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Development Fund



# **DIGITAL BUSINESS ECOSYSTEM TRANSFORMATION**

## **DIGIBEST**

### **JOINT PEER REVIEW REPORT**

**January, 2022**



# Table of contents

Summary .....	4
1. Introduction and Overview .....	5
1.1. Introduction .....	5
1.2. Overview .....	7
2. Interregional Learning and Exchange of Good Practices .....	8
3. Comparative Analysis.....	12
3.1. Awareness raising & collaboration .....	12
3.2. Enabling corporate environment & capacity building obstacles .....	17
3.3. Administrative & technical & legal obstacles .....	21
3.4. Financial & economic obstacles .....	24
3.5. Policy & security obstacles.....	27
4. Effectiveness of the PR Process .....	31
4.1. General assessment of the PR process. ....	32
4.2. PR preparation and implementation .....	34
4.3. Assessment of the PR experts' work.....	36
5. Main Conclusions and Recommendations.....	38
5.1. Conclusions .....	38
5.1.1. Good Practices .....	38
5.1.2. Comparative analysis .....	38
5.1.3. Assessment of PR by HP .....	39
5.2. Recommendations .....	39
5.2.1. Good Practices .....	39
5.2.2. Comparative analysis .....	39
5.2.3. Assessment of PR process by HP.....	41
Attachments.....	42
Attachment 1. Synopsis of the implemented Field Visits .....	42
Attachment 2. Good Practices recommended for project partners.....	46
Attachment 3. Good Practices recommended for PP by experts .....	51
Attachment 4. Solutions offered to deal with existing digitalization challenges of the DigiBEST partners.....	54

List of abbreviations used in the text.

<b>AP</b>	Advisory Partner
<b>BDRM</b>	Business Digitalisation Regional Roadmaps
<b>DESI</b>	Digital Economy and Society Index
<b>EU</b>	European Union
<b>GP</b>	Good Practice
<b>HP</b>	Hosting Partner
<b>ICT</b>	Information and Communication Technologies
<b>JR</b>	Joint Report
<b>LP</b>	Leading Partner
<b>MoEPRD</b>	Ministry for Environmental Protection and Regional Development
<b>OP</b>	Operational Programme
<b>PP</b>	Project Partner
<b>PR</b>	Peer Review
<b>PRR</b>	Peer Review Report
<b>RS</b>	Regional Studies
<b>SH</b>	Stakeholder
<b>SP</b>	Sending Partner
<b>SME</b>	Small and medium enterprise

List of abbreviations for project partners.

<b>PP1</b>	The Ministry of Environmental Protection and Regional Development of Latvia, Latvia
<b>PP2</b>	University of Latvia, Centre for European and Transition Studies, Latvia
<b>PP3</b>	Trøndelag County Council, Trøndelag, Norway
<b>PP4</b>	Sviluppo Basilicata SPA, Basilicata, Italy
<b>PP5</b>	Granada County Council, Granada, Spain
<b>PP6</b>	Creative Industries and Entrepreneurship, Austria
<b>PP7</b>	Intermunicipal Community of Tâmega e Sousa, Portugal

Main definitions used in the text.

**Digital transformation** is the incorporation of computer-based technologies into an organization's products, processes and strategies. Organizations undertake digital transformation to better engage and serve their workforce and customers and thus improve their ability to compete.<sup>1</sup>

**Digitalisation** is the ongoing integration of digital technologies and digitised data across the economy and society.<sup>2</sup>

<sup>1</sup> <https://www.techtarget.com/searchcio/definition/digital-transformation>

<sup>2</sup> Eurofound (2022), Digitalisation. Retrieved from: <https://www.eurofound.europa.eu/topic/digitalisation>

## Summary

The objective of this PRR is to present a comprehensive and comparative overview of the DigiBEST PR process and to draw conclusions and common recommendations, which can be useful for promoting the SME digital transformation.

The PR process involving 6 PP and 12 PR external experts was taking place from April 2021 until January 2022. During the PR process 30 meetings and 25 interviews were organized by the partnership involving at least 61 SHs. The interregional learning process including the exchange of 31 GP was recognized as particularly useful for PP. The results of the PR were used by PP to develop 6 BDRM and 6 AP for improving their targeted policy instruments and promoting SMEs Digital transformation process.

The comparative analysis in five policy areas has resulted in common recommendations:

1. Awareness raising & collaboration: requires well-coordinated and targeted actions and initiatives; enhanced continuous networking and cooperation with technology institutions, clusters, universities, and EDIHs; involvement of potential providers, as well as beneficiaries of knowledge and technologies; collaborative and integrated digital innovation ecosystem; cooperation and sharing between private and public organizations.

2. Enabling corporate environment & capacity building: needs tailor-made solutions, training, improved competences and training programmes for SME; an increased access to and investment in know-how and RTD; increase in digital literacy and skills of the overall population; involving skilled immigrants in the labour market; the creation of Citizen's Shops.

3. Administrative, technical, and legal obstacles: require the use of policy instruments, i.e., tax and investment policy, financial incentives, procurement, etc. in promoting SMEs digital transformation; defining the role of responsible public institutions in promoting SMEs digital transformation; various support measures, such as a technological support platform and competence centres; systematic monitoring and evaluation framework of the digital transformation progress; regular international benchmarking.

4. Financial and economic obstacles: require awareness rising about financing opportunities and support programmes; alternative sources and options of funding in the form of vouchers and grants or developing specific funding facilities; skills and capacity of SMEs to apply for funding; more active female participation in publicly funded digital transformation projects; creation of a state venture capital fund or state financial institution; consultations and training on digital transformation of SMEs for commercial banks.

5. Policy and security obstacles: demand more systematic and regular involvement of stakeholders in the policy planning process; the roadmap to achieve step-by-step digital transformation of businesses; networking, coordination between various players to address needs for increased innovation; training and support for digital transformation and e-commerce; closing urban-rural digital divide; continuous monitoring of SMEs digital maturity and needs; improved governance and regular revision, and updates of the policy framework and support instruments.

Overall, PP were satisfied with results of PRs and mostly positively assessed the PR process, especially the involvement of external PR experts and their provided output. Most of PP were satisfied with an active involvement of stakeholders, as well as with usefulness and clarity of the PR methodology.

Challenges faced during the PRs were mostly related to the fact that PR events had to be held online which presented limitations for planning meetings and activities. Also, this was recognized that involving stakeholders in online events is more difficult than in onsite events.

## 1. Introduction and Overview

### 1.1. Introduction

The main objective of the PR process is to have an external analysis performed by external qualified experts of the situation on digital transformation of SMEs and microenterprises in each DigiBEST region and country, including analysis of GP.

The PR process has been following a detailed methodology specially developed for the DigiBEST project. According to this methodology the PR findings, feedbacks and details are reflected in 5 main documents, which form the basis for this PRR (see Table 1.1).

**Table 1.1.** List of PR documents

No	Title of the document	Responsible parties	No of documents delivered
1	Peer Review Report	PR Experts	6
2	DigiBEST Peer Review Feedback Report for Sending Partner	PR Experts	2 <sup>3</sup>
3	DigiBEST Peer Review Event Feedback Report for PR Team	Advisory Partner	6
4	DigiBEST Peer Review Feedback	Hosting Partner	6
5	DigiBEST Peer Review Key Details	Hosting Partner	6

Following the PR methodology, the PR process and findings in each of the DigiBEST PP region or country are based on such elements:

- ✓ **Desk research**, including review of literature, policy documents and legislation;
- ✓ **Field research**, that consisted of meetings, interviews, site visits (online) or presentations and networking.

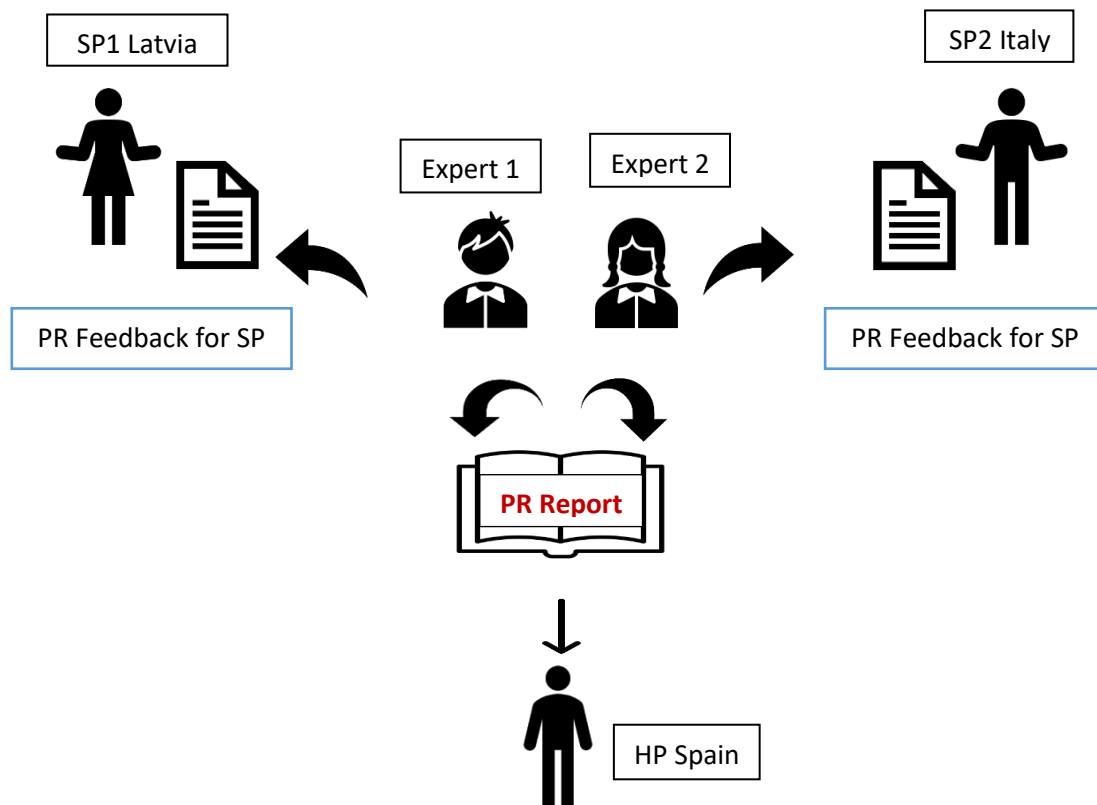
The PR external experts have provided key findings and conclusions after focused analysis of each countries' situation and came up with recommendations for promoting the digital transformation among SMEs and microenterprises for improving partners' policy instruments.

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<sup>3</sup> Latvia as SP received 2 PR Feedback reports from both hired PR experts.

During the project's 4<sup>th</sup> and 5<sup>th</sup> semesters (April 2021 – January 2022), each DigiBEST partner territory was visited by a PR team including representatives of both SPs, HP, and AP, as well as external experts hired by responsible SPs following the scheme presented in the Figure 1.

**Figure 1.** Scheme of the cooperation between the PR experts, HP, and SP (example of PR event in Spain)



Source: Guidelines of the Peer Review Report, p.7

During PR an in-depth analysis according to the designed PR methodology was carried out. Each PR included site events, meetings with SHs, individual interviews, as well as public events in which the international PR team shared and discussed its initial findings with the host territory, including conclusions and resulting recommendations for policy improvement. Results of six PRs are reflected in DigiBEST partners' PR documentation listed in the Table 1.1. which were prepared after each PR visit. PR results have been used for developing partners BDRM and AP during 5<sup>th</sup> and 6<sup>th</sup> semesters.

This **PR JR** is based on results of 6 PRs and related documents developed by PR experts and project partners: 6 PRR, 6 PR Event Feedback Reports for PR Team, 6 PR Feedback Forms, 6 PR Key Detail forms and 1 PR Feedback Report for SP have been prepared (see Table 1.1.). The PR Feedback Report was exceptionally developed for DigiBEST LP as SP upon their request and this was optional for other partners to use it. Therefore, the results of the PR Feedback Report for SP (Latvia) have been only partly considered in this PR JR.

## 1.2. Overview

The PR JR provides an overview, analysis and main results of the six DigiBEST PR events. Please, see Table 1.2.

**Table 1.2.** PR implementation

No	PR Hosting partner	Countries and regions sending PR experts	PR dates
1	Granada County Council, Spain	Latvia, Riga; Italy, Basilicata	27.04.2021 – 29.04.2021
2	Intermunicipal Community of Tâmega and Sousa, Portugal	Latvia, Riga; Austria, Vienna	18.05.2021 – 20.05.2021
3	Ministry for Environmental Protection and Regional Development, Latvia	Norway, Trøndelag; Austria, Vienna	31.05.2021 – 02.06.2021
4	Trøndelag County Council, Norway	Spain, Granada; Italy, Basilicata	20.10.2021 – 22.10.2021
5	Sviluppo Basilicata SPA, Italy	Portugal, Tâmega and Sousa; Spain, Granada	14.12.2021 – 16.12.2021
6	Austria Wirtschaftsservice Gesellschaft mbH, Austria	Portugal, Tâmega and Sousa; Norway, Trøndelag	13.01.2022 – 14.01.2022

Source: Attachment 3 of the PR Methodology Guidelines

In total, **6** PRs with participation of **12** external experts were carried out from April 2021 until the middle of January 2022. During PR visits, **30 meetings and 25 interviews** were organized by the partnership involving at least **61 SHs** (see Attachment 1).

Based on PR assessment and mutual learning activities DigiBEST partners have developed **6 BDRM** and **6 AP**. The AP focusses on the improvement of partners selected policy instruments to support the digital transformation of SMEs involving the adoption of lessons learnt offered by the DigiBEST partnership and Interreg Europe Policy Learning Platform (GP, SV, PR recommendations).

The three DigiBEST PPs – Latvia, Basilicata Region and Austria are targeting the OP as their main policy instruments for fostering the digital transformation of SMEs. In case of the Trøndelag Region, the policy instrument tackled in the framework of the DigiBEST project is the regional strategy “Smart Societies” in “A value creating Trøndelag. Strategy for innovation and wealth creation in Trøndelag”. The Granada Province of Andalucía tackles a local level planning document “Plan for the Development of Local Productive Activities”. Tâmega e Sousa of the Norte Region works with a local level document “S2E - System of incentives for work and entrepreneurship. Several partners during the learning process of partners GP and development of the BDRM and AP have changed the policy instrument to be tackled, mainly due to the ending of OP financing period. The DigiBEST addressed policy instruments in PP APs are listed in the Table 1.3.

**Table 1.3.** Policy instruments addressed by DigiBEST partners

Region, country	Originally targeted Policy Instrument	Policy instrument targeted in the Action Plan
Latvia	<a href="#">ERDF Programme “Growth and Employment”</a>	<a href="#">Recovery and Resilience Facility (RRF) program, pillar 2: Digital transformation</a>

<b>Trøndelag, Norway</b>	<a href="#">Regional strategy “Smart Societies” in “A value creating Trøndelag. Strategy for innovation and wealth creation in Trøndelag”</a>	<a href="#">Regional strategy “Smart Societies” in “A value creating Trøndelag. Strategy for innovation and wealth creation in Trøndelag”</a>
<b>Basilicata, Italy</b>	<a href="#">Operative Programme ERDF Basilicata 2014-2020</a>	<a href="#">Development and Cohesion Fund 2014-2020</a>
<b>Granada, Andalucía, Spain</b>	<a href="#">Plan for the Development of Local Productive Activities</a>	<a href="#">Plan for the Development of Local Productive Activities</a>
<b>Austria</b>	<a href="#">Programme ERDF investments in the growth and employment Austria 2014-2020</a>	National Foundation for Research, Technology, and Innovation (NFTE) <a href="#">(link 1)</a> <a href="#">(link 2)</a>
<b>Tâmega e Sousa, Norte, Portugal</b>	<a href="#">S2E - System of incentives for work and entrepreneurship</a>	<a href="#">Recovery and Resilience Plan – RRP, Dimension 3: Digital transition</a>

Source: DigiBEST Application form, partners’ AP

## 2. Interregional Learning and Exchange of Good Practices

The exchange of GP and interregional learning process are seen as crucial components of the DigiBEST project and especially the PR process to be able to design and implement AP for improving PI. The transfer of GP can be started by PP already during the 1<sup>st</sup> phase of the project and should be accomplished by the end 2<sup>nd</sup> project phase to result in improvements addressing national or regional challenges related to digital transformation of SMEs.

The pool of DigiBEST 19 initially proposed GP represents different examples of such measures as collaboration models, strategies, digital innovation hubs, support offices or services, training programmes, funding programmes, advisory or mentoring programmes, tools for assessment of digital maturity and recommendations or plans with specific actions and other activities that proved efficient in the facilitation of business digital transformation. According to the DigiBEST methodology and in the result of cooperation between project partners and local SHs, all GP are grouped into 3 different categories: 1) Awareness raising and collaboration; 2) Empowering tools; 3) Enabling environment.

During the PR process the most popular GP proposed by PR experts to 3 PP (PP1, PP3, PP4) was the Consortium Fernando de los Ríos project “Guadalinfo” located in Spain (proposed by PP5), followed by Digital Pro Bootcamps (PP6); Business Space (PP7); Consultancy on Business Support (PP1), Programme Portugal Industry 4.0 (PP7); Development of Digital Networks (Fixed & Mobile) in Non-Commercially Viable Areas (PP3); Programme “Ticcamaras” (PP5), all of which were proposed twice. Five GP were proposed for other PP once and seven GP were not proposed for other partners (please, see Table 2.1.).



**Table 2.1.** Overview of the use of DigiBEST GP by category and PP

No	PP of GP	Title of GP	GP proposed for PP
<b>AWARENESS RAISING AND COLLABORATION</b>			
1	PP1	<a href="#">Smart Latvia &amp; Digital Maturity Test</a>	PP5
2	PP1	<a href="#">Programme “My Latvija.Lv! Do Digitally!”</a>	-
3	PP3	<a href="#">Restructuring Motor – Digital Competence Enhancement</a>	-
4	PP4	<a href="#">Digital Innovation Hub Confindustria Basilicata</a>	-
5	PP4	<a href="#">Digital Business Points</a>	-
6	PP4	<a href="#">Growing in Digital</a>	PP1
7	PP6	<a href="#">Digital Pro Bootcamps</a>	PP5, PP7
8	PP7	<a href="#">Business Space</a>	PP1, PP4
<b>EMPOWERING TOOLS</b>			
1	PP1	<a href="#">Consultancy on Business Support</a>	PP4, PP7
2	PP7	<a href="#">Citizen’s Shop</a>	PP1
3	PP7	<a href="#">Programme Portugal Industry 4.0</a>	PP1, PP6
<b>ENABLING ENVIRONMENT</b>			
1	PP1	<a href="#">Digital Innovation Hub Latvia</a>	-
2	PP3	<a href="#">Development of Digital Networks (Fixed &amp; Mobile) in Non-Commercially Viable Areas</a>	PP4, PP6
3	PP3	<a href="#">Public-Private Cooperation &amp; Funding Model for Business Gardens-Creating Ecosystems</a>	PP1
4	PP5	<a href="#">Programme “Ticcamaras”</a>	PP1, PP7
5	PP5	<a href="#">Digital Transformation Offices</a>	-
6	PP5	<a href="#">Guadalinfo</a>	PP1, PP3, PP4
7	PP5	<a href="#">Programme “Digital Advisors”</a>	PP1, PP7
8	PP6	<a href="#">Programme - Digital Innovation Hubs</a>	-

Source: Developed based on the Regional Studies of DigiBEST partners and results of PR events

During the PR process PR experts identified and proposed **31** GP, which could be used for improving SMEs digital transformation and transferred by PP to improve their policy instruments. Part of these **19** GP (Table 2.1) were those already proposed by PP and published on the [Interreg Europe Policy Learning Platform](#), however, **12** GP were newly discovered during the PR process. Most of GP were identified and proposed to PP in PRR prepared for HP, while in case of PP1 (Latvia), GPs were also proposed to PP in PPR prepared for SP (see Attachment 2).

