE is in early implementation phase, it has already achieved significant milestones relevant to the topic of harnessing talent. For example, the project has already developed a self-assessment tool designed to help employees over the age of 55 to assess their skills and identify their stronger and weaker areas (<https://satool.ujep.cz/>).”

Sandra Bulat Lokas, Senior Advisor at Public Institution Development Agency of Šibenik-Knin County

Results

Policy actors and stakeholders in the Danube region aim to achieve several key outcomes. They seek to create supportive and inclusive work employability of older workers through skill development and mentoring. They also promote intergenerational cooperation, encouraging knowledge sharing between older and younger employees.

Success factors

The main success factors for the IntegrAGE project were the strong stakeholder engagement and collaboration across multiple countries, which ensured a comprehensive approach to integrating older generations into the labour market.

The conclusion of our expert Sandra Bulat Lokas, Senior Advisor at Public Institution Development Agency of Šibenik-Knin County.

“IntegrAGE addresses the shortages of skilled workforce by leveraging the expertise of older (55+) workers and capitalising on their existing knowledge. Empowering this underused demographic, has been a real gamechanger”.

Useful sources

Official website: <https://interreg-danube.eu/projects/integrage>
<https://icuk.cz/en/pro-region/projekt-integrage/>
<https://www.bcci.bg/projects/IntegrAGE/description.html>
<https://inkubator.hr/projects/43-integrage>
<https://www.bsc-kranj.si/integrage/>
<https://keep.eu/projects/29478/A-practical-approach-to-sup-EN/>

4.21. TEAMCARE: an inTerprofessional EuropeAn curriculumM for health and social Care staff

Working Group:

Health

Member States:

Austria, Italy, Ireland, Greece, Poland, Belgium

Thematic areas:

- Digital and physical connectivity
- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

RCSI - Royal College of Surgeons - Ireland

Partner organisations:

- Università di Genova
- SI4LIFE - Scienza e Impresa per migliorare la qualità della vita SCRL
- Alisa- Azienda sanitaria della Regione Liguria
- WIAB, ECTE, 7th HRC, HMU, Lodzkie Region
- Medical University Lodz, RSCN from
- Italian National Agency for Regional Healthcare Services (AGENAS)
- ProMIS - Programma Mattone Internazionale Salute

Project duration:

October 2023 – Ongoing (until September 2026)

Overview and objectives

TEAMCARE aims to enhance the responsiveness of Social and Health Care (SHC) systems to current societal challenges by addressing the mismatch between the skills of SHC professionals and those demanded by the public sector. The project will develop an EU Curriculum for “Specialist in Community Based Interprofessional Teams (CBIT) for person-centred care,” based on an Integrated Framework of Competences and supported by guidelines for implementation in different countries.

The project addresses the upskilling of social and healthcare professionals (SHCPs) improving the cross-disciplinary and interprofessional teamwork, focusing on a coordinated and multidisciplinary approach to person-centred care (Community-Based Interprofessional Teams - CBITs). In particular, the project aims to train SHCPs to work effectively together as a team, to perform an effective multidimensional users’ assessment and to tailor personalised care plans, thanks to the proper transversal, soft and digital skills. Overall, the project therefore seeks to improve access to medical services for the citizens.

Context

The project aims to tackle the lack of a unified set of competences for healthcare professionals in community-based interprofessional teams, the need for effective teamwork and patient-centred care in community settings, and the mismatch between the skills of SHC professionals and those demanded by the public sector for resilient and sustainable systems.

Target groups

The target groups of the project are healthcare and social care professionals working in community-based settings.

Actions

TEAMCARE actions include developing an EU Curriculum, creating guidelines for implementation, training SHCPs, performing multidimensional users' assessments, tailoring personalised care plans, and providing transferable and reusable tools for localising the curriculum.

Financial allocation

Total budget:

EUR 1 400 000

EU co-funding:

Yes

Sources of funding:

Erasmus+

Working Group Insights

"The TEAMCARE project serves as an innovative approach to tackling medical deserts by providing healthcare professionals with flexible, community-oriented skills. Its EU-wide curriculum for "Specialists in Community-Based Interprofessional Teams" presents a standardised yet adaptable framework that can be customised to meet regional needs through localisation guidelines. This ensures that the programme remains relevant in various contexts, particularly in underserved areas. A significant advancement is the incorporation of micro-credentials that align with ECTS, allowing professionals to gradually gain specific competencies. This modular strategy reduces barriers to upskilling and encourages movement to resource-limited regions by offering stackable, recognised certifications. The curriculum focuses on interdisciplinary collaboration and digital skills, which aligns with EU healthcare priorities and promotes comprehensive, patient-centred care. Tested in four countries, TEAMCARE shows potential for scalability, while its open-access platform and tools help minimise implementation costs.

By aligning training with labour market needs and EU standards, it boosts the appeal of the workforce in medical deserts, addressing the gaps between education and community health requirements. This model not only fortifies local healthcare systems but also encourages cross-border professional mobility, making it a transformative solution for underserved areas."

Paolo Michelutti, project manager at Programma Mattone Internazionale Salute (ProMIS) – Italy and Health Workforce expert for the Italian Ministry of Health

Results

The project aims to improve community-based care, which can contribute to better job satisfaction and retention among healthcare professionals. The project involves several key initiatives aimed at enhancing the skills and competencies of health and social care professionals, it includes the development of an Integrated Framework of Competences (IFC) and the creation of a comprehensive curriculum for CBIT specialists. The project also

implements pilot programmes in different countries to test and refine the curriculum. Additionally, a web-based platform for training will be developed, along with open content training materials to support the learning process. Finally, the project provides recommendations and a roadmap for decision-makers to ensure the successful implementation and scalability of the project outcomes.

Success factors

The success factors of the TEAMCARE project include the effective development of the EU Curriculum, comprehensive training programmes, and the successful implementation of personalised care plans. These factors are supported by collaboration among multiple partners from different countries, the involvement of international experts in the validation process, a comprehensive analysis of existing frameworks and best practices, and the development of flexible and adaptable training programmes.

The conclusion of our expert Paolo Michelutti, project manager at Programma Mattone Internazionale Salute (ProMIS) – Italy and Health Workforce expert for the Italian Ministry of Health

“TEAMCARE went beyond the usual collaboration among partners from different countries and decided to involve international experts in the validation process of its results”.

Useful sources

Official website: <https://www.projectteamcare.eu/>

<https://promisalute.it/wp-content/uploads/2023/08/TEAMCARE-Scheda-progetto.pdf>

<https://static1.squarespace.com/static/65e63af813125b0310a9d2a5/t/66fb0dfbdadaf70fedf6e681/1727729148968/0010+Project+Overview+Leaflet+RevD+Spreads.pdf>

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/43353764/101111736/ERASMUS2027>

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/erasmus-edu-2022-pi-all-inno-edu-enterp>

4.22. my-AHA: My Active and Healthy Aging

Working Group:

Health

Member States and other countries:

Austria, Germany, Italy, Netherlands, Portugal, Spain, United Kingdom, Australia, Japan, South Korea

Thematic areas:

- Competitiveness and Innovation
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

Università degli Studi di Torino (University of Turin) - Italy

Partner organisations:

- Associacao Fraunhofer Portugal Research
- Deutsche Sporthochschule Köln
- Gestio Sociosanitaria al Mediterrani SL
- Institut für Experimentelle Psychophysiologie GmbH
- Instituto de Biomecánica de Valencia
- Fondazione LINKS - Leading Innovation & Knowledge for Society
- Johanniter Österreich Ausbildung und Forschung Gemeinnützige GmbH
- Kaasa Solution GmbH, Loughborough University, Universität Siegen
- IP Health Solutions BV, JIN Co., Ltd., Seoul National University
- National University Corporation Tohoku University
- University of the Sunshine Coast

Project duration:

January 2016 - March 2020

Overview and objectives

The My Active and Healthy Aging (my-AHA) project aimed to develop and validate an ICT-based solution for early risk detection and intervention to support active and healthy aging. The project focused on preventing cognitive impairment, frailty, depression, and falls among older adults by using unobtrusive longitudinal behavioural sensing and personalised interventions. The my-AHA platform integrated various existing and future ICT tools to provide comprehensive monitoring and support for the elderly, promoting their independence and well-being. The main aim of my-AHA was to reduce frailty risk by improving physical activity, cognitive function, psychological state, social resources, nutrition, sleep, and overall well-being. This empowered older citizens to better manage their own health and improve their quality of life, resulting in healthcare cost savings. The project focused on early risk detection using advanced ICT tools, provided personalised interventions based on individual risk factors, and promoted active and healthy aging to enable older adults to remain independent.

Context

The project intended to tackle the increasing prevalence of frailty and related conditions, leading to higher healthcare costs and reduced quality of life among the elderly. Frailty assessment methods often missed early identification of at-risk individuals. Existing diagnostic criteria focused primarily on physical conditions and neglected non-physical aspects such as cognitive and psychological factors. Additionally, the growing elderly population requires more affordable healthcare solutions and personalised interventions that allows each individual to address risk factors and promote active, healthy aging.

Target groups

The target groups of the my-AHA project were primarily older adults who were at risk of developing frailty, cognitive impairment, depression, and other age-related conditions.

Actions

The project involved several types of actions, including early risk detection using ICT tools and methodologies to identify early signs of frailty and other age-related risks. Data collection and analysis were conducted using wearable devices and fitness apps to improve risk detection and intervention strategies. The project included clinical trials to test the effectiveness of the my-AHA platform and interventions. Additionally, it involved collaboration and dissemination efforts with healthcare authorities, NGOs, businesses, and other stakeholders to demonstrate the effectiveness of the my-AHA system and promote its adoption. Field experiments, data collection, and personalised recommendations were integral parts of the project.

Financial allocation

Total budget:

EUR 5 200 000

EU co-funding:

Yes

Sources of funding:

Horizon 2020 research and innovation programme

Working Group Insights

“This good practice was selected because it empowers older adults to promote their health and well-being through incorporating technology and ensuring they are not left behind in the digital age. Promoting active and healthy aging helps older adults remain independent and enhances their quality of life. Early risk detection and personalised interventions through digital tools can reduce the burden on healthcare systems, support interprofessional collaboration and communication, and streamline care management.

The my-AHA project was relevant for attracting, retaining, and developing talent in the region because it employed advanced analytical concepts for early health monitoring and disease prevention, creating opportunities for remote service delivery. As such, it addressed the problem of medical deserts and helped to deliver certain services regardless of the patient’s location. This could improve the attractiveness of remote regions, where access to health services may be limited.”

Lisa Wetzlmair-Kephart, Council of Occupational Therapists for the European Countries (COTEC)

Results

The my-AHA project developed ethical protocols, commenced Randomised Controlled Trials (RCTs), and investigated system portability and usability. The project created a flexible and usable ICT platform for early risk detection and personalised interventions, tested across different cultures and languages. Significant results were obtained for cognitive function and Quality of Life, which led to partnerships with stakeholders, SMEs, NGOs, and insurance companies. The system's scalability was proven, and new models of frailty were designed, including a cumulative frailty index (My-AHA FI).

Success factors

The success factors of the project were the use of commercial and non-stigmatising devices to collect data from all frailty domains, allowing real-time behaviour monitoring. Employing machine learning algorithms allowed the early detection of pre-frailty and frailty. My-AHA provided personalised interventions based on detailed user characteristics and individual risk. Additionally, it developed middleware to connect end users and healthcare providers, facilitating the inclusion of new services and products. Finally, it supported at-home care, helping to reduce the workforce gap.

Implementation challenges

The main challenges included coordinating the diverse range of international partners and ensuring consistent communication across different time zones and cultural contexts. Additionally, integrating various ICT tools and ensuring their usability for older adults posed significant technical and user-experience challenges. The project also faced difficulties in maintaining participant engagement over the long term and ensuring the ethical management of sensitive health data.

The conclusion of our expert Lisa Wetzlmair-Kephart, Council of Occupational Therapists for the European Countries (COTEC)

"The my-AHA platform solved two issues with one solution: It improved access to health services and enhanced the quality of life for the elderly in the participating countries, by promoting their independence and well-being through the use of ICT. My-AHA addresses physical and social challenges associated with aging and enables a holistic and person-centred view. It also enabled at-home care, thus reducing the impacts of the health workforce gap."

Useful sources

Official website: <https://www.activeageing.unito.it/>

<https://cordis.europa.eu/project/id/689592>

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/31045243/689592/H2020>

4.23. NET4Age-Friendly: International Interdisciplinary Network on Smart Healthy Age-friendly Environments

Working Group:

Health

Member States and other countries:

- The network comprises researchers and academic professionals from 39 countries, including 26 EU member states (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden) and 13 non-EU countries (Albania, Bosnia and Herzegovina, Georgia, Iceland, Israel, Moldova, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Turkey, United Kingdom).
- Additionally, the network has attracted interest from researchers in international partner countries such as the United States, Japan, Georgia, and Ukraine.

Thematic areas:

- Digital and physical connectivity
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

AFEdemy, Academy on Age-Friendly Environments - Netherlands

Partner organisations:

432 experts across 39 countries globally

Project duration:

October 2020 - October 2024

Overview and objectives

NET4Age-Friendly was a European Cooperation in Science and Technology (COST) Action aimed at establishing an international and interdisciplinary network of researchers and stakeholders to promote smart, healthy, and age-friendly environments (SHAFE). The project focused on fostering awareness, supporting the creation and implementation of SHAFE, and overcoming fragmentation in research and policy related to age-friendly environments. The main approach of NET4Age-Friendly was the establishment of new local or regional ecosystems or the expansion of existing ones in each European COST country involved, to work on health and well-being in an age-friendly digital world. The ecosystems consisted of citizens, public authorities, businesses, NGOs, and research and were supported by four thematic Working Groups, whose final outcomes were obtained in the work of a 5th one, creating a synergised output - the Reference Framework.

The goals of the project included promoting social inclusion, independent living, quality of life and active and healthy ageing in society. Additionally, the project aimed to develop a Reference Framework for Smart Healthy Age-Friendly Environments (SHAFE) with guidelines, standards, and practices. Furthermore, it encouraged knowledge creation and sharing among researchers and promoted the involvement of Early Career Investigators and participants from COST Inclusiveness Target Countries.

Context

The NET4Age-Friendly project aimed to address the fragmentation and critical gaps in creating and implementing smart, healthy, and age-friendly environments. The challenges arose from a lack of interdisciplinary collaboration and stakeholder engagement, insufficient integration of digital solutions in age-friendly environments, and inadequate policies and funding mechanisms to support sustainable and responsive environments for ageing populations. By tackling these issues, the project sought to create more cohesive and effective strategies for promoting social inclusion, independent living, and active and healthy ageing.

Target groups

The project's target groups included researchers, policymakers and stakeholders in health and well-being.

Actions

The project involved a variety of actions aimed at promoting smart, healthy, and age-friendly environments. These actions included establishing and nurturing local or regional ecosystems, hosting regular themed sessions with stakeholders and users' representatives, conducting research, and developing reports on the state-of-the-art in Smart Healthy Age-Friendly Environments (SHAFE), and developing and disseminating a Reference Framework for SHAFE. Additionally, the project organised training schools, workshops, and conferences to further knowledge and collaboration in this field.

Financial allocation

Total budget:
EUR 156 000 000

EU co-funding:
Yes

Sources of funding:
COST (European Cooperation in Science and Technology)

Working Group Insights

“NET4Age-Friendly’s development of modules, including business and evaluation models, integrated health and well-being pathways, and user-centred design recommendations, offered practical tools for reforming health and care ecosystems in regions facing population ageing. These resources are focused on creating horizontal policies supporting age-friendly environments, including workplaces, housing, transportation, and public spaces. By promoting improved accessibility and digital connectivity, these modules contribute to enhanced quality of life and more equal access to services for older individuals.

