Action Plan

West Regional Development Agency of West Region Romania

CONTENTS

1 EXECUTIVE SUMMARY

West Region's ICT and Automotive are the strongest in terms of GDP, employees, market value and RDI, and their development overtime is intertwined, generating the most relevant expenditure in terms of both skills and innovation. The contribution of digital technologies in manufacturing is not only symbiotic, but a top priority in the transition towards the Industry 4.0 and Factories of the Future. However, even if the regional landscape dominated by corporates that expanded the regional supply chain, the gap in digitalisation among them increased exponentially, instead of being organically developed. This gap has shown that it impedes not only the innovation in the region, but also growth and competitiveness of SMEs in both the vertical and horizontal supply chains.

The global dynamics, the new European Union's Objectives regarding positioning in the global technology competition and related policies to empower the SMEs in this dynamic, made digitalisation a top priority on all levels, enhanced even more since the COVID19 outbreak, that put digitalisation the sine-qua-non investment priority. Thus, the 2021 -2027 programming period is focused specifically to reduce the gaps among European regions, and among different economic sectors. Romani's funding policies are currently aligned to these imperatives, whereas digitalisation is top priority in the coming period.

In this context, West RDA's objectives in the DEVISE project was to identify successful practices in intermediating and stimulating the adoption of digitalisation in SMEs across sectors, but also investment of material and non-material assets in developing new technologies, reducing the digital gap between regional SMEs and its European and global counterparts being a core priority in West Region's strategic policies.

Following a series of learning and experience sharing activities, West RDA adopted 2 core actions for the improvement of regional support to enhance digital transformation.

The first action, is willing to capitalize the knowledge and the approach learned from DEVISE project through the IoT Compass Hub (Finland) GP where the local DIH is actively participating to help the digital transformation of companies. In the context of DEVISE, West Region already took the initiative of developing a DIH by enrolling Tehimpuls in the DIHelp Academy program in 2019. Consequently, the concept of a future DIH was designed and successfully implemented in September 2020 when Tehimpuls passed the national selection for future EDIH.

The proposed action is intended to further strengthen the WEST Region capacity to play a role in the future EDIH community, by developing and implementing at small scale a tool and a methodology that facilitate the demand and supply of digital transformation. The initiative will be implemented by Tehimpuls under the coordination

of West RDA providing a good case of adoption of digital technologies within the manufacturing sector.

The second action is a pilot one and aims at providing a platform to access latest augmented, virtual and mixed reality technologies as digital solutions to increase the overall competitiveness of SMEs at considerable lower costs then traditional technologies. The benefits and application of such technologies, apart from standard business enhancements (customer engagement - marketing, modelling and prototyping and safe environment for complex collaborative innovation) is progressing continuously in all domains and niches, and particularly fast since the COVID19 outbreak. The action is meant to provide thus easy access to demonstrations of VR technology applications and uses, to key players in the field at global level. Also the goal is to stimulate not only adoption of such technologies, but also using them in developing new innovations in a collaborative fashion to grow and expand the VR community of West Region overall.

Both actions shall be implemented with own resources by West RDA as coordinating actor, but in close cooperation with local stakeholders, predominantly Universities and Innovation support players in the ecosystem. These partnership are meant to be materialised by the end of the implementation to consolidate the 2 instruments piloted.

With a total of 200 SMEs expected to be reached in the implementation period, the spill-over effect in the aftermath is estimated to grow exponentially and facilitate access to digitalisation projects to over 7000 SMEs over the course of 7 years.

2 GENERAL INFORMATION

- **Project: DEVISE**
- **Partner organisations: WEST RDA**
- **Other partner organisations involved (if relevant):**
- **Country: ROMANIA**
- **NUTS2 region: WEST REGION**
- **Contact person: RALUCA CIBU-BUZAC**
    - **Email: raluca.cibu@adrvest.ro**
    - **Phone number: 004 0256 491 923**

3 POLICY CONTEXT

The Action Plan aims to impact:

☒ Investment for Growth and Jobs programme

☐ European Territorial Cooperation programme

☐ Other regional development policy instrument

Name and reference of the policy instrument addressed:

- **West Region's Smart Specialisation Strategy**
- **Regional Operational Programme of West Region 2021-2027**

Digitalisation of West Region - State of Play

Although the Western Region has a significant mass of IT&C specialists, the high level of skills of human resources is not sufficiently capitalized and is not reflected in a high degree of digitalization of society at the regional level.

According to the CE DESI 2019 Report, Romania ranks 26th in the EU in terms of digitalization, from the perspective of the five relevant indicators, with a score of 40 compared to 52.6 EU average. The Western Region is in line with the national trend, but is above the national average in terms of Connectivity, with 88% of households with internet access (second place at national level) and Internet use, with a percentage of 76% (second place nationally). Reported at EU level, however, this performance is also average.

The Digital Technology Integration average recorded at national level can be deductively extrapolated at the level of West Region, thus well below the EU average. Only 23% of Romanian companies use digital solutions. This is reflected in the low adoption rate of digitization solutions, which although they offer great competitive advantages, are used rather isolated.

For SMEs, the challenges of digitization are different, the needs for support measures need to be adapted according to their level of digitization and their size. The adoption of new technologies is rather low and correlation between diverse solutions and current business operations or business expansion is sporadic.

Among obstacles in capitalizing digital solutions West RDA identified:

- Lack of knowledge regarding the benefits and ease of use (ready-to-use) of current digital solutions is significantly low
- Reduced digital skills of the human factor and I
- Lack of funding and in correlation, lack of dedicated advisory support for decision making regarding investments in digital technologies
- Lack of support service for integration of digital solutions into a comprehensive digitalization strategy at company level
- Accessing knowledge regarding digital solutions available and demonstration to their use and applicability

Thus the digital transformation of the regional economy is a top priority for ensuring and improving the prosperity of the region, being a key factor in stimulating innovation and competitiveness.