During the PR in Norway, PR experts from Spain and Italy decided that three of the Norwegian GP are especially useful and easily applicable for all other DigiBEST PP. These GP are: 1) National Strategy for a Green, Circular Economy (Norwegian Ministry of Environment); 2) Regional, national, and international incubators and networks (Trøndelag County Council) and 3) The Industrial Development Corporation of Norway – SIVA (The Norwegian Government, Trøndelag County Council) (see Attachment 2).

During the PR process the PP1 received recommendation for transferring know-how and learning from **15** GP from other partners, which was the greatest number of GP recommended to one PP. At the same time, the PP3 was recommended only to use learning from one GP. The recommended GP for

each PP are listed in the Table 2.2. Those GP, which were recommended by PP for inclusion in the Interreg Europe Policy Platform are marked with green colour and those GP marked with white colour are new GP identified and suggested by PR experts during PR process.

**Table 2.2.** GP recommended by PR experts for PP during the PR process.

Project partner	GOOD PRACTICES*
<b>PP1 – The Republic of Latvia</b>	1. Business Space - Paços de Ferreira Municipality, Portugal
	2. B.Box @ Tâmega e Sousa - Tâmega e Sousa Intermunicipal Community, Portugal
	3. Citizen’s Shops - AMA – Administrative Modernization Agency, Portugal
	4. DES AGRO 4.0 - Business association DOLMEN, Portugal
	5. “Digital Advisors” programme - Spain Chamber of Commerce
	6. “Granada Empresas”- Granada Provincial Council, Spain
	7. Growing in Digital - Chamber of Commerce of Basilicata, Spain
	8. “Guadalinfo” - Consortium Fernando de los Ríos, Spain
	9. Idea generation workroom “LabinGranada”- MediaLab UGR and University of Granada, Spain
	10. Industry 4.0 Maturity Assessment Model - Ministry of Economy and Digital Transition, IAPMEI - Agency for Competitiveness and Innovation, Portugal
	11. Industry 4.0 Programme Portugal - Ministry of Economy and Digital Transition, IAPMEI - Agency for Competitiveness and Innovation, Portugal
	12. Industry 4.0 Trøndelag - Digital transformation in small and micro-sized enterprises - Trøndelag County Council, Norway
	13. Public-private cooperation/funding model for Business Gardens-creating ecosystems - The Industrial Development Corporation of Norway and County Councils, Norway
	14. SME.Digital Austria - Ministry of Economics of Austria
	15. “TICCAMARAS” - Spanish Chamber of Commerce
<b>PP3 – Trøndelag, Norway</b>	1. “Guadalinfo” - Consortium Fernando de los Ríos, Spain
<b>PP4 - Basilicata, Italy</b>	1. Andalucía Open Future (AOF) - Andalusia Regional Ministry of Economy, Knowledge, Enterprises and University, Spain
	2. Business Space - Paços de Ferreira Municipality, Portugal
	3. Consultancy on business support (SMEs internationalisation through digital solutions) - Zemgale Region Human Resource and Competences Development Centre, Latvia
	4. Development of digital networks (fixed & mobile) in non-commercially viable areas - Trøndelag County Council, Norway
	5. “Granada Empresas”- Granada Provincial Council, Spain
	6. “Guadalinfo” - Consortium Fernando de los Ríos, Spain
	7. Industry 4.0 Referential - National Operational Programme for Competitiveness and Internationalisation (COMPETE 2020) - Managing Authority, Portugal

	8. Master's Degree in Digital Agriculture and Agri-Food Innovation at University of Sevilla - University of Seville, Spain
<b>PP5 - Granada, Andalucía, Spain</b>	1. Awareness raising campaign "Digital week" – Latvian Information and Communication Technology Association
	2. "Digital Pro Bootcamps"- Austrian Research Promotion Agency
	3. Project "Trainings for SME for development of innovations and digital technologies" - Latvian Information and Communication Technology Association
	4. Smart Latvia & Digital Maturity Test – Latvian Information and Communications Technology Association
<b>PP6 - The Republic of Austria</b>	1. Agricultural Dataflow- Agricultural Dataflow SA, Norway
	2. Alliance for Equality in Information and Communication Technologies (ICT) - Commission for Citizenship and Gender Equality in articulation with the Portuguese Association for Diversity and Inclusion, Portugal
	3. Development of digital networks (fixed & mobile) in non-commercially viable areas - Trøndelag County Council, Norway
	4. Industry 4.0 Referential - National Operational Programme for Competitiveness and Internationalisation (COMPETE 2020) - Managing Authority, Portugal
	5. Industry 4.0 Programme Portugal - Ministry of Economy and Digital Transition, IAPMEI - Agency for Competitiveness and Innovation
	6. Support the competitiveness and innovation of small companies in low-density territories (SIZÉ programme) - Intermunicipal Communities and Local Action Groups, Portugal
<b>PP7 - Tâmega e Sousa, Portugal</b>	1. Awareness raising campaign "Digital week" – Latvian Information and Communication Technology Association
	2. "Digital Pro Bootcamps" - Austrian Research Promotion Agency
	3. Consultancy on business support (SMEs internationalisation through digital solutions) – Zemgale Region Human Resource and Competences Development Centre, Latvia
	4. "Digital Advisors" programme - Spanish Chamber of Commerce
	5. Project "Trainings for SME for development of innovations and digital technologies" - Latvian Information and Communication Technology Association
	6. "TICCAMARAS" - Spanish Chamber of Commerce, Spain

Source: PR Reports of project partners

\*GP with the green background have been selected by PP for interregional learning and published on the Interreg Europe Platform; GP with the white background have been identified and additionally proposed for PP during the PR process.

The PR process helped to promote and expand the interregional learning by adding **12** new GP to the already proposed **19** GP. **Four** Norwegian GP were proposed to be considered for additional learning and possible takeover for all other partners. In total, **27** GP were used by PP in their work. Also, it provided an opportunity for exploring deeper GP and identifying features, which are particularly useful for PP.

### 3. Comparative Analysis

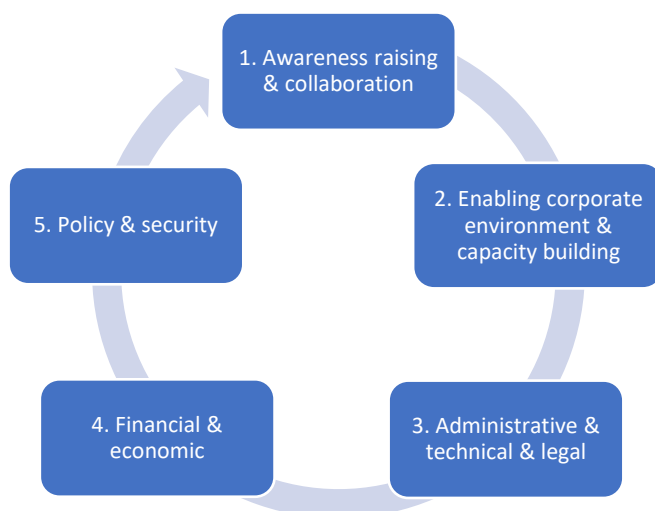
The initial and comprehensive analysis of the SME digital transformation barriers and solutions of the DigiBEST partners is provided in PP Regional Studies and JR.

The barrier & solution analysis separates barriers and solutions into five categories:

1. Awareness raising & collaboration;
2. Enabling corporate environment & capacity building;
3. Administrative & technical & legal obstacles;
4. Financial & economic barriers;
5. Policy & security barriers.

Following the logics of previous reports, as well as the PR methodology, PR experts were also asked to analyse main barriers for SME digital transformation, as well as to provide credible solution. Therefore, the PR JR provides a comparative analysis of barriers and proposed solutions in PP countries and regions based on the DigiBEST RS and JR. Also, findings of the PR are compared to initial findings reflected in the DigiBEST JR (see Attachment 4).

The logic of this analysis is reflected by Figure 2.



In preparation for PR visits, PR experts studied partners' RS, as well as DigiBEST JR, internet resources and documents provided by Hosting Partners. The PR focus was given on the most important regional challenges for promoting digital transformation of SMEs. This should be noted that the PRR doesn't provide conclusions and recommendations for all barrier and solution categories in cases of all partners.

#### 3.1. Awareness raising & collaboration

Awareness raising & collaboration are very important considering that digital innovation nowadays is advancing at an unprecedented speed. As a result, businesses must be able to react and adapt to this ever-changing landscape. For many businesses, the security of 'sticking to what they know' can seem favourable to trialling a new technology, but by the time they have come around to the idea of change, the likelihood is that that innovation is already old news. For digital transformation to be a success, businesses must be willing to try something new, and to try it quickly. Therefore, there should be developed communication channels to increase awareness of SMEs and disseminate information on digital innovation and its offered benefits for enterprises.

According to the PRR of PP5: **Awareness raising is one of the toughest but significant objectives to promote digital transformation of SMEs, as it takes time and requires general cultural changes in population and cannot be done overnight.**

Another important obstacle is an insufficient collaboration between IT and businesses even though technology and IT are an intrinsic part of any organization. Therefore, new solutions should be searched to link IT with other businesses.

The most often named barriers for the DigiBEST partners is a **low digital maturity** of SMEs that presents the major problem for digital transformation. Other more often identified problems are related to **lack of digital skills and employees with such skills, gaps in ICT education, lack of awareness and insufficient cooperation. Low performance on e-commerce** is another barrier or consequence of existing problems mentioned by the DigiBEST partners (see Attachment 4).

PR key findings and conclusions show that there are already awareness raising and cooperation activities ongoing in PP regions and countries. However, they need to be **better coordinated and duplication of activities should be avoided**. Also, the use of digital technologies needs to be further promoted and facilitated. Furthermore, the **networking of companies on regional, national and European levels**, as well as **technological and research cooperation** for promoting the technological cooperation between SMEs have been recognized as an important factor for innovation and technological uptake. In addition, **data access to public sector data and facilitation of data sharing within the private sector** must be encouraged. Awareness raising and cooperation activities need to be actively used to help companies to facilitate and speed up the digital transformation (see Table 3.1.).

**Table 3.1.** Awareness raising & collaboration: key findings and conclusions

Partner	Key findings
PP1	<ul style="list-style-type: none"> <li>✓ There are already many activities underway related to awareness raising. Rather than adding to these (and potentially creating greater fragmentation), there should be an increased coordination between existing activities and SHs facilitated through EDIHs.</li> <li>✓ At the national level, it already appears to have an increased cross-departmental cooperation. There is a scope to coordinate existing activities to reduce duplication. For example, webinars held in one region could be promoted to participants in all regions.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>✓ Low propensity of Lucanian companies to participate in national networks of technological specialisation, as well as in European innovation networks.</li> <li>✓ The lack of cooperation between SMEs and entities of the scientific and technological system, and among SMEs themselves, makes it more difficult for small companies to develop innovation activities.</li> <li>✓ Some initiatives are implemented in the region to bring SHs together, to promote joint actions, to raise awareness and promote capacity building for digital transition have achieved very relevant results.</li> </ul>
PP5	<ul style="list-style-type: none"> <li>✓ Awareness raising is one of the toughest but significant objectives to promote digital transformation of SMEs, as it takes time and requires general cultural changes in population and cannot be done overnight.</li> <li>✓ Granada market is full of micro enterprises that run their business traditionally and digitalisation, in most of the cases, is seen as a waste of money and not as an opportunity. Sectors like agriculture, hospitality and food industry are the most disadvantaged in this context because of their lack of digital vision and digital strategies, often derived from unawareness of certain issues.</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Digital technologies such as AI, robotics, blockchain, HPC, IoT and 5G have the potential to increase farm efficiency, while improving economic and environmental sustainability.</li> <li>✓ Increased use of digital technologies will also have a positive impact on the quality of life in rural areas and may attract a younger generation to farming and rural business start-ups.</li> <li>✓ There is a need to strengthen the skill base of tourism SMEs, whose growth potential is often unexploited due to limited access to life-long learning and awareness of developments in the smart use of technologies.</li> <li>✓ According to the PR Expert's opinion, collaboration with the University of Granada and OnGranada Cluster could raise awareness and enhance a powerful process of transformation involving young professionals and students in a virtuous circle of sharing ideas and knowledge.</li> <li>✓ Business owners and managers often do not know how and where to apply digital solutions to business processes/channels.</li> </ul>
PP6	<ul style="list-style-type: none"> <li>✓ Most SMEs are aware of the benefits of digital transformation, although about a half of them lack a companywide digital transformation strategy.</li> <li>✓ A certain lack of culture of cooperation among SMEs was perceived, either with other companies or with other organisations such as RTD and innovation centres. Few policy measures to change this reality have been found which could, for instance, strengthen supply chains diversity with the engagement of small enterprises and start-ups that could share data and information about processes or business activities, as well as multi-partner projects bringing together entities of the scientific and technological system, SMEs, large companies, business associations and ICT suppliers working around the development of new products, processes, or markets.</li> <li>✓ No evidence was found that Austria has a strategy for sharing of data, apart from using GDPR or secondary data from research institutions. The government has a major role to play in facilitating data access to public sector data and facilitating data sharing within the private sector. Austrian enterprises, and especially SMEs, could be encouraged to share and re-use data among them to enhance business opportunities and improve internal efficiency.</li> </ul>
PP7	<ul style="list-style-type: none"> <li>✓ The region has a problem related to the lack of digital awareness. There are already some initiatives to improve workers' digital skills and that is a good prospect for the whole region. New processes and digital tools can be implemented quickly, and this creates a competitive advantage.</li> <li>✓ Both, the state and the EU are promoting many investments in digitization within the programs and initiatives. The decisive factor will be whether the entrepreneurs understand quickly enough, how to deal with the digitization. The most important thing for the Tâmega e Sousa Region is to help their entrepreneurs and CEOs understand what they must do.</li> <li>✓ There is a huge unused potential in collaborations, which are an essential tool for knowledge transfer between companies. The cooperation usually brings benefits to all sides, and the overall output increases if successful cooperation avenues can be found.</li> <li>✓ Low awareness about the necessity of digital transformation in the long term, and potential benefits that digital solutions can provide.</li> <li>✓ Low awareness about digital solutions that are available in the market, and how they could be implemented.</li> </ul>

Source: PR Reports

Awareness raising and coordination activities are recognized as particularly important for promoting the digital transformation of SMEs by all DigiBEST PP.

Following the key findings and main conclusions the most important recommendations include the **increased need for well-coordinated and targeted awareness raising actions and initiatives, as well**

as enhanced continuous networking and cooperation with technology institutions, clusters, and universities to transfer awareness into action. One of the important tools that could be used – the European Digital Innovation Hub (EDIH). Also, actors who are potential providers, as well as beneficiaries of knowledge and technologies, to create a collaborative and integrated digital innovation ecosystem should be intensively used. Also, cooperation and sharing between private and public organizations should be used to promote digital transformation (see Table 3.4.).

**Table 3.2.** Awareness raising & collaboration: recommendations

Partner	Recommendations
PP1	<ul style="list-style-type: none"> <li>✓ The EDIHs could be used as a good tool to support increased coordination. Clearer communication with and clearly defined roles for regional actors in the roll out of the EDIHs will be vital in ensuring that the implementation meets the expectations.</li> <li>✓ Local and regional actors should be equipped with a strong awareness of the national agenda and be provided with adequate tools to enact the digital agenda.</li> <li>✓ Coordination of existing activities needs to be ensured to reduce duplication.</li> <li>✓ To avoid having too many initiatives but rather chose a small number of priorities and focus on maintaining and promoting these in a clear and consistent way to SMEs and other SHs.</li> <li>✓ Implement awareness raising activities that encourage companies to take things to the next level – transforming awareness into action.</li> </ul>
PP3	<ul style="list-style-type: none"> <li>✓ To optimize the passage of information and optimize digital and cultural transformation, the Agrifood consortium should develop communication actions aimed at enhancing the variety and diversity of the single product: training tools intended for the general public; dossier on the foundations of the denomination intended for professionals; website intended for a wider audience; public relations and media relations; customized visit programs and educational tastings for journalists and experts in the sector.</li> <li>✓ Develop information and communication programs about the benefits of adding information technologies and digitization.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>✓ Identify the actors in Basilicata who are potential providers as well as beneficiaries of knowledge and technologies to create a collaborative and integrated digital innovation ecosystem.</li> <li>✓ Launch physical and virtual technology marketplaces for digital innovation. Intermediaries such as clusters, business associations or ICT companies, which are offering digital products and solutions to the market, could facilitate the creation of such physical and virtual technology marketplaces that use digital innovation as a service, and assist small firms in the transition of their business models towards new paradigms.</li> <li>✓ Accelerate the digital transformation of the public sector, which will raise awareness among public employees and end users (businesses and citizens) on the potential of digital solutions, hence producing a pull effect for digital transformation on the whole society.</li> <li>✓ Make science-business cooperation more regular through ongoing multilateral projects involving SMEs, large companies (including multinational), entities of the scientific and technological system, business associations and clusters.</li> </ul>
PP5	<ul style="list-style-type: none"> <li>✓ The focus of awareness raising activities must be consented on addressing CEOs and managers of SMEs, as they are the decision makers and therefore can influence wider circle around them.</li> <li>✓ Possibly separate initiative could be developed that targets SME managers based on SME needs and profiling according to previously mentioned maturity identification approaches.</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Information about available support, funding, initiatives and awareness raising events, training programs as well as organisations that provide support should be represented according to a consolidated approach.</li> <li>✓ SMEs should not get confused when searching for information regarding digital transformation, which based on PR Expert experience is a common problem. In PR Expert opinion there should be a platform that works as a one-stop-shop for citizens, SMEs, and SHs, where they can find most relevant information regarding various digital transformation angles.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>✓ Instead of one-to-one projects, in which SME work with a single innovation service provider, micro and small companies would benefit from working with a wide range of partners for a faster diffusion of knowledge, technologies, and processes in local innovation ecosystems.</li> <li>✓ More efforts could be done to foster multilateral projects bringing together a variety of actors (e.g., RTD and innovation centres, business associations, clusters, business incubators, SMEs, ICT firms) to gather the necessary knowledge, experience, and resources to respond to specific digital transformation needs of small businesses.</li> <li>✓ Co-operation between companies in a value chain would also able better service for cybersecurity and facilitate advice, support, and training actions (e.g., through business associations) etc. This would configure relevant support for business competitiveness.</li> <li>✓ Significant efforts must be made towards the digital transformation of SMEs and companies in general, reinforcing the funding to the instruments that are in the first line of business support, disseminating digital technologies and their potential, publishing successful business cases, and bringing the most diverse SHs closer together for faster and more effective knowledge sharing.</li> <li>✓ To foster the national data economy, additional measures could be implemented to further develop and raise awareness about the concept of B2B data sharing and its benefits, as well as to provide guidance to SMEs interested in sharing and re-using data among them.</li> <li>✓ Promoting a culture of cooperation under value chains or innovation projects may also have a positive impact on the opportunities created in terms of data sharing through digital platforms.</li> </ul>
<b>PP7</b>	<ul style="list-style-type: none"> <li>✓ To increase the awareness among SMEs about necessity of digital transformation and potential digital solutions that could be adopted by SMEs, the planning documents of Tâmega e Sousa could include areas about importance of coordinated awareness raising activities, and list programs and initiatives that should be developed jointly with involved SHs and business associations. Consistent, coordinated and extensive event organization would be beneficial, mainly due to fact that they also share success stories of other enterprises, which is one of the main tools to convince SMEs to change based on the real-life examples.</li> <li>✓ Besides this approach, collaboration between SMEs should be facilitated, possibly by identifying and assigning digital champions, who could be more actively involved in organized experience sharing campaigns and seminars.</li> <li>✓ SMEs could also try to launch more projects with universities. Not only external expert knowledge is available in such way, but also an opportunity to present company as an employer at the same time. The companies benefit from the research work of the university and can also network with talented people.</li> </ul>

Source: PR Reports



### 3.2. Enabling corporate environment & capacity building obstacles

Undertaking digital transformation effort requires a risk-averse culture and a business being willing to explore and experiment, organizations need to ensure that they are facilitating these changes from the inside out. Therefore, a requirement of creating a culture where innovation is being encouraged is a precondition to transformation success.