NET4Age-Friendly focused on smart, healthy, and age-friendly environments that have direct relevance for attracting, developing, and retaining talent. By promoting, among others, age-friendly workplaces, the project contributed to closing skills gaps and ensuring the continued integration of experienced professionals. This not only benefits organisations by keeping valuable knowledge and expertise but also improves the quality of life for all generations, including older individuals, by enabling continued engagement and contribution.”

Andrzej Klimczuk, PhD, Assistant Professor at SGH Warsaw School of Economics

Results

The project aimed to create inclusive and supportive environments, which could contribute to better job satisfaction and retention among healthcare professionals. The important results achieved by the NET4Age-Friendly project included the creation of a Reference Framework integrating the outcomes of thematic Working Groups, the development of innovative solutions for digital health and age-friendly environments, the establishment of a network of ecosystems promoting health and well-being in an age-friendly digital world.

Success factors

The success factors for the NET4Age-Friendly project included the effective establishment of local or regional ecosystems involving citizens, public authorities, businesses, NGOs, and researchers. Support from thematic Working Groups focusing on user-centred design, integrated health pathways, digital solutions, and policy development was also crucial. Additionally, the promotion of knowledge creation and sharing among researchers and stakeholders, along with the involvement of Early Career Investigators and participants from COST Inclusiveness Target Countries, contributed to comprehensive stakeholder engagement and the successful implementation of smart and healthy environments.

Implementation challenges

The key challenges encountered during the implementation of the NET4Age-Friendly project included overcoming fragmentation and gaps in innovation and policy development, ensuring effective collaboration among diverse stakeholders from different sectors and countries, addressing the varying levels of digital literacy and infrastructure across regions, and securing sustainable funding and resources for long-term implementation and scaling of solutions. Additionally, ensuring consistent and high-quality training across different regions and healthcare systems was a significant challenge.

The conclusion of our expert Andrzej Klimczuk, PhD, Assistant Professor at SGH Warsaw School of Economics

“NET4Age-Friendly empowers communities with practical tools and a strong network to build smart, healthy, and inclusive environments—ensuring better accessibility, digital connectivity, and quality of life for all as we age.”

Useful sources

Official website: <https://www.net4age.eu/>
<https://www.afedemy.eu/projects/net4age-friendly/>
<https://www.cost.eu/actions/CA19136/>

4.24. SHAPES: Smart & Healthy Ageing through People Engaging in Supportive Systems

Working Group:

Health

Member States and other countries:

Belgium, Cyprus, Czechia, Finland, France, Germany, Greece, Ireland, Italy, Norway, Portugal, Spain, Sweden, United Kingdom

Thematic areas:

- Digital and physical connectivity
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

Assisting Living and Learning (ALL) Institute, Maynooth University - Ireland

Partner organisations:

35 partner organisations (see under useful sources below)

Project duration:

November 2019 - December 2023

Overview and objectives

The SHAPES project aimed to create the first European open ecosystem for the large-scale deployment of digital technologies that support healthy and independent living for older individuals, improving their quality of life. It integrated smart digital technologies to collect and analyse health, environmental, and lifestyle information, providing personalised solutions while ensuring data protection and trust. Engaging over 2,000 older individuals in 15 pilot sites across 10 EU Member States, SHAPES collaborated with key stakeholders to enhance health, independence, and care system sustainability. Its multidisciplinary approach spanned 7 themes, validating cost-effective, scalable innovations for in-home and external support. SHAPES also developed business models and policy recommendations to expand the market for active and healthy ageing solutions across Europe. The project's main goal was to facilitate long-term healthy and active ageing and the maintenance of a high-quality standard of life by integrating smart digital technologies. The project enhanced efficiency in health and care

delivery across Europe, improving the quality of life for older individuals and their caregivers. SHAPES engaged over 2,000 older individuals in pilot sites to validate cost-efficient innovations. It also developed value-based business models and recommendations for the widespread adoption of digital health solutions.

Context

The project addressed the challenges of an ageing population, including the increased risk of chronic health conditions, reduced quality of life, and social isolation. It aimed to provide solutions that enabled older individuals to remain active, healthy, and independent in their own homes.

Target groups

The target groups of the SHAPES project were older individuals in Europe, healthcare providers and caregivers, researchers and developers in digital health technologies.

Actions

The project involved several types of actions, including developing a project handbook and quality plan, designing a Digital Ethnography Methodology, and establishing trends in health and care delivery in Europe. The project also focused on developing the SHAPES Platform architecture, matching digital solutions to pilot themes, and creating an evaluation methodology. Additionally, the project involved building the SHAPES Ecosystem, launching open calls for innovative collaborators, and establishing a dissemination plan to enhance project visibility.

Financial allocation

Total budget:
EUR 21 000 000

EU co-funding:
Yes

Sources of funding:
Horizon 2020 research and innovation programme

Working Group Insights

"Smart & Healthy Ageing through People Engaging in Supportive Systems (SHAPES) SHAPES' development of digital solutions for healthy ageing and independent living shows particular relevance for depopulating, peripheral, and lagging regions. SHAPES' emphasis on scalable and cost-effective innovations, combined with innovative business models for widespread adoption, offers the potential for improving service accessibility and quality in these areas, thus contributing to both quality of life and equal access to services.

SHAPES contributed to attracting, developing, and retaining talent in regions by fostering an innovative ecosystem around digital health and ageing. By enhancing regional capabilities in health and social care through the integration of digital technologies, SHAPES makes these areas more attractive for skilled professionals. The project offered opportunities for contributing to smart solutions addressing population ageing, thereby stimulating professional development and creating a vibrant environment that encourages talent retention within these regions."

Andrzej Klimczuk, PhD, Assistant Professor at SGH Warsaw School of Economics

Results

The SHAPES project has achieved several important results, including the creation of a Digital Ethnography Methodology and the establishment of trends in health and care delivery in Europe. Additionally, the project has developed the initial architecture for the SHAPES Platform, matched digital solutions to pilot themes, and created an evaluation methodology. The project has also built the SHAPES Ecosystem and launched open calls for collaborators.

Success factors

Success factors for the SHAPES project included in-depth knowledge of the healthcare sector and its dynamics, effective communication with a wide ecosystem of healthcare actors, and the adoption of a co-creation approach for developing key deliverables. Intense project and stakeholder management, strong involvement from leading institutions, and the existence of an active network of regions managed by ProMIS (Programma Mattone Internazionale Salute) also contributed significantly.

Implementation challenges

Key challenges encountered included ensuring data protection, consistent quality across multiple pilot sites, and scalability of innovations. When encountering challenges in scaling digital health solutions across different healthcare settings, the initiative focused on standardising its platform architecture to facilitate wider adoption.

The conclusion of our expert Andrzej Klimczuk, PhD, Assistant Professor at SGH Warsaw School of Economics

“SHAPES is transforming healthy ageing with smart, scalable digital solutions—empowering older individuals to live independently while enhancing regional health and social care systems to attract and retain talent”.

Useful sources

Official website: <https://shapes2020.eu/>

Partner organisations: <https://shapes2020.eu/partners/>

<https://cordis.europa.eu/project/id/857159/reporting>

<https://www.interregeurope.eu/good-practices/shapes-digital-services-for-active-and-healthy-ageing#resources-needed>

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-results-platform/65280>

4.25. A social innovation for increased attraction and receiver capacity in Norrbotten/Arctic Sweden

Working Group:

Territorial

Member State, Region:

Sweden, Region Norrbotten

Thematic areas:

- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details**Lead organisation:**

Region Norrbotten - Sweden

Partner organisations:

- Municipalities of Arvidsjaur, Arjeplog, Boden, Gällivare, Haparanda, Jokkmokk, Kalix, Kiruna, Luleå, Pajala, Piteå, Älvsbyn, Övertorneå and Övertorneå
- EURES (EUROpean Employment Services)
- Swedish Lapland Visitors Board
- Driftwind (Consultant)

Project duration:

January 2022 - November 2024

Overview and objectives

The initiative's core objective was to boost regional population by attracting and retaining newcomers. It focused on empowering municipalities with the necessary skills, infrastructure and services to welcome and integrate new residents. The ultimate goal was to attract new citizens and create a sustainable model for population growth, ensuring that newcomers have access to services and feel welcome and supported in their new communities. Key strategies include:

- Establishing a network and a mobile co-creation lab for the relocation services in all the municipalities of Region Norrbotten.
- Conducting innovation design cycles to develop digital solutions for attracting talent.
- Implementing various methods and tools to enhance the capacity and attraction of the receiver municipalities, with focus on creating an appealing lifestyle.
- Marketing and showcasing the region's lifestyle appeal to potential migrants, through various marketing channels.
- Participating in international fairs to raise the region's profile and manage emerging interest from potential migrants.

Facilitating shared learning and knowledge exchange among the municipalities, the Swedish Public Employment Service EURES and Region Norrbotten, among others through the setting up of a mobile co-creation lab, which enabled the main stakeholders and diverse societal actors to engage in processes of social learning, joint meaning-making, exploration and experimentation.

Context

The receiver capacity in the municipalities of the Region Norrbotten faces challenges, including a lack of housing and apartments, high governmental demands for minimum salaries for new citizens, and a “fly in and fly out” movement that yields no income taxes for the local municipalities. The receiver municipalities therefore face a lack of working-age people and Norrbotten needs to attract 100 000 new workers until 2035. The absence of national-level financial and legislative support also places a heavy burden on municipalities, particularly in navigating challenges.

Target groups

Potential migrants, newcomers, relocation services, local citizens and officials in the municipalities, private companies and public organisations.

Actions

The initiative:

- Created a mobile co-creation lab in Region Norrbotten.
- Organised design cycles and workshops to prototype digital solutions and addressed the migrant value change.
- Worked with local residents and businesses to assess their capacity to support newcomers.
- Launched marketing campaigns that highlighted the unique lifestyle benefits of living in Region Norrbotten
- Attended key international job and migration fairs, showcasing Region Norrbotten's opportunities and lifestyle.
- Shared best practices, success stories, and resources with the location services and other professions involved in the municipalities, EURES, and Region Norrbotten.
- Hosted local events that promote cultural exchange and integration.

Financial allocation

Total budget:

EUR 1 800 000

EU co-funding:

Yes

Sources of funding:

- EU funding: EUR 1 456 762 for the project North Sweden Green Deal (co-funded with 50% i.e. EUR 728 381 from the European Regional Development Fund - ERDF)
- National funding: EUR 325 725 for the project Attraction and Receiver Capacity (funded via the Regional Development Fund for Upper Norrland)

Working Group Insights

"In agreement with the other members of the Territorial WG, I selected this good practice because it addresses the critical challenge of increasing a region's population, specifically focusing on international target groups. To bring in new citizens, a mobile co-creation lab was established, involving 14 municipalities and EURES (EUROpean Employment Services) to enhance their receiver capacity and attraction skills, while addressing various governance challenges. The strategy, methods applied, and findings could be adapted to other regions facing similar challenges.

By using a bottom-up approach with the involved municipalities, the project managed to establish a positive trend in international migration. Each municipality strengthened its own capacity and self-esteem, contributing to a regional alliance for addressing talent attraction and retention, with an emphasis on lifestyle appeal. The project has established a mindset and capacity to address further challenges for long-term sustainable development and growth, both locally and regionally".

Stina Almkvist, Strategist and Innovation Leader at Driftwind

Results

Statistically, the project enhanced the capabilities of municipalities to attract newcomers, leading to a positive impact on international migration to the region. This has increased the region's attractiveness and strengthened the self-esteem of the location services and the municipalities.

Success factors

Success factors for the initiative included: a) the combination of digital tools with targeted outreach activities which helped the Norrbotten Region attract and retain highly skilled workers, b) the close collaboration between the local, regional and national level, c) the inclusion and consultation of local residents and businesses to assess their capacity to support newcomers, and d) the physical presence where the target audience was, through the mobile co-creation lab for the relocation services. The good practice also demonstrated how regional alliances and local self-empowerment can help regions address demographic challenges and talent retention, emphasising lifestyle appeal and inclusive governance.

Implementation challenges

The level of support in the governance system for attracting and retaining new residents varies across the municipalities. The absence of national-level financial and legislative support places a heavy burden on municipalities, particularly in navigating challenges. Building trust and relationships with potential new residents requires significant time and effort. It is also a challenge both in the private and public sector when it comes to hiring people who only speak English, even if it is sufficient for the job sought.

The conclusion of our expert Stina Almkvist, Strategist and Innovation Leader at Driftwind

“What really made the change in this project was the creation of the mobile co-creation lab for the relocation services, as it allowed us to be present in the places where our target audience was”.

Useful sources

Official website: www.movetoarcticsweden.se

<https://utvecklanorrbotten.se/projektstod/north-sweden-green-deal-projektbeskrivning/north-sweden-green-deal/nsqd-eng/>

<https://northswedenbusiness.com/news/2024/december/new-innovation-centre-in-norrbotten/>

<https://www.driftwind.se/en/making-norrbotten-grow>

<https://utvecklanorrbotten.se/projektstod/north-sweden-green-deal-projektbeskrivning/north-sweden-green-deal/nsqd-eng/>

<https://arbetsformedlingen.varbi.com/en/?jobtoken=176452332d3cbfc5eab3278c1a910b9cf638c93fc>

<https://europeanjobdays.eu/en/company/arctic-sweden>

<https://www.swedishlapland.com/live-work/>

4.26. Community building and youth voluntary activities in Municipality of Aristotele

Working Group:

Territorial

Member State, Region, Municipality:

Greece, Region of Central Macedonia, Municipality of Aristotele

Thematic areas:

- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

Municipality of Aristotele - Greece

Partner organisations:

- Ministry of Labour
- Local civil society organisations "United Societies of Balkans" and "Aristoteles"

Project duration:

This programme is ongoing and operates on an annual basis since 2021. Each year, a contract is established between the Municipality and the Ministry, outlining a comprehensive annual plan that guides the programme's activities and objectives.

Overview and objectives

The Municipality of Aristotele is situated in a remote area in the eastern part of the Chalkidiki region. Stratoni, a seaside village within this municipality, has struggled with a negative reputation due to the presence of a nearby mine. This has resulted in a significant decline in tourism—a key sector in the region—leading to a lack of investment and insufficient care for the local population and its amenities. Consequently, the youth in the area face a scarcity of opportunities. In response to this challenge, the programme owners initiated a project to renovate part of the old Vocational School of Stratoni, transforming it into an educational centre with dormitory facilities that had previously been underutilised by the community. They began introducing European educational and volunteering projects to invigorate the village and reinvest in its development. Volunteers established a small library and revitalised a park dedicated to seahorses, as the beach is home to one of the largest seahorse populations in the Mediterranean. Over the years, additional activities have included the creation of a cookbook featuring local recipes in collaboration with women's associations, the establishment of a youth council, sports programmes for children and young people, the MUSE festival, and awareness campaigns addressing social issues such as HIV, beach clean-ups, and skin cancer prevention.

As the project progressed, the municipality began to support these efforts, exemplifying a successful collaboration between NGOs and local authorities. The goals of this project are as follows:

- Revitalisation of the Community and improving the quality of life of the citizens: To rejuvenate the villages of Stratoni, Arnaia, and surrounding areas by enhancing their social, economic, and cultural environments.
- Promotion of Local Heritage and Sustainability: To preserve and promote unique local traditions, culture, and environmental assets, including the seahorse population and traditional recipes.

- **Upskilling and Creation of Opportunities for Youth:** To provide educational, social, and career development opportunities, thereby reducing youth outmigration and increasing local engagement.
- **Fostering European Integration and Collaboration:** To connect the local community with European opportunities, facilitating cross-cultural exchanges through educational and volunteer programmes.
- **Encouragement of Active Citizenship and Volunteerism:** To engage the local population, particularly youth, in community development through volunteering and active participation in social and environmental initiatives.
- **Building Strong Partnerships:** To strengthen collaboration between local authorities, civil society organisations, and international partners to ensure sustainable community development.
- **Increasing Tourism and Economic Development:** To attract visitors and investments by enhancing the village's amenities and promoting its environmental and cultural assets, contributing to sustainable economic growth.