West Region's policy framework

The Regional Development Plan, the main policy instrument for the regional policy of West Region identifies 3 main priorities for the period 2021-2027:

EU Objective	ROP Priority	ROP Specific Objectives
A prosperous, competitive and innovative economy	**Priority 1.** Transform the West Region into an Innovation Hub	Develop the innovation ecosystem of West region to enable the transformation of West Region into a national pole of innovation
	Priority 2. A region of competitive and dynamic businesses	Boost the economy of West Region through RDI and innovation based growth of SMEs competitveness
	Priority 3. A digital Region	**Adoption and integration of digtal technologies in both the economy and public sector**

Based on wide consultation with all types of socio-economic factors, West RDA identified the critical investment goals for each of the 3 Development Priorities.

In the case **of Priority 3 "A Digital West Region",** aimed at supporting the adoption and integration of digital technologies in both the economy and public sector, the following investment goals have been identified and integrated with the Regional Operational Programme 2021-2027 for West Region:

- Investments in SMEs for the procurement of services and equipment necessary for digital transformation
- Support for digitalization of manufacturing process to enable transition to Industry 4.0
- Support SMEs to strengthen their capacities to adopt and develop new technologies (IoT, AI, Robotics, VR, etc,)
- Support the expansion and development of e-commerce
- Support the development of Regional Digital Innovation Hub of West Region.

Contributions of DEVISE project

West RDA joined the DEVISE project in order to actively participate, share and learn about measures and initiatives at regional level aimed at supporting the digitalisation of SMEs.

During the Phase I of DEVISE, West RDA:

- Acquired knowledge about the good practices of project partners with regard to policy instruments to implement, support and measure digitalisation support projects and also with regard to pilot programmes aimed at bridging the digital adopters with digital providers by both financial and non-financial means. Of particular interest being the good practices aimed at linking RDis insititutions and SMEs for the purpose of enhancing the emergence of projects dedicated to digitalisation.
- Participated in 3 staff exchanges to observe and learn in more detail about the selected good practices
- Discussed with stakeholder groups regarding joint initiative to support the faster adoption of digital technologies
- Dialogued with SMEs, both digital providers and adopters, in order to identify critical needs, obstacles and support gaps
- Capitalised data acquired to make recommendations regarding financing instruments for digitalisation of SMEs at policy level (ROP 2021-2027)

A detailed list of activities conducive to the 2 actions is provided in Annex 1 of the Action Plan.

Correlating the **digitalisation needs** (digital providers / digital adopters) and **gaps in the support ecosystem regarding digitalisation** (non-financial support programmes to help SMEs define digitalisation goals) identified within regional analysis, with the financial priorities addressed by regional policy instruments, West RDA defined 2 actions under the umbrella of DEVISE project:

ACTION 1 - Instrument for harvesting digital projects to support the development of future EDIH service

ACTION 2 - Development of the Virtual Reality Collaboration Hub

4 ACTION 1 DEVELOPMENT OF INSTRUMENT FOR HARVESTING DIGITAL PROJECTS TO SUPPORT THE DEVELOPMENT OF FUTURE EDIH SERVICE

4.1 BACKGROUND

Digitalisation of West Region - State of Play

West Region Romania is the second developed region in terms of GDP and exports after the capital region Bucharest due to the contribution of automotive FDI in the region, the strong tissue of suppliers and ICT companies but lacks in technological transfers and innovation driven economy.

In a region where basic manufacturing has been the main source of value added, ICT activities emerge as one of the few successful knowledge-intensive service sectors. According with the World Bank study for the RIS3, the region is taking advantage of the significant human capital supplied by regional universities, the ICT sector in the West Region is generally regarded as an internationally competitive player in the areas of software development activities as well as design and engineering.

Despite huge discussions, EU and governmental policies related on digitalisation as "a must do" the knowledge gap is still a challenge and without awareness on how digital technologies are impacting businesses the chances of rapid adoption of technologies are decreasing. IT technology providers are facing the lack of client's awareness regarding the facilities of the latest technologies and what they can provide.

Since then, the need of a European Digital Innovation Hub was acknowledged to support companies to adopt digital technologies to increase their processes.

West RDA along with the three created spin-offs decided that the digital transformation process will affect positively the manufacturing side of the region that is strong and supported by the multinationals. Also, digital companies would like to improve the ecosystem to be able to bring more value added to their activities and ease the digital transformation of SMEs. This is the main driver for initiating an EDIH, support service creation and facilitate with local stakeholders.

Thus West RDA identified the opportunity to uptake the know-how of bridging digital providers and adopters via dedicated DIH instruments within project partner SEAMK.

Following this learning process and analysing adaptations to West Region's ecosystem, West RDA identified the need to develop an dedicated instrument to **harvest digital projects with the involvement of digital providers as a prerequisite step to develop the critical mass for the operationalisation of DIH services** (to be adopted by the Future DIH of West Region), following lessons learned from project partners (particularly South Ostrobothnia IoT Kompass).

REGIONAL ANALYSIS

The main objective of West RDA in the context of the DEVISE project is to **enable SMEs to exploit digital technologies to boost their competitiveness particularly in the Smart Specialisation sectors of West Region**.

The participation in stake-holder group meetings along with the regional baseline evaluation report revealed some important lessons related to digital transformation.

Supply chain - is mostly focusing on the engineering / and production area acting as a provider of externalised services, technical consultancy and technology integrators. There is also the presence of soft services like training regarding the use of Key technologies. The general use of robotics and IOT have a lower presence on the market but there are still some entrepreneurial signs of turning to the use of IOT.

It seems that **digitalisation projects are following the money** thus companies are implementing their services usually to companies over 49 employees due to the manufacturing profile of our region. Turning services to small companies (up to 9 employees) being a rather niche activity although there are examples of micro enterprises fully digitalised. The money is coming mostly from projects development and implementation an almost at all from maintenance for a long time.

Scaling up the company's turnover and developing new products are the **main challenges** of the company rather than going international.