The digital transformation implies a change across the entirety of a business. Unfortunately, most businesses still believe that planning to protect their core business, rather than expanding into innovation and embracing the changing digital world, is the key to success. Therefore, enterprises need to ensure they have necessary capabilities and right people in place to facilitate these changes, as well as capable managers to undertake digital transformation initiatives.

In addition, staff of enterprises needs to be willing and able to use new technologies and IT. Therefore, having necessary skills and their regular upgrade is another challenge that businesses may experience.

The most often named barriers for the DigiBEST partners in this category is a **lack of skills, knowledge and competence** of SMEs that presents the major problem for digital transformation. Other the most often mentioned problems are related to **insufficient support resulting in a low innovation potential** (see Attachment 4).

**Shortage of digital skills, mismatch between skills and needs, and brain drain** are among the most often mentioned obstacles for digital transformation in PRR. Also, **continuing of improving and strengthening the digital infrastructure, especially in rural and remote areas, as well as supplying technology to SME** is an important task to foster and speed up digital transformation.

**Table 3.3.** Enabling corporate environment & capacity building: key findings and conclusions

Partner	Key findings
PP1	<ul style="list-style-type: none"> <li>✓ Supporting SMEs to take the next steps in their digital journey's (beyond the acquisition of basic digital skills) appears to be the most important challenge to be addressed going forward. At this stage, companies will require a tailored approach that considers their specific needs and is led by a trusted individual who can support them through the process (e.g., coach, mentor, IT company, regional expert).</li> <li>✓ Being up to date with all digital transformation issues can be hard and requires a lot of effort. Since IT expert companies need the same inputs as people from governmental teams it makes sense to derive an infrastructure where knowledge will be passed on to those who need it in a centralized way.</li> <li>✓ The collaboration between industry and education to integrate digital skill provision into the curriculum in Latvia is on a high level, which might have a positive impact on indicators related to human capital in the long-term.</li> </ul>
PP3	<ul style="list-style-type: none"> <li>✓ The high level of digitization in Norway is well above the European average with a high level of digitization both in infrastructures and connectivity. It also happens for supply, demand, skills and use of the Internet by companies and people.</li> <li>✓ Small and medium-sized companies, especially, those located in rural areas have difficulties in accessing knowledge in management, marketing, and technologies for digital development, and bringing qualified personnel in ICT to rural areas.</li> <li>✓ There is a limited supply in technology for rural areas and small and medium companies.</li> <li>✓ Little access to information on tools and instruments of public institutions that facilitate the development of their level of digitization.</li> <li>✓ Problems in purchasing public services and difficulties in competitiveness.</li> </ul>

<b>PP4</b>	<ul style="list-style-type: none"> <li>✓ Difficulty in maintaining qualified young people in the region. Although coordination between the university and the labour market could be more effective to resolve the mismatch between graduates' profiles and companies' needs, such a problem as brain drain has evidently much deeper reasons that have to do with the fact the region is not being attractive enough for young people to carry out their professional careers.</li> <li>✓ Another problem that needs to be resolved is the loss of qualified young people who leave the region (brain-drain).</li> <li>✓ Limited digital skills available in the region and scarce adoption of ICT technologies, reduced capacity of SMEs to innovate and digitalize, and uneven distribution of broadband infrastructure across the territory, with clear disadvantage for rural areas.</li> <li>✓ A positive evolution in business innovation expenditure regarding certain indicators (e.g., non-R&amp;D innovation expenditure and product/process innovation), and the role of the university has been progressively noticed through the carried-out R&amp;D activities and growing number of young people holding a university degree who reach the labour market every year.</li> <li>✓ A gradual expansion of the broadband infrastructure that allows fast internet connectivity, which is covering more and more territory and population.</li> <li>✓ Evidence of progressive digital transformation of SMEs, including digital technologies, processes, and business models. Several regional successful initiatives can be identified to foster digital transition in SMEs, such as the Digital Innovation Hub, Punto Impresa Digitale and Growing in Digital.</li> </ul>
<b>PP5</b>	<ul style="list-style-type: none"> <li>✓ Two of the relevant and correlated obstacles for the adoption of digital technologies are concerns surrounding business digital transformation and the need to recruit and retain highly skilled staff with digital expertise.</li> <li>✓ SMEs and microenterprises have higher skill deficiencies than large firms and SMEs training efforts are on average significantly weaker per employee than in larger firms.</li> <li>✓ The high unemployment rate and the various employment opportunities do not represent a constraint on brain drain. Better salaries and multinational careers paths are a key push factor for emigration of qualified workers from Spain.</li> <li>✓ Brain drain is still an urgent problem to downsize – University of Granada trains researchers to be engines of socio-economic growth and Granada Province cannot afford a brain waste.</li> <li>✓ Employees need technical know-how to integrate digital solutions. They also need the skills necessary to approach larger-scale, transformational projects as well as to articulate robust technical implementation roadmaps and/or business plans.</li> <li>✓ Granada province faces high unemployment, however, the unemployed population lack digital skills for them to be incorporated in digital environment and to be able to find new career paths.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>✓ Contrary to what happens in other European countries, where there are measures that small businesses benefit, particularly those based in rural areas, in Austria small and micro-enterprises appear to compete on an equal footing with larger enterprises.</li> <li>✓ Digital transformation projects in small and micro-enterprises are often closely related to broader investment projects.</li> <li>✓ The most important challenges of SMEs seem not to be found on the supply side (availability of solutions) but rather within the enterprises, related to in-house organisation, skills, and know-how.</li> <li>✓ Successful digital transformation projects in SMEs require organisational and technological know-how and often also a reorganisation of business processes.</li> <li>✓ Regarding human capital, the number of ICT specialists and graduates increased in the last years, but the lack of qualified staff to address the high demand in the labour market persists and can slow down the digital transformation of businesses. SMEs have difficulties in recruiting ICT specialists at every level.</li> <li>✓ Despite very positive advances in recent years, the country remains below the EU average in terms of fixed VHCN (Very High-Capacity Networks) coverage and take-up.</li> </ul>

	<p>Rural VHCN coverage remains very low, even when compared to the EU average. As high-quality fixed connections are a prerequisite for the digital transformation of the country, this is a critical aspect that must be given absolute priority by government authorities. On the other hand, Austria is at the forefront in the roll-out of 5G technology.</p> <ul style="list-style-type: none"> <li>✓ A very high level of mobile coverage and up-take, and businesses may have been using mobile connection as a complement to or substitute for their fixed connection.</li> <li>✓ Existing ICT skills in the working population are insufficient to meet the needs of the Austrian economy and society, including the shortage of ICT specialists and trainers.</li> <li>✓ Regarding the adoption of certain digital technologies such as cloud computing, e-invoicing or big data, the county's performance is lower. The ICT producing sector measured in value added to GDP is smaller compared to the leading innovation countries in ICT. Furthermore, whereas the overall digital transformation performance is marked by good performance in the manufacturing industries, weaknesses are identified in the service sector concerning the take-up of digital technologies.</li> <li>✓ Despite the high investment made in the last few years, deficits in broadband and fibre-based networks persist. Addressing this issue should remain a priority, as fixed-broadband take-up rates are especially lagging comparing to digital leading countries. Businesses, and particularly SMEs, need faster Internet connections for their digital transformation, and urban-rural divide in ultra-fast Internet access remains undiminished.</li> </ul>
<p><b>PP7</b></p>	<ul style="list-style-type: none"> <li>✓ The digital infrastructure is relatively well developed; however, improvements are still needed according to information obtained during field research interviews with SHs. It especially applies for the countryside, as often there is a lack of a fast internet connection.</li> <li>✓ The Tâmega e Sousa Region has no attractive universities and the competition for labour force from other regions like Porto or Lisbon is high.</li> <li>✓ Low level of management and digital skills in SMEs and no corporate digital strategy in place for most of SMEs.</li> <li>✓ Low level of digital literacy among the population in the region.</li> </ul>

Source: PR Reports

Recommendations in the category Enabling corporate environment & capacity building are mainly related to **developing tailor-made solutions, training, and training programmes for SME**, as well as **providing an increased access to and investment in know-how and RTD to increase their capacity and skills uptake**. Several PPR also recommend promoting the **increase in digital literacy and skills of the overall population**, also including the **improvement of the skills of unemployed**, as well as **involving skilled immigrants in the labour market**. The boost of SMEs digital competences could also take place through the **EDIH**.

An interesting recommendation developed for PP7, which could also be used by other DigiBEST PP is the **establishment of the Citizen's Shop** where several public and private services are brought together in one place which could help businesses to access technological infrastructure, offer fast access to Experts, promote networking, as well as help on digital matters for citizens.

**Table 3.4.** Enabling corporate environment & capacity building: recommendations

Partner	Recommendations
<b>PP1</b>	<ul style="list-style-type: none"> <li>✓ Tailored support needs to be provided for SMEs through a consistent and transparent framework that operates similarly for all companies. This will avoid further fragmentation of support measures.</li> <li>✓ Community-based initiatives to support re-skilling of unemployed workers and general digital skills also have great potential in the short-medium term.</li> <li>✓ Promoting a dual VET (vocational education &amp; training) system with addition of dual academy that makes job/education rotations easier and helps the life-long-learning concepts.</li> </ul>
<b>PP3</b>	<ul style="list-style-type: none"> <li>✓ Increase access and transfer of knowledge and training in digital skills in the environment of small and medium-sized enterprises and rural areas.</li> <li>✓ Add programs about the services and tools available from public institutions to level up their digital maturity.</li> <li>✓ Create, facilitate, and promote collaborative groups or clusters of small and medium-sized companies that help them gain dimension in their digital development, both in purchases and sales, as well as in the incorporation of talent and qualified personnel.</li> <li>✓ Enhance, promote, and attract technology-based projects to rural areas.</li> <li>✓ Enhance and promote work systems and environments remotely.</li> </ul>
<b>PP4</b>	<ul style="list-style-type: none"> <li>✓ Invest in scientific excellence, namely in higher education and specific RTD areas where the region can stand out in the country and abroad, increasing the region's chances to be internationally recognised as an innovative region.</li> <li>✓ Attract ICT highly skilled talent through the reinforcement of scholarship systems for international students, including PhD students and researchers.</li> <li>✓ Foster technology and knowledge-based entrepreneurship, so that innovative firms can bring new products, technologies and business models, increasing innovation and competitiveness, while retaining and attracting talent.</li> <li>✓ Attract Foreign Direct Investment (FDI) and repositioning the region into global value chains, which can be achieved through a mix of efficient logistical networks, qualified human resources, highly reputable university, and internationally recognised research centres, placing Basilicata on the radar of multinational companies.</li> <li>✓ Accelerating the expansion of ultra-broadband infrastructure and 5G technology to enable ultra-fast internet connectivity.</li> <li>✓ Launch new training centres in ICT that support companies (particularly SMEs) in upskilling and reskilling their human resources, so they can have a good command of digital technologies applied to production, management and sales processes.</li> <li>✓ Implement campaigns of digital literacy and digital skills development for the population at large.</li> </ul>
<b>PP5</b>	<ul style="list-style-type: none"> <li>✓ Collaboration between various SHs could be increased in joint strategy development, especially University of Granada could potentially play an important role in support for training program development and overall digital maturity assessment.</li> <li>✓ Training programs is another important area for successful digital transformation, especially for Granada province where there is a disproportional demand and supply for skilled labour force in a high unemployment environment.</li> <li>✓ Training programs for SMEs and unemployed population should be rather simple, but at the same time tailored to meet actual labour market and SMEs needs. PR Experts believe that introduction of up to life-long learning programs that focus on reskilling population from traditional skills to digital skills should be implemented, and co-funded to increase incentive for population to participate in these programs.</li> <li>✓ To facilitate collaboration, the University of Granada should be involved in designing of these programmes, as they have strong knowledge and competencies in ICT.</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Additionally, Granada Province in collaboration with Granada ICT companies could design special boot-camp programs to train and integrate unemployed population in the actual work environment. To facilitate collaboration and take the administrative burden away from individual ICT companies, this kind of initiative could be organised collectively by various ICT enterprises or business associations (for example “Young Entrepreneurs Association”) or operate as a modular part integrated in life-long learning programs.</li> <li>✓ In this case, institutions should also play an important role to retain skilled professionals by investing in tax incentives and providing, in collaboration with SMEs, career pathing and employee development.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>✓ Specific initiatives could be tailored to the needs of small and micro-enterprises, especially if based in remote areas, including specific calls for proposals, provision of grants with higher co-funding rates, advice, training, and assistance in integration into value chains.</li> <li>✓ Competence exchange from various projects should be shared through practical competence areas with actors outside the value chain.</li> <li>✓ It should be a strategic ambition for AWS to link the competence building closely to the funding operations. The role of AWS will then be facilitation of networking, sharing experiences from different projects, to encourage implementation of new/improved production processes and systems, and new business models linked to its funding’s criteria. One element would be the establishment of Digital Innovation Hub (EDIH) centres, which will assist SMEs and the public sector with a digital competence boost.</li> <li>✓ A stronger focus on ICT in all cycles of education, as well as training and retraining of employees and unemployed people is needed.</li> <li>✓ Changing the criteria for the entry of skilled immigrants into the country would be beneficial to the economy.</li> </ul>
<b>PP7</b>	<ul style="list-style-type: none"> <li>✓ The Citizen’s Shop is a concept where several public and private services are brought together in one place. The feedback from the SHs showed that this project could be the key to overcome many of the given challenges. It provides the technological infrastructure to everyone, as well as offers fast access to Experts, and connects different people of different ages in one place.</li> </ul>

Source: PR Reports

### 3.3. Administrative & technical & legal obstacles

This category of barriers is related to the decision-making process, i.e., administrative, technical and legal barriers. Digital transformation initiatives could be particularly sensitive to administrative barriers placed by legislative framework, bureaucracy, tax policy, procurement, lack of experience or resources, etc. A failure to change legacy systems for new technology will continue to act as a significant blocker for SMEs digital transformation. If such barriers exist, it would be important to look for solutions on how to remove them to promote SMEs digital transformation. At the same time, identified barriers & solutions should be specific for the SMEs digital transformation, not for the digital transformation in general.

The most of existing barriers for the DigiBEST partners in this category should be solved on a national or local government level, and only some on business levels. Such barriers as **shortages in legislation and policy-making, bureaucracy, and infrastructure** are among the most often mentioned by the DigiBEST partners (see Attachment 4).

Among the administrative, technical, and legal obstacles mentioned in PRR as the most important are noted those related to **investments and measures related to digital transformation made by public**

**institutions, low use of digital tools and insufficient accessibility of digital networks in rural areas, as well as promoting digital literacy and access to public services by population.**

Very interesting example or GP is mentioned by the PRR of Austria. This is an initiative of public authorities to promote **teleworking** in SMEs supported by a group of ICT companies to promote digital transformation during the Covid-19 pandemics.

**Table 3.5.** Administrative & technical & legal: key findings and conclusions

Partner	
PP1	<ul style="list-style-type: none"> <li>✓ There is a disproportionate investment in E-Government in comparison to Human Capital, which is a risky long-term path if the goal is the digital transformation of the SMEs.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>✓ Fragmentation of RTD activities into multiple projects with rather limited critical mass. Stable collaboration (e.g., public-private partnerships) based on regional specialisations have not been identified. In fact, interactions within the innovation system tend not to be continuous, representing almost always isolated experiences.</li> </ul>
PP5	<ul style="list-style-type: none"> <li>✓ An important obstacle is related to the longstanding issues that rural areas are facing both in terms of economic development and in terms of quality of life/wellbeing issues such as the access to key services.</li> <li>✓ Rural parts of the Granada Province face challenges arising from a wide range of factors, including low productivity, low-paid jobs, a low skills base, transport, and IT infrastructure weaknesses.</li> <li>✓ Guadalinfo is a wise example of a practical initiative established to provide citizens with training resources, to offer SMEs and microenterprises tools for digital transformation and the development of a model to encourage cooperation between local bodies.</li> </ul>
PP6	<ul style="list-style-type: none"> <li>✓ Teleworking has been encouraged by Austrian public authorities during the COVID-19 pandemic. The launch of "Digital Team Austria", through which a group of ICT companies supported SMEs in the implementation of teleworking, seems to be a GP that could be considered by any other country. However, there is no clear evidence that other relevant measures have been launched to support SMEs in these endeavours towards new digitally forms of work (e.g., hybrid work, dislocated working etc.), such as expert advice for development of teleworking plans, dissemination of key information and GP, assistance with software and hardware, cybersecurity tools, training, etc.</li> <li>✓ The uneven distribution of high-quality digital infrastructure across Austria may be hampering the adoption of remote work by SMEs, especially in rural areas.</li> </ul>
PP7	<ul style="list-style-type: none"> <li>✓ A lack of collaboration in joint digitalisation strategy elaboration and execution in Tâmega e Sousa between business associations, local government bodies and other organizations.</li> <li>✓ To increase digital literacy and public service usage among individuals another GP is developed in Portugal. Citizen's stops are physical locations across Portugal that citizens can visit and get individualised assistance on how to use online services and internet in general, as well as how to work with computer. Citizen's shops, however, provide possibility for the citizens and companies to have access to a wide range of public and private services in a single space. The program has significantly facilitated the quality levels and demand related to the availability of public online services in the country.</li> </ul>

Source: PR Reports

Recommendations in area of administrative, technical, and legal obstacles are mainly related to the **use of policy instruments, i.e., tax and investment policy, financial incentives, procurement, etc.,** as

well as **the role of public institutions in promoting SMEs digital transformation**. Also, **various support measures, such as a technological support platform and competence centres promoting take up of digital technologies and innovation** are being recommended.