Context

The cause of the challenges faced by the village of Stratoni stems from its negative reputation associated with the nearby mine. This poor image has resulted in a decline in tourism, a lack of investments, and limited opportunities for the local youth, hindering the community's overall development and growth and reducing the overall quality of life of the citizens.

Target groups

Local residents, youth, volunteers, and tourists.

Actions

- **Infrastructure Renovation and Development:** Renovating local spaces like the old Vocational School and public parks to create community hubs, while enhancing public amenities and promoting environmental sustainability, such as the seahorse park.
- **Educational and Volunteer Programme:** Hosting European educational projects that engage volunteers in community-building activities and offering workshops for youth on entrepreneurship, environmental sustainability, and social engagement.
- **Cultural Preservation and Promotion:** Collaborating with local women's associations to publish a cookbook of traditional recipes and organising cultural events like the MUSE festival to celebrate local arts and traditions.
- **Youth Empowerment:** Establishing a youth council for local governance participation and engaging youth in sports and leadership activities to foster personal growth.
- **Environmental Awareness and Protection:** Organising beach clean-ups and campaigns on ocean conservation, while promoting ecological awareness through sustainability workshops.
- **Health and Social Awareness Campaigns:** Running initiatives to raise awareness about public health issues, including HIV prevention and skin cancer awareness, and engaging the community in health-focused activities.
- **Cross-Cultural and International Collaboration:** Bringing together international volunteers and local residents to foster dialogue and facilitate the exchange of best practices in community development with other European regions.

Financial allocation

Total budget:
EUR 60 000 per year

EU co-funding:

Yes

Sources of funding:

- EU funding: Part of the funding for these activities comes from the Erasmus+ program, with a significant portion of the work being carried out through voluntary service.
- Local funding: The municipality of Aristotele is providing an amount of EUR 25 000 per year to support volunteer and youth activities.
- Private funding: Private donors provide around 20 000 euro per year for supporting the activities.

Working Group Insights

"In agreement with the other members of the Territorial WG, I selected this good practice because it proposes a methodology/approach for revitalising remote rural areas. It fosters social inclusion through intergenerational inclusive exchanges and encourages social engagement of locals with young people and tourists. Additionally, it preserves and promotes local cultural identity and heritage through the co-design, organisation, and implementation of specific youth-led initiatives and projects.

By developing a long-term programme based on a specific strategic plan for small community building, and through the development and implementation of youth-led initiatives in collaboration with locals, the project successfully enhanced the quality of life, increased the interest of young people in visiting and organising cultural and social activities, and significantly boosted the level of tourism attractiveness."

Ifigenia Katchie, Director, Social Policy and Action Organisation

Results

The project successfully engaged local residents in social, cultural, and educational activities, enhancing local involvement and fostering a sense of community pride. The establishment of a youth council provided young people in Stratoni with a platform to express their concerns and actively participate in local decision-making processes. The municipality's support for the project demonstrated a robust partnership between NGOs and local government in advancing community development efforts. Traditional recipes were preserved through the creation of a cookbook, while cultural events like the MUSE Festival showcased the area's rich heritage. Stratoni now boasts enhanced public spaces, including a renovated school and park, which serve as community hubs for social, educational, and cultural activities. The village has gained recognition as a unique and culturally rich destination, thanks to the hosting of international events and the promotion of local traditions, which has increased its tourism potential. Local young people now have greater access to educational and social opportunities through volunteering projects, the youth council, and community-driven initiatives, reducing the need to leave the area for better prospects. The collaboration between local authorities and NGOs has established a solid foundation for future projects and ongoing support for the community's growth and sustainability.

Success factors

Success factors for the project included strong collaboration between NGOs and local authorities, which ensured alignment of goals and resources for effective community development. The effective use of European educational and volunteering projects provided essential funding and support, enabling the implementation of impactful initiatives that engaged the community. Additionally, active community participation played a vital role, as

encouraging local residents to take part in social, cultural, and educational activities fostered a sense of ownership and pride, driving the overall success of the initiatives.

Implementation challenges

The village's remote location and inadequate infrastructure posed logistical hurdles for implementing activities, particularly those that required larger facilities and equipment. Additionally, securing continuous funding and resources for the long-term sustainability of the project proved to be a significant challenge. The reliance on external funding for educational and volunteering projects made the initiative vulnerable to financial fluctuations, potentially affecting the scope and consistency of activities. Furthermore, engaging young people in a community with limited opportunities necessitated ongoing efforts to develop relevant programmes and maintain their interest and involvement in local development.

The conclusion of our expert Ifigenia Katchie, Director, Social Policy and Action Organisation

“This best practice shows that local communities do not always need a large budget to change their destiny. Identifying, enhancing and promoting the unique characteristics of local cultural identity and heritage, through youth-lead initiatives and projects, can be at the reach of every community”.

Useful sources

Official website: <https://www.usbngo.gr/en/local-actions/cultural-center-stratoni-halkidiki>
<https://www.facebook.com/visitstratoni>
https://www.instagram.com/stratoni_the_seahorse_village/?hl=en

4.27. Retour aux pays: Digital platform for countering brain drain

Working Group:
Territorial

Member State, Region:
France, Guadeloupe

Thematic areas:

- Jobs and Skills
- Digital and physical connectivity

Basic project details

Lead organisation:
Association Alé Vini Guadeloupe - France

Partner organisations:

- Regional Council of Guadeloupe,
- Ministry of Overseas,
- The French Overseas Agency for Mobility

Initiative duration:

February 2022 - Ongoing

Overview and objectives

The initiative aims to enhance the visibility of candidates returning to Guadeloupe among local employers and to make it easier for employers to find skills not represented in the region. The goal is to facilitate visibility for returning candidates and smoothen the process for local employers to find needed skills. This is done through partnership agreements with economic, institutional and associative stakeholders in the region. The partners involved are either sources of co-financing, service providers, operational players, or relays of information to the target audience. The initiative also makes it possible to support project leaders and entrepreneurs. The platform provides access to institutional and economic actors, including the Guadeloupe Regional Council, which offers tailored support for business creation and development. Young entrepreneurs, in particular, benefit from the Action Youth Plan, which provides targeted assistance to facilitate their integration into the local economy.

Context

The initiative addresses two key challenges:

- Lack of connection between returning talents and local employers – Many professionals willing to return struggle to find job opportunities due to a lack of visibility and networking.
- Limited support for project leaders and entrepreneurs – Returning individuals who wish to start a business in Guadeloupe often face administrative complexities and difficulty accessing institutional and economic support.

By bridging these gaps, the initiative fosters both professional reintegration and local economic development.

Target groups

The target group of the initiative encompasses several key stakeholders. First, it includes returning candidates, individuals who have previously participated in educational or volunteering programs and are looking to reintegrate into the community with new skills and experiences. Additionally, local employers are a vital part of the initiative, as they can provide job opportunities and support local economic development. The initiative also aims to engage entrepreneurs and project leaders who are seeking to launch new ventures or lead community projects, thereby contributing to local innovation and growth. Lastly, institutional and economic actors, such as government agencies, non-profits, and economic development organisations, play a crucial role in shaping policies and providing resources that support community initiatives.

Actions

The following actions are undertaken under this initiative:

- Signing partnership agreements with institutional, economic, and associative stakeholders to strengthen the initiative.
- Co-financing and service provision to ensure the platform's sustainability and efficiency.
- Regular information relay to both returning candidates and local employers.
- Supporting returning candidates by providing guidance on employment opportunities and entrepreneurship.
- Facilitating networking between returning talents, the Guadeloupe Regional Council's services, and other institutional and economic actors to enhance professional reintegration and business creation.

Financial allocation

Total budget:

EUR 55 000

EU co-funding:

No

Sources of funding:

- National funding: EUR 40 000
- Regional funding: EUR 15 000

Working Group Insights

"In agreement with the other members of the Territorial WG, I selected this good practice because it addresses a major challenge faced by many regions: the difficulty for returning talents to reconnect with the local job market. By facilitating the connection between local employers, economic and institutional actors and expatriate professionals wishing to return. This initiative represents an innovative solution to combat brain drain and strengthen regional economic development in a context where the region aims to retain and attract talent while fostering the growth of new entrepreneurial ventures.

By implementing a dedicated digital platform, the initiative has facilitated the visibility of returning candidates' profiles to local employers, while making it easier to find rare skills in the region. This initiative has not only strengthened the region's attractiveness for returning talents but has also allowed local businesses to access a highly skilled workforce that is often difficult to recruit. It also supports project leaders in their efforts to establish or develop a business in Guadeloupe".

Priscilla Sylvestre, Project Manager at the Regional Council of Guadeloupe

Results

The initiative has helped retain talent by making it easier for returning candidates to find employment in Guadeloupe. Additionally, it has facilitated the creation of new businesses by connecting entrepreneurs with key institutional and economic stakeholders. Thanks to support programmes from the Guadeloupe Regional Council, particularly the Action Youth Plan (PAJ), several young entrepreneurs have successfully launched their businesses, contributing to the region's economic vitality.

Success factors

Success factors include a constant connection with the business sector, ensuring that the platform remains aligned with market needs. The partnership with the Guadeloupe Regional Council plays a crucial role in supporting project leaders. Additionally, the identification and development of new partnerships with companies across various industries strengthen the platform's impact. The initiative is also highly effective as it focuses on targeted outreach to professionals abroad, providing them with detailed employment and entrepreneurship opportunities in the region. It also focuses specifically on job search assistance, addressing high-demand professions and skills that are scarce in the region.

Implementation challenges

- Securing continuous funding and keeping content updated was challenging. The challenge was mitigated by forming strategic partnerships with businesses and public institutions to maintain operational sustainability.
- Ensuring regular content updates, including new job offers and candidate profiles, to keep the platform attractive for both employers and returning talents.
- Maintaining long-term financial stability to sustain the platform's operations and outreach.
- Adapting the platform to evolving needs, whether in response to labour market changes or shifts in how returning candidates plan and organise their reintegration into the local economy.

The conclusion of our expert Priscilla Sylvestre, Project Manager at the Regional Council of Guadeloupe

"What really made Retour aux pays successful, was the fact that we managed to have partnership agreements with all the relevant economic, institutional and associative stakeholders in the region, with each of them contributing to the effort in their own way".

Useful sources

Official website: <https://www.alevini.fr>

<https://www.regionguadeloupe.fr/les-aides-les-services/guide-des-aides/aides-aux-entreprises/#>

4.28. Invest in Alentejo Initiative

Working Group:

Territorial

Member State, Region:

Portugal, Alentejo

Thematic areas:

- Competitiveness and Innovation
- Jobs and Skills

Basic project details

Lead organisation:

ADRAL – Alentejo Regional Development Agency - Portugal

Partner organisations:

ACOS, AED Cluster Portugal, Aicep Global Parques, APS, A Comunidade Intermunicipal do Alto Alentejo, Comunidade Intermunicipal do Alentejo Central, Community services/non-profits in GRÂNDOLA, Comunidade Intermunicipal do Baixo Alentejo, EDIA, ERTA, IPBeja, IPPortalegre, University of Évora, and all the municipalities in Alentejo.

Initiative duration:

January 2016 – Ongoing

Overview and objectives

The initiative seeks to position the Alentejo region as an attractive destination for foreign direct investment (FDI), with the goals of driving sustainable economic growth, enhancing the competitiveness of small and medium-sized enterprises (SMEs), and promoting economic diversification. Building on the successes of previous initiatives, it aims to leverage existing networks and relationships while showcasing the region's key infrastructure, research and development capabilities, and business sectors in alignment with the region's Smart Specialization Strategy (EREI). Additionally, the initiative focuses on increasing the region's international visibility, fostering strategic partnerships, and empowering local businesses to expand into global markets. It also aims to address the challenges posed by demographic changes and the decline in the population of tertiary-educated individuals.

Key objectives includes attracting significant foreign direct investment that surpassed initial expectations, fostering collaboration, and strengthening networks among essential regional stakeholders.

Context

The initiative intends to address the following challenges and limitations: a) The region faces low population density and an ageing demographic, which hinder economic growth and social dynamism; b) A small regional market and limited economic mass restrict business opportunities and the attraction of investment; c) The business structure is fragile, characterised by a predominance of micro-enterprises and limited cooperation, which impedes innovation and competitiveness; d) There is a pressing need for improved skills and innovation to enhance the region's competitiveness and attract high-value investments.

Target groups

The target group of the initiative focused on enhancing the competitiveness of small and medium-sized enterprises (SMEs) and promoting economic diversification in the Alentejo region.

Actions

Investment promotion, strategic partnerships, and international visibility campaigns.

Financial allocation

Total budget:

Ca. EUR 2 000 000

EU co-funding:

Yes

Sources of funding:

- EU funding: EUR 1 700 000 via the Alentejo 2020 / Alentejo 2030 ROP - ERDF (2014-2020) / ERDF (2021-2027)
- Private funding: EUR 300 000

Working Group Insights

"In agreement with the other members of the Territorial WG, I selected the "Invest In Alentejo Initiative" for its comprehensive approach to attracting foreign direct investment (FDI) and promoting economic diversification in the Alentejo region. It builds on the successes of previous initiatives, showcasing the region's key infrastructure, R&D capabilities, and business sectors. The initiative addresses the challenges of demographic change and declining tertiary educated populations by promoting sustainable economic growth and enhancing the competitiveness of small and medium-sized enterprises (SMEs).

By establishing the Alentejo region as an attractive destination for FDI, the initiative has driven sustainable economic growth, enhanced the competitiveness of SMEs, and promoted economic diversification. This has led to increased job opportunities, development of new skills, and improved infrastructure, making the region more appealing for talent attraction, development, and retention."

**Daniel Janeiro, Coordinator of the External Relations and Foreign Investment Department
at ADRAL – Alentejo Regional Development Agency**

Results

The initiative has yielded several key results that demonstrate its effectiveness.

- Attracting significant FDI: Successfully drawn substantial foreign direct investment, exceeding initial expectations.
- Fostering collaboration: Strengthened networks and fostered collaboration among key regional stakeholders.
- Promoting international visibility: Effectively promoted the Alentejo region internationally, increasing its visibility and recognition in strategic sectors.
- Facilitating internationalisation: Assisted local businesses in expanding into global markets through internationalisation efforts.
- Diversifying the regional economy: Contributed to the diversification of the regional economy by attracting investment in various sectors.

Success factors

- Strong institutional leadership: ADRAL's leadership and experience in regional development ensured effective coordination and implementation of the initiative.
- Strategic partnerships: Collaboration with regional stakeholders, including businesses, municipalities, and other entities, fostered a cohesive approach.
- International networks: Leveraging international networks, such as EURADA, facilitated access to knowledge, best practices, and potential investors.
- Targeted approach: Focusing on key sectors aligned with the region's strengths and opportunities ensured effective resource allocation and maximisation of impact.
- Effective communication: A comprehensive communication strategy promoted the region's investment potential and attracted international attention.

Implementation challenges

- Some areas experience low tourist density, impacting economic opportunities.
- Maintaining momentum during the Pandemic: The COVID-19 pandemic disrupted international travel and investment activities, necessitating adjustments to the initiative's timeline and strategies.
- Addressing regional disparities: Ensuring that the benefits of FDI and economic growth reach all parts of the Alentejo region, including less developed areas.

- Skills development: Ongoing efforts are required to adapt the skills and knowledge of the workforce to meet the demands of new investments and industries.
- Promoting long-term sustainability: Balancing economic growth with environmental protection and social inclusion is essential for the initiative's long-term success.