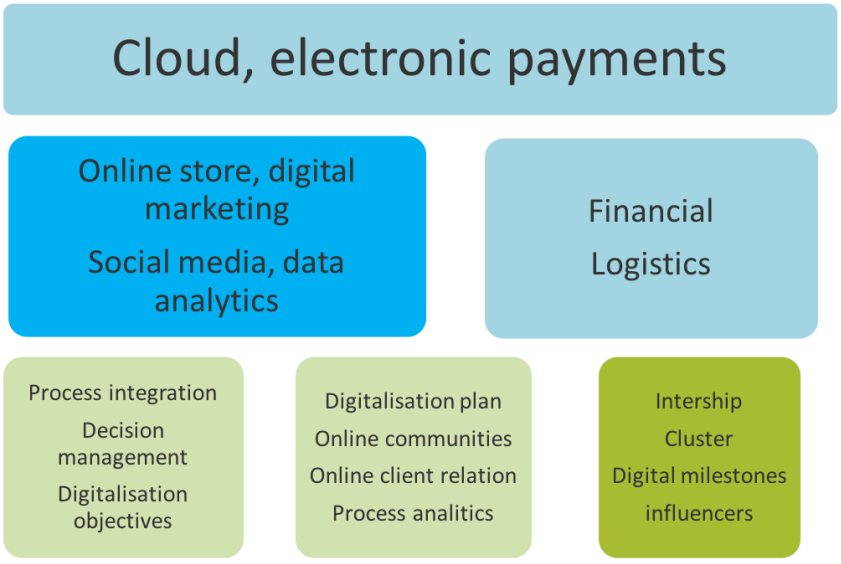
Digital transformation main focus regarding their clients is clustering mostly around data analytics, cloud, followed by soft measures like digital events, internship and digital marketing. The rising of digitalisation objectives could improve a long term partnership between supply and demand especially in the field of technology integrators and service providers. This is due to the fact that the IT companies are

already working with clients that have digitized the several aspects like processes of companies, financial and logistic.

Regarding the **bottle-necks** that IT companies are facing when working with clients are surprisingly not financial, although there are constraints there but rather companies are not aware of the latest technologies and what they can provide. This seems to be even more evident within traditional/family business. Also, based on the fact that general companies already implemented some digital technologies, they are afraid that digitalisation will affect the already existing management system and the business model but not their relation with the business partners.

The main **benefits** that can be traced trough **digitalisation** are reducing cost, speeding-up processes and increasing sales but there is less feedback regarding the online reputation.

The demand side comprising in local companies are using cloud and electronic payments followed by "trendy" activities like digital marketing and logistics which are easier to implement. The **challenge** consists in process digitalisation among with decision management where the level of sophistication is higher. From establishing digital objectives trough digital milestones the cases are shrinking even more showing that digitalisation is a complicated process.

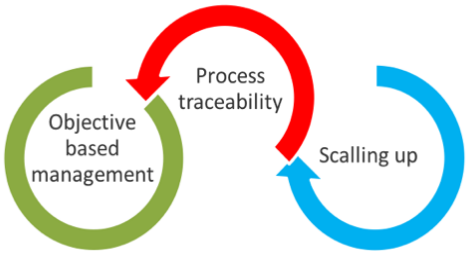


The very next intentions on digital transformation are: establishing digital milestones and participation in digitalisation trainings who are essential overcoming uncertainty and integrating a logical process of digitalisation within the company hopefully shared by all the employees.

What digitalisation is doing now for the companies?

There is a "trio" as a driver and it all relates to increasing turnover of the company: process traceability is the main focus 100% that supports the general objective based management and furthermore scalling-up. This framework is quite logical as you

cannot scale-up as a company without objective based management and you cannot have that without transparency. Accessing new markets and competition pressure are just peripheral motivations.



Regarding the **benefits** of already existing digitalisation project respondents are 100% aware that it reduced costs and speeded up the internal processes. A third clear and traceable effect that almost 2/3 of companies are declaring is that digitalisation offered a better position on the market. Brand recognition is somehow clear and traceable.

The **general conclusions** of the regional workshop in West Region Romania, as well in all the other partner regions that the demand side is needing demonstration to understand the new technologies, examples of good cases where digital technologies are making the difference and overall a facilitating mechanism that is helping the companies to navigate between needs and possible technological solutions.

There are several initiatives regarding the **awareness raising & showcasing** that stake-holder companies are willing to develop and could be supported by a specific **portfolio of EDIH services**:

- **Digital workshops** for clients in a non-formal manner to increase awareness (ex. Hacking courses);
- **Interactive workshops** for educating clients – providing a consumer digital experience;
- More support to **promotion of digital success stories** within companies – stimulate open innovation processes and clients participation to design IT solution;
- **Showcasing** benefits of digitalisation and social media into marketing;
- **Mapping digital solution** providers and present successful projects.

Related to this action, West RDA envisaged in Phase 2 is to develop specific services within the regional initiative of a future EDIH. The initiative has already been taken by the submission of the first application at national board for national selection. The proposed initiative was taken at regional level by Tehimpuls Association in partnership with the Regional ICT Cluster as a strategic regional partner consisting most of the offer side. Both Tehimpuls and ICT Cluster are spin-offs of West RDA.

Since the application already passed the first national phase, the next challenge is to successfully pass the EDIH competition and become a relevant construction for the regional supply and demand.

The proposed action of initiating a process of in depth harvesting with stake-holders is meant to bring more precision into the operationalisation of DIH services. More precision is needed also in the facilitation process between demand side, regional DIH and the real offer of technological solutions that Universities and companies have.

The proposed action is willing to develop and provide instruments and activities that are supporting an efficient facilitation process between the demand and the supply side.

The foreseen instrument is an extensive needs assessment based on an online survey that will act as a buffer between the EDIH and clients helping the EDIH experts to understand the needs and to give a hint on what technologies may be applied. The instrument will shorten the dialogue with the clients and may even give the client the possibility to access an online demonstration of an appropriate technology study case that is available at the regional level.

The instrument will act as a digital maturity assessment tool but more focused on the actual needs of the company and finally provide a fair access to the supply side.