The PP6 PRR also recommends establishing **a systematic monitoring and evaluation framework of the digital transformation progress to better assess the efficiency of the measures, and more effectively address emerging needs**. Also, **regular international benchmarking exercises** could be performed to allow a better understanding of how the country compares to digital transformation leaders.

**Table 3.6.** Administrative & technical & legal: recommendations

Partner	
PP1	<ul style="list-style-type: none"> <li>✓ A system where the investment in digital transformation leads to a lower tax rate should be established. Alternatively, a bonus could be provided at the end of the year – an investment bonus on digital transformation investments that have been applied for at the beginning of the year.</li> <li>✓ An Investment Allowance system for private investors, business angels is missing and should be implemented to attract future businesses.</li> <li>✓ The Ministry of Education and Science and the State Employment Agency should play a greater role in the human capital development and help to overcome skills mismatch on the labour market.</li> </ul>
PP3	<ul style="list-style-type: none"> <li>✓ The implementation of a technological support platform, proposing a working method that enables local actors to rationalize the creation and management of content, with the aim of simplify internal data production processes, generate data prepared for open publication and facilitate the availability of data (Open Data), increase the ability to build and manage large amounts of data, through the construction of large digital archives (Big Data), favour the updating of data in real time, exponentially increasing its potential value (Fast Data) could be useful.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>✓ Existing cooperation between companies belonging to the same sectors or clusters, seem to seek mainly commercial purposes, not looking for cooperation to develop innovative production processes based on advanced technologies that could give rise to high added-value products.</li> </ul>
PP5	<ul style="list-style-type: none"> <li>✓ Before launching a call for participation, it could be useful to provide specific trainings to unemployed people or professionals on the compliance matters, so that they could be effective and helpful support for SMEs that want to learn more and apply for funds</li> <li>✓ Local Government sets different kinds of support to raise digital skill levels, however, to make its provision/access as flexible as possible, this support should be promoted via a range of different networks (not only technology related) to maximise awareness and ensure that it's not restricted to those with an interest in new technology or working within a particular sector.</li> </ul>
PP6	<ul style="list-style-type: none"> <li>✓ The government should consider the establishment of a more systematic monitoring and evaluation framework of Austria's digital transformation progress to better assess the efficiency of the measures, and more effectively address emerging needs</li> <li>✓ Regular international benchmarking exercises could be performed to allow a better understanding of how the country compares to digital transformation leaders.</li> </ul>
PP7	<ul style="list-style-type: none"> <li>✓ This might be beneficial to establish either in municipal level or regional level competency centres (or extend the services provided by the Citizens Shops) to provide business assistance in terms of business incubators, relatively simple training programs</li> </ul>

on how to start doing e-commerce or establish visual identity, as well as provide free consultations about what the possible digital solutions are, technologies that could be fit for SMEs, as well as provide guidance about funding possibilities and collaboration with educational institutions in R&D process, and provide training programs on ICT tools, and other life-long learning programs.

Source: PR Reports

### 3.4. Financial & economic obstacles

Financial and economic barriers are related to the access to finance. Financial and economic barriers are usually the most crucial ones for SMEs making decisions about introducing new technologies and IT. Digital transformation costs can be high and businesses should be willing to invest in the process. Sometimes enterprises simply lack funding, but on other occasions it may also be the unwillingness of senior management to invest budget into digital transformation projects. Therefore, solutions could be found in making internal decisions to adapt businesses to stay competitive, as well as to provide external support measures to ensure increase in innovation and competitiveness of enterprises.

The **access to financing and resources** was identified as the main barrier in all DigiBEST partners' RS. Also, the **lack of information about funding possibilities** is one of the most often mentioned barriers by the partners (see Attachment 4).

Most often mentioned financial and economic obstacles in PP PRR are related to **SME difficulties to access funding to invest in technologies and digital transformation**, as well as a **lack of information about financial opportunities and support programmes** which often results in an insufficient competitiveness of SMEs on local and international markets. At the same time there are quite many investment opportunities, and the ERDF funding is available in the framework of concrete programmes for the needs of digital transformation. However, there are **only a limited number of sources of alternative funding**. And **small and micro enterprises are in the less advanced position for accessing financing**.

**Table 3.7.** Financial & economic: key findings and conclusions

Partner	
PP1	<ul style="list-style-type: none"> <li>✓ SME's have difficulties in accessing funding to invest in ICT.</li> <li>✓ There appears to be a degree of confusion about exactly what support is available to companies and from where.</li> <li>✓ For start-ups and scale-ups new funds and initiatives are in place. Not every investment is high tech or can be financed by investors.</li> <li>✓ The greatest need for investment is in more tailored activities that will support individual companies to take the next step in their digital journey. These activities are obviously quite labour intensive and, as such, could benefit from involvement of actors from the private sector and from academia.</li> <li>✓ Despite the range of support measures available, it is somewhat difficult to sketch out a clear picture of all measures. A similar lack of clarity was evident among the interviewed regional SHs, suggesting that this is an important area to be addressed, rather than an oversight on PR experts' part.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>✓ Basilicata faces the challenge of improving the competitiveness of its economy and improving its relative position in the ranking of innovative regions in the country and in Europe.</li> </ul>



	<ul style="list-style-type: none"> <li>✓ Greater internationalisation of companies and organisations must also be a goal which the region must seek to achieve, including attracting investment and talent.</li> <li>✓ Basilicata's SMEs also have the possibility of obtaining financing (including access to credit) through national programmes also funded by the ERDF.</li> </ul>
<b>PP5</b>	<ul style="list-style-type: none"> <li>✓ For Spanish SMEs and microenterprises different sources of financing are available (i.e., European/Government funds) but SMEs and microenterprises are not aware of how and when they can take benefits.</li> <li>✓ The availability of funds is often not well sponsored or selective means of communication are used that fail to reach certain groups of entrepreneurs.</li> <li>✓ The Government has promoted some policies with the aim to shore up liquidity as businesses struggled for cash during a year of lockdowns and other restrictions. The regional government also has produced several strategic documents that set objectives and roles in economic development.</li> <li>✓ There are many investment opportunities for SMEs and microenterprises to improve their digital skills. Main opportunities arise in the need for basic digital transformation in the areas of connectivity, infrastructures, usage of the internet and especially human capital. Combined with the statistics of where companies see the most need for digital improvement, fruitful investment strategies can be made.</li> <li>✓ Disruptive technologies train and invest in the innovative technologies that Spain is leading in and further developing. These themes have yet assumed top importance in the policy agenda of the regional government.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>✓ Subsidiaries of multinational enterprises found Austria an attractive location for business and research-intensive activities.</li> <li>✓ While aspects such as advice and training, cooperation and integration into value chains are of utmost importance for SMEs innovation, the lower financial capacity of these companies must be somehow addressed by public policies, especially when digital technologies, processes and business models will increasingly be a critical pillar for business competitiveness.</li> <li>✓ Initiatives such as "SME Digital" and "Industry 4.0" already provide relevant support for enterprise digital transformation, but in general existing programmes require relatively high investment from beneficiary companies.</li> <li>✓ No specific initiatives have been identified for small and micro-enterprises.</li> <li>✓ Like many other countries, Austria faces the challenge in supporting SMEs to invest more in digital solutions, including technologies, processes, and business models. Compared to the EU average, Austrian SMEs perform slightly better regarding basic level of digital intensity, online sales, and online sales across borders.</li> <li>✓ Although there is evidence that high investments are being made, for example in digital fixed and mobile infrastructure, concrete programmes for digital transformation in industry (e.g., Industry 4.0 programme) seem to have relatively limited budgets.</li> <li>✓ The nature of the provided support suggests a focus on the manufacturing industry and on relatively high investments (perhaps except for the SME Digital programme).</li> <li>✓ Regarding companies' funding, in addition to non-reimbursable grants, the funding instruments rely considerably on soft loans which, although made on favourable terms to the borrowers, may not be the most appealing model for small businesses.</li> </ul>
<b>PP7</b>	<ul style="list-style-type: none"> <li>✓ Local initiatives to raise awareness about new technologies can help to train the society, but there is more effort needed to hold the best talents in the region or even country. Tax benefits when companies hire tech talents could be one key element to slow down this development.</li> <li>✓ Insufficient awareness level about possible funding options, and lack of resources in terms of knowledge, time, and human capital to draw applications for EU funding and other support mechanisms.</li> <li>✓ Limited number of sources for alternative funding (e.g., venture capital, seed funds) and lack of bank financing options.</li> </ul>

Source: PR Reports

Recommendations in area of financial and economic obstacles are mainly related to **increasing awareness about financing opportunities and support programmes for SME digital transformation and enforcing alternative sources of funding**. There is a need to provide **options of funding also available for small and micro enterprises, especially in rural areas, in the form of vouchers and grants or developing specific funding facilities**. Also, small, and medium enterprises are often lacking **skills and capacity to apply for funding** and would need assistance in this respect.

PRR of PP6 specifically suggests encouraging **female participation in publicly funded digital transformation projects**, as well as **proposing the creation of a state venture capital fund or state financial institution** to support business investments in digital transformation.

Interestingly, that it was noted in the PRR of PP7 that commercial banks are often lacking knowledge about the needs of companies for digital transformation, which results in mainly issuing loans for physical assets. Therefore, **providing consultations and training on digital transformation of businesses for commercial banks could also be considered**.

**Table 3.8.** Financial & economic: recommendations

Partner	
<b>PP1</b>	<ul style="list-style-type: none"> <li>✓ Recommendations of the OECD study should be revisited and incorporated into the Roadmap.</li> <li>✓ Alternate avenues for funding with a view to securing the sustainability of programs beyond EU funding (e.g., Public-private partnerships) should be explored.</li> <li>✓ Create sustainable structures that are independent from EU funding mechanisms.</li> </ul>
<b>PP4</b>	<ul style="list-style-type: none"> <li>✓ Ensure funding for regional or sub-regional networks for digital transformation of micro and small companies, made up of public and private entities on the supply and demand sides of digital support services. This should be accompanied by a better understanding of the needs of Basilicata’s small firms in terms of the type of digital transformation needed and the type of support required.</li> <li>✓ Overcome financial barriers to digital transition, paying particular attention to micro and small enterprises. Vouchers and grants, which have been the most common instruments used to support SMEs, should continue to be made available to small businesses under the next cycle of ERDF support.</li> <li>✓ Supporting micro companies in accessing funding for innovation and digital transformation, including specific calls for proposals only for micro and small companies, and particularly for those located in rural areas. The management of these calls could be decentralised in rural territories, being entrusted to groups of municipalities or other entities at sub-regional level.</li> </ul>
<b>PP5</b>	<ul style="list-style-type: none"> <li>✓ Government should properly work on developing target funds: specific funds to SMEs and microenterprises, on one hand, could also involve the hiring of innovation managers, covering part of consultancy costs, increasing the digital resources and, on the other hand, be targeted to specific disadvantaged regions or provinces.</li> <li>✓ Very often SMEs are reluctant to apply for ESF funding due to lack of skills and understanding how to write project applications for funds. It could be beneficial to educate SMEs, by helping through seminars or education programs that teach how to write these projects. Either a new educational initiative could be developed for purpose of this, or it could be incorporated in existing GP by extending their provided services.</li> </ul>

PP6	<ul style="list-style-type: none"> <li>✓ The funding should encourage sharing of data between companies for maximising value creation. The sharing of data should be based upon standards APIs and within the framework of the European Interoperability Framework.</li> <li>✓ The criteria for funding should encourage female participation in publicly funded digital transformation projects, for example by increasing the evaluation score and/or increasing the public incentive rate to projects with significant female involvement, and to award prizes to projects that represent GP regarding female participation in digital transformation and disseminate them in the media.</li> <li>✓ The creation of a state venture capital fund to support business investments in digital transformation is being considered, which would be a positive measure to support the launch of start-ups in the digital field, and to leverage significant investments in existing companies.</li> </ul>
PP7	<ul style="list-style-type: none"> <li>✓ Many banks often lack an understanding of digital assets. A software usually does not provide any security for the bank loans. Instead - if the bank is ready to provide financing - physical assets like machines or real estate are financed. Therefore, the banking sector needs better knowledge about digitization and needs to be involved in support programs so that the banks support regional companies.</li> <li>✓ To address financing issue of SME digital solutions, from perspective of non-EU fund financing, it might be considered to introduce either separate state financial institution like ALTUM in Latvian case, that is operated by regional government or national government, or it would be beneficial for state to start a dialog with banking industry for development of programs specifically designed for SME digital transformation purposes. Such programs would possibly provide more favourable funding conditions to SMEs with a purpose to develop their businesses.</li> <li>✓ Most common reasons why such SMEs are not able to take part in funding programs is lack of skills on how to apply for such funds and insufficient financial strength to do that. This challenge could be addressed by individual consultations on how to draft EU or state funded projects, similarly as consulting is provided regarding digital transformation solutions by GP “Digital Advisors”.</li> </ul>

Source: PR Reports

### 3.5. Policy & security obstacles

This category of barriers is related to legislation, policy documents and policy-making on both, national and regional levels, which might place obstacles for the digital transformation of SMEs. The cybersecurity issue is particularly important for this category. Cybersecurity risks now go hand in hand with digital transformation; businesses need to be able to protect themselves as more and more information is moved to the cloud, and as organisations become increasingly reliant on technology. Therefore, cybersecurity is presenting a very tangible threat to the success of digital transformation projects. If businesses are to survive in the digital age, they need to ensure that their security measures advance alongside their digital transformation initiatives. This category of barriers will require to revise relevant legislative acts and normative documents, as well as policy documents and programmes.

Such barriers as **shortages of policy and regulatory framework, brain drain, risks of the concentration of digital skills only in urban areas and large companies** are among the most often mentioned by the DigiBEST partners (see Attachment 4).

The situation in this area in the DigiBEST PPs’ regions and countries can be well characterised by the PRR of PP6: **The current policy landscape may seem rather complex for SMEs, making it difficult to take full advantage of the support available to them. Digital policies would benefit from**

**strengthened governance in policy-making and implementation, including greater coordination among the relevant entities and higher harmonisation of instruments.**

According to PRR findings there are **various policy documents focusing on digital transformation, including aspects related to the SME digital transformation.** At the same time, only few PP have developed strategies and planning documents specifically targeting the business digital transformation. The same relates to the **cybersecurity strategy for businesses.** The development of **European Digital Innovation Hubs** across European countries and regions is supposed to facilitate the digital transformation of businesses. At the same time, the greatest **digital divide persists between urban and rural territories**, which is still causing problems for business competitiveness and economic development.

**Table 3.9.** Policy & security: key findings and conclusions

Partner	
PP1	<ul style="list-style-type: none"> <li>✓ The digital transformation guidelines include a wide range of measures to help incorporate digital transformation in SMEs. Especially start-ups and scale-ups are well covered – also through measures of the new started DIH.</li> <li>✓ Cybersecurity is already addressed at the highest level but the measures for SMEs were missing until the development of the cyber strategy in 2019. This strategy covers the most important issues in building a secure infrastructure. The cooperation between national cybersecurity experts and cybersecurity companies or companies that help securing SMEs (like IT infrastructure and network support companies) should be added to the overall structure.</li> <li>✓ There is no single strategy addressing the digital transformation of SMEs in Latvia. Instead, digital transformation efforts are guided and funded through a range of policy instruments spanning various government departments. Several guiding policies provide the overall development context for the country and set a broad framework for digital transformation work. Sitting beneath these are four core policies (Latvia 2030, National Development Plan 2021-2027, Growth and Employment, Post-corona Recovery and Resilience Facility Plan) that act as the central engine driving the digital transformation of SMEs. The environment for SME digital transformation is further supported by a series of enabling policies related to human capital and technology and data.</li> <li>✓ Several of the most relevant policies are undergoing a process of renewal. These policy changes (improvements) are based on substantial consultation and thus should be anticipated by the institutions who are in decision making power. There was however less evidence for the direct inclusion of SMEs themselves in the policy-making process. Two EDIHs will be implemented, each supporting a different subset of the SME community (digital native and traditional).</li> </ul>
PP4	<ul style="list-style-type: none"> <li>✓ One of the recognised issues in the region is a certain divide between rural and urban areas. There seems to be a certain delay in relation to the initial plans to cover the entire territory, which is hampering the digital transition process for companies located in the most remote areas.</li> <li>✓ There is significant public support for digital transformation at regional level, being of a particular relevance the Regional Operational Programme 2014-2020 funded by the ERDF providing a wide range of action lines and instruments for SMEs to innovate and digitalise.</li> <li>✓ The next few years will bring excellent opportunities for small and micro firms in Basilicata to be increasingly innovative and digital. The new Regional Operational Programme 2021-2027 is to reinforce public funding for RTD, innovation and digital transformation activities, while the Italian Recovery and Resilience Plan points out digital</li> </ul>

	<p>transformation as a key priority for investment, including digital infrastructure and public services, which will also benefit SMEs as end-users.</p>
<b>PP5</b>	<ul style="list-style-type: none"> <li>✓ Spain ranks 11th on DESI index and 2nd in the EU on digital public services thanks to its well-timed implementation of a digital-by-default strategy throughout its central public administration.</li> <li>✓ Bureaucracy in Spain, as in many other European countries, is a slowdown in the process of funding SME and microenterprise digitization projects. Moreover, Spain lacks the presence of professionals able to address and properly advise entrepreneurs who try to define a process of innovation. The lack of these qualified figures does not facilitate the use of Government aids.</li> <li>✓ The deficiencies of the Province of Granada on issues such as employment and local development policies does not allow an effective local urban economic renewal. Granada lacks coordination and digital competences compared to other administrations (regional and central).</li> <li>✓ A relevant achievement is the launch of the “2021-2025 SME Digitalisation Plan” by Spain’s government: over 465 billion euros will be invested by the public sector and will directly impact 1.5 million SMEs.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>✓ There is a strong policy commitment to innovation and digital transformation, although digital policies would benefit from strengthened governance in policy-making and implementation, including greater coordination among the relevant entities and higher harmonisation of instruments. Particularly for SMEs, the current policy landscape may seem rather complex, making it difficult to take full advantage of the support available to them.</li> <li>✓ The country has launched many strategies for numerous aspects related to digital transformation, as well as various instruments to put them into practice (although some of them not addressing digital transformation explicitly). While efforts have been made in recent years to harmonise digital policies and measures under fewer government entities, the existing mix of instruments used at the federal level seems to be somewhat fragmented and complex, among measures delivered by different ministries, state agencies and other entities (e.g., Austrian Economic Chambers), not to mention public support available at regional and local levels.</li> <li>✓ The creation of a Digitalisation Agency (DIA), which works closely together with the inter-ministerial task force of “Chief Digital Officers”, seems to be useful with a view to harmonising digital policies, although it is somewhat surprising that it works outside the ministry that coordinates digitalisation.</li> <li>✓ While not having a specific national strategy, there is evidence that cybersecurity has been included in several strategic frameworks and digital transformation support programmes. Considering that cybersecurity is crucial for SMEs since business activities increasingly move online, more support for small businesses could be delivered in the future, namely eligibility of cybersecurity-related expenditures under all digital transformation support programmes, acquisition of specialised assistance and cybersecurity tools (e.g., through cybersecurity vouchers), establishment of networks of cybersecurity providers, training programmes, and collective projects on cybersecurity involving for instance RTD and innovation centres, ICT companies, SMEs and business associations.</li> </ul>
<b>PP7</b>	<ul style="list-style-type: none"> <li>✓ Most of the policies effecting Tâmega e Sousa are either national policies or regional policies that are covering Norte region.</li> <li>✓ Tâmega e Sousa is dependent from national and regional policies, and there is no policy document or planning guidelines particularly attributed to Tâmega e Sousa and actions related to digital transformation are carried out by various business associations, government bodies and other shareholders, making the process of digital transformation rather fragmented and overlapping in terms of involved party responsibilities.</li> </ul>

Source: PR Reports

Recommendations in the area of policy and security obstacles are mainly related to increased focus on supporting the SME digital transformation and they are tailored to situations and needs of PP. As noted in the case of PRR of PP1, the **more systematic and regular involvement of SHs in the policy planning process**, as well as **building the roadmap to achieve step-by-step digital transformation of businesses** is needed.