The conclusion of our expert Daniel Janeiro, Coordinator of the External Relations And Foreign Investment Department at ADRAL – Alentejo Regional Development Agency

“The key highlight of the Invest In Alentejo Initiative is its comprehensive approach, encompassing investment attraction, SME competitiveness enhancement, and economic diversification, all while aligning with the region's Smart Specialisation Strategy. The success of this best practice is mainly based on the fact that we did not try to reinvent the wheel -we based this initiative on the successes of previous initiatives.”

Useful sources

Official website: <https://investinalentejo.pt/en/>

4.29. Living Labs – Laurea: Co-producing knowledge with local communities

Working Group:

Territorial

Member State, Region:

Finland, Uusimaa

Thematic areas:

- Jobs and Skills
- Quality of Life and Equal Access to services

Basic project details

Lead organisation:

Laurea University of Applied Sciences - Finland

Partner organisations:

The Partner organisations are representative of the following sectors: Healthcare and Social Services, Technology and IT Services, Construction and Real Estate, Retail and Consumer Services, Financial Services, Logistics and Transportation, Education and Training, and Non-Profit and Community Services.

Project duration:

2006 - Ongoing

Overview and objectives

The Living Labs are hubs managed by a Higher Education Institution (HEI), which puts forward state-of-the-art resources for learners to address a local/regional societal issue. The Lab identifies the challenge, the stakeholders (an industry, business, a group of citizens, media, governmental authorities, etc) and creates a learning programme. The students joining the

programme develop their competences and obtain their degree while working on specific challenges, providing real-world experience and applied learning.

The Lab in Laurea has been implementing this model since 2006, launching and finalising various projects. The current projects account for a Digital Living Lab (with state-of-the-art resources such as robots and drones), a BarLaurea (which represents a space for work-based learning of learners in the HORECA sector, and contributes to serving organic and local-based dishes), and the Event Living Lab (which supports the local event organising business). The experimentation is citizen-driven, co-creating challenges for digital inclusion, health services or sustainable tourism, while promoting creativity, diverse learning and multidisciplinary. It allows for the rapid experimentation within the community of ideas and prototypes developed by the HEI's staff and students.

The goal is to foster open innovation and shared partnership, combining the ideas, knowledge, and resources of different stakeholders to solve real-life problems.

Context

The problem aims to tackle specific community-based challenges, thus improving the quality of life in these communities. At the moment, it works on improving the event organisation industry in the Finnish region where it operates, the digital innovation in the region and providing a sustainable model for the HORECA industry. It also aims to boost partnerships between academia and the local industry, while preparing learners for the transition into the workplace.

Target groups

Students, Researchers, Local businesses, Communities.

Actions

Co-creation and open innovation operations, user-driven innovation, collaborative learning, rapid experimentation of ideas and prototypes. In a nutshell, it runs iterative project-based learning programmes. Normally, three such projects are running at the same time, and implemented until they are organically introduced into the fabric of the local community. The diversity of each project depends on the challenge identified, on the desires of the local community and stakeholders and on the solution with which the HEI's staff and students come up.

Financial allocation

Total budget:

EUR 8 300 000 for 2023

EU co-funding:

Yes

Sources of funding:

National and EU funding via the European Social Fund 2014-2020, Horizon2020, Horizon Europe

Working Group Insights

"In agreement with the other members of the Territorial WG, I selected this good practice because it uses existing regional resources to widen partnerships for community-based problem solving. The Living Labs are a world-wide example of collaboration with a Higher Education Institution at its centre. The specific example of Living Labs set up by the Laurea University of Applied Sciences expands the HEI's local and regional partnerships with businesses, community services, local and regional authorities among others for the benefit of preparing its learners while delivering a specific regional/local service.

By providing challenge-based learning experiences to its students, the project contributed to tailoring the learning experience to the needs of the community around while also making use of external partners' resources in enriching the learning experience. It helps to better prepare learners for the world of work, while upgrading the potential of the region and setting up longer-term solutions which will then require the retention of the talent that worked on identifying a solution to the challenge presented".

Piotr Sadowski, Secretary General, Volonteuropa

Results

The project contributed to nurturing talent in the region by providing learners with real-life learning experience and a learning offer tailored to the needs of the community and labour market in their vicinity. The project contributed to retaining talent by providing opportunities for students and researchers to engage in real-world projects and innovation. The projects remain in the region, boosting the retention rate as graduate students can continue working on the projects as they are taken up in the community.

Success factors

Success factors include strong collaboration between academia, industry, and communities, as well as a focus on open innovation and rapid experimentation.

Implementation challenges

The main challenges included coordinating the diverse range of stakeholders involved, ensuring continuous engagement and collaboration, and managing the complexity of integrating various disciplines and sectors. Additionally, maintaining the balance between academic objectives and practical, real-world problem-solving posed significant challenges. These factors required robust communication strategies and adaptive management to ensure the project's success.

The conclusion of our expert Piotr Sadowski, Secretary General, Volonteuropa

"Laurea's 'Living Labs' embody the essence of lifelong learning, creating spaces where knowledge is co-produced with communities, skills evolve through real-world challenges, and learning extends beyond formal education into continuous engagement with society."

Useful sources

Official website: <https://www.laurea.fi/en/research/laurea-living-labs/>
<https://vitalise-project.eu/laurea-activity-living-lab/>

<https://enoll.org/member/laurea-living-labs-network/>
<https://tuotanto.laurea.fi/en/research/laurea-living-labs/http://www.transitsocialinnovation.eu/sii/living-labs-1>
<https://www.laurea.fi/en/laurea/laurea-annual-report/annual-report-2023---rdi-and-business-operations/#:~:text=Annual%20Report%20%2D%20RDI%20and%20business%20operations&text=In%20three%20years%2C%20Laurea%20has, and%202023%2C%20EUR%208.3%20million.>
<https://www.laurea.fi/avainkumppanuus/#avainkumppanimme>
<https://www.laurea.fi/en/international/event-living-lab/>
<https://www.laurea.fi/en/international/barlaurea/>
<https://www.laurea.fi/en/research/digital-living-lab/>

4.30. Proyecto EREA: Promoting entrepreneurship ecosystems and the social economy in rural areas of Aragon

Working Group:
Territorial

Member State, Region:
Spain, Region of Aragon

Thematic areas:

- Competitiveness and Innovation
- Job and skills

Basic project details

Lead organisation:
Aragon Emprende Foundation - Spain

Partner organisations:
National Administration, represented by the General Secretariat for the Demographic Challenge within the Ministry for the Ecological Transition and the Demographic Challenge, Network of Entrepreneurship Centres of Aragon (ARCE Network)

Initiative duration:
The programme launched its first edition in 2022 and has since been conducted annually.

Overview and objectives

This initiative is designed to promote the economic and social development of rural and intermediate areas (urban-rural regions). The programme has a dual objective: first, to strengthen the entrepreneurial ecosystem and foster innovation in rural areas by encouraging actions beyond urban environments; and second, to create opportunities in regions facing demographic and socio-economic challenges.

By promoting entrepreneurship, the initiative aims to cultivate an environment conducive to innovation and business development. Additionally, it seeks to energise these territories by creating opportunities for a highly skilled workforce, particularly targeting young people. Furthermore, the initiative facilitates the identification of business opportunities that can help bridge the socio-economic and service-access gap between rural and urban areas.

Context

Demographic challenges such as population decline and aging populations reduce economic activity and vitality in rural areas. Aragon was lacking the infrastructure and support systems needed for innovation and entrepreneurship, limiting its development potential.

Target groups

The programme focuses on rural areas and local communities within rural-urban intermediate areas. Specifically, it targets two primary groups: entrepreneurs looking to launch new initiatives in their territories, and professionals or self-employed individuals who are already operating businesses in these areas and seek to enhance their projects.

Actions

The initiative comprises an integrated programme designed to promote entrepreneurship through three key pillars:

- Support and advisory mechanisms: This includes the establishment of business incubators, co-working centres, and financial guidance services to assist in the development of entrepreneurial initiatives.
- Financial support: The programme offers financial backing for innovative projects aimed at territorial transformation, particularly in rural municipalities with populations of fewer than 5,000 inhabitants.
- Acceleration programme: An acceleration programme for entrepreneurial initiatives is provided, featuring a digital platform and a range of training activities, including both face-to-face and hybrid online-offline formats.

Financial allocation

Total budget:

EUR 2 800 000 (2022-2024)

EU co-funding:

No

Sources of funding:

- National Funding (Cohesion and Territorial Transformation Fund, distributed by State Government to regions)
- Regional funding (ARCE Network)

Working Group Insights

"In agreement with the other members of the Territorial WG, I selected this good practice due to its significant potential, as evidenced by its initial results. The initiative has played a crucial role in fostering an innovative ecosystem that generates opportunities in rural areas. By promoting the development of entrepreneurial skills and providing tailored support, it enables the better utilisation of local resources and facilitates the creation of new professional networks. Furthermore, this initiative exemplifies effective collaboration between different levels of government and various policy instruments.

By providing comprehensive and personalised support, this practice plays a vital role in both developing and retaining talent. On one hand, it aims to strengthen skills in rural and urban areas through targeted training programmes and mentorship opportunities. On the other hand, it offers a pathway to retain highly skilled workers and entrepreneurs by facilitating the effective implementation of their projects within the territory. This dual approach not only

enhances individual capabilities but also contributes to the overall economic vitality of the region”.

**Gonzalo Valencia Sagrera, Deputy Director for Inclusion Policies
(Ministry of Inclusion, Social Security and Migrations of Spain)**

Results

From 2022 to 2024, the initiative achieved significant results, promoting a total of 190 entrepreneurial projects. Additionally, it has engaged 200 participants, contributing to the development of skills and strengthening the entrepreneurial ecosystem within the targeted areas.

Success factors

The success factors of the initiative include the effective leveraging of local resources, strong support for diverse business sectors, tailored assistance for aspiring entrepreneurs, and a focus on innovation and business development. Additionally, the comprehensive nature of the programme, which combines various interventions, has led to better overall results. The combination of financial incentives, business incubation, and mentorship programmes also contributed to the creation of a self-sustaining entrepreneurial environment.

Implementation challenges

The key challenges faced by the initiative include:

- Financial needs: There is a pressing need for increased focus on securing adequate financing for rural development initiatives to ensure their sustainability and effectiveness.
- Learning from past mistakes: It is crucial to analyse and learn from previous failures to avoid repeating them and to enhance future efforts.
- Building a regional ecosystem: Creating a strong regional ecosystem that effectively connects rural and urban areas is essential. This requires careful analysis of business opportunities, available resources, and the unique advantages of each area.
- Support infrastructure and expertise: Establishing a support infrastructure and ensuring access to specialised staff with local knowledge are critical for the success of rural development programmes.

The conclusion of our expert Gonzalo Valencia Sagrera, Deputy Director for Inclusion Policies (Ministry of Inclusion, Social Security and Migrations of Spain)

“This practice’s unique characteristic is the combination of all possible support mechanisms (advisory, financial, and acceleration featuring a digital platform and a range of training activities) adapted to rural and intermediate rural- urban areas, which ensures that entrepreneurs, professionals and self-employed individuals succeed in their goals”.

Useful sources

Official website: <https://erea.aragonemprende.com/>
<https://erea.aragonemprende.com/testimonios-inspiradores/>
<https://erea.aragonemprende.com/proyectos-con-impulso/>
<https://re-viviendo.es/>
<https://www.mateosierra.es/>

4.31. Programa Campus Rural: University internship programmes in rural areas

Working Group:

Territorial

Member State, Regions:

Spain, all the 17 Spanish regions

Thematic areas:

Jobs and Skills

Basic project details

Lead organisation:

Spanish State Government (Ministry for the Ecological Transition and the Demographic Challenge) - Spain

Partner organisations:

- Association of Spanish Universities (CRUE Universidades)
- 41 Spanish public universities are involved

Initiative duration:

June 2022-Ongoing

Overview and objectives

The programme offers university students paid professional internships lasting five months in organisations or companies situated in municipalities with fewer than 5 000 inhabitants and in rural regions. It also encourages participants to reside in the area throughout the internship period. The primary objectives of this programme are to: a) Immerse new qualified generations in the professional landscape of rural areas, providing them with new avenues for career development; b) Connect talent located in urban areas with potential employment and entrepreneurial opportunities in rural communities; c) Foster a shift in the prevailing perceptions of declining areas in Spain.

Context

The initiative aimed to address the following challenges: a) Lack of interest in rural areas among university undergraduate students; b) Difficulty in attracting a highly skilled workforce to rural territories; and c) Insufficient awareness of the opportunities available for developing personal and professional projects in rural areas.

Target groups

University students from Spanish public universities. Internships are intended for all profiles and academic areas (Humanities, Social Sciences, Bio health and STEM).

Actions

- Internships in rural areas.
- Professional training and development of professional skills in undergraduate students.

Financial allocation

Total budget:

EUR 4 200 000 (2022- 2024)

EU co-funding:

No

Sources of funding:

- National funding (General Secretariat for the Demographic Challenge, Ministry for the Ecological Transition and the Demographic Challenge): 90%
- Regional funding (Each involved university budget): 10%

Working Group Insights

"In agreement with the other members of the Territorial WG, I selected this good practice because it is directly connected to the challenge of promoting urban-rural dialogue, by boosting cooperation between urban areas and their territorial areas of influence. After several editions of the programme, it could be considered that it has great potential to build links between relevant socio-economic actors as universities, with rural areas and small municipalities. Thus, it is an innovative way to bring other territorial realities closer to young people.

By matching the professional expectations of young university students and the opportunities for training and job placement in rural areas and small municipalities, this initiative contributed to the attraction of talent and high skilled workforce. In the same way, it improved the vision of rural territories by young people, showing them as areas of personal and professional opportunities".

**Gonzalo Valencia Sagrera, Deputy Director for Inclusion Policies
(Ministry of Inclusion, Social Security and Migrations of Spain)**

Results

Between 2022 and 2024, the initiative has successfully engaged 1,500 undergraduate students from 41 universities across 600 municipalities in 47 out of 51 provinces. This programme has not only facilitated the development of entrepreneurship projects but has also resulted in job placements following internships, thereby contributing to the retention of talent in rural areas.

Success factors

The initiative emphasised that improved and innovative forms of cooperation were crucial in breaking the status quo and effectively addressing the challenges at hand. By strengthening efforts to collaborate with organisations that are closely connected to rural territories, the initiative aimed to harness local expertise and resources. By increasing partnerships with rural businesses and municipalities, the initiative improved placement rates and post-internship retention. Finally, the programme targeted students interested in professional opportunities in rural areas, ensuring that placements aligned with both student interests and regional workforce needs.

Implementation challenges

The main challenges faced by the initiative included the consolidation of the Campus Rural Programme as a comprehensive framework for intervention in local communities through talent

development. Additionally, there was a need to expand the offerings by increasing the number of internship positions and fields of study, while also addressing institutional barriers that hindered the enlargement of internship opportunities. Another significant challenge was to enhance the connection between young talent and available job opportunities or entrepreneurship projects. Finally, ensuring long-term retention rates of participants after their internships proved to be a critical concern for the initiative's success.

The conclusion of our expert Gonzalo Valencia Sagrera, Deputy Director for Inclusion Policies (Ministry of Inclusion, Social Security and Migrations of Spain)

“The close collaboration of Spanish public universities with organisations that are closely connected to rural territories, allowed this programme to harness local expertise and resources and at the same time to connect talent with opportunities in rural communities. It was this element that ensured the success of the programme”.