At the end of the process EDIH is willing to generate several use cases of pilots where successful digitalisation process has been implemented. Building the model will be transferred to have impact also on policy level by providing the major milestones that regional policy and policy instrument should consider generating digital transformation.

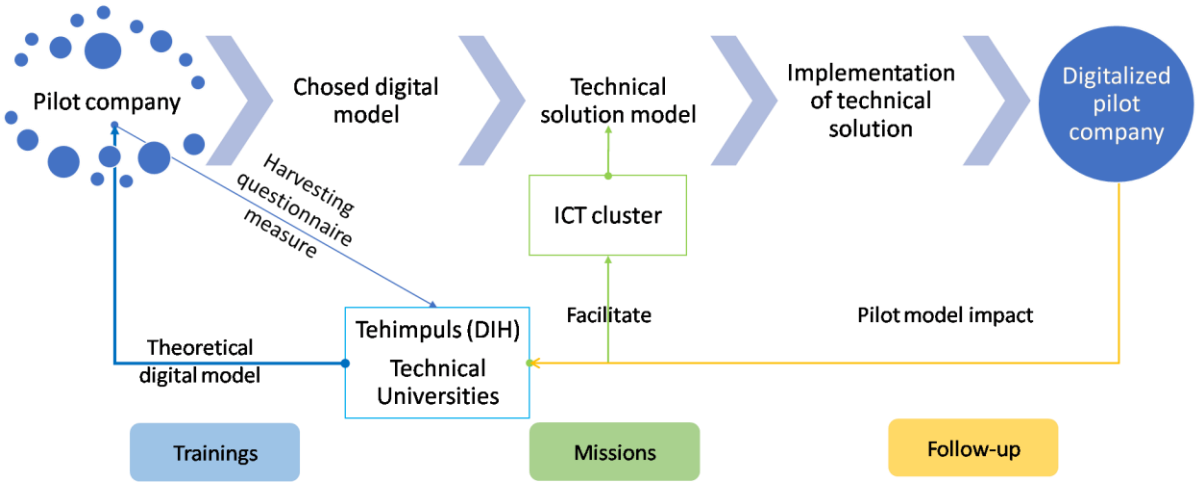
For the EDIH, the instrument will act as a compass helping to take operational decisions regarding the portfolio of services based on the existing demand dynamics.

Beyond this final product, the action is based on preparatory work with the stake-holders helping to build up the general framework of the mechanism:

- 3 bilateral workshops with three regional universities providing IT education designed to understand the technical facilities and the competences that are intended to be offered to the business environment;

- 3 fact finding missions to pilot companies that will help better understand the digitalisation challenges in the manufacturing sector and to start generate the pilots use cases for the regional EDIH;
- 3 missions to companies together with Universities, facilitated by the EDIH to start implementing technical aspects for digitalisation projects. These missions will be needed to develop the future pilot use cases of digital technologies.

The general process overview can be seen in the chart below where the regional DIH (Tehimpuls) is facilitating few use cases for some manufacturing companies from West Region from which **1 will become a good practice**. This action intends to change expertise and to facilitate supply and demand in an organised manner using several facilitation tools from which the **harvesting questionnaire** will be developed within this action.



Beyond the facilitation activities and new tools developed, this action will generate proposed procedures and a coherent services implementation model for the DIH. The role of the West RDA is to transfer the knowledge and the good practices into the future EDIH along with facilitation the dialogue between Tehimpuls and DEVISE partners during phase two.

Objectives of the Action:

- Increase the capacity of digital transformation of companies through business support tools and services, capable of implementing the best technologies that suites the business needs.

- Enable regional SMEs to take the necessary actions to digital transform the companies by providing metrics and milestones and access to future regional EDIH infrastructure within a coordinated process.

Stakeholder involvement

Beyond Tehimpuls who is implementing the action in the context of DIH, designed by West RDA, there are several categories of stake-holders in for this action:

- regional universities who are members of Tehimpuls association and in particular the technical ones that will be in the forefront of DIH proposed action by actively participating in the construction of pilot use cases;
- the regional ICT cluster who represents the provider of digital products and services and act as a strategic partner of actual DIH providing technical support during the implementation o pilot use cases;
- companies who are the beneficiaries of the DIH services and who will test the new digitalisation project as well the questionnaire of the facilitating instrument;

Even if the EDIH initiative shall be implemented by Tehimpuls having as partner the ICT Cluster, West RDA shall contribute in the implementation of activities related to EDIH by infusing knowledge gained during the implementation of DEVISE project:

- Establish and coordinate stakeholders meetings in order to focus EDIH services towards the regional needs;
- Facilitate between offer and demand regarding digital technologies in the manufacturing activities;
- Provide support for the operationalisation of demonstration and testing services of Technical Faculties within the DIH;
- Recruit businesses for the selection of business use cases applying digital technologies;
- Coordinate awareness campaign related to digital transformation and the role of EDIH in this challenge;
- Recruit and engage international collaborations to implement good practices (Ostrobothnia IoT Kompass a) related to DIH services;
- monitor activities carried out by all parties involved.

To reach its objectives, West RDA shall work closely with the three reginal Universities with technical expertise and infrastructure needed for demonstrations as well with SMEs already providing IOT and automatization services.Knowledge applied from DEVISE

Partner good practice/experience (please, detail: good practice name, short description and location)	How this good practice/experience has contributed to the actions developed in your Action Plan (detail any transfers, full or partial of good practice)
Regional Manufacturing Digital Innovation Hub IoT-Compass	The good practice is providing a complex package of services within the DIH, that: o Asses the digital maturity of companies o Provide infrastructure from SeAMK School of Technology to learn more of digital manufacturing and industrial internet. There companies can utilize laboratory in their own development work with the guidance of specialists. West RDA shall support the transfer of this good practice by: • Facilitating the discussion between both DIH to better understand the model, the services and the process needed to implement a regional solution for West Region • Engage specialists from **Hub IoT-Compass** during Phase 2 in order to present some inspirational case studies for the stake-holders of DIH. Facilitate the adoption og GP in the second phase by the West Region DIH.