Issues related to **increased networking, coordination between various players to address needs for increased innovation, training, support for digital transformation and e-commerce, closing urban-rural digital divide, continuous monitoring of SMEs digital maturity and needs**, as well as **improved governance and regular revision and updates of the policy framework and support instruments** are among the most recommended actions for promoting the SME digital transformation and security on the policy level.

**Table 3.10.** Policy & security: recommendations

Partner	
PP1	<ul style="list-style-type: none"> <li>✓ Ministries should consider a stronger role for the voice of SME representatives themselves in the policy-making process.</li> <li>✓ Clearer communication between various levels of governing bodies, and a more clearly defined role for the Planning Regions in the roll out of the DIHs.</li> <li>✓ It is strongly recommended to establish a fixed communication structure between all relevant SHs with a clear chain of command.</li> <li>✓ There are a lot of good strategy and action documents now but it's hard to find the roadmap in between – so building up the “one Latvian step-by-step-Roadmap” could be the big goal (maybe in a moderated process that identifies short, medium, and long-term goals).</li> <li>✓ SHs like the ones from the PR event, should be in a systematic, regular strategic process where the strategy is revised, and next steps are planned. Working on coordinating pictures like the “Digitalisation in Latvia” map help removing obstacles before they occur.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>✓ Prioritising support for wide collective projects involving various actors of the regional innovation system (region, university, RTD/innovation support centres, business associations, clusters, digital service providers) to the detriment of one-to-one projects in which a SME works with only one service provider.</li> <li>✓ Enhancing the coordination between the ERDF ROP and ESF ROP, to improve training actions and the development of digital skills in small companies within broader innovation investment projects.</li> <li>✓ Address rural-urban digital divide through better understanding of the needs of Basilicata's rural SMEs in terms of digital transformation required and support needed. Specific measures for small and micro businesses could be considered with support from ERDF and ESF funding.</li> <li>✓ Signpost digital support available in the region, including the development of a directory of providers of digital support, as well as a single information portal, which could gather on just one portal or website information related to digital transformation and ICT services, such as training, e-commerce, internet connectivity, cybersecurity, etc.</li> <li>✓ Boost e-commerce in SMEs (through for instance cooperation with third-party e-commerce companies) and digital payment processes, allowing small enterprises to increase sales and exports.</li> </ul>
PP5	<ul style="list-style-type: none"> <li>✓ Program of Assistance and Cooperation for Local Economic Promotion need more certain activates and guidelines such as the Development of system for continuous SMEs needs</li> </ul>

	<p>identification, targeted support instrument development and provision and feedback gathering on the efficiency and effectiveness of provided instruments and support in digital transformation and digital transformation.</p> <ul style="list-style-type: none"> <li>✓ To develop support programs and instruments for SMEs, their various profiles could be identified and specific needs for digital transformation could be accordingly identified to provide the spot-on support for various profiles of companies.</li> <li>✓ To identify and continuously monitor the level of digital transformation across industries maturity assessment could be developed in case if it is not developed yet and applied consistently – both to identify the needs for companies across industries and profiles and as well to monitor the progress in digital transformation.</li> <li>✓ To continuously monitor the changing needs of SMEs in Granada Province a mechanism of gathering them and feedback on efficiency and effectiveness of provided support could be developed. Experts highlight, that to identify what should be included in policy framework and on what actions policies should focus, continuous monitoring should be performed, as the situation very often changes.</li> <li>✓ It is important to regularly evaluate the policy framework itself and existing support instruments to understand their effectiveness and how various groups like SMEs and other SHs see it and what is their feedback. Such approach would also facilitate collaboration between involved parties and gap identification.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>✓ The current policy landscape may seem rather complex for SMEs, making it difficult to take full advantage of the support available to them. Digital policies would benefit from strengthened governance in policy-making and implementation, including greater coordination among the relevant entities and higher harmonisation of instruments.</li> <li>✓ The establishment of a more systematic monitoring and evaluation framework of Austria’s digital transformation progress seems to be necessary to better assess the efficiency of the measures, and more effectively address emerging needs. Regular international benchmarking exercises would allow a better understanding of how the country compares to digital transformation leaders.</li> </ul>
<b>PP7</b>	<ul style="list-style-type: none"> <li>✓ To create the digital transformation process in Tâmega e Sousa more tailored to specific region needs of SMEs, it might be considered to have a local planning document or digital strategy guidelines that are specifically targeting digital transformation of Tâmega e Sousa or region-specific planning aspects to be included in the national level documents.</li> <li>✓ Develop sub-region-specific planning document or strategy, such document could identify specific goals for the Tâmega e Sousa (e.g., considering the industry specifics), involved parties and their coordinated responsibility areas and actions, and describe their collaboration framework between state and municipality institutions and regional SHs. The goals could include quantitative and qualitative targets for Tâmega e Sousa that should be accomplished by the end of certain period.</li> </ul>

Source: PR Reports

#### 4. Effectiveness of the PR Process

In this section the effectiveness of the PR process is assessed based on the feedback received from the HP (Attachment 4 of the PR documents). The assessment of the effectiveness of the PR process is divided into three parts: 1) General assessment of the PR process; 2) PR preparation and implementation; 3) Assessment of the PR experts’ work.

It should be noted that all six DigiBEST PR events were organised online, which created additional challenges related to technical implementation of this process.

#### 4.1. General assessment of the PR process.

On the overall the PR process has been mostly positively assessed – as very productive and useful, but also challenging at the same time. Most of the PP were satisfied with an active involvement of SHs and their responsiveness during the PR process. The PP5 noted that it was very productive for the PR process to hold previous face-to-face meetings with the SHs to involve them in the PR event.

Involvement of PR experts and their provided recommendations were evaluated as very useful. Also, the PR methodology was positively evaluated.

Several PP expressed dissatisfaction with the fact that PR events had to be held online, which had some limitations with respect to meetings and activities to be organized. Also, organizational matters and difficulty with the right planning of timing were among the most often mentioned negative aspects.

While the involvement of SHs was mostly positively assessed, there were also cases mentioned by PP5 and PP7, when this was quite difficult to convince and involve SHs in online events.

One improvement was suggested by PP7 related to the usefulness of translation for SHs to make them more comfortable during the meetings.

**Table 4.1.** Assessment of the effectiveness of the PR process. Part 1. PR event in general.

PP	Positive aspects	Negative aspects
PP1	<ul style="list-style-type: none"> <li>Latvian SHs were very responsive and really interested in participation.</li> </ul>	<ul style="list-style-type: none"> <li>It's a big pressure on experts and HP if there are more than three interviews and meetings in a day.</li> <li>It was quite challenging, especially organizing online meetings with our partners and agreeing on dates, timings, and with experts to agree on requirements and needs to make them understandable for each party.</li> <li>Sometimes there were no breaks between the meetings.</li> <li>It was difficult to arrange the timing, because by the time of the event there were too many different online events around and local SHs were quite busy.</li> </ul>
PP3	<ul style="list-style-type: none"> <li>Worked fine as an online event.</li> <li>SHs were very cooperative and interested in participation.</li> </ul>	<ul style="list-style-type: none"> <li>As an online event, it has limited possibilities.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>After almost 2 years of online meetings, we have acquired a good expertise in this kind of events.</li> <li>The SHs invited were very responsive and interested in participating. We chose to have the main regional</li> </ul>	<ul style="list-style-type: none"> <li>Because of the Covid-19 pandemic, we were obliged to organize an online event.</li> <li>2 interviewees were cancelled for other urgent professional commitments.</li> </ul>



	<p>actors/SHs acting in the digital transformation field.</p> <ul style="list-style-type: none"> <li>We were very satisfied that most of them also took part in the last day webinar with first tips and recommendations from the two PR experts.</li> </ul>	
<b>PP5</b>	<ul style="list-style-type: none"> <li>The PR methodology has been very useful to organize the PR event. The steps contained in the document were a good guideline to explain to our SHs the objective of the activity, and its implications and commitments.</li> <li>It was very helpful for us to have preparatory meetings with the experts and with the LP and AP to clarify the management of the activity and the involvement of the local SHs.</li> <li>Being an online event, the logistics was relatively easy, considering that we chose the ZOOM premium platform for the virtual rooms.</li> <li>It was very productive to hold previous face-to-face meetings with the SHs involved in the PR event, for discussing the activity, and to organize the meetings with the PR experts.</li> </ul>	<ul style="list-style-type: none"> <li>Since there are no previous experiences among our SHs of this type of event, involving them was a bit difficult. At first, we contacted everyone by email to explain the scope of the PR activity and encourage them to participate. After a second email insisting on this issue, only one entity, the AJE, volunteered to participate in the PR event. Finally, we had to make personalized calls to each SH to achieve a certain degree of commitment, which was settled among the entities and businesses that finally joined the event.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>The communications with SHs went very well and they were very thankful to have the opportunity to use the PR for developing the new national funding programs.</li> <li>Technically everything went well.</li> <li>We liked that we could use the PR as a joint big brainstorming session with very smart people.</li> </ul>	<ul style="list-style-type: none"> <li>We would have preferred to invite the experts in person though. It's simply easier to have a smooth conversation when everyone is in the same room.</li> </ul>
<b>PP7</b>	<ul style="list-style-type: none"> <li>The overall experience of the PR event was positive, with many different points of view on the digital transformation of companies in the Tâmega e Sousa region.</li> <li>Our experience in organizing the logistics and implementing the PR agenda during our PR event was positive, since the methodology guide helped us in establishing all the steps necessary for a successful event.</li> <li>The SHs of the Intermunicipal Community of Tâmega e Sousa were</li> </ul>	<ul style="list-style-type: none"> <li>Since the event was organized online, there were some technical problems with some SHs, but they were overcome.</li> <li>There were moments when for some SHs it was boring to wait their turn to speak, because of too many SHs being present in one meeting.</li> <li>A translator for the stakeholders that weren't so comfortable expressing themselves in English would be a good improvement for upcoming PR.</li> </ul>

	actively involved in the PR event, participating massively in the event, making it possible to highlight their difficulties and main concerns.	
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Source: PRR attachment 4

#### 4.2. PR preparation and implementation

The preparation and implementation of the PR events was also mostly positively assessed by PP. Most of PP have recognized that the PR methodology was very useful and clear. The cooperation between SP and HP, as well as selection and quality of PR experts were also mostly recognized as productive and good. PP are satisfied with achieved results and their usefulness for the further work.

It was recommended by PP1 to add even more details in some parts of the PR methodology, as well as to use more communication methods during PR meetings, while PP3 commented that there were too many PR documents provided for PP to be completed. PP5 noted that additional work was needed to prepare SH to participate in PR events and that the interview with the University was also needed in the case of their PR event.

**Table 4.2.** Assessment of the effectiveness of the PR process. Part 2. PR preparation and implementation

PP	Positive aspects	Negative aspects
PP1	<ul style="list-style-type: none"> <li>The PR methodology provided clear and detailed enough guidelines for organizing the PR.</li> <li>We had very responsive sending partners. They worked hard and with high responsibility about the hired experts – evaluated their experts very carefully, selected the best, most qualified and experienced ones who had applied for the procurement.</li> </ul>	<ul style="list-style-type: none"> <li>For the future it would be beneficial to write down more detailed tasks and responsibility of each part in the PR methodology.</li> <li>There was only one method used during the PR event – interviews. The only remark would be regarding the organization and the type of meeting: it is desirable to include as few speakers as possible in the interviews for more qualitative results.</li> </ul>
PP3	<ul style="list-style-type: none"> <li>Methodology was great. Made it easy for both experts and HP to keep track of the process. Good guidelines.</li> <li>Goals were achieved because we received some tips on how to integrate agriculture and food into digital transformation strategies, discussed sustainability/circular economy related to digital transformation.</li> </ul>	<ul style="list-style-type: none"> <li>PR experts were interested in the event and had many great ideas. No requests after sending out the package of information, combined with links inside Regional Analysis.</li> </ul>
PP4	<ul style="list-style-type: none"> <li>The methodology was very helpful to provide good guidelines both for the partners and the PR experts.</li> <li>Experts were very professional and participative in all the phases of the PR.</li> </ul>	<ul style="list-style-type: none"> <li>Attachments were too many and could be summed up in 2/3.</li> </ul>

	<ul style="list-style-type: none"> <li>• Cooperation was good and sending partners were very attentive to satisfy our requests concerning the fields of expertise we required.</li> </ul>	
<b>PP5</b>	<ul style="list-style-type: none"> <li>• The objective was to put together the broadest spectrum of entities that can play an important role in the digitization of Granadian businesses, including the experience of businesses immersed in this process.</li> </ul>	<ul style="list-style-type: none"> <li>• In this sense, it would be interesting to provide more information to the stakeholders, and at the beginning of the project, to provide a detailed schedule of the activities, so that they could know what they are committing to get involved in the project.</li> <li>• Perhaps the most difficult thing was to make understandable the benefit that the PR event could bring to them.</li> <li>• Lack of clear understanding of the benefits of the PR event.</li> <li>• An interview with the University was lacking.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>• The methodological guidelines and their annexes were clear for us. It contained even more information than we needed to implement the PR.</li> <li>• The PR experts were very cooperative and interested in participating in the PR event, they prepared and asked the questions and overall respected the schedule we had planned.</li> </ul>	
<b>PP7</b>	<ul style="list-style-type: none"> <li>• The methodological guidelines and their annexes were important in helping the preparatory work for the event and after the event, with information on how to act in all moments of the event and their attachments were very useful, the documents provided all the information we needed to organize the PR event.</li> <li>• The meetings were the most interesting and engaging because they allowed us and the experts to get the stakeholders feedback.</li> <li>• There was a good understanding between the SP and PR team, we were in constant communication, first we held a meeting to decide on the experts' profile, agenda and other set of information.</li> <li>• We've managed to achieve our main targets; we were able to get an insight</li> </ul>	

	on the main difficulties and problems regarding digital transformation for our stakeholders and strategies to solve them.	
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Source: PRR attachment 4

#### 4.3. Assessment of the PR experts' work

The work of PR experts was positively assessed by all PP. The added value brought by experts has been the use of innovative methods during PR (PP1). The work of experts was assessed as very professional, efficient, and useful. PP have been satisfied with the PR experts' work during the PR process, as well as provided results.

The PP5 has recommended to postpone the final presentation of PR experts for later time to provide more time for PR experts to work on the analysis of PR results, as well as to give more time for meetings or interviews, where more than two people are participating.

**Table 4.3.** Assessment of the effectiveness of the PR process. Part 3. Assessment of the PR experts' work

PP	Positive aspects	Negative aspects
PP1	<ul style="list-style-type: none"> <li>• Experts were cooperative and actively participated and responded to any question and expressed a desire for additional participants and additional research in the field of digital skills.</li> <li>• PR experts were preparing very carefully and with great interest to do their best. We had really good feedback from them, and they asked us additional questions to be sure if their way of thinking is correct which was helpful for them as well as for hosts and final report.</li> <li>• PR experts evaluated documents and asked additional questions to be confident and prepared to resolve our requirements.</li> <li>• The cooperation with the PR experts during the desk research and the process in general was very efficient</li> <li>• They prepared an innovative method of presentation of their outputs in the Muray platform and involved all the participants in development of the SMEs Digitalisation Roadmap of Latvia.</li> </ul>	
PP3	<ul style="list-style-type: none"> <li>• Experts met expectations for desk research.</li> <li>• Target was mainly to evaluate our</li> </ul>	

	<p>strategies and projects on digital transformation, and as such they did a very good job.</p>	
<b>PP4</b>	<ul style="list-style-type: none"> <li>• Experts' work during the desk research met the expectations.</li> <li>• Cooperation between us (SP and experts) was efficient, they asked for useful information and/or documents and we answered to their requests immediately.</li> <li>• During the last day's workshop, they presented very interesting PowerPoint slides with the contents and results of the 2-day interviews.</li> <li>• We believe that the PRR is very well written, complete in the contents and with useful recommendations and suggestions.</li> </ul>	
<b>PP5</b>	<ul style="list-style-type: none"> <li>• Experts managed to achieve the objective of this PR event.</li> </ul>	<ul style="list-style-type: none"> <li>• The calendar of two days plus a third for the conclusions seems appropriate, although the day of presentation of conclusions could be further distanced, so that the experts could deepen with more time into their reflections. Regarding agenda, if more than two people participate in one interview, it would be useful to extend it for more than an hour.</li> </ul>
<b>PP6</b>	<ul style="list-style-type: none"> <li>• The experts did a good desk research and fulfilled the expectations.</li> <li>• They gave us some preliminary recommendations orally at the end of the PR which were already good. Then they gave us even better recommendations in the PR Report.</li> </ul>	
<b>PP7</b>	<ul style="list-style-type: none"> <li>• The PR experts were very cooperative during all the PR event process.</li> <li>• The PR experts showed knowledge of the documents we've sent and even asked for more information regarding the stakeholders.</li> <li>• On the 3<sup>rd</sup> day of the event the preliminary results were presented to the stakeholders by the experts. The suggestions were well received and there was response and feedback from all parties.</li> </ul>	

Source: PRR attachment 4

## 5. Main Conclusions and Recommendations

### 5.1. Conclusions

#### 5.1.1. Good Practices

During the PR process PR experts identified and proposed **31** GP to be used for improving SMEs digital transformation and transferred by PP to improve their policy instruments. Part of these **19** GP were those already proposed by PP for promoting on the Interreg Europe Policy Learning Platform, however, **12** GP were new GP discovered during the PR process. The **4** Norwegian GP were proposed to be considered for additional learning and possible takeover for all other partners. In result, **27** GP were used by PP in their work. Also, it provided an opportunity for exploring deeper GP and identifying features, which are particularly useful for PP.