Useful sources

Official website: https://www.miteco.gob.es/es/reto-demografico/temas/campus_rural.html
<https://elpais.com/eps/2023-01-09/los-erasmus-del-mundo-rural.html>
<https://www.courrierinternational.com/article/initiative-en-espagne-des-etudiants-au-secours-du-monde-rural#:~:text=Des%20universit%C3%A9s%20espagnoles%20envoient%20leurs,voie%20hors%20des%20sentiers%20battus>
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<https://www.youtube.com/watch?v=kX-75hnOy7E>
<https://www.youtube.com/watch?v=CTQXYgvwKNk>

5. Key takeaways

The key takeaways presented in this Catalogue are based exclusively on the good practices collected and submitted by the members of the four WGs. As such, they reflect specific solutions that have been identified and validated through first-hand experience, rather than a comprehensive set of policy options. While we acknowledge that the challenges outlined—particularly those related to talent retention and access to essential services—could be addressed through a broader range of policy measures (e.g. investments, reforms, intermunicipal cooperation), the scope of this Catalogue is intentionally focused on documenting and analysing selected practices. These insights are intended as a starting point for further reflection and will be complemented by additional analysis and recommendations in future deliverables, including Volume 2 of the Catalogue.

The key takeaways consist of WG-specific key takeaways and in common key takeaways. The WG-specific key takeaways summarise the main lessons learned from the good practices collected by each WG. In particular, they highlight identified practical solutions and policy recommendations that can inform future initiatives in their respective fields. The common key takeaways identify common themes, success factors, and implementation challenges encountered that emerge across the different WGs, reflecting the areas of synergy outlined in the WGs Strategic Roadmaps. In particular, the common themes — skills and education systems, inclusion, innovation, and access to essential services — capture shared priorities across the WGs.

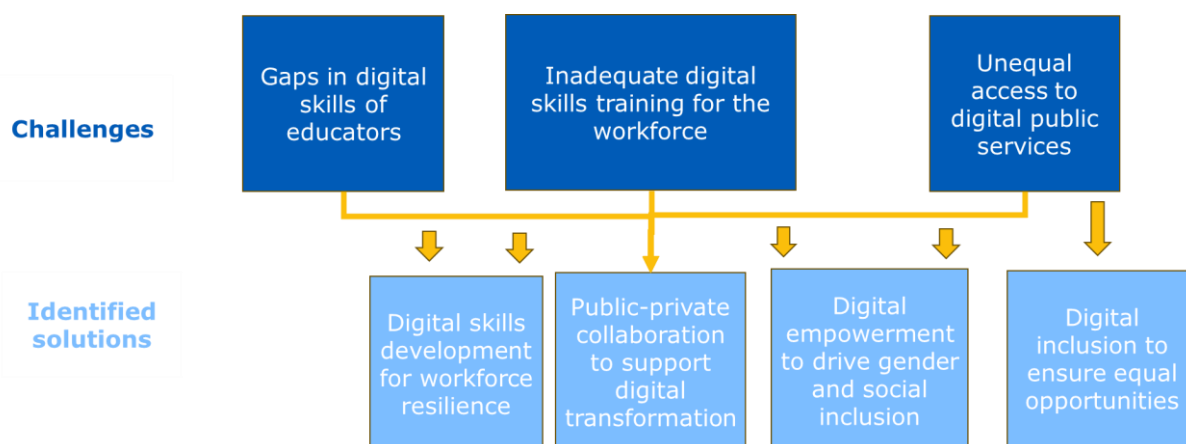
5.1. WG-specific key takeaways

Digital WG

The good practices compiled under the Digital WG highlight several key takeaways on fostering digital transformation, inclusion, and skills development across different sectors and population groups. These insights reflect successful strategies for bridging the digital divide, integrating digital skills into education and workforce development, and leveraging digital tools for social and economic empowerment.

The figure below illustrates how each key takeaway highlights solutions to the specific challenges outlined in Section 2 (Context), with more detailed explanations provided thereafter.

Figure 7: Challenges and identified solutions (Digital WG)



1) Digital skills development for workforce resilience

One of the recurring themes across the good practices is the need for continuous upskilling and reskilling to keep pace with technological advancements. **The BeaT initiative (good practice 4.1)** in Germany illustrates how digital skills training tailored to industry needs—such as Train the Trainer Workshops—can strengthen workforce adaptability in rapidly transforming sectors like automotive manufacturing. Similarly, **Scuola Digitale Liguria (good practice 4.7)** demonstrates how structured digital education in schools can create a pipeline of digital talent for the future labour market.

Insights gained from these successful practices highlight that close collaboration between industry, vocational education, and regional authorities is essential to align digital skills training with market demands. Sustainable solutions require a comprehensive, system-wide approach, embedding digital skills into formal education and lifelong learning. Targeted upskilling programmes tailored to industry-specific needs enhance employability and business adaptability, especially when preceded by assessments of individual skill gaps. Prioritising pilot actions in regions facing greater challenges and facilitating knowledge transfer through study visits can amplify impact. Peer-to-peer learning initiatives, such as twinning digital talents with those with lower skills, foster inclusive upskilling, while train-the-trainer models help multiply knowledge within communities and promote broader digital inclusion.

2) Digital inclusion to ensure equal opportunities

Several initiatives demonstrate the importance of ensuring digital skills and infrastructure are accessible to all social groups. The **Digital Inclusion Czechia project (good practice 4.2)** and **Apulia's digital facilitation services (good practice 4.5)** address the digital divide by providing training and support to underserved communities, particularly the elderly and socio-economically disadvantaged groups. The **Workshops for digital literacy of people of the third age in Croatia (good practice 4.6)** further reinforce the importance of tailoring digital education to empower older individuals, preventing social exclusion, and enabling their continued participation in an increasingly digital society.

Lessons learned from these good practices highlight the fact that bridging digital inequalities requires multi-level collaboration between governments, NGOs, and community organisations to provide targeted and sustained support. Accessible digital skills training programmes must be tailored to the needs of specific groups, such as seniors, people in vulnerable socio-economic situations, and those with limited digital exposure. Combining digital literacy efforts with access to digital infrastructure, such as public WiFi and community hubs, significantly enhances inclusion outcomes. Public administrations that innovate through digital inclusion strategies can create opportunities to retain local talent and foster territorial development. Moreover, providing wraparound employability support is crucial to enable disadvantaged individuals to transition from digital literacy to work-based environments. Finally, integrating training on advanced digital skills and human-centred data interaction – such as interpreting, communicating, and acting on data insights – can enhance users' ability to engage meaningfully with digital tools and systems.

3) Digital empowerment to drive gender and social inclusion

Digital skills play a transformative role in gender equality and economic empowerment. The **Digital Kick initiative in Latvia (good practice 4.3)** highlights how targeted digital training, mentorship, and entrepreneurship support can help women overcome barriers to entering the digital economy. Similarly, **MindSpring in Denmark (good practice 4.8)** demonstrates how digital tools can be leveraged to support the integration of refugees and ethnic minorities, helping them navigate public services and employment opportunities.

Lessons learned from these good practices highlight the fact that providing digital skills training tailored to underrepresented groups fosters greater participation in the digital economy and reduces gender and social inequalities. Combining technical training with mentorship and entrepreneurship support enhances long-term digital empowerment, while upskilling career counsellors in digital skills, labour market trends, and bias awareness improves access to opportunities for all. Digital literacy programmes also facilitate the social and economic integration of migrants and disadvantaged groups by improving their access to essential services and employment. Itinerant digital facilitation points further promote inclusion by making public services more accessible, particularly in rural areas. Sustained commitment, stakeholder involvement, and the use of role models are essential to empower vulnerable groups effectively. Identifying and promoting good practices, such as leveraging digital skills to enable remote work for mothers, enhances gender inclusivity, and combining training with financial or logistical support increases participation among low-income individuals facing barriers like transport or connectivity issues.

4) Public-private collaboration to support digital transformation

The success of digital transformation initiatives relies on strong cooperation between public institutions, private sector actors, and civil society. **The DIGITClue project (good practice 4.4)** showcases the importance of integrating digital inclusion into teacher education, ensuring that future generations of educators are equipped with the tools to support digital learning. **Apulia's digital facilitation services (good practice 4.5)** exemplify how regional governments can take the lead in coordinating digital inclusion programs at scale, working with municipalities, private stakeholders, and third-sector organisations to enhance digital literacy and access to public services.

The outcomes of these good practices demonstrate that public-private partnerships enhance investment, scalability, and long-term sustainability of digital initiatives. Government-led digital strategies should actively leverage industry expertise and financial resources to accelerate transformation. Strong collaboration between educational institutions and businesses, including SMEs, ensures that digital skills programmes remain closely aligned with labour market needs, while targeted engagement efforts broaden participation. Establishing regional digital assistants and mentors to support policymakers improves decision-making and the effective rollout of digital strategies. Finally, promoting smart public policy measures fosters a strategic, coordinated approach that advances digital transformation across sectors.

The box below provides a summary of the key takeaways of the Digital WG.

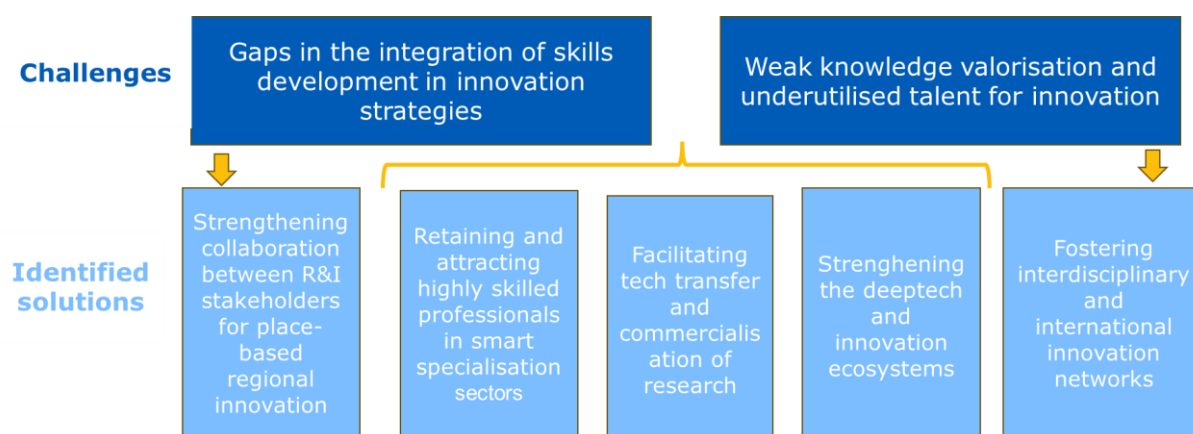
Box 1: Summary of the key takeaways of the Digital WG

The good practices showcased within the Digital WG confirm that digital transformation is not only about technology but also about accessibility, inclusion, and adaptability. Addressing digital skills gaps, expanding access to digital literacy training, and fostering inclusive digital ecosystems are crucial to ensuring that all individuals and regions can fully participate in the digital economy. For policymakers and practitioners, these lessons underline the need for long-term, place-based strategies, multi-stakeholder collaboration, and continuous adaptation of digital skills training to ensure equitable access and economic resilience.

The R&I WG has explored different approaches to fostering knowledge valorisation, bridging the gap between academia and industry, and strengthening regional innovation ecosystems. The collected good practices highlight strategic initiatives that support deep tech entrepreneurship, facilitate technology transfer, create stronger academia-industry linkages, and attract and retain highly skilled professionals in innovation-driven sectors. These insights offer valuable lessons on how to build a dynamic and competitive research and innovation landscape across EU regions.

The figure below illustrates how each key takeaway highlights solutions to the specific challenges outlined in Section 2 (Context), with more detailed explanations provided thereafter.

Figure 8: Challenges and identified solutions (R&I WG)



1) Strengthening the deep tech and innovation ecosystems

One of the key challenges in translating research into market applications is the lack of structured support for deep tech entrepreneurs. Initiatives such as the **“Deep Tech Entrepreneurship” curriculum (good practice 4.9)** and the **“Mature Your PhD” challenge (good practice 4.10)** provide structured training and mentorship to help researchers transform academic knowledge into viable tech start-ups. These programmes help bridge the gap between research and industry, offering entrepreneurial training, intellectual property guidance, and access to early-stage funding.

Insights gained from these initiatives highlight that deep tech entrepreneurship programmes are crucial in helping researchers commercialise innovation and develop spin-offs and start-ups. Structured training in business skills and market analysis is essential to enable the transition from academia to entrepreneurship. Public-private collaboration with industry stakeholders strengthens the deep tech ecosystem and accelerates the pace of innovation. Providing continuous support beyond the start-up phase ensures long-term sustainability and business growth. Additionally, legal and fiscal incentives play a key enabling role by attracting investment and reducing early-stage risks for deep tech entrepreneurs.

2) Facilitating tech transfer and commercialisation of research

The conversion of high-potential research into marketable solutions remains a critical challenge not only for regional innovation ecosystems but also more broadly for technology transfer and commercialisation in general. The **“Mature Your PhD” challenge (good practice 4.10)** has successfully helped early-stage researchers identify the commercial potential of their work, access mentorship, and develop go-to-market strategies. Meanwhile, the **“Team-to-Market” programme (good practice 4.11)** ensures scientific spin-offs find experienced business leaders to drive commercialisation.

Lessons learned from these good practices highlight the fact that tech transfer support for PhD students enhances regional innovation and helps retain talent. Targeted initiatives matching researchers with business professionals improve the scalability of spin-offs and start-ups, while early-stage funding for tech maturation bridges the gap between prototypes and market-ready solutions. Building strong teams around research ideas fosters innovation and increases commercial success rates. Supporting interface facilities like Technology Parks strengthens innovation ecosystems by offering infrastructure and collaboration opportunities. Moreover, funding for proof-of-concept studies and prototype development accelerates the commercialisation process, while facilitating access to Business Angels, venture capital, and other investment sources bolsters financial support for emerging technologies.

3) Retaining and attracting highly skilled professionals in smart specialisation sectors

Many European regions face brain drain due to limited career opportunities for highly skilled professionals, particularly in science and technology sectors prioritised under regional smart specialisation strategies. The **Extremadura Tech Talent initiative (good practice 4.12)** directly addresses this challenge by reconnecting qualified professionals from Extremadura, Spain—who are living and working abroad—with local employment opportunities in innovative, technology-based companies. Through a dedicated online platform and ongoing engagement with both talent and employers, the initiative supports the growth of regional businesses while helping skilled individuals return to meaningful careers in their home region. Similarly, the **European Battery Alliance (EBA) Academy (good practice 4.17)** focuses on upskilling and reskilling workers across the battery value chain, ensuring that Europe has the specialised workforce needed to meet the demands of its green and industrial transitions.

The outcomes of these practices show that regions must actively promote their innovation potential to attract skilled professionals and expatriate talent. Digital platforms and targeted job-matching services play a crucial role in connecting tech professionals to local innovation ecosystems. Upskilling and reskilling initiatives are essential to maintaining regional competitiveness in rapidly evolving sectors such as energy, digital manufacturing, and AI. Offering continuous learning opportunities, clear career paths, and mentorship programmes enhances professional growth and long-term workforce engagement. Finally, providing attractive career opportunities alongside promoting quality of life is key to retaining and drawing top talent to regional innovation hubs.

4) Strengthening collaboration between R&I stakeholders for place-based regional innovation

To strengthen research valorisation, several initiatives highlight the importance of structured collaboration between academia, industry, and public authorities in driving innovation. In Ireland, the **I-Form Research Centre for Advanced Manufacturing (good practice 4.13)** effectively connects academia and industry through applied research projects, talent development pathways, and PhD placements in the private sector. Similarly, Greece's **Teaching Factory Competence Centre (good practice 4.16)** provides a collaborative platform that fosters innovation in Industry 4.0 manufacturing technologies, while embedding a strong place-based approach, tailored not only to the challenges of European industrial ecosystems but also to regional needs. Additionally, a key success factor of the **Team-to-Market project (good practice 4.11)** was the strong backing from regional partners, which enabled the initiative to engage a broad range of researchers and organisations. Likewise, in the **Extremadura project (good practice 4.12)**, robust regional support—through a close-knit network of companies and institutions—has played a crucial role in attracting and retaining talent in the region.