4.2 ACTION DESCRIPTION

Description of the action planned, including at least:

Main objectives	*Value brought by this action into the region*	*Players involved and role in the implementation and collaboration between them*
Increase the capacity of digital transformation of companies trough business support tools and services, capable of implementing the best technologies that suites the business needs Enable regional SMEs to take the necessary actions to digital transform the companies by providing metrics and milestones and access to future regional EDIH infrastructure within a coordinated process.	*Increase the ecosystem capacity to support the manufacturing businesses needs in digital transformation.* *Increasing the adoption the most suitable technologies into businesses* *Transfer an already existing good practice in the services portfolio of future EDIH for West Region Romania*	***West RDA:*** • *Coordinate the implementation of the action* • *Develop and implement the Awareness Campaign, disseminating the services created by the among regional businesses* • *Establish and coordinate the dialogue between the Hub IoT-Compass and the local stake-holder group* • *Recruit SMEs for the pilot implementation of technical solutions* ***Tehimpuls (EDIH&Universities)*** • *Contribute to the adoption of the concept related to the GP in its own services portfolio,*

		• *Make the new service of digital transformation operational by establishing a clear process and tools providing metrics and milestones* ***Regional ICT Cluster:*** • *Engage in the implementation of technical support for the business cases* *Contribute with business case requests and case studies*

Activities

1. **Coordination and Management** of action implementation
2. Design the roles of a **regional collaboration framework (semester 1 2021)** within DIH dedicated to digital transformation of the manufacturing sector based on the Digital Factory Academy from IoT-Compass DIH.
   2.1. **Define stakeholders group** and responsibilities in:
   - Joining expertise and making available infrastructures from Technical Faculties for testing, demonstration and open innovation activities;
   - Generating content for the awareness campaign;
   - Scouting and selecting companies for demonstrations and presentations.

Apart from Tehimpuls, whose members are technical Universities, and who owns the initiative of developing the EDIH for West Region, and apart the ICT cluster the key stakeholder representing the ICT sector at regional level, West RDA is the third stakeholder contributing with its own network of companies representing the demand of digital services.

2 coordination meetings per year are envisaged in January and June. Continuous communication is foreseen to take place via digital means.

2.2. Prepare the **digital harvesting questionnaire** tool for assessing digital needs and the services model for digital transformation for the manufacturing sector.
2.3. **Launch awareness campaign on EDIH role in transforming the manufacturing industry** (mainly via social media, short films and testimonials).

3. **Implementation (semester 2 2021)** of the digital transformation activities for the pilot companies by implementing the tools developed:
    - harvesting questionnaire
    - 3 bilateral workshops between DIH and the three regional universities;
    - 3 fact finding missions to pilot companies;
    - 3 missions to companies together with Universities, facilitated by the EDIH to start implementing technical aspects for digitalisation projects.
    - Engaging the ICT cluster in the elaboration of the technical solution model for pilot selected companies;
    - Follow-up the implementation of the digital transformation activities within the companies.

4. International Cooperation

As the initiative was inspired by the IoT-Compass Hub (Finland), West RDA will facilitate **two sessions** of technical dialogue with the regional stake-holders, Tehimpuls, and ICT cluster in order to create the model for supporting the digital transformation of the regional manufacturing sector. This activity will take place in the first semester of 2021.

5. Sustainability

By the end of 2022 West RDA shall initiate a stakeholders meeting to set up the sustainability measures for continuation of the initiative in a cooperative manner with the future EDIH. It is estimated that in the second semester of 2021, the financing contract of EDIH for West region Romania will be signed assuring the sustainability of the model services created.

Tehimpuls being the future EDIH host will assure the sustainability of the activity initiated trough the DEVISE project.

EXPECTED RESULTS

- **100 reach outs via social media campaign**
- **3 SMEs** engaged in the process of digital transformation of the company
- **1 success story** of digital transformation of a manufacturing company

4.3 TIMEFRAME AND FUNDING

Include here the timeframe for the project funding application and set-up/implementation process. Note: this chart will be key for the reporting procedure on the indicators given in the Application Form (Number of Projects and Investments relating to your PI and other Policy Instruments)

Project/Action Investment Line/Funding Source + Amount (please state each source of funding)	***Submitted For Funding***	***Funding Decision***	***Project Start Date / Finish date***	***Other key milestones***
Development of instrument for harvesting digital projects to support the development of future EDIH service ***17.750 Euros – covered by West RDA's own resources***	*N/A*	*N/A*	*January 2021 - 30 April 2022*	*November 2021 - Launching of West Region's DIH*

4.4 WORKPLAN

WP	Tasks
Work Package 1 MANAGEMENT	Task 1.1 Monitor the action plan implementation
	Task 1.2 Elaborate reports on progress
Work Package 2 Establish the collaboration model with the DIH and the working tools	Task 2.1 Facilitate the dialogue between DIH and IoT Compass Hub to start transferring knowledge to the regional initiative.
	Task 2.2 Define stakeholders' group and responsibilities in: • Joining expertise and making available infrastructures from technical faculties for testing, demonstration and open innovation activities in the context of DIH; • Generating content for the awareness campaign; • Scouting and selecting companies to generate use cases for demonstrations and presentation; • Project implementation.
	Task 2.3 build the implementation instruments: digital harvesting questionnaire, workshops format, missions' methodology, milestones of digital transformation.
Work Package 3. Initiate digital transformation implementation	Task 3.1 Start the recruiting campaign
	Task 3.2 Implementing the support for digital transformation package: harvesting questionnaire, 3 bilateral workshops between DIH and the three regional universities; 3 fact finding missions to pilot companies; 3 missions to companies together with Universities; facilitate the generation of technical solutions
	Task 3.3 follow-up the implementation of the digital transformation activities within the companies

Work Package 4 Sustainability	Task 4.1 Stakeholders meeting to discuss continuation of the action and establish the procedures and rules within the DIH partnership agreement

4.5 BUDGET BREAKDOWN FOR THE ACTION

Detailed budget associated to the action. It can be presented using different costs categories. You can also use the budget headings used in your applications for funding. Below is an example

Category of funding	Expenditure Amount
Salaries	15.000 Euros
Overheads *(i.e. calculated at x % of staff costs)*	2.250 Euros
Travel & Subsistence	0
External expertise	500 Euros
Building/renovation / refurbishment	0
Equipment	0
TOTAL	17.750 Euros

4.6 VIABILITY AND SUSTAINABILITY

The action proposed is intended to be implemented and transfered to Tehimpuls as a hosting organisation of the regional DIH and fututre EDIH. The action results and the instruments developed will become services in the future EDIH portfolio. It is estimated that the EDIH cotract will be signed in the second semester of 2021. From that point on the action will be maintained and delivered by future EDIH being supported by the EU grant for the following 7 years.