#### 5.1.2. Comparative analysis

The comparative analysis of PR findings in the above analysed categories has resulted in the following conclusions:

- ✓ Awareness raising and coordination activities have been recognized as particularly important for promoting the digital transformation of SMEs by all DigiBEST PP.
- ✓ The networking of companies on regional, national, and European levels, as well as technological and research cooperation for promoting the technological cooperation between SMEs have been recognized as particularly important factors for SMEs innovation and technological uptake.
- ✓ The most often mentioned obstacles in the PPR for the DigiBEST partners in the category of Enabling corporate environment & capacity building are related to the shortage of digital skills, mismatch between skills and needs, and brain drain.
- ✓ The continuation of improving and strengthening the digital infrastructure, especially in rural and remote areas, as well as supplying technology to SME is an important task to improve and speed up digital transformation.
- ✓ Among the Administrative, technical, and legal obstacles mentioned in the PRR the most important are – investments and measures related to digital transformation made by public institutions, low use of digital transformation and insufficient accessibility of digital networks in rural areas, as well as promoting digital literacy and access to public services by population.
- ✓ Most often mentioned Financial and economic obstacles are related to SME difficulties to access funding to invest in technologies and digital transformation, as well as a lack of information about financial opportunities and support programmes which often results in an insufficient competitiveness of SMEs on local and international markets.
- ✓ There are numerous investment opportunities, and the ERDF funding is available in the framework of concrete programmes for the needs of digital transformation. However, SMEs and microenterprises often aren't aware of these existing opportunities.
- ✓ There is only a limited number of sources of alternative funding.
- ✓ Small, and micro enterprises are in the less advanced position for accessing financing.
- ✓ Findings in the area of policy and security reveal that there are various policy documents regulating digital transformation and targeting the SME digital transformation.
- ✓ Only few PP have developed strategies and planning documents specifically targeting the business digital transformation. The same relates to the cybersecurity strategy for businesses.
- ✓ The development of European Digital Innovation Hubs across European countries and regions is supposed to facilitate the digital transformation of businesses.

- ✓ The greatest digital divide is still between urban and rural territories, which is causing problems for business competitiveness and economic development.

### 5.1.3. Assessment of PR by HP

The PR process has been mostly positively assessed by PP, who hosted the PR. It was recognized as very productive and valuable, but also challenging at the same time. Most of PP were satisfied with an active involvement of stakeholders and their responsiveness during the PR process. Involvement of PR experts and their provided recommendations were evaluated as very useful. Also, the PR methodology, as well as the preparation and implementation of PR events were mostly positively assessed by PP. Most of PP have recognized that the PR methodology was very useful and clear. The cooperation between SP and HP, as well as selection, quality of and cooperation with PR experts, were mostly recognized as productive and good. Also, PP are satisfied with achieved results and their usefulness for their further work.

Several PP expressed dissatisfaction with the fact that PR events had to be held online, which also had some limitations with respect to meetings and activities to be organized. Also, organizational matters and difficulty with the right planning of timing were among the most often mentioned negative aspects. PP5 and PP7 noted that this was quite difficult to convince and involve stakeholders in online events.

## 5.2. Recommendations

### 5.2.1. Good Practices

The PR process has confirmed that the analysis of and learning from GP is a particularly valuable experience that could help to improve policy instruments and they can be directly applicable for promoting the digital transformation of SMEs. Therefore, this is recommended to continue using GP in the exchange of experience processes and use GP features for improving relevant policy instruments.

Considering the PR results in Norway this is recommendable for all project partners additionally consider learning from the Norwegian GP, which were found especially useful and easily applicable in cases of all other partners.

### 5.2.2. Comparative analysis

Following key findings and conclusions the most important common recommendations on previously analysed categories include:

#### Awareness raising & collaboration

- ✓ Develop **well-coordinated and targeted awareness raising actions and initiatives;**
- ✓ Ensure **enhanced continuous networking and cooperation with technology institutions, clusters, and universities to transfer awareness into action;**
- ✓ Use the **EDIH** as a tool for promoting digital transformation of SMEs and rising their awareness of digital transformation benefits;

- ✓ Intensively involve also **actors who are potential providers, as well as beneficiaries of knowledge and technologies, to create a collaborative and integrated digital innovation ecosystem;**
- ✓ Promote digital transformation through **cooperation and sharing between private and public organizations.**

#### Enabling corporate environment & capacity building

- ✓ Develop **tailor-made solutions, training, and training programmes for SME;**
- ✓ Provide **an increased access to and investment in know-how and RTD to increase SMEs capacity and skills uptake;**
- ✓ Promote the **increase in digital literacy and skills of the overall population, including the improvement of the skills of unemployed;**
- ✓ Involve **skilled immigrants in the labour market;**
- ✓ Boost SMEs digital competences through the **EDIH;**
- ✓ Consider the **establishment of the Citizen's Shop** where several public and private services are brought together in one place which could help businesses to access technological infrastructure, offer fast access to experts, promote networking, as well as help on digital matters for citizens.

#### Administrative, technical, and legal obstacles

- ✓ Ensure the use of **policy instruments, i.e., tax and investment policy, financial incentives, procurement, etc.** in promoting SMEs digital transformation;
- ✓ Define **the role of responsible public institutions in promoting SMEs digital transformation;**
- ✓ Employ **various support measures, such as a technological support platform and competence centres for promoting the take up of digital technologies and innovation;**
- ✓ **Establish a systematic monitoring and evaluation framework of the digital transformation progress** to better assess the efficiency of the measures, and more effectively address emerging needs;
- ✓ Perform **regular international benchmarking exercise** to allow a better understanding of how the country compares to digital transformation leaders.

#### Financial and economic obstacles

- ✓ Increase **awareness about financing opportunities and support programmes for SME digital transformation;**
- ✓ Enforce **alternative sources of funding;**
- ✓ Provide **options of funding also available for small and micro enterprises, especially in rural areas, in the form of vouchers and grants or developing specific funding facilities;**
- ✓ Facilitate **skills and capacity of SMEs to apply for funding;**
- ✓ Encourage **female participation in publicly funded digital transformation projects;**
- ✓ Propose **the creation of a state venture capital fund or state financial institution** to support business investments in digital transformation.
- ✓ Provide **consultations and training on digital transformation of businesses for commercial banks** to increase their knowledge and understanding about needs of SMEs.

#### Policy and security obstacles



- ✓ Ensure **more systematic and regular involvement of stakeholders in the policy planning process;**
- ✓ **Build the roadmap to achieve step-by-step digital transformation of businesses;**
- ✓ Increase **networking, coordination between various players to address needs for increased innovation;**
- ✓ Provide **training and support for digital transformation and e-commerce for SMEs**
- ✓ Ensure **closing urban-rural digital divide;**
- ✓ Provide **continuous monitoring of SMEs digital maturity and needs;**
- ✓ Improve **governance and regular revision and updates of the policy framework and support instruments.**

### 5.2.3. Assessment of PR process by HP

The recommendation related to improvements of the PR planning and implementation were mainly related to involvement of stakeholders, improvements in PR methodology and reduction of documents to be completed during the PR process, as well as a need to improve time planning and approaches of meetings.

According to findings this is recommendable to

- ✓ Better prepare stakeholders for the PR event, i.e. by previously organizing face-to-face meetings;
- ✓ Provide the translation for stakeholders if necessary to make them more comfortable during the meetings;
- ✓ Ensure that the PR methodology is detailed enough to provide a clear guidance;
- ✓ Apply more communication methods and tools during PR meetings;
- ✓ Limit a number of PR documents to be completed not to exceed capacity of PP;
- ✓ Postpone the final presentation of PR experts for a later time to give more time to PR experts to work on the analysis of PR results;
- ✓ Allocate more time should for meetings or interviews, where more than two people are participating.

## Attachments

### Attachment 1. Synopsis of the implemented Field Visits

Hosting Partner [1]	Peer Review Date [2]	Team of Experts [3]	Number of Participating Stakeholders & Policy-Makers Representatives [4]	Number of individual Interviews [5]
PP1 - Latvia	31.05.2021 - 02.06.2021	<p>PR Expert 1: <b>Markus Roth</b>, 'creativeBITS', Business Owner and IT Consultant, Austria</p> <p>PR Expert 2: <b>Linda Randall</b>, Nordregio, Senior Research Advisor, Norway</p> <p>PR Expert 3: <b>Mari Wøien Meijer</b>, Nordregio, Senior Research Advisor, Norway</p> <p>HP1: <b>Santa Sipola</b>, The Ministry of Environmental Protection and Regional Development of Latvia, Project Manager, Latvia</p> <p>HP2: <b>Liene Strazdina</b>, The Ministry of Environmental Protection and Regional Development of Latvia, Digital Skills Promotion Projects Division Manager, Latvia</p> <p>HP3: <b>Julija Kovalska</b>, The Ministry of Environmental Protection and Regional Development of Latvia, Project Coordinator, Latvia</p> <p>AP1: <b>Zane Zeibote</b>, Project Manager, University of Latvia, Latvia</p> <p>AP2: <b>Denize Ponomarjova</b>, Project Manager, University of Latvia, Latvia</p> <p>AP3: <b>Davis Vitols</b>, Project Manager Assistant, University of Latvia, Latvia</p> <p>SP1: <b>Eistein Guldseth</b>, Trøndelag County Council, Project Manager and Senior Advisor Digital business development, Norway</p> <p>SP2: <b>Christina Koch</b>, Project Manager, Creative Industries and Entrepreneurship, Austria</p>	In total, <b>17</b> representatives of the stakeholders participated in the peer review event	<b>7</b> interviews with local stakeholders

<p><b>PP3</b> - <b>Norway</b></p>	<p>20.10.2021 - 22.10.2021</p>	<p>PR Expert 1: <b>Jaime Martínez-Brocal Ogayar</b>, Lecturer in San Telmo Business School and Founder of three companies (Behave4 Management Consulting, Taktice and Everis, and Europraxis Consulting), Spain</p> <p>PR Expert 2: <b>Menzio Lucia</b>, Technical assistance to the Veneto Region Audit Authority, Protiviti Government Services srl, Italy</p> <p>AP1: <b>Zane Zeibote</b>, Project Manager, University of Latvia, Latvia</p> <p>AP2: <b>Denize Ponomarjova</b>, Project Manager, University of Latvia, Latvia</p> <p>AP3: <b>Davis Vitols</b>, Project Manager Assistant, University of Latvia, Latvia</p> <p>SP1: <b>Patrizia Orofino</b>, Project Manager, Sviluppo Basilicata spa, Italy</p> <p>SP2: <b>Maria Giovanna Lecce</b>, Financial Manager, Sviluppo Basilicata spa, Italy</p> <p>SP3: <b>Ignacio Rosales Zabal</b>, Project Manager, Granada County Council, Spain</p> <p>SP4: <b>Luis Ignacio Fernández-Aragón Sánchez</b>, Project Coordinator, Granada County Council, Spain</p>	<p>In total, <b>6</b> local representatives of the stakeholders participated in the peer review event</p>	<p><b>3</b> interviews with local stakeholders</p>
<p><b>PP4</b> - <b>Italy</b></p>	<p>14.12.2021 - 16.12.2021</p>	<p>PR Expert 1: <b>Augusto Ferreira</b>, Consultant in STI, Expert, The University-Enterprise Association, Braga/Guimarães, Portugal</p> <p>PR Expert 2: <b>Mauricio Álvarez García</b>, Business Developer &amp; Community Manager, Nazarías IT, Spain</p> <p>SP1: <b>Ignacio Rosales Zabal</b>, Project Manager, Granada County Council, Spain</p> <p>SP2: <b>Luis Ignacio Fernández-Aragón Sánchez</b>, Project Coordinator, Granada County Council, Spain</p> <p>SP3: <b>Susana Alves</b>, Head of Multidisciplinary Team, Investment and Territorial Promotion Agency, Intermunicipal Community of Tâmega and Sousa (CIM-TS), Portugal</p> <p>AP1: <b>Zane Zeibote</b>, Project Manager, University of Latvia, Latvia</p>	<p>In total, <b>6</b> local representatives of stakeholders participated in the peer review</p>	<p><b>6</b> interviews with local stakeholders</p>

		<p>AP2: <b>Denize Ponomarjova</b>, Project Manager, University of Latvia, Latvia</p> <p>AP3: <b>Davis Vitols</b>, Project Manager Assistant, University of Latvia, Latvia</p>		
<b>PP5</b> <b>Spain</b>	27.04.2021 – 29.04.2021	<p>PR Expert 1: <b>Emils Liepins</b>, KPMG Baltics, Senior Advisor Management Consulting, Latvia</p> <p>PR Expert 2: <b>Margoth Nicosia</b>, Protiviti Italia, Senior Consultant, Italy</p> <p>PR Expert 3: (assistant): <b>Dana Behmane</b>, Senior Manager Management Consulting, KPMG Baltics, Latvia</p> <p>PR Expert 4 (assistant): <b>Alessandro Gallo</b>, Protiviti Italia, Auditor of training plans financed by Formatemp, Italy</p> <p>HP1: <b>Ignacio Rosales Zabal</b>, Granada County Council, Project Manager, Spain</p> <p>HP2: <b>Luis Ignacio Fernández-Aragón Sánchez</b>, Granada County Council, Project Coordinator, Spain</p> <p>AP1: <b>Denize Ponomarjova</b>, Project Coordinator, University of Latvia, Latvia</p> <p>AP2: <b>Davis Vitols</b>, Project Manager Assistant, University of Latvia, Latvia</p> <p>SP1: <b>Santa Sipola</b>, Project Manager, Ministry of Environmental Protection and Regional Development of the Republic of Latvia, Latvia</p> <p>SP2: <b>Julija Kovalska</b>, Project Coordinator, Ministry of Environmental Protection and Regional Development of the Republic of Latvia, Latvia</p> <p>SP3: <b>Patrizia Orofino</b>, Project Management, Sviluppo Basilicata spa, Italy</p> <p>SP4: <b>Maria Giovanna Lecce</b>, Project Management, Sviluppo Basilicata spa, Italy</p>	In total, <b>10</b> stakeholder representatives participated in the peer review event	<b>5</b> interviews with nine local stakeholder s took place
<b>PP6</b> <b>Austria</b>	13.01.2022 – 14.01.2022	<p>PR Expert 1: <b>Augusto Ferreira</b>, Consultant in STI, Expert, The University-Enterprise Association, Braga/Guimarães, Portugal</p>	In total, <b>3</b> stakeholder representatives from Austria wirtschaftsservice Gesellschaft participated in	<b>4</b> interviews, in total, took place

		<p>PR Expert 2: <b>Arild Haraldsen</b>, Consultant in strategic use of ICT, CEO of StratIT, Norway</p> <p>AP1: <b>Zane Zeibote</b>, Project Manager, University of Latvia, Latvia</p> <p>AP2: <b>Denize Ponomarjova</b>, Project Coordinator, University of Latvia, Latvia</p> <p>AP3: <b>Davis Vitols</b>, Project Manager Assistant, University of Latvia, Latvia</p> <p>SP1: <b>Eistein Guldseth</b>, Trøndelag County Council, Project Manager and Senior Advisor Digital business development, Norway</p> <p>SP2: <b>Susana Alves</b>, Intermunicipal Community of Tâmega e Sousa, Portugal</p>	the peer review event	
<b>PP7 - Portugal I</b>	18.05.2021 – 20.05.2021	<p>PR Expert 1: <b>Emils Liepins</b>, Senior Advisor Management Consulting, KPMG Baltics, Latvia</p> <p>PR Expert 2: <b>Klaus Buchroithner</b>, CEO &amp; FOUNDER, Das Merch, Austria</p> <p>PR Expert 3: <b>Dana Behmane</b>, Senior Manager Management Consulting, KPMG Baltics, Latvia</p> <p>HP1: <b>Mário Júlio</b>, Project Manager, Intermunicipal Community of Tâmega e Sousa, Portugal</p> <p>AP1: <b>Zane Zeibote</b>, Project Manager, University of Latvia, Latvia</p> <p>AP2: <b>Denize Ponomarjova</b>, Project Manager, University of Latvia, Latvia</p> <p>AP3: <b>Davis Vitols</b>, Project Manager Assistant, University of Latvia, Latvia</p> <p>SP1: <b>Santa Sipola</b>, Project Manager, Ministry of Environmental Protection and Regional Development of the Republic of Latvia, Latvia</p> <p>SP2: <b>Julija Kovalska</b>, Project Coordinator, Ministry of Environmental Protection and Regional Development of the Republic of Latvia, Latvia</p> <p>SP3: <b>Christina Koch</b>, Project Manager, Creative Industries and Entrepreneurship, Austria</p>	In total, <b>19</b> stakeholder representatives participated in the peer review event	<b>6</b> interviews with <b>14</b> local stakeholder s took place

Source: DigiBEST Peer Review event feedback for PR team

Attachment 2. Good Practices recommended for project partners<sup>4</sup>

Good Practices proposed by PR experts for PP	Owners of GP
<b>PP1 – The Republic of Latvia</b>	
<b>Good Practices proposed by PR experts for SP</b>	
<a href="#">Business Space (Espaço Empresa)</a> - support for entrepreneurs in the creation and management of their businesses, under a logic of a single point of contact between the government and the SMEs.	Paços de Ferreira Municipality, Portugal
<a href="#">B.Box @ Tâmega e Sousa</a> - re-acceleration and skills development program for Tâmega e Sousa entrepreneurs and business persons.	Tâmega e Sousa Intermunicipal Community, with the scientific coordination of the Higher School of Technology and Management of the Polytechnic of Porto
<a href="#">Citizen’s Shop</a> - one stop public services. The possibility for the citizen and companies to have access to a wide range of public and private services in a single space.	The Administrative Modernization Agency (AMA), Portugal
<a href="#">DES AGRO 4.0</a> - the program tries to spot and perform mapping for technological innovations in field of agriculture.	Business association DOLMEN, Portugal
<a href="#">“Digital Advisors” programme</a> - to tackle the challenges of awareness raising, lack of time and other resources, as well the challenge to attract the ICT employees. The program includes a diagnosis of the state of digitalization of SMEs and an action plan for its digital transformation.	Spanish Chamber of Commerce
<a href="#">“Granada Empresas”</a> - the idea is to create a platform similar to “One-Stop-Shop” concept, where most SMEs and microenterprises could find information about relatively simple, but expert assessed tools that could be used to digitalise their business activities based on their particular business sector needs.	Granada Provincial Council, Spain
<a href="#">“Guadalinfo”</a> - to facilitate basic digital tools and computer skills in rural areas. Guadalinfo aims to close the digital gap between urban and rural areas and to encourage full integration into the Knowledge Society.	Fernando de los Ríos Consortium, Spain
<a href="#">Idea generation workroom “LabinGranada”</a> - to promote idea sharing in Granada.	MediaLab UGR and University of Granada, Spain

<sup>4</sup> Those GP, which were recommended by PP for inclusion in the Interreg Europe Policy Platform are marked with green colour and those GP marked with white colour are new GP identified and suggested by PR experts during PR process.