Evidence from these practices underscores that strategic partnerships between academia and industry significantly enhance knowledge transfer and improve research impact. These partnerships should align with regional priorities to build a critical mass of innovation, attracting and retaining talent, ensuring sustainable economic growth. The direct involvement of public authorities in supporting academia-industry partnerships enhances collaboration and facilitates funding. Work-integrated learning models are essential in ensuring that graduates possess the skills required in high-tech industries. Innovation hubs and competence centres act as catalysts for regional competitiveness and talent development, while dedicated financing for academia-industry R&I projects within the scope of S3 strategies strengthens regional innovation ecosystems and enhances the impact of smart specialisation strategies.

5) Fostering interdisciplinary and international innovation networks

Interdisciplinary collaboration and international knowledge exchange are key drivers of innovation and talent mobility. The **Pathways to Innovation & Entrepreneurship programme (good practice 4.15)** fosters cross-sector collaboration between students, SMEs, and international innovation ecosystems. Similarly, the **LCAMP initiative (good practice 4.14)** has established a pan-European training and skills platform for advanced manufacturing, promoting lifelong learning and regional capacity-building.

The outcomes of these good practices demonstrate that interdisciplinary approaches are crucial for enhancing innovation by connecting diverse fields of expertise. International collaborations expand learning opportunities and provide access to global innovation ecosystems. Lifelong learning platforms ensure that regions stay competitive in emerging industries. Furthermore, skills and jobs observatories are essential, as they provide valuable insights into labour market trends, skill demands, and emerging opportunities, ensuring alignment between workforce development and innovation needs.

The box below provides a summary of the key takeaways of the R&I WG.

Box 2: Summary of the key takeaways of the R&I WG

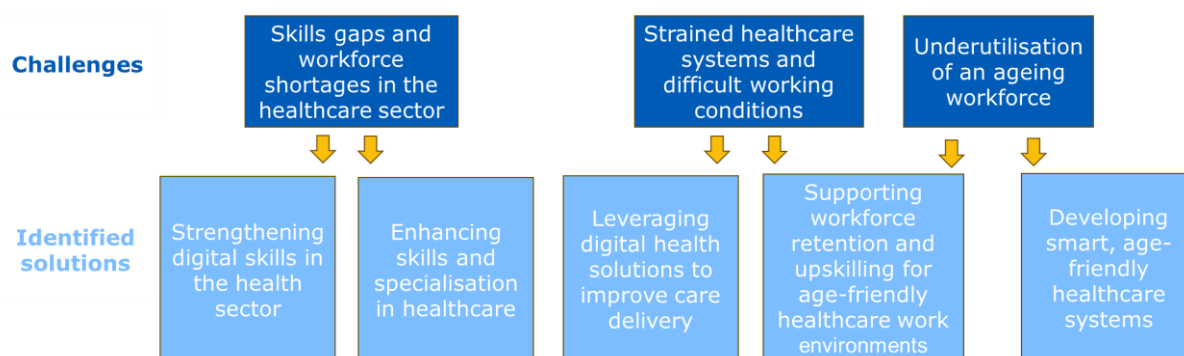
The good practices collected under the R&I WG demonstrate that effective knowledge valorisation and innovation strategies require multi-stakeholder collaboration, targeted training initiatives, and structured support for tech transfer and entrepreneurship. Place-based strategies and Smart Specialisation Strategies (S3) play a crucial role in this process by ensuring that investments and policies align with regional strengths and opportunities. Strengthening deep tech ecosystems, connecting academia with industry, and providing structured career pathways for highly skilled professionals are key factors in building a resilient, innovative, and competitive research ecosystem.

Health WG

The Health WG has identified key lessons from various good practices focused on digital skills, workforce capacity, ageing population challenges, and healthcare system resilience. These initiatives highlight innovative solutions for workforce development, digital transformation, and inclusive health systems.

The figure below illustrates how each key takeaway highlights solutions to the specific challenges outlined in Section 2 (Context), with more detailed explanations provided thereafter.

Figure 9: Challenges and identified solutions (Health WG)



1) Strengthening digital skills in the health workforce

The digitalisation of healthcare services is essential for improving healthcare quality, efficiency, and accessibility. However, insufficient digital skills among healthcare professionals can hinder the effective implementation of digital solutions, such as Electronic Health Records (EHRs), telemedicine, and AI-based diagnostics. **The “Digital Skills to Increase Quality and Resilience of the Health System in Italy” initiative (good practice 4.18)** addresses this gap by developing a national strategy and action plan for digital skills improvement.

Insights gained from these initiatives highlight the importance of a clear digital skills strategy to support workforce upskilling, ensuring healthcare professionals can effectively use new digital tools. Stakeholder engagement and co-creation approaches are crucial for improving adoption, tailoring training programmes to regional needs and healthcare system structures. Defining KPIs for digital transformation ensures accountability and allows for continuous improvement in digital skill development. Additionally, defining observable behaviours is essential for accurately assessing current skill profiles and setting clear expectations for skill development over time. Finally, integrating digitalisation in healthcare with a change management model is vital to address resistance to change, which can vary by generation and professional role.

2) Enhancing skills and specialisation in healthcare

Workforce shortages and skill mismatches in healthcare can undermine service quality, particularly in rural or underserved areas. The **ENHANCE project (good practice 4.19)** successfully developed a European curriculum for Family and Community Nurses (FCNs) to standardise and strengthen specialised skills in community healthcare. Moreover, the **TEAMCARE project (good practice 4.21)** addresses the upskilling of social and healthcare professionals (SHCPs) improving the cross-disciplinary and interprofessional teamwork, focusing on a coordinated and multidisciplinary approach to person-centred care (Community-Based Interprofessional Teams - CBITs).

Lessons learned from these initiatives highlight the importance of developing standardised, modular training programmes to enhance the professionalisation of healthcare roles, thereby improving workforce mobility across Europe. Investing in Primary Healthcare (PHC) specialisation strengthens decentralised healthcare delivery, reduces hospital dependency, and improves long-term cost efficiency. Scalable training models can be adapted across different regions, helping address local healthcare workforce shortages. Additionally, increasing the attractiveness of PHC roles and specialisations is crucial, as acute care specialisations tend to be more appealing. Finally, thinking "outside the box" by involving diverse expertise beyond healthcare providers (HCPs) can lead to more innovative and integrated healthcare solutions.

3) Supporting workforce retention and upskilling for age-friendly healthcare work environments

Europe faces a shrinking healthcare workforce and an ageing population, leading to increased demand for age-inclusive workforce policies. The **IntegrAGE project (good practice 4.20)** focuses on retaining workers 55+ in the healthcare sector by promoting age management strategies, upskilling programs, and intergenerational knowledge transfer.

Evidence from these initiatives shows the importance of encouraging age management strategies to retain experienced healthcare professionals, reducing the loss of valuable knowledge and expertise. Flexible work arrangements and mentoring programmes facilitate intergenerational knowledge transfer, improving the quality of patient care. Addressing workforce shortages through innovative retention policies helps stabilise the healthcare labour market in ageing regions. Additionally, training managers in age-friendly management practices fosters inclusive workplaces, enhances workforce retention, and supports the well-being of healthcare professionals across all age groups.

4) Leveraging digital health solutions to improve care delivery

The **my-AHA project (good practice 4.22)** and **SHAPES initiative (good practice 4.24)** demonstrate how smart health technologies can enhance healthy ageing, chronic disease management, and home-based care. By using AI-driven health monitoring, digital platforms, and wearable devices, these projects improve early risk detection and enable remote service delivery in medical deserts.

The outcomes of these practices highlight the role of digital health solutions in reducing the burden on healthcare facilities by allowing patients to monitor their health remotely, thus preventing unnecessary hospital visits. Personalised digital interventions empower older adults to manage their own health, increasing autonomy and improving their quality of life. Integrating digital health tools into public healthcare systems requires strong governance to address issues like data security, accessibility, and interoperability. Additionally, developing the digital skills of social and healthcare staff through targeted education and training is essential for the effective adoption of digital solutions and improved patient care. Building patient trust in the healthcare system, including public healthcare services and digital tools, is also crucial for effective care delivery and patient engagement.

5) Developing smart, age-friendly healthcare systems¹⁷

The **NET4Age-Friendly (good practice 4.23)** and **SHAPES (good practice 4.24)** initiatives promote Smart Healthy Age-Friendly Environments (SHAFE). These projects demonstrate the importance of intersectoral collaboration in transforming healthcare ecosystems.

Lessons learned from these initiatives emphasise the value of creating horizontal policies that integrate digital solutions into healthcare environments to support more inclusive and sustainable ageing strategies. Collaboration between policymakers, researchers, and industry is key to developing effective and scalable health and care models. Digital connectivity improves equal access to healthcare, especially in remote or depopulated regions, making these areas more attractive to healthcare professionals. Additionally, developing smart, age-friendly healthcare systems requires long-term strategies that address aging proactively, starting from early life. This includes fostering digital health literacy from a young age to ensure individuals can navigate healthcare systems effectively as they age.

The box below provides a summary of the key takeaways of the Health WG.

¹⁷ Smart healthcare systems leverage technology, data, and innovation to enhance healthcare delivery. This includes digital health solutions, telemedicine, AI-driven diagnostics, and electronic health records that improve efficiency, accessibility, and patient outcomes.

Age-friendly healthcare systems are designed to meet the needs of people across different life stages, particularly older adults. This involves accessible infrastructure, personalised care pathways, and long-term strategies such as preventive care, geriatric expertise, and digital health literacy initiatives that start early in life.

Box 3: Summary of the key takeaways of the Health WG

The good practices collected under the Health WG demonstrate that digital transformation, workforce capacity-building, and age-friendly policies are essential for sustainable and equitable healthcare systems. To future-proof healthcare services, policymakers and stakeholders should focus on:

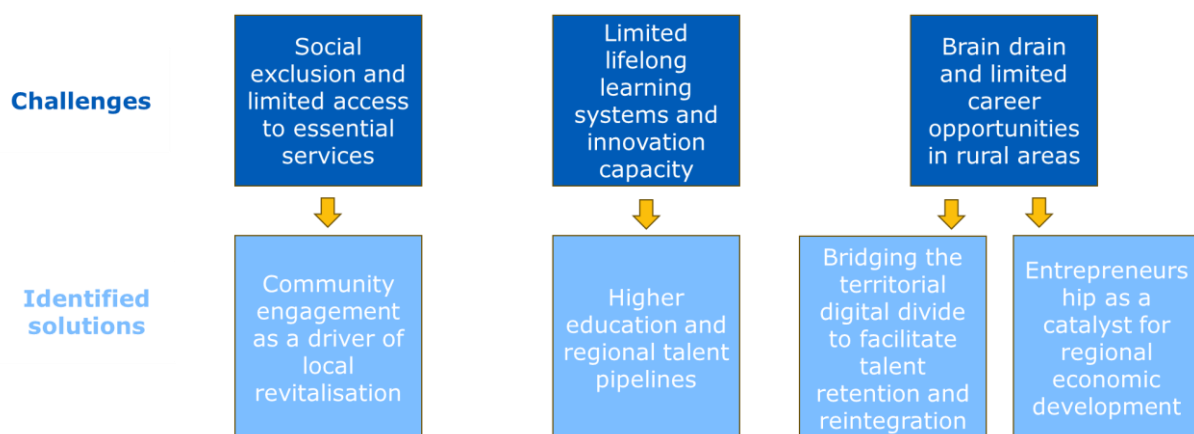
- *Investing in digital skills training for healthcare professionals to ensure the efficient use of emerging technologies.*
- *Developing standardised training programs to enhance workforce specialisation and mobility.*
- *Implementing workforce retention strategies that address both the ageing healthcare workforce and the growing needs of an ageing population.*
- *Leveraging digital health tools to improve early detection, remote care, and patient empowerment.*
- *Fostering intersectoral collaboration to build smart, inclusive, and age-friendly healthcare ecosystems that support both an ageing workforce and the needs of an ageing population.*

Territorial WG

The Territorial WG explored various place-based strategies for talent attraction and retention, regional development, and economic revitalisation. The selected good practices highlight the role of community engagement, digital platforms, entrepreneurship ecosystems, and higher education partnerships in strengthening regional attractiveness and fostering sustainable growth. These initiatives provide valuable insights into leveraging regional assets, enhancing collaboration between public and private stakeholders, and addressing demographic and economic challenges.

The figure below illustrates how each key takeaway highlights solutions to the specific challenges outlined in Section 2 (Context), with more detailed explanations provided thereafter.

Figure 10: Challenges and identified solutions (Territorial WG)



1) Community engagement as a driver of local revitalisation

A major challenge for rural and remote areas across Europe is the persistent decline in population and limited access to opportunities. While broader measures—such as investments in infrastructure, public service reforms, and intermunicipal cooperation—are essential to addressing these structural issues, community-driven initiatives offer a complementary and

place-based approach that can unlock local potential, mobilise citizens, and reinforce the social fabric needed to make such reforms effective and sustainable. In this context, community-led initiatives that prioritise creativity, cultural heritage, and civic engagement play a vital role in strengthening regional identity and improving quality of life. The **Community building, youth voluntary activities in the Municipality of Aristotele initiative (good practice 4.26)** provides a structured approach to revitalising rural areas through youth-led projects, cultural preservation, and intergenerational engagement. By fostering local participation and ownership, this initiative has strengthened community cohesion, increased tourism attractiveness, and provided young people with meaningful opportunities to remain engaged in their regions. Moreover, community-driven initiatives can be powerful tools for revitalising rural areas and creating local opportunities.

Lessons learned from these initiatives indicate that community-driven initiatives can be powerful tools for revitalising rural areas and creating local opportunities. Intergenerational exchanges and youth-led projects have been shown to strengthen social cohesion and increase regional attractiveness. Collaboration between local authorities, NGOs, and civil society is essential to ensuring long-term sustainability. Additionally, multi-level governance and stakeholder involvement are key to ensuring the sustainability and impact of rural revitalisation efforts, as they help connect grassroots initiatives to broader governance structures.

2) Bridging the territorial digital divide to facilitate talent retention and reintegration

The lack of structured support for returning talent remains a key barrier for regions aiming to counter brain drain and attract skilled professionals. While digital platforms and tools play an important facilitating role, they are not sufficient on their own. Their effectiveness depends on being embedded within a broader, well-coordinated local strategy that includes targeted support schemes, incentives, and career development opportunities for returning individuals. Robust digital infrastructure and territorially tailored solutions can bridge this gap by facilitating connections between returning talent and local employers, economic actors, and business support services. The **Digital platform for returning home (Retour aux Pays) in Guadeloupe (good practice 4.27)** has effectively addressed this challenge by connecting expatriate professionals with job opportunities and entrepreneurship support, while also being part of a wider local approach that strengthens regional employer networks and supports reintegration. In **Arctic Sweden, the mobile co-creation lab and innovation sprints (good practice 4.25)** have helped municipalities develop tailored digital solutions for talent attraction, complementing other regional initiatives that facilitate talent reintegration. These place-based digital tools demonstrate how technology can support—but not replace—comprehensive, policy-backed efforts to strengthen local economies, improve labour market access, and enhance territorial resilience.

Insights gained from these initiatives highlight that digital platforms can improve talent reintegration by facilitating visibility and connections between returning professionals and local employers. They also show that regional authorities play a key role in ensuring that returning talent has access to job placement services, funding opportunities, and entrepreneurship support. Finally combining digital tools with targeted outreach can help regions attract and retain highly skilled workers.

3) Entrepreneurship as a catalyst for regional economic development

Many regions, particularly rural areas, struggle with economic diversification and a lack of business opportunities. Supporting entrepreneurship ecosystems is a crucial step in fostering local innovation and providing skilled professionals with reasons to stay. The **Promoting entrepreneurship ecosystems in rural areas of Aragon (EREA) project in Spain (good practice 4.30)** and the **Invest in Alentejo Initiative (good practice 4.28)** demonstrate how regional investment strategies, financial incentives, and business incubation programmes can support the growth of local enterprises and attract external investment. These initiatives have

successfully strengthened business ecosystems, created jobs, and fostered innovation in previously underserved regions.