The DIH already passed the national selection for future EDIH so the last stage is to access the

At this stage during the second phase the activities will be mostly preparatory for experimenting and pilot testing so there will be no monetization.

4.7 IMPACT EXPECTED

During Action Plan Implementation Based on the activities generated and having a feedback from a practical implementation of a service the future EDIH will be able to provide feedback to the policy instrument dedicated to funding EDIH as well to other policy instruments dedicated to suport the digital transformation of companies.

In terms of indicators we expect to generate the following:

- **100 companies** reached via the recruiting campaign
- **3 SMEs** engaged in the process of digital transformation of the company with the support of the tools and service created
- **1 digital harvesting questionnaire** created to facilitate the dialogue between the company and the DIH
- **3 bilateral workshops** between DIH and the three regional universities aiming to understand their capabilities that are intended to be shared within the EDIH as a support for companies;
- **3 fact finding missions** to pilot companies to understand their challenges in terms of digitalisation ;
- **3 missions** to companies together with Universities, facilitated by the EDIH to start implementing technical aspects for digitalisation projects;
- **1 good example** of digital transformation of a manufacturing company.

In the post implementation phase the potential impact of the instrument shall increase exponentially via the future EDIH which shall uptake the instrument as the primary tool for supporting the digital transformation of West Region. The overall population of targeted SMEs over the span of 7 years is 1.3 million, covering the entire region, with an estimated project rate of 0.5%, resulting in a rate of digital projects of 6.500 SMEs.

Impact on the policy instrument

Despite estimate goal of West RDA to address the ROP 2014-2020 in the course of DEVISE project implementation, the measures to address digitalisation themes under this period have been delayed at the level of Managing Authority and later transferred under the future programming period.

West RDA had, since 1999, the role of coordinating and implementing the regional development policy that were then integrated into the Funding Instruments.

Thus during the implementation of Phase 1 of the DEVISE project, West RDA provided input gained through the project regarding measure to support digital transformation of SMEs in the elaboration of its 2 strategic regional policy documents:

- **Improved governance of the Regional Development Plan 2021-2027 which defines the critical role of digital technologies for improving the competitiveness** of SMEs, where good practices from DEVISE project have been exemplified in the RDP for the sustainability of business sector.
- **Improved governance of the Smart Specialisation Strategy of West Region 2021-2027 which** strategy defines the primary focus of integrating regional capacities between ICT and manufacturing sector in order to support the transition towards Industry 4.0 and Factories of the Future, particularly through supporting the development of complex and collaborative digital transformation.

Additionally, following an elaborated political debate and negotiation process with the European Commission, **RDAs in Romania have been assigned as Managing Authorities** for the next programming period, **2021-2027**.

This new role invested West RDA with full ownership of also developing the **Regional Operational Programme 2021-2027**, starting 2020.

Thus, during 2020, insight gained in the DEVISE project has been regularly corroborated with the preparation of the future ROP, in particular to the ***Priority 3. A Digital Region-Adoption and integration of digital technologies in both the economy and public sector***. The aim is to fund projects for digitalisation of businesses, on one hand, and for the development of digital innovation support providers, on the other hand.

The DEVISE contribution to this policy instrument is related the **definition of technical and financial criteria for the digital projects** that will be funded through ROP 2021-2027, by capitalising the gap analysis between **digital supply and demand** side of digitalisation (DEVISE regional analysis) and good practices from project partners

Through this particular Action, West RDA aims to further support the **successful implementation of ROP 2021-2027 Priority 3**, by **developing of the capacities of regional stakeholders to identify, define, develop and implement digital transformation projects** that shall be funded under the future ROP.

This action contributes in a critical manner to the successful implementation of ROP 2021-2027 because will enable to a change in the management of the policy instrument (improved governance) and:

- **Ensure faster capacity building** for digital projects right at the beginning of the new programming period
- **Capitalise on the knowledge gained through DEVISE** project and also the know-how of DEVISE project partners, AND

- **Transfer the capacity to relevant stakeholder** (future EDIH) to ensure continuous support services for the development of digital projects for the entire programming period.

Thus the aim is to West RDA aims to involve the regional stakeholders into developing and pilot this instrument in the first semester of 2021 to make sure support is available to SMEs by the time ROP funding under Priority 3 is estimated to be made available for them. To ensure continuation, the instrument shall be transferred to Tehimpuls Association, as coordinator of West Region's EDIH, which is estimated to receive the 7 year funding under EC's EDIH call by end of 2021.

Thus the resources put available by West RDA for this action is basically meant to ensure synergy between multiple EU funds:

- Interreg Europe funding (through DEVISE) to make use of good practices in order to develop the regional capacities to identify, select and define digital projects and support cooperation among stakeholders
- EC's Digital Europe Programme – for funding the operationalization of West Regions EDIH
- ERDF Funding, through ROP 2021-2027, aimed at digital transformation which SMEs will be able to access in the new programming period, with the support of Regional EDIH, which in turn will use the instrument as recruitment and selection tool for ensuring high quality digitalisation projects.