<a href="#">Industry 4.0 Maturity Assessment Model</a> - to ensure evaluation on the SMEs digital maturity. A unique tool to enhance the Portuguese business fabric, in particular SMEs, in the sense that it will allow, in the first place, to obtain significant information on the maturity status of organizations in Portugal, as well as about their knowledge of issues related to the digital transformation inherent to Industry 4.0.	THEIA Cotec, Portugal
<a href="#">Industry 4.0 Programme Portugal</a> - the project intends to generate favourable conditions for the development of national industry and services (SMEs) in the new paradigm of the Digital Economy, through a set of measures.	Ministry of Economy and Digital Transition, IAPMEI - Agency for Competitiveness and Innovation, Portugal
<a href="#">"TICCAMARAS"</a> - programme providing to local SMEs a series of instruments, activities and support to help their digitalization processes and applications of IT.	Spanish Chamber of Commerce
<b>Good Practices proposed by PR experts for HP</b>	
<a href="#">Citizen's Shop</a> - one stop public services. The possibility for the citizen and companies to have access to a wide range of public and private services in a single space.	The Administrative Modernization Agency (AMA), Portugal
<a href="#">Growing in Digital</a> - how to grow digital to be competitive on national and international markets. Initiatives involving NEET to resolve digital needs of SMEs and equip youth with digital skills.	Chamber of Commerce of Basilicata, Italy
<a href="#">Industry 4.0 Trøndelag – Digital transformation in small and micro-sized enterprises</a> - Industry 4.0 is an effort to improve the digital skills in these enterprises through low threshold workshops, that focus on a step-by-step introduction to digitalisation in businesses.	Trøndelag County Council, Norway
<a href="#">Public-private cooperation/funding model for Business Gardens-creating ecosystems</a> - is a national/regional Gov. program established in 1998 to enhance business development in the rural areas. A Business Garden co-locates development-oriented companies in order to promote growth, cooperation and development.	The Industrial Development Corporation of Norway (SIVA)
<a href="#">SME Digital Austria</a> - showing a predefined set of relevant digital trends and their application through specifically certified IT consultants / IT companies.	Ministry of Economics, Austria
<b>PP3 – Trøndelag, Norway</b>	
<b>Good Practices proposed by PR experts for HP</b>	
<a href="#">"Guadalinfo"</a> - to facilitate basic digital tools and computer skills in rural areas. Guadalinfo aims to close the digital gap between urban and rural areas and to encourage full integration into the Knowledge Society.	Fernando de los Ríos Consortium, Spain
<b>PP4 - Basilicata, Italy</b>	
<b>Good Practices proposed by PR experts for HP</b>	

<a href="#"><u>Andalucía Open Future (AOF)</u></a> - initiatives intend to promote technology-based entrepreneurship in Andalusia region by the means of acceleration programmes especially oriented to companies developing technological solutions, mainly small start-ups.	Andalusia Regional Ministry of Economy, Knowledge, Enterprises and University, Spain
<a href="#"><u>Business Space (Espaço Empresa)</u></a> - support for entrepreneurs in the creation and management of their businesses, under a logic of a single point of contact between the government and the SMEs.	Municipality of Paços de Ferreira, Tâmega e Sousa, Portugal
<a href="#"><u>Consultancy on business support (SMEs internationalisation through digital solutions)</u></a> - provides mentored consultations free of charge to SMEs, including home producers about how to establish their visual identity on the Internet & increase market competitiveness.	Zemgale Region Human Resource and Competences Development Centre (ZRKAC), Latvia
<a href="#"><u>Development of digital networks (fixed &amp; mobile) in non-commercially viable</u></a> - the aim is to increase both fixed and mobile digital network coverage in Trøndelag. The coverage for Trøndelag currently stands at 86% for 30 Mbps and 82% for 100 Mbps. Mobile coverage is increasing, and the focus is now on area coverage. Trøndelag has an area coverage of 4G of 86%.	Trøndelag County Authority, Norway
<a href="#"><u>“Granada Empresas”</u></a> - the idea is to create a platform similar to “One-Stop-Shop” concept, where most SMEs and microenterprises could find information about relatively simple, but expert assessed tools that could be used to digitalise their business activities based on their particular business sector needs.	Provincial Council of Granada, Spain
<a href="#"><u>“Guadalinfo”</u></a> - to facilitate basic digital tools and computer skills in rural areas. Guadalinfo aims to close the digital gap between urban and rural areas and to encourage full integration into the Knowledge Society.	Fernando de los Ríos Consortium, Spain
<a href="#"><u>Industry 4.0 Referential</u></a> - referential for the assessment of Industry 4.0 relevance in the context of investment projects, regarding particularly project selection.	National Operational Programme for Competitiveness and Internationalisation (COMPETE 2020) - Managing Authority, Portugal
<a href="#"><u>Master’s Degree in Digital Agriculture and Agri-Food Innovation at University of Sevilla</u></a> - this master focuses on the advancement of digital and precision agriculture to generate an educational model based on technological innovation in agriculture.	University of Seville, Spain
<b>PP5 - Granada, Andalucía, Spain</b>	
<b>Good Practices proposed by PR experts for HP</b>	
Awareness raising campaign <a href="#"><u>“Digital week”</u></a> - a week-long event during which, both central events and discussions were organized, which could be followed live on the Internet and TV, as well as other	The Ministry of environmental protection



online events organized by partners in all regions of Latvia: schools and libraries, non-governmental organizations, municipalities and companies. The primary goal of the event is to initiate a discussion in society about digitalization from various angles, including digitalization of SMEs and by doing it to increase awareness among general population and companies.	and regional development of the Republic of Latvia
<b><u>"Digital Pro Bootcamps"</u></b> - program addresses the development of digital skills, the support of digital further training to master the challenges of advancing digitalization and the fight against the shortage of skilled workers.	Austrian Research Promotion Agency (FFG)
<b><u>Project "Trainings for SME for development of innovations and digital technologies"</u></b> - the project was aimed at raising productivity, innovations and increasing the long-term competitiveness of small and micro-enterprises by teaching them how to effectively apply ICT technologies and e-skills. The training courses offered by the project are designed to improve ICT skills of SME workers and the self-employed.	Developed by Latvian Information and Communication Technology Association and implemented by Baltic Computer Academy, Ltd and Computer Science Centre, Ltd
<b><u>Smart Latvia &amp; Digital Maturity Test</u></b> - the test allows SME and microenterprise managers to assess their digital maturity and compare themselves against other enterprises and to find out what IT solutions would help the company work more effectively, with less costs and higher profits.	Latvian Information and Communications Technology Association (LICTA)
<b>PP6 - The Republic of Austria</b>	
<b>Good Practices proposed by PR experts for HP</b>	
<b><u>Agricultural Dataflow</u></b> - agricultural Dataflow SA develops and maintains standards and infrastructure to streamline central data flow, share data, secure ownership of data and provides better decision support for individual agricultural enterprises/farmers and the whole agricultural industry in Norway.	Agricultural Dataflow SA, Norway
<b>Alliance for Equality in Information and Communication Technologies (ICT)</b> <sup>567</sup> - the objective is to promote women's digital inclusion and their participation in engineering and technology, furthering cooperation and dissemination actions amongst the partner entities.	Commission for Citizenship and Gender Equality (CIG) in articulation with the Portuguese Association for Diversity and Inclusion (APPDI)
<b><u>Development of digital networks (fixed and mobile) in non-commercially viable areas</u></b> - this will ensure that businesses, households and other areas where people travel should have access to a timely and stable network.	Trøndelag County Council, Norway

<sup>5</sup> <https://www.portugal.gov.pt/pt/gc22/comunicacao/noticia?i=portugal-formaliza-alianca-para-a-igualdade-nas-tecnologias-de-informacao-e-comunicacao>

<sup>6</sup> <https://www.engenheirasporumdia.pt/>

<sup>7</sup> <https://www.cig.gov.pt/>

<p><a href="#">Industry 4.0 Referential</a> - referential for the assessment of Industry 4.0 relevance in the context of investment projects, regarding particularly project selection (e.g., increase or decrease rating, incentive amounts etc) are very useful for the managing authorities in charge of digitalisation support programmes. Such referential are essential to evaluate whether projects include (or not) relevant investments in i4.0.</p>	<p>National Operational Programme for Competitiveness and Internationalisation (COMPETE 2020) - Managing Authority, Portugal</p>
<p><a href="#">Industry 4.0 Programme Portugal</a> - through the Industry 4.0 initiative it is intended to generate favourable conditions for the development of SMEs in industry and services under the new paradigm of digital economy, through a set of measures.</p>	<p>Ministry of Economy and Digital Transition, Portugal IAPMEI - Agency for Competitiveness and Innovation</p>
<p><a href="#">Support the competitiveness and innovation of small companies in low-density territories (SI2E programme)</a> - the main objective of the SI2E programme is to promote entrepreneurship, competitiveness and innovation of micro and small companies located in low-density territories.</p>	<p>Intermunicipal Communities and Local Action Groups, Portugal</p>
<p><b>PP7 - Tâmega e Sousa, Portugal</b></p>	
<p><b>Good Practices proposed by PR experts for HP</b></p>	
<p>Awareness raising campaign "<a href="#">Digital week</a>" - a week-long event during which, both central events and discussions were organized, which could be followed live on the Internet and TV, as well as other online events organized by partners in all regions of Latvia: schools and libraries, non-governmental organizations, municipalities and companies. The primary goal of the event is to initiate a discussion in society about digitalization from various angles, including digitalization of SMEs and by doing it to increase awareness among general population and companies.</p>	<p>The Ministry of environmental protection and regional development of the Republic of Latvia</p>
<p><a href="#">"Digital Pro Bootcamps"</a> - program addresses the development of digital skills, the support of digital further training to master the challenges of advancing digitalization and the fight against the shortage of skilled workers.</p>	<p>Austrian Research Promotion Agency (FFG)</p>
<p><a href="#">"Consultancy on business support"</a> - provides mentored consultations free of charge to SMEs, including home producers about how to establish their visual identity in the Internet &amp; increase market competitiveness.</p>	<p>"Zemgale Region Human Resource and Competences Development Centre", Latvia</p>
<p><a href="#">"Digital Advisors" programme</a> - to tackle the challenges of awareness raising, lack of time and other resources, as well the challenge to attract the ICT employees. The program includes a diagnosis of the state of digitalization of SMEs and an action plan for its digital transformation.</p>	<p>Spain Chamber of Commerce</p>

<p><a href="#">Project "Trainings for SME for development of innovations and digital technologies"</a> - the project was aimed at raising productivity, innovations and increasing the long-term competitiveness of small and micro-enterprises by teaching them how to effectively apply ICT technologies and e-skills. The training courses offered by the project are designed to improve ICT skills of SME workers and the self-employed.</p>	<p>Developed by Latvian Information and Communication Technology Association</p>
<p><a href="#">"TICCAMARAS"</a> - programme providing to local SMEs a series of instruments, activities and support to help their digitalization processes and applications of IT.</p>	<p>Spanish Chamber of Commerce, Spain</p>

Source: DigiBEST PR Reports and Joint Report

### Attachment 3. Good Practices recommended for PP by experts

No	Title of GP	Owner of GP	Partners for whom the GP has been recommended
<b>PP1 – Latvia</b>			
1.	<a href="#">Consultancy on business support (SMEs internationalisation through digital solutions)</a>	Zemgale Region Human Resource and Competences Development Centre	PP4 - Basilicata, Italy PP7 - Tâmega e Sousa, Portugal
2.	<a href="#">Awareness raising campaign "Digital week"</a>	Latvian Information and Communication Technology Association	PP7 - Tâmega e Sousa, Portugal PP5 - Granada, Andalucía, Spain
3.	<a href="#">Project "Trainings for SME for development of innovations and digital technologies"</a>	Latvian Information and Communication Technology Association	PP5 - Granada, Andalucía, Spain PP7 - Tâmega e Sousa, Portugal
4.	<a href="#">Smart Latvia &amp; Digital Maturity Test</a>	Latvian Information and Communications Technology Association	PP5 - Granada, Andalucía, Spain
<b>PP3 – Trøndelag, Norway</b>			
5.	<a href="#">Agricultural Dataflow</a>	Agricultural Dataflow SA	PP6 - The Republic of Austria
6.	<a href="#">Bioeconomy - Forestry – DistriktForsk</a>	Trøndelag County Council, Ministry of Agriculture and Food	Suggested for all partners by Italian and Spanish PR experts
7.	<a href="#">Development of digital networks (fixed &amp; mobile) in non-commercially viable areas</a>	Trøndelag County Council	PP4 - Basilicata, Italy

			PP6 - The Republic of Austria
8.	<a href="#">Industry 4.0 Trøndelag – Digital transformation in small and micro-sized enterprises</a>	Trøndelag County Council	PP1 - The Republic of Latvia
9.	<a href="#">National strategy for a green, circular economy</a>	Norwegian Ministry of Environment	Suggested for all partners by Italian and Spanish PR experts
10.	<a href="#">Regional, national and international incubators and networks</a>	Trøndelag County Council	Suggested for all partners by Italian and Spanish PR experts
11.	<a href="#">The Industrial Development Corporation of Norway (SIVA)</a>	The Norwegian Government, Trøndelag County Council	Suggested for all partners by Italian and Spanish PR experts
12.	<a href="#">Public-private cooperation/funding model for Business Gardens-creating ecosystems</a>	The Industrial Development Corporation of Norway (SIVA)	PP1 - The Republic of Latvia
<b>PP4 - Basilicata, Italy</b>			
13.	<a href="#">Growing in Digital</a>	Chambre of Commerce of Basilicata	PP1 - The Republic of Latvia
<b>PP5 - Granada, Andalucía, Spain</b>			
14.	<a href="#">Andalucía Open Future (AOF)</a>	Andalusia Regional Ministry of Economy, Knowledge, Enterprises and University	PP4 - Basilicata, Italy
15.	<a href="#">“Digital Advisors” programme</a>	The Spanish Chamber of Commerce	PP1 - The Republic of Latvia PP7 - Tâmega e Sousa, Portugal
16.	<a href="#">“Granada Empresas”</a>	Granada Provincial Council	PP1- The Republic of Latvia PP4 - Basilicata, Italy
17.	<a href="#">“Guadalinfo”</a>	Consortium Fernando de los Ríos	PP1- The Republic of Latvia PP3- Norway PP4 - Basilicata, Italy
18.	<a href="#">Idea generation workroom “LabinGranada”</a>	MediaLab UGR and University of Granada	PP1 - The Republic of Latvia
19.	<a href="#">Master’s Degree in Digital Agriculture and Agri-Food Innovation at University of Sevilla</a>	University of Seville	PP4 - Basilicata, Italy

20.	<a href="#">"TICCAMARAS"</a>	The Spanish Chamber of Commerce	PP1- The Republic of Latvia PP7 - Tâmega e Sousa, Portugal
<b>PP6 - The Republic of Austria</b>			
21.	<a href="#">"Digital Pro Bootcamps "</a>	Austrian Research Promotion Agency	PP5 - Granada, Andalucía, Spain PP7 - Tâmega e Sousa, Portugal
22.	<a href="#">SME.Digital Austria</a>	Ministry of Economics of Austria	PP1 - The Republic of Latvia
<b>PP7 - Tâmega e Sousa, Portugal</b>			
23.	Alliance for Equality in Information and Communication Technologies (ICT) <sup>8,9,10</sup>	Commission for Citizenship and Gender Equality in articulation with the Portuguese Association for Diversity and Inclusion.	PP6 - The Republic of Austria
24.	<a href="#">B.Box @ Tâmega e Sousa</a>	Tâmega e Sousa Intermunicipal Community, with the scientific coordination of the Higher School of Technology and Management of the Polytechnic of Porto	PP1 - The Republic of Latvia
25.	<a href="#">Business Space</a>	Paços de Ferreira Municipality	PP1 - The Republic of Latvia PP4 - Basilicata, Italy
26.	<a href="#">Citizen's Shops</a>	The Administrative Modernization Agency (AMA)	PP1 - The Republic of Latvia
27.	<a href="#">DES AGRO 4.0</a>	Business association DOLMEN	PP1 - The Republic of Latvia
28.	<a href="#">Industry 4.0 Maturity Assessment Model</a>	THEIA Cotec in Portugal	PP1 - The Republic of Latvia
29.	<a href="#">Industry 4.0 Programme Portugal</a>	Ministry of Economy and Digital Transition IAPMEI - Agency for Competitiveness and Innovation	PP1 - The Republic of Latvia PP6 - The Republic of Austria
30.	<a href="#">Industry 4.0 Referential</a>	National Operational Programme for Competitiveness and Internationalisation	PP4 - Basilicata, Italy PP6 - The Republic of Austria

<sup>8</sup> <https://www.portugal.gov.pt/pt/gc22/comunicacao/noticia?i=portugal-formaliza-alianca-para-a-igualdade-nas-tecnologias-de-informacao-e-comunicacao>

<sup>9</sup> <https://www.engenheirasporumdia.pt/>

<sup>10</sup> <https://www.cig.gov.pt/>

		(COMPETE 2020) - Managing Authority	
31.	<a href="#">Support the competitiveness and innovation of small companies in low-density territories (SI2E programme)</a>	Intermunicipal Communities and Local Action Groups in Portugal	PP6 - The Republic of Austria

Source: DigiBEST PR Reports and PR Report for SP for PP1.