The outcomes of these good practices demonstrate that entrepreneurship support programmes can stimulate economic growth and provide long-term career opportunities in rural areas. Financial incentives, mentoring, and business incubation are also key enablers of regional talent attraction and retention. They also demonstrate that public-private partnerships can play a critical role in creating a dynamic entrepreneurial ecosystem, and that positive incentives for rural projects, including tax benefits, can encourage investment, entrepreneurship, and long-term talent retention in less populated areas.

4) Higher education and regional talent pipelines

A key factor in addressing regional skills gaps and workforce shortages is creating stronger links between higher education institutions and local economies. The **University internship programmes in rural areas (Programa Campus Rural) in Spain (good practice 4.31)** demonstrates how placing university students in rural internships can expose young professionals to career opportunities outside urban centres, reduce brain drain, and improve perceptions of rural areas as viable career destinations. Similarly, **the Living Labs – Laurea initiative (good practice 4.29)** showcases how higher education institutions can act as drivers of regional innovation, fostering applied learning and industry collaboration to retain local talent.

Evidence from these initiatives emphasise that regional internship programmes can help bridge the gap between higher education and local employment opportunities. They also show that higher education institutions can play a strategic role in developing regional skills pipelines and fostering innovation ecosystems, and that work-integrated learning experiences can strengthen talent retention by exposing students to career opportunities in their regions.

The box below provides a summary of the key takeaways of the Territorial WG.

Box 4: Summary of the key takeaways of the Territorial WG

The good practices collected under the Territorial WG demonstrate that effective regional talent strategies require place-based, multi-stakeholder approaches that can offer real socioeconomic incentives to its communities. Strengthening regional identity and actively promoting rural areas as attractive places to live and work are essential for talent retention and attraction. Additionally, fostering community participation, leveraging digital tools, boosting entrepreneurship, ensuring access to essential and public services (including housing and physical, digital and cultural connectivity), and linking education with the needs and characteristics of local economies are success factors for building dynamic, attractive territories that retain and attract skilled professionals.

5.2. Common key takeaways

Common themes in good practices

Europe faces a set of persistent challenges related to workforce development, inclusion, innovation, and economic resilience, all of which have significant implications for talent attraction, retention, and development. The rapid transformation of industries due to technological advancements, demographic shifts, geopolitical shifts and digitalisation has exacerbated existing labour market mismatches while creating new obstacles for individuals and businesses alike. Many regions struggle with skills shortages and skills mismatches, underdeveloped innovation ecosystems, and a growing divide between urban and rural areas in terms of economic opportunities and access to essential services.

This section examines the recurring themes that emerged during the mapping and analysis of the collected good practices. **The four common themes identified in this section — skills, inclusion, innovation, essential services and quality of life — reflect the key areas of synergy previously outlined by the WGs in their Strategic Roadmaps.** These themes capture common challenges or needs across sectors and regions, highlighting areas where collaborative solutions can have the greatest impact.

More precisely, the four common themes identified are:

- 1) Skills and education systems: future-ready skills and workforce development
- 2) Digital, social and economic inclusion
- 3) Driving innovation, entrepreneurship and knowledge transfer
- 4) Essential services and quality of life: enhancing well-being and regional attractiveness

Further details are provided below.

1) Skills and education systems: future-ready skills and workforce development

A well-functioning education and training system is critical to ensuring that both young people and workers possess the skills needed for a rapidly evolving economy. To be effective, these systems must not only provide high-quality skills, but also ensure their relevance to current and future sectoral and labour market needs. However, many EU regions struggle with misalignment between education systems and labour market demands¹⁸, leading to workforce imbalances and talent shortages. Emerging industries such as advanced manufacturing, digital technologies, and renewable energy require specialised technical expertise, yet curriculum rigidity and weak academia-industry collaboration make it harder for vocational training and higher education institutions to adapt quickly to evolving needs. Additionally, the limited availability of lifelong learning opportunities affects not only mid-career workers but also organisations, reducing business competitiveness in a world of rapid technological and geopolitical shifts.

Addressing these challenges requires comprehensive curriculum reforms that update and tailor educational programs to evolving industry needs, alongside stronger industry-academia collaboration to enhance hands-on learning and innovation. Greater flexibility in vocational education and training (VET) curricula, as well as closer cooperation between research organisations and educational institutions, is essential to ensure that skills gaps are quickly identified and translated into targeted training programs at different EQF levels and specialisations. A systematic approach to monitoring and forecasting labour market trends is needed, including the development of skills intelligence systems, labour market forecasting

¹⁸ See for instance European Commission (2019), Skills Mismatch & Productivity in the EU, available at: https://economy-finance.ec.europa.eu/system/files/2019-07/dp100_en.pdf

tools, and academia-business partnerships to anticipate future workforce demands. Test pilots in regions can serve as experimental models to refine these strategies based on real-world data. Additionally, public policy measures should be adapted to ensure greater equality, inclusion, and diversity in learning and work, while also enhancing support for local and regional authorities in workforce development. Strengthening digital skills in teacher training, fostering private sector involvement in co-designing courses and skill frameworks, and encouraging the use of microcredentials for upskilling and reskilling will contribute to a more adaptable and future-proof education system.

Box 5: Examples of good practices addressing the issue of skills mismatch and future workforce needs

- **BeaT** (good practice 4.1) - Addresses the shift to electric mobility by reforming VET for automotive industry workers.
- **DIGITClue** (good practice 4.4) - Integrates digital inclusion into teacher education programmes, ensuring that future educators are equipped with the skills and knowledge to support all students in a digital learning environment.
- **Scuola Digitale Liguria** (good practice 4.7) - Designed to support educators with tools and resources to foster innovative digital learning experiences, to modernise educational institutions, enhance VET programmes, and promote digital skills for students.
- **LCAMP** (good practice 4.14) - Aims to reduce skill gaps in advanced manufacturing through knowledge transfer between VET centres and companies.
- **The European Battery Alliance (EBA) Academy** (good practice 4.17) - Focuses on reskilling/upskilling employees in the battery value chain, responding to growing industry demand.
- **ENHANCE** (good practice 4.19) - Develops a European curriculum for Family and Community Nurses (FCNs) to meet healthcare sector needs.
- **TEAMCARE** (good practice 4.21) - The activities include developing an EU Curriculum, creating guidelines for implementation, training SHCPs, performing multidimensional users' assessments, tailoring personalised care plans, and providing transferable and reusable tools for localising the curriculum.
- **Digital Platform for Returning Home (Retour aux Pays)** (good practice 4.27) - Facilitates the reintegration of skilled professionals into Guadeloupe's local economy by connecting them with job and entrepreneurship opportunities.

2) Digital, social and economic inclusion

Persistent digital, social, and economic divides continue to limit equal access to opportunities in Europe, particularly in rural and underserved areas. Vulnerable groups, including the elderly, low-income individuals, and migrants, often struggle to participate in digital and economic life due to a lack of training, resources, or tailored support. Additionally, women and underrepresented communities face barriers in accessing high-growth sectors such as technology. The digital divide limits employability and exacerbates social inclusion challenges, particularly for those living in rural and peripheral areas, where technical issues with internet connectivity make it difficult to access digital public services platforms. In the health sector, differences in digital health literacy create additional barriers for both patients and healthcare providers, highlighting the need for digital skills development at both the individual (clients and staff) and organisational (service provider) levels. The rapid pace of digital transformation demands continuous learning and adaptation, yet many education and training systems remain ill-equipped to provide accessible and flexible digital education. This is particularly concerning given the widening digital divide between certain EU regions, where limited funding is available for addressing basic digital infrastructure problems at the municipal level.

To bridge these divides, digital literacy needs to be integrated into national education curricula and upskilling/reskilling programs, ensuring that all individuals acquire essential digital

competencies. Digital education should not only focus on technical skills but also include deep human skills such as critical thinking, legal awareness (e.g., e-signature use), and practical applications to promote the responsible and strategic use of technology. Expanding accessible learning resources and integrating digital training into work hours can also help ensure that lifelong learning opportunities reach older adults, low-income individuals, and marginalized groups. Publicly funded training programmes can be developed to equip workers with relevant digital skills, while itinerant information points in rural and remote areas can support citizens in accessing digital public services and improving their digital competencies. Test pilots in regional areas should be launched to evaluate the effectiveness of digital literacy initiatives and tailor solutions to local needs. To encourage underrepresented groups—such as women, refugees, and people with disabilities—to participate in the digital economy, initiatives should include targeted employability and entrepreneurship programs, as well as radically improved communication strategies. Additionally, flexible work arrangements (remote, blended, and adaptable schedules) should be facilitated to make employment more accessible for parents, caregivers, and individuals in rural areas. A stronger collaboration between governments, tech companies, universities, and social innovation centres is also essential to expand digital infrastructure in low-income and remote regions. Finally, local governments should be more actively involved, and communities must be better informed about the benefits of digital inclusion to encourage self-sufficiency and long-term engagement.

Box 6: Examples of good practices tackling digital, social and economic inclusion

- **Digital Inclusion Czechia** (good practice 4.2) - Provides digital literacy training to social workers, enabling them to educate vulnerable populations.
- **Digital Kick** (good practice 4.3) - Bridges the gender digital divide by equipping women with digital entrepreneurship skills.
- **Workshops for Digital Literacy of people of the third age** (good practice 4.6) - Encourage the development of basic digital skills among the elderly.
- **MindSpring** (good practice 4.8) - Supports refugees and ethnic minorities by providing digital and mental health resources for smoother societal integration.
- **IntegrAGE** (good practice 4.20) - Aims to support the healthy integration of working generations 55+ into the labour market by capitalising on their knowledge and assisting them in adapting to new ways of working.
- **My Active and Healthy Aging (my-AHA)** (good practice 4.22) - Uses digital tools to monitor frailty risks and support independent living for older adults.
- **Promoting Entrepreneurship Ecosystems in Rural Aragon (EREA)** (good practice 4.30) – Facilitated the identification of business opportunities that can help bridge the socio-economic and service-access, to promote the economic and social development of rural and intermediate areas.

3) Driving innovation, entrepreneurship and knowledge transfer

Innovation ecosystems play a critical role in regional economic development, fostering entrepreneurship, research, and technological advancements. However, many regions struggle with weak knowledge transfer between research institutions and businesses, underused infrastructure and research potential, and a lack of transdisciplinary collaboration. Additionally, differences in legislation across countries can sometimes further complicate efforts to build competitive ecosystems. Although entrepreneurial activity is a key driver of economic growth and job creation, many regions, particularly outside major urban hubs, lack the necessary support structures for startups and small businesses. Limited access to financing, insufficient mentorship programs, and difficulties in coordinating objectives between academia and industry hinder the ability to translate research into market-ready solutions. Highly skilled researchers often lack business acumen, making it difficult to commercialise their discoveries which can lead to the underutilisation of research outputs.

To overcome these barriers, several good practices have focused on strengthening innovation networks, fostering industry-academia collaboration, and integrating social and business innovation through bottom-up ecosystem design. Facilitating collaboration between research institutions and businesses is essential to translate scientific discoveries into market-ready solutions. In addition, enhancing the role of Technology Transfer Offices (TTOs) can accelerate commercialisation efforts. Improving communication and knowledge transfer between entrepreneurs, public institutions, and academia can be supported by establishing regional innovation matchmaking platforms, where stakeholders can exchange development projects, capacities, and expertise. Additionally, cross-border hackathons and innovation contests involving similar regions at different NUTS levels can foster transnational cooperation and strengthen sectoral value chains. To develop resilient entrepreneurial ecosystems, it is crucial to expand mentorship programs, financing opportunities, and targeted support for start-ups, including online ecosystems where entrepreneurs can access resources, connect with mentors, and find funding. Leveraging international grants and investments from organisations such as the World Bank, or private foundations can also provide the financial backing needed to scale innovation. Additionally, elevating the role of skills in smart specialisation strategies and promoting relevant online courses, digital certificates, and tests can ensure continuous learning and workforce readiness. Finally, strengthening regional collaboration in niche sectors where regions have a competitive advantage and creating networking and visibility platforms tailored to the needs of technology and industrial startups will help drive economic diversification and regional competitiveness.

Box 7: Examples of good practices aiming to drive innovation, entrepreneurship and knowledge transfer

- **Digital Kick** (good practice 4.3) - Equips women with digital entrepreneurship skills.
- **Deeptech Entrepreneurship Curriculum** (good practice 4.9) - Supports scientists and PhD candidates in transforming research into start-ups.
- **Mature Your PhD** (good practice 4.10) - Bridges the gap between academic research and commercialisation.
- **Team-to-Market** (good practice 4.11) - Facilitates the recruitment of business professionals to support scientific spin-offs.
- **Extremadura Tech Talent** (good practice 4.12) - Attracts and reintegrates highly skilled professionals into the regional innovation ecosystem.
- **I-Form, the Research Ireland Centre for Advanced Manufacturing** (good practice 4.13) - Centre that aims to shape the future of manufacturing through high-impact research into the application of digital technologies to materials processing.
- **Pathways to Innovation and Entrepreneurship** (good practice 4.15) - Leverages collaboration between universities and businesses to share a culture of Responsible Research and Innovation (RR&I) along with promoting opportunities for applied research and skilled employment.
- **Teaching Factory Competence Centre (TF-CC)** (good practice 4.16) - Innovative approach to interconnect educational institutes and the manufacturing industry on a global scale.
- **SHAPES** (good practice 4.24) – Created a European open ecosystem and developed value-based business models and recommendations for the widespread adoption of digital health solutions.
- **Digital Platform for Returning Home** (good practice 4.27) – Supports young entrepreneurs and project leaders who seek to launch new ventures or lead community projects, thereby contributing to local innovation and growth.
- **Living Labs (Laurea)** (good practice 4.29) - Uses an open innovation model to co-create solutions with students, businesses, and communities, and provides real-world problem-solving experiences for students through university-industry collaboration.

- **Promoting Entrepreneurship Ecosystems in Rural Aragon (EREA)** (good practice 4.30) – Combined financial incentives, business incubation, and mentorship programmes to create a self-sustaining entrepreneurial environment.

4) Essential services and quality of life: enhancing well-being and regional attractiveness

Access to essential services—such as healthcare, education, and digital public services—is a fundamental aspect of well-being, social and economic stability. However, demographic shifts, aging populations, rural depopulation, and territorial discontinuities pose challenges in ensuring equitable service provision, particularly in remote and island regions where essential services are often centralised in just a few locations. Many rural and economically weaker regions face workforce shortages in healthcare and public administration, which undermines the provision of essential services. These challenges are compounded by mobility limitations and inadequate transportation infrastructure, further restricting residents' access to hospitals, schools, and public offices — ultimately diminishing overall quality of life. Additionally, the digital transition has made service accessibility more complex for older populations, who often lack the necessary digital literacy to engage with digital public services and healthcare platforms.

Addressing these challenges requires improving service accessibility, workforce retention, and digital tools for efficiency. Expanding telehealth, online education, and digital public services can better serve remote areas, but ensuring accessibility for all demographics and maintaining in-person support is crucial for those with limited digital literacy. Enhancing rural mobility through on-demand transport, free passes for youth and elderly, and broadband expansion can improve connectivity. Collaboration between regions and private companies will ensure sustainable essential services, while financial incentives and hybrid work models can attract skilled professionals to underserved areas. Cultural engagement is also key to regional attractiveness. Expanding multilingual cultural offerings, cross-cultural events, and regional branding can strengthen community identity and boost tourism. Moreover, establishing local service hubs integrating healthcare, education, and administrative support, alongside community-led digital literacy programs, can bridge gaps in access. Public administration can also facilitate talent retention with housing policies, AI-supported integration services, and funding for high-skilled professionals in rural areas.