4.8 MONITORING ACTIVITIES IN PHASE 2

During Phase 2 of DEVISE project the following monitoring activities are planned:

1. In each semester - record progress on action implementation using the project form (questionnaire developed by project partner SEAMK)
2. At end of each year - application of impact questionnaire, to all stakeholders involved (Tehimpuls (DIH), Universities, ICT Cluster) as well as beneficairies SMEs.

In each hase achivement of estimated inidcators shall be addressed together with succesful steps together with any obstacles and unforseen risks identified and corrected during implementation.

At the end of Phase 2 a separate report shall be made regarding the sucessful adoption of the instrument and its concrete sustainability plan (following decision at stakeholder's level and depending on the exact legal structure of the future EDIH).

5 ACTION 2. VIRTUAL REALITY COLLABORATION HUB (PART OF DEVISE PROJECT PILOT ACTION)

5.1 BACKGROUND

Context

The main objective of West RDA in the context of the DEVISE project is to **enable SMEs to exploit digital technologies to boost their competitiveness particularly in the Smart Specialisation sectors of West Region**.

In Phase I of the project, West RDA explored the good practices from the project partners to identify means by which to use latest technologies as business boosters and drivers for innovation. Also a critical aspect depicted in the process of data collection for the Baseline Methodology was that in order to foster digitalisation of SMEs, 2 critical aspects should be addressed SMEs:

- Raise awareness among SMEs of the digital capabilities and trends, best by use cases of specific applicability and
- Demonstration of business benefits on the shirt and long run, in terms of ROI, expansion of client base, client retention, user experience, of idea generation for product/service innovation, improvements of process KPIs and even expansion of business models
- Facilitate access to the right technologies and support in the decision making process, taking into consideration high costs of acquisition coupled with increasing variety of deep tech (not easily understood by non-technical professional), continuous change due to fierce technology competition at global level

Since manufacturing in general, and automotive production in particular, is the most important in terms of PIB in West Region, and also the domain with highest interest in innovation, one of the fields West RDA focused on during Phase I of the project was AR/VR/XR, and explored the good practices offered by the Mayenne Technpole partner and also participated in one physical staff exchange in Laval, France in 2019 and 1 virtual staff exchange in 2020. Furthermore, West RDA organised a staff exchange in Timisoara for Mayenne Technopole and its stakeholders, Laval Virtual Center and Clarte, and since then ongoing discussion took place to develop common actions in support of creating an annual VR flagship event in Timisoara, as a premier in Romania.

Following this exchange, West RDA envisaged in Phase 2 is to establish a pilot **collaborative framework dedicated to AR/VR/XR** to support the showcasing of such

technologies, encourage development using these technologies, facilitate adoption in Industry and promote the results widely.

Objectives:

- Enable and foster the exploration of Virtual Reality by entrepreneurs as means to increase their outreach (virtual events, user experience) or to innovate faster and more efficient (using VR in designing and manufacturing processes
- Enable regional SMEs to exploit virtual environments in order to increase their access to knowledge and technologies faster and less expensive
- Encourage SMEs to participate in collaborative projects internationally much easier through the virtual environments and tools

Stakeholder involvement

West RDA shall coordinate the implementation of activities envisaged and contribute with:

- Establish and coordinate stakeholders meetings and monitor activities carried out by all parties involved
- Recruit businesses for the selection of business use cases applying VR technologies
- Social media awareness campaign
- Co-organize the Regional VR hacathons
- Recruit and engage international collaborations (Laval Virtual Centre, Clarte, etc.) for the regional hackathons

To reach its objectives, West RDA shall work closely with 2 reginal Universities with technical expertise and experience in organization of entrepreneurial discovery events.

The Center for Multimedia Research (established in 1996 with Polytechnic University of Timisoara), carries out educational, research and innovation activities in ICT, focusing on interactive multimedia technologies and technologies, Smart Cities, Open Data, Augmented Reality, Internet of Things, ICT Entrepreneurship, advanced educational Technologies, OER, MOOCs. The Multimedia Center is experienced in activities to support **entrepreneurship in ICT (StartUp Weekend, HackTM, Hackaton, Meet-ups)** and organizes the International Digital Media Student Contest student competition annually. The E-Learning Centre has been involved for several years in AR / VR (augmented and virtual reality) research and participated in several European projects in partnerships with other university centres and ICT companies from Timișoara, materialized through a series of scientific articles published in international conferences and journals. They also promoted actively VR technologies in its events, such as Timișoara Science Festival. Since the break of COVI19 pandemic, the Centre has been in charge of coordinating the virtual environments for its host, Polytechnic University of

Timisoara, and later other Universities from the region, hosting over 17.000 users. There are continually developing new applications and are curating them based on demands from educational system as well as regional businesses.

Aurel Vlaicu University of Arad is the main educational and research body in Arad County. Through its Faculty of Exact Sciences (Department of Mathematics and Computer Science), the university carries out educational and research activities in the field of ICT. The main research topics are: Artificial Intelligence, Bio-inspired Nanotechnologies, Neuronal Networks, Post-quantum Cryptography, Image Processing and Digital Cities. The research results, obtained in the own AI laboratories or in collaboration with international partners, are published in valuable scientific journals or conference proceedings. Aurel Vlaicu University is involved in various projects enhancing the collaboration between academia and companies and supporting students innovation. To support entrepreneurship in general and in ICT in special, the university organizes activities like the hackaton (Hack4Arad), the International Students Conference (StudMath-IT) and the IT Job fair. The university takes part in activities related to Open Data, participates in the Innovation Labs, presents its results at the Science Festival, and cooperates with innovative companies working with new technologies. Aurel Vlaicu University is founding member of the regional IT&C cluster and of Tehimpuls – the Regional Centre for Innovation and technology transfer….

Additionally, West RDA initiated discussions with **Laval Mayenne Technopole** and its stakeholders, **Laval Virtual Center** and **Clarte** in order to support this actions with appropriate expertise..