#### Attachment 4. Solutions offered to deal with existing digitalization challenges of the DigiBEST partners

Country/Region	Problem	Proposed solutions
PP1 – The Republic of Latvia	<b>Awareness Rising &amp; Collaboration</b>	
	Low adoption of technology.	Training programs and individual consultations (digital champions / train the trainer / digital advisors or mentors).
	Low e-commerce performance.	Workshops, educational tutorials, webinars and 1to1 coaching that teach small businesses simple ways to engage in e-commerce & adapt hybrid selling structures (combination of big shops, local platforms, and offline selling in own shop).  Local e-commerce platform for small companies.
	Decentralised activities and communication.	Establishment of a single platform EDIH network (EDIH as one-stop shop for those who wish to know more about digital transformation).  Sending official local representatives to tell companies about the advantages of digital transformation.
	<b>Enabling Corporate Environment &amp; Capacity Building</b>	
	Lack of in-work training.	Legal framework for support of in-work training / strengthening links between educational institutions and businesses.  Promoting a dual VET (vocational education & training) system with addition of dual academy that makes job/education rotations easier and helps the life-long-learning concepts.
	Lack of skills needed to implement business digital transformation.	A broad set of skill development programs.
	Lack of incentives for digitalisation.	Promoting cross-sectoral cooperation / advantages for companies that interact online / mentorship and consultations.
	<b>Administrative &amp; Technical &amp; Legal</b>	

	Low level of innovation.	R&D support measures as part of the National Development Plan 2021-2027 (e.g., tax incentives, checks / grants for companies that cooperate with research institute, support when applying for a patent).
	A tax policy that does not promote business expansion / lack of employees with adequate skills to make full use of ICT and those with change management skills / lack of time	SME support instruments (National Industrial Policy 2021-2027) / RRF plan (e.g., a combination of grants, research bonus and tax deduction for innovative companies).
	<b>Financial &amp; Economic</b>	
	SME's have difficulties in accessing funding to invest in ICT.	Public funding for SMEs to promote the deployment of new technologies.
	<b>Policy &amp; Security</b>	
	Latvia does not currently have a comprehensive business digitalisation strategy.	Digital Transformation Guidelines 2021-2027 includes several policies including digitalisation of SMEs.
	Cybersecurity risks.	Communication / training on cybersecurity issues.
<b>PP3 – Trøndelag, Norway</b>	<b>Awareness Rising &amp; Collaboration</b>	
	SMEs do not have enough knowledge in digital Management and Technology SMEs.	Transferring educational knowledge (example: training courses online and on-site (Remote)).
	There is a lack of capacity of SMEs to attract qualified people in new technologies to SMEs or rural areas.	Improve communication about Information of Technologies benefits for SMEs, Information from Public Institutions to SMEs related to services and tools available, and Information from ICTs suppliers to SMEs.
	There are several separate initiatives within the field (at the national, regional, and local levels). There are no coordinated regional efforts.	A solution would be why the country council a being as an entity without financial interest had a more relevant role and had more support from the rest of the player as within the business gardens, also digital transformation and cooperation is needed to be coordinated.
	Problems in Public purchasing services and products.	Subside digital projects in rural areas in order small companies contract new projects about new technologies. And promote virtual/remote work environments.
	<b>Enabling Corporate Environment &amp; Capacity Building</b>	

	<p>Lack of rural ecosystems where businesses can cooperate to overcome lack of skills and specialist personnel, SMEs are to some extent detached from the urban competence institutions (universities etc) and environments. Urban-rural divide (gap.).</p>	<p>They can build ecosystem. And county council can orchestrate regional ecosystems with R&amp;D, and other actors.</p>
	<p>Public institutions need to increase encourage, and attract, more technology-based projects in rural environments and managed by SMEs.</p>	<p>In order to become big, we propose setting up Clusters or hubs to aggregate or cooperate between SMEs to do many things for example in public purchase and contracts to develop and do aggregation methods to let SMES become a big company, also to bring newly qualified people to work in the companies.</p>
	<p>SMEs companies can't afford to hire ICT specialists/ professionals, especially difficult to recruit them in rural areas. Also, often unclear for SMEs what kind of specialists they need.</p>	<p>They can establish pool of competent professionals and sharing service. Also, several businesses can hire professionals together.</p>
	<p>Lack of rural ecosystems where businesses can cooperate to overcome lack of skills and specialist personnel.</p>	<p>The industry 4.0 Trøndelag project can be a first step for creating this.</p>
<b>Financial &amp; Economic</b>		
	<p>There are many possibilities for funding through Innovation Norway, banks. But few investors.</p>	<p>A solution could be for this increase financial local tools or programs to incentive local taxes.</p>
	<p>Lack of access to information about support instruments and public funding possibilities. Due to the "lack of coordinated public support funding for development projects" it can be difficult to find out what exactly a SME can be entitled to get regarding public support.</p>	<p>This will be a challenge on national level.</p>
<b>Policy &amp; Security</b>		



	Centralized digital competence. The tendency that digital competence and skills are centralized to urban areas may be a reason for SMEs in rural areas experiencing a double digital divide.	A solution for this the national level policies need to be changed.
	Brain drains. There is Structural challenge. And People want to live in urban areas. Also, there is a double digital divide (urban-rural).	They need to find mechanisms to compensate. For example, some online presence of workers.
	Lack of coordinated public support funding for development projects. Inflexible and rigid structures/guidelines for (cross) financing large projects where participates public bodies like County Council, Innovation Norway, SIVA, SMEs, and R&D structures. Time consuming and difficult to meet all the different demands.	It is difficult to improve/change the national level policy for county-level authorities
<b>PP4 - Basilicata, Italy</b>	<b>Awareness Rising &amp; Collaboration</b>	
	Lack of cooperation between SMEs and entities of the scientific and technological system, and among SMEs themselves.	<p>Boost science-business cooperation at regional level, namely through the support of multilateral projects involving SMEs, large companies (including multinational) and entities of the scientific and technological system, to create new momentum in the interaction between scientific/technological entities and the business community.</p> <p>Deeply understand the ecosystem. The region could identify the actors in Basilicata who are potential providers as well as beneficiaries of knowledge and technologies to create a collaborative and integrated digital innovation ecosystem, which can become a stable basis for the digital transformation of SMEs in the region.</p> <p>Better signposting digital support. Large numbers of businesses (especially micro businesses) may find difficult to identify external digital support. The region, in collaboration with relevant stakeholders, could launch a regional-wide initiative with the aim of identifying and disseminating existing support in</p>

		<p>Basilicata to help companies, in particular SMEs, in their digital transformation processes.</p> <p>Establish and implement a regional digitalisation strategy. Rather than implementing isolated measures to create the necessary conditions for small businesses to be more successful in digital transition processes, the region could consider launching an integrated strategy for digitalisation.</p>
<b>Enabling Corporate Environment &amp; Capacity Building</b>		
	<p>Limited digital skills available in the region.</p> <p>Scarce adoption of ICT technologies.</p>	<p>Scientific excellence in ICT. Reinforce the profile of the University of Basilicata as an entity of scientific excellence in education and research in ICT technologies.</p> <p>Attraction of highly skilled talent. The reinforcement of scholarship systems for international students in higher education (including PhD students and researchers) could be pondered in Basilicata, to enhance the attraction and retention of talent.</p> <p>Strengthen teaching in STEM areas. To develop, retain and attract digital skills in the region.</p> <p>New training centres. The number of institutions providing training services for the development of digital skills seems to be insufficient to respond to the needs of Basilicata's labour force.</p> <p>Digital skills development in SMEs' staff. Another means to help address the digital support needs of small businesses in Basilicata is to improve digital skills of small business owners and their staff.</p>
	<p>Low capacity of SMEs to innovate and digitalise.</p>	<p>Overcoming financial barriers to digital transformation. It is necessary to facilitate support for the implementation of digital transformation in SMEs.</p> <p>Innovation ecosystem at the service of SMEs. It is necessary to promote multilateral projects bringing together the region's main stakeholders, to gather the knowledge, experience and resources.</p> <p>Technology-based entrepreneurship. New companies, especially if they are technology- and/or knowledge-based (e.g., university spin-off companies), invest more than average in new products, technologies and business models that can positively "contaminate" the regional innovation system.</p>
<b>Financial &amp; Economic</b>		

	<p>Improving the competitiveness of Basilicata economy.</p> <p>Improving its relative position in the ranking of innovative regions in the country and in Europe.</p> <p>Low internationalisation of its companies and organisations.</p>	<p>Scientific excellence. Being internationally recognised as excellent in a particular scientific area is one of the most important assets to win the competition for Foreign Direct Investment (FDI).</p> <p>Science-business cooperation. European funding (e.g., ERDF and ESF), namely through the support of multilateral projects involving SMEs, large companies (including multinational) and entities of the scientific and technological system.</p> <p>Technology-based entrepreneurship. The most innovative and transformative projects are often led by new companies.</p> <p>Foreign Direct Investment. Attracting FDI is essential to improve integration into global value chains.</p>
<b>Policy &amp; Security</b>		
	<p>Divide between rural and urban areas.</p> <p>Lack of support for the digitalisation endeavours of rural-based SMEs.</p>	<p>Identification of rural SMEs needs. There should be a better understanding of the needs of Basilicata's rural SMEs in terms of type of digital transformation and type of support required.</p> <p>Specific measures for small companies. Tailored support to the needs of small or micro companies could be considered, including for instance specific calls for proposals for them (and especially for those located in rural territories).</p> <p>Consortia to support small businesses. Regional or sub-regional funded networks for digital transformation of micro and small companies could be created, made up of public and private entities on the supply and demand sides of digital support services.</p>
<b>PP5 – Granada, Andalucía, Spain</b>	<b>Awareness Rising &amp; Collaboration</b>	
	<p>Lack of general digital awareness.</p>	<p>This implies that the first change must happen in entrepreneurs and CEOs' minds. Collaborations with the University of Granada and OnGranada Cluster could rise awareness and enhance a powerful process of transformation involving young professionals and students in a virtuous circle of sharing ideas and knowledge.</p> <p>Each individual entity should provide all the information they have and work together for technological development. An information and assistance platform combined with training programs aimed at the needs of SMEs and microenterprises help to have more and more awareness and knowledge of the tools by helping</p>

	the actors involved to touch the possibility of expanding their business in a simple and innovative way.
<b>Enabling Corporate Environment &amp; Capacity Building</b>	
Lack of basic digital skills.	<p>OnGranada Cluster, leveraging its already cohesive and strong relationship with the local community, could cooperate with UGR to stimulate young students or professionals using - for example - innovation hubs.</p> <p>OnGranada Cluster should support the beneficiaries and help them spend the public funds in a smart way.</p>
Limited access to the internet.	Local citizen initiatives are the first step of a larger instrument to demand better access and knowledge to use digital services but the Government itself should propose to the whole population specific measures, such as the creation of special funds or subsidies to the access and use of digital services able to enhance the use of digital tools.
Brain drain.	<p>Innovators could be offered a collaboration contract or a partnership in some research programs held by the University to reduce brain drain.</p> <p>Institutions should also play an important role to retain skilled professional investing in tax incentives and providing, in collaboration with SMEs, career pathing and employee development.</p> <p>For example, in Italy, the budget law includes a tax cut for young people that, after 2 or more years spent abroad, come back to Italy. It becomes even more convenient if you move your tax domicile to disadvantaged regions in the south (it's called "reverse brain-drain").</p>
Low adoption of digital technologies.	<p>Specific trainings to unemployed people or professionals working with compliance matters so that they could be an effective and helpful support for SMEs that want to learn more and apply for funds.</p> <p>Some supporting programmes such as TICCAMARAS and INNOCAMARAS provide innovative solutions to SMEs and microenterprises to drive the digital development.</p>
Lack of qualified staff to implement the digital transformations in the businesses.	Better salaries and multinational careers paths are a key push factor for emigration of qualified workers to Spain.
<b>Financial &amp; Economic</b>	
Difficulty in accessing financing sources to undertake businesses digitization projects.	Government should develop Target funds: specific funds to SMEs and microenterprises on one hand could also involve the hiring of innovation managers, covering part of consultancy costs, increasing the digital

		<p>resources and, on the other hand, be targeted to specific disadvantaged region or provinces.</p> <p>Improve Communication: clear and easy messages should be defined to make each opportunity understandable and available even for not educated people.</p> <p>The University should take care of analysing the market and the public entities should take care of financing.</p>
<b>Policy &amp; Security</b>		
	Lack of policy strategy for innovation.	<p>Develop a policy strategy for innovation that:</p> <ol style="list-style-type: none"> <li>1. Generate a dynamic network of digital municipalities that seek to share know-how and jointly address common problems and solutions with a focus on key productive sectors for the provincial economy.</li> <li>2. Create sectorial clusters for public-private cooperation where a culture for innovation, participation, collaboration, and commitment to digital of all stakeholders may be fostered.</li> <li>3. Raise awareness and promote digital upskilling and talent enhancing at all levels in the society and the business domain.</li> <li>4. Leverage the province lifestyle as a tractor element for talent retention and investments attraction, building upon Granada Province's traditional strengths.</li> </ol>
<b>PP6 – The Republic of Austria</b>	<b>Awareness Rising &amp; Collaboration</b>	
	Communication on digital transformation support.	Better signposting existing digital support provided by public entities. Such a measure could consist of including all digital policy instruments on a single site - a portal or website - which could also provide information and advice on issues that are of interest to companies in view of their digital transformation.
	Cooperation between large companies and SMEs.	Austrian public policies could therefore increasingly promote large-scale projects that bring together large companies, SMEs, start-up firms, business associations, clusters and RTD and innovation entities to jointly work on common projects towards the development of new products, services, or processes.
Pandemic crisis and new forms of working.	Austrian authorities could consider the creation of funding schemes to promote the adoption of teleworking by SMEs, mitigating their disproportionately higher costs compared to larger companies, including support for access to expert advice for development of teleworking plans; purchase, installation and assistance in ICT software, hardware, and networks; cybersecurity tools; and training for workers and managers.	

Low rate of ICT students.	<p>Fostering teaching in STEM areas.</p> <p>Greater attraction of ICT scientific talent by reinforcement of scholarship systems for international students in higher education and entry of qualified ICT specialists into the country.</p> <p>Increased capacity of universities in ICT.</p> <p>Reskilling programmes.</p>
Low rate of female ICT students.	<p>Encourage female participation in publicly funded digitalisation projects.</p> <p>Award prizes to projects that represent Good Practices regarding female participation in ICT.</p> <p>Support lifelong training to facilitate the professional transition of women to ICT-related positions.</p>
<b>Enabling Corporate Environment &amp; Capacity Building</b>	
Business risk aversion to innovate.	Promoting SMEs participation in local innovation ecosystems.
businesses' capacity for innovating.	Knowledge- and technology-based entrepreneurship. The country must continue to make efforts to create the best framework for knowledge-intensive entrepreneurship to flourish.
Financial barriers to SMEs digitalisation.	Specific measures could be adopted to assist smaller businesses, for example calls for proposals exclusively dedicated to them, particularly if based in rural areas.
<b>Administrative &amp; Technical &amp; Legal</b>	
Excessive bureaucracy around application processes for public funding.	The deployment of user-friendly online tools, that effectively simplify bureaucratic procedures.
insufficient evaluation of national programmes and measures.	The funded projects must have clear established key performance indicators, with respective objectives and deadlines, whose fulfilment determines the level of funding to be allocated.
Development of an ultra-speed broadband infrastructure. Rural VHCN coverage remains low, with 12% of households covered compared to 28% at EU level.	The use of the Recovery and Resilience national programme can play an important role to solve this problem.
<b>Financial &amp; Economic</b>	
The unwillingness of small companies to invest in	Improved support for innovative small and micro enterprises, for example by offering higher co-funding

	digital development projects.	rates in the provided grants or even launching specific calls for proposals for them.
	<b>Policy &amp; Security</b>	
	<p>Cybersecurity threats for enterprises.</p> <p>Ensure that the country remains at the forefront of technological advances in cybersecurity.</p>	<p>Consider eligible cybersecurity-related expenditures under all digitalisation support programmes.</p> <p>Provide small and medium-sized companies specific support for cybersecurity either through direct support or the establishment of networks of cybersecurity providers.</p> <p>Support cybersecurity training programmes for companies – for instance led by business associations or clusters – and financially support SMEs to access those programmes.</p> <p>Develop joint cybersecurity promotion projects, involving universities, research, and technological development (RTD) centres, companies (including SMEs) and business associations.</p>
<b>PP7 - Tâmega e Sousa Portugal</b>	<b>Awareness Rising &amp; Collaboration</b>	
	Awareness rising.	<p>Coordinated awareness raising campaigns should be implemented, as well as active success story sharing should be organised to show SMEs advantages of digital solutions based on real life examples and encourage SMEs pay more attention to elaboration of corporate digital strategies.</p> <p>Coordinated and extensive event organization would be beneficial, mainly due to fact, that they also share success stories of other enterprises, which is one of the main tools how to convince SMEs to change with a help of real-life examples.</p>
	<b>Enabling Corporate Environment &amp; Capacity Building</b>	
	Low digital skills.	Introduce and popularize programs related to life-long learning that train more basic digital skills like e-commerce, general computer skills, to facilitate skillset transformation of the population.
	Managers do not have enough technical capacity.	Provide business assistance in terms of business incubators, relatively simple training programs on how to start doing e-commerce or establish visual identity, as well as provide free consultations about what the possible digital solutions are, technologies, that could be fit for SMEs, as well as provide guidance about funding possibilities and collaboration with educational institutions in R&D process, and provide training programs on ICT tools, and other life-long learning programs.
	<b>Financial &amp; Economic</b>	

	<p>Limited awareness about financing support options.</p>	<p>This challenge could be addressed by individual consultations on how to draft EU or state funded projects, similarly as consulting is provided regarding digitalization solutions by GP “Digital Advisors”.</p> <p>The planning documents of Tâmega e Sousa could include areas about importance of coordinated awareness raising activities, and list programs initiatives that should be developed jointly with involved SHs and business associations.</p>
	<p>Lack of financing.</p>	<p>Considered to introduce either separate state financial institution like ALTUM in Latvian case, that is operated by regional government or national government or start a dialog with banking industry for development of programs specifically designed for SME digitalization purposes. Such programs would possibly provide more favourable funding conditions to SMEs with a purpose to develop their businesses.</p>
	<p>There is not a single customized strategy or policy planning document regarding digital transformation specific for Tâmega e Sousa.</p>	<p>A local planning document or digital strategy guidelines that are specifically targeting digital transformation of Tâmega e Sousa or region-specific planning aspects to be included in the national level documents.</p>

Source: DigiBEST PR Reports