Box 8: Examples of good practices aiming to improve access to essential services and quality of life

- **Apulia's Digital Facilitation Services** (good practice 4.5) - Establishes digital help centres to assist citizens in using online services.
- **ENHANCE** (good practice 4.19) - Develops a European curriculum for Family and Community Nurses to strengthen primary healthcare capacity.
- **Digital Skills for the Italian Health System** (good practice 4.18) - Upskills healthcare workers to improve the resilience and efficiency of the healthcare system.
- **NET4Age-Friendly** (good practice 4.23) – Creates horizontal policies supporting age-friendly environments, including workplaces, housing, transportation, and public spaces.
- **SHAPES** (good practice 4.24) - First European open ecosystem for the large-scale deployment of digital technologies that support healthy and independent living for older individual.
- **Programa Campus Rural** (good practice 4.31) - Encourages young professionals to undertake internships in rural areas, fostering local economic and social revitalisation.

Operational key takeaways

This section presents operational key takeaways drawn from the analysis of good practices. These include concrete, practice-based success factors that contributed to the effectiveness of the good practices, as well as implementation challenges and the strategies successfully used to overcome them.

Success factors identified in the good practice cases

While thematic differences shape specific success factors, several elements have emerged as crucial for the effectiveness of initiatives across all domains. These factors contribute to the sustainability, impact, and scalability of interventions, ensuring that they successfully address talent-related challenges across different contexts:

- 1) Multi-stakeholder collaboration, institutional support and early involvement of end users
- 2) Needs-based, place-based and targeted interventions
- 3) Effective communication and outreach strategies
- 4) Integration of innovative methodologies and technologies
- 5) Sustainability and scalability mechanisms
- 6) Policy alignment and regulatory support

Further details are provided below.

1) Multi-stakeholder collaboration, institutional support and early involvement of end users

One of the most frequently observed success factors is the presence of strong partnerships between academia, industry, public authorities, and civil society organisations (quadruple helix). Clear and organised collaboration between these actors greatly increases the chance that initiatives are well-supported, aligned with policy priorities, and capable of mobilising the necessary resources for long-term impact. Strong political support is also needed to ensure the success of the initiatives.

Box 9: Examples of good practices showcasing collaboration, institutional support and early involvement of end users

- **BeaT** (good practice 4.1) – successfully brought together industry players, vocational education providers, and policymakers to ensure that workforce training was aligned with the evolving needs of the automotive sector.
- **Scuola Digitale Liguria** (good practice 4.7) – relied on partnerships with schools, educators, and businesses to develop a systemic approach to digital education, ensuring relevance and sustainability.
- **MindSpring** (good practice 4.8) – demonstrated the importance of collaboration between municipalities, NGOs, and healthcare providers in developing a community-based mental health support system.
- **The social innovation initiative for increased attraction and receiver capacity** (good practice 4.25) in Artic Sweden demonstrated how regional alliances and local self-empowerment can help regions address demographic challenges and talent retention, emphasising lifestyle appeal and inclusive governance.
- **Invest in Alentejo** (good practice 4.28) – leveraged partnerships with regional businesses, municipalities, and investment agencies to attract foreign direct investment and boost regional economic growth.

2) Needs-based, place-based and targeted interventions

Effective initiatives tailor their interventions to the specific local needs of their target groups, ensuring that solutions are relevant, accessible, and impactful. A thorough needs assessment phase, often involving direct engagement with beneficiaries, increases the chances of success.

Box 10: Examples of good practices showcasing need-based, place-based and targeted interventions

- **Digital Inclusion Czechia** (good practice 4.2) - designed its training programmes based on an in-depth analysis of digital exclusion in the country, ensuring that social workers could effectively support vulnerable populations.
- **Workshops for Digital Literacy of the Third Age** (good practice 4.6) - developed tailored training modules that addressed the specific digital needs of older individuals, increasing confidence and digital participation.
- **ENHANCE** (good practice 4.19) - identified skill gaps in primary healthcare and developed a standardised European curriculum for Family and Community Nurses to address the mismatch between healthcare workforce competencies and sector needs.
- **Programa Campus Rural** (good practice 4.31) - targeted students interested in professional opportunities in rural areas, ensuring that placements aligned with both student interests and regional workforce needs.

3) Effective communication and outreach strategies

Many successful good practices have employed well-designed communication strategies to reach their target audiences, foster engagement, and encourage participation. This includes easy access to information (one-stop-shop model). This is particularly crucial for programs that aim to address social exclusion, digital illiteracy, or talent retention.

Box 11: Examples of good practices showcasing effective communication and outreach strategies

- **Digital Kick** (good practice 4.3) – leveraged social networks, mentorship programmes, and accessible online materials to reach women seeking digital entrepreneurship opportunities.
- **MindSpring** (good practice 4.8) – used peer-to-peer networks and culturally tailored communication to build trust and engage migrant communities in mental health support programs.
- **Community building in Aristotele** (good practice 4.26) – increased participation by actively involving local youth in designing volunteer activities, fostering a sense of ownership and engagement.
- **Digital Platform for Returning Home** (good practice 4.27) – focused on targeted outreach to professionals abroad, providing them with detailed employment and entrepreneurship opportunities in the region.

4) Integration of innovative methodologies and technologies

The ability to incorporate digital solutions, AI-driven tools, or innovative training methods has been a significant advantage in many good practices, enabling scalable and efficient learning experiences.

- **Apulia Digital Facilitation Services** (good practice 4.5) – integrated digital assistance services across multiple sectors, allowing citizens to receive structured training and one-on-one support in accessing online services.
- **I-Form** (good practice 4.13) – focused on cutting-edge research in digital manufacturing, linking education and industry to accelerate technological adoption.
- **LCAMP** (good practice 4.14) – used an advanced learning platform to provide targeted, learner-centric training programs that addressed skill gaps in advanced manufacturing.
- **SHAPES** (good practice 4.24) - developed a co-creation approach, integrating digital health tools with user-centred design to ensure effective adoption by older adults and caregivers.

5) Sustainability and scalability mechanisms

A well-designed initiative ensures long-term sustainability by combining clear funding strategies (e.g. structured support models, blending public and private sources) with strong institutional backing through alignment with local or regional policy priorities (e.g. integration of the initiative into regional development plans). Sustainability is further enhanced by designing adaptable implementation models.

Box 13: Examples of good practices showcasing sustainability and scalability mechanisms

- **Digital Inclusion Czechia's** (good practice 4.2) - ensures continued impact by providing structured training and digital resources that remain accessible beyond the project's initial funding period.
- **Team-To-Market** (good practice 4.11) - established a structured consultancy support model that helps spin-offs become self-sufficient, increasing their survival rate.
- **Invest in Alentejo** (good practice 4.28) - focused on long-term investment attraction by embedding the initiative within the region's broader economic development strategy.
- **Promoting Entrepreneurship Ecosystems in Rural Aragon (EREA)** (good practice 4.30) – combined financial incentives, business incubation, and mentorship programmes to create a self-sustaining entrepreneurial environment.

6) Policy alignment and regulatory support

Many good practices, particularly in health and territorial development, have benefited from alignment with national and EU policies, ensuring funding continuity, regulatory support, and broader institutional backing. This was mostly achieved by ensuring consistency with relevant policy frameworks (e.g. national strategies, EU industrial or health agendas), and maintaining regular reporting and communication. An excellent example of policy alignment and regulatory support is the above-presented good practice 4.18 (Digital skills for the Italian healthcare system). The project involved already from the initial needs analysis phase the 19 Italian regions and the 2 Italian Autonomous Provinces. The needs were then gathered at the national level and transmitted to the European level and namely to the European Commission Directorate-General for Structural Reform Support (DG REFORM). The design phase of the project was then funded by DG REFORM via the Technical Support Instrument (TSI) 2021 and resulted in the preparation of inception reports, analysis of current situation and a roadmap for implementation, which were approved by all three operational levels (regional, national and EU). These were then used for securing further financing for the implementation phase, again in alignment with national and EU policies (Pact for Skills).

- **European Battery Alliance (EBA) Academy** (good practice 4.17) – aligned with EU priorities on green energy and industrial innovation, ensuring long-term funding and cross-border cooperation.
- **Digital skills for the Italian healthcare system** (good practice 4.18) – was integrated into Italy's national digital transformation strategy, ensuring institutional commitment and regional implementation.
- **ENHANCE (European Curriculum for Family and Community Nurses)** (good practice 4.19) healthcare policymakers, ensuring that the new curriculum aligned with EU and WHO recommendations.
- **NET4Age-Friendly** (good practice 4.23) – worked within the EU's policy frameworks for ageing and digital inclusion, enabling broader stakeholder engagement and adoption.

Implementation challenges and mitigation strategies in the good practice cases

Despite the successes of the good practice cases, various challenges emerged during their implementation, often linked to structural, financial, operational, or societal factors. These challenges differ across good practices, but some recurring obstacles include difficulty engaging target groups, securing sustainable funding, addressing skills mismatches, and ensuring alignment with policy frameworks. In response, good practices have developed and implemented mitigation strategies to overcome these challenges and enhance their impact:

- 1) Strengthening multi-stakeholder partnerships to overcome barriers to participation
- 2) Diversifying funding strategies to ensure long-term sustainability
- 3) Adapting training systems to address skills mismatches
- 4) Coordinating stakeholders and aligning with policy frameworks
- 5) Facilitating knowledge transfer and scaling successful models

These challenges and related mitigation measures are detailed below.

1) Strengthening multi-stakeholder partnerships to overcome barriers to participation

Reaching and sustaining engagement among the intended beneficiaries—whether vulnerable individuals, workers in transition, or rural entrepreneurs—has proven difficult for many good practices. Barriers such as mistrust, digital illiteracy, geographical remoteness, and lack of awareness often reduce participation rates.

Mitigation strategies focused on building trust and proximity through local partnerships and intermediaries. Many initiatives improved their effectiveness by fostering deeper collaboration among industry, academia, public authorities, and NGOs.

- **Digital Inclusion Czechia** (good practice 4.2) – encountered difficulties engaging digitally excluded individuals, particularly those mistrusting state digital services or vulnerable to digital fraud. The project overcame this through collaboration with NGOs and social workers who act as intermediaries, building trust with end users.
- **Apulia Digital Facilitation Services** (good practice 4.5) – faced challenges in engaging citizens with limited digital literacy. A broad communication campaign and locally embedded facilitators helped increase outreach and trust among potential beneficiaries.

- **MindSpring** (good practice 4.8) – faced language barriers and cultural mistrust within migrant communities. To address this, the initiative developed peer-led workshops, ensuring cultural relevance and improving engagement levels.
- **Programa Campus Rural** (good practice 4.31) – was launched to address the difficulty of connecting students with relevant rural job opportunities. By strengthening partnerships with rural businesses and municipalities, the initiative improved placement rates and post-internship retention.

2) Diversifying funding strategies to ensure long-term sustainability

Many good practices have relied on short-term grants or external funding, creating challenges in sustaining their impact beyond the initial project period. Ensuring long-term financial viability remains a key obstacle.

Mitigation measures included developing blended funding models, embedding initiatives into wider economic strategies, and engaging private partners.

Box 16: Examples of good practices showcasing diverse funding strategies to ensure long-term sustainability

- **Team-To-Market** (good practice 4.1111) – faced financial challenges in mobilising experienced business leaders for spin-offs. A structured consultancy funding model was introduced, helping match business leaders with innovative research projects more effectively.
- **The social innovation initiative for increased attraction and receiver capacity** (good practice 4.25) – in Arctic Sweden, the absence of national-level financial and legislative support places a heavy burden on municipalities, particularly in navigating challenges.
- **Community Building in Aristotele** (good practice 4.26) – relied on external funding for volunteering projects, making it vulnerable to financial fluctuations. To counteract this, the initiative diversified its funding sources by leveraging education and youth programs.
- **Digital Platform for Returning Home** (good practice 4.27) – faced difficulties securing continuous funding and keeping content updated. It mitigated this by forming strategic partnerships with businesses and public institutions to maintain operational sustainability.
- **Invest in Alentejo** (good practice 4.28) – faced challenges in sustaining investment attraction efforts during the COVID-19 pandemic. By adapting its strategy to focus on digital promotion and virtual networking, it was able to maintain momentum despite travel restrictions.

3) Adapting training systems to address skills mismatches

Several good practices faced challenges in aligning their training programmes with real labour market demands, especially in rapidly evolving industries such as manufacturing, digitalisation, and healthcare. Moreover, there are challenges getting the necessary data about skills mismatches.

Mitigation strategies centred on closer collaboration with industry, the use of regional skills observatories, and modular training.

- **BeaT** (good practice 4.1) – encountered difficulties in identifying specific qualification needs in the automotive sector. The initiative collaborated closely with industry representatives to ensure its training aligned with emerging technological trends.
- **I-Form** (good practice 4.13) – found that SMEs often lacked access to tailored upskilling opportunities. By offering modular, industry-specific training and co-funded research partnerships, it bridged the gap between academic research and market needs.
- **LCAMP** (good practice 4.14) – was developed in response to skills mismatches in the advanced manufacturing sector. By developing regional skills observatories and learner-centric training modules, it provided more responsive and tailored education.
- **ENHANCE** (good practice 4.19) – faced challenges ensuring consistency in nurse training across different European healthcare systems. The initiative worked closely with policymakers to standardise qualifications, facilitating mobility and career progression for trained professionals.

4) Coordinating stakeholders and aligning with policy frameworks

Some initiatives faced difficulties in maintaining alignment between multiple stakeholders, particularly where different institutional agendas, regional policies, or regulatory frameworks were involved. Moreover, the synergies among EU, national and regional funds and policies could be enhanced.

Mitigation strategies included co-governance models, regional ecosystems, and alignment with EU/national priorities.

Box 18: Examples of good practices showcasing coordinated stakeholders and alignment with policy frameworks

- **The European Battery Alliance (EBA) Academy** (good practice 4.17) – faced the challenge of uneven talent mobility across Europe. By developing a pan-European training network and aligning with EU industrial policies, the initiative sought to balance regional skills distribution.
- **Digital Skills for the Italian Healthcare System** (good practice 4.18) – aimed to bridge misalignments between national and regional objectives. To address this, the initiative established a co-governance model, involving key regional authorities in both the design and implementation stages.
- **NET4Age-Friendly** (good practice 4.23) – faced fragmentation in innovation and policy development across EU countries. It established WGs and regional ecosystems to facilitate knowledge exchange and improve policy coherence.
- **Promoting Entrepreneurship Ecosystems in Rural Aragon (EREA)** (good practice 4.30) – encountered obstacles in building a regional ecosystem that effectively connected urban and rural areas. By conducting detailed business opportunity analyses and forming multi-sectoral partnerships, the initiative strengthened its territorial approach.

5) Facilitating knowledge transfer and scaling successful models

Transferring knowledge between stakeholders and ensuring best practices reach a broader audience was a recurring challenge, particularly in projects that required coordination across regions or disciplines.

Mitigation approaches focused on standardising tools, building networks, and mentorship.

- **MindSpring** (good practice 4.8) – initially faced difficulties in replicating its peer-support model across different municipalities. Standardised training materials and collaboration agreements with local authorities helped scale the initiative more effectively.
- **Mature Your PhD** (good practice 4.10) and **Deeptech Entrepreneurship Curriculum** (good practice 4.9) faced difficulties in ensuring PhD students had access to relevant industry networks. Dedicated networking events and mentorship programs were introduced to facilitate knowledge exchange.
- **Smart & Healthy Ageing through People Engaging in Supportive Systems (SHAPES)** (good practice 4.24) – encountered challenges in scaling digital health solutions across different healthcare settings. The initiative focused on standardising its platform architecture to facilitate wider adoption.