5.2 KNOWLEDGE APPLIED FROM DEVISE

Partner good practice/experience (please, detail: good practice name, short description and location)	How this good practice/experience has contributed to the actions developed in your Action Plan (detail any transfers, full or partial of good practice)
VR/AR Exploration - Meetings and seminars in order to raise the attendees' understanding about Virtual and Augmented Reality technologies and the potential applications. **Clarte, Laval, France**	The good practice emphases means to raise awareness on VR technologies to industry via; • Dissemination of information about new uses of VR/AR globally, and presentation of uses cases in traditional businesses. • Organization of seminars where companies discover these new technologies and how they can integrate them into their processes, offers, etc. West RDA shall support the transfer of this good practice by: • Discuss with Clarte to support with use cases for industry in areas of interest for businesses in West Region Invite specialists from Clarte at the VR events organised by West RDA during Phase 2 in order to present case studies and support SMEs from West Region to explore how they can incorporate VR technologies in their businesses.

5.3 ACTION DESCRIPTION

Main objectives	*Value brought by this action into the region*	*Players involved and role in the implementation and collaboration between them*
Develop a collaborative framework dedicated to VR technologies	*Increase awareness regarding applicability of VR technologies in businesses from West Region* *Support the creation of project based cooperation for testing/demonstrating/adapting VR technologies* *Increase business networking via virtual environments*	***West RDA:*** • *Coordinate the implementation of the action* • *Develop and implement the Awareness Campaign, disseminate VR content among reginal businesses* • *Establish and coordinate the stakeholder group* • *Main organizer of the VR Days events (1 per year): promotion, recruiting speakers and trainers, handle logistics, recruiting participants* • *Co-organize and recruit SMEs for the virtual matchmakings* ***Polytechnic University of Timisoara***

		• *Contribute to the awareness campaign, with content and case studies and disseminate information in own network* • *Co-organize the VR Days events (coordinate organization of the hackathons, recruit students, entrepreneurs and researchers, provide trainings and presentations during the event, as well as technical support)* ***Aurel Vlaicu University in Arad*** • *Contribute to the awareness campaign, with content and case studies and disseminate information in own network* • *Co-organize the VR Days events (coordinate organization of the hackathons, recruit students, entrepreneurs and researchers,*

		provide trainings and presentations during the event, as well as technical support) ***Regional ICT Cluster** and **Regional Automotive Cluster:*** • *Disseminate opportunities related to VR projects* *Contribute wit business case requests and case studies*

Activities

1. **Coordination and Management** of action implementation
2. **Establish a regional collaboration framework dedicated to AR/VR/XR in West Romania** to discuss potential pilot application and demonstration of usage of VR technologies in industry (December 2020 – February 2021).
   2.1. **Define stakeholders group** and responsibilities in:
   - Generating content for the awareness campaign
   - Scouting and selecting use cases for demonstrations and presentations
   - Recruitment of young entrepreneurs and SMEs to participate in entrepreneurial discovery utilising AR/VR/XR.

   Apart from the 3 main organizations in charge (West RDA and Polytechnic and Aurel Vlaicu Universities Stakeholders), others stakeholders from the business ecosystem shall be recruited to support with awareness campaign and business use case generation). 2 coordination meetings per year are envisaged in January and June. Continuous communication is foreseen to take place via digital means

   2.2. **Launch awareness campaign on applicability of AR/VR/XR for business generation** (mainly via social media of all stakeholders involved). Dedicated social media channels shall be created and promoted in relation to the brand of Regional VR Days (January 2021 – March 2021, then ongoing)

2.3. **Organize VR local events** - comprising of demonstration of VR technologies, trainings on VR applications, and trends in supporting various industry and businesses ecosystems overall, with core focus on **hackathons** dedicated to entrepreneurs to develop VR solutions for industry. The event shall be co-organised by West RDA, Polytechnic University of Timisoara, Aurel Vlaicu University in Arad shall in close cooperation. West RDA shall coordinate the awareness campaign in the business sector, and engage clusters and other stakeholders, while the 2 Universities shall contribute with recruiting students / researchers in the field, and provide technical support during the events, with support from stakeholders from France. Discussions with Laval Virtual Centre will be carried out in detail for support with know-how, case studies, professionals (trainers), demonstrations of latest technologies, access to the Virtual Network, as well as admittance to the Laval Virtua Conferences.

Estimated Results:

- **1000 reach outs via social media campaign** (1000 estimated target of unique accounts reached), **100 SMEs companies reached**
- **20 young entrepreneurs/SMEs** involved in VR entrepreneurial discovery activities (hackathons)
- **2 success stories** regarding implementation of VR solutions

3. Sustainability

By the end of 2022 West RDA shall initiate a stakeholders meeting to set up the sustainability measures for continuation of the initiative in a cooperative manner among the stakeholders engaged (establishing roles, rights and ownership, budget contributions and cost effectiveness, branding, etc.)

5.4 TIMEFRAME AND FUNDING

Project/Action Investment Line/Funding Source + Amount (please state each source of funding)	*Submitted For Funding*	*Funding Decision*	*Project Start Date / Finish date*	*Other key milestones*

Pilot Virtual Collaboration Frameworkl **11,728 Euros covered in kind by ADR Vest own funds**	*N/A*	N/A	*December 2020- December 2022*	*N/A*

5.5 WORKPLAN

Include an outline of the Work-plan for each project. A suggestion could be to breakdown the Work-plan in work packages and tasks as below:

WP	Tasks
Work Package 1 MANAGEMENT	Task 1.1 Monitor the action plan implementation
	Task 1.2 Elaborate reports on progress
Work Package 2 Establish the regional collaboration framework in the field of VR	Task 2.1 **Define stakeholders group and responsibilities in:** • **Generating content for the awareness campaign** • **Scouting and selecting use cases for demonstrations and presentations** • **Recruitment of young entrepreneurs and SMEs to participate in entrepreneurial discovery utilising AR/VR/XR.** Apart from the 3 main organizations in charge (West RDA and Polytechnic and Aurel Vlaicu Universities Stakeholders), others stakeholders from the business ecosystem shall be recruited to support with awareness campaign and business use case generation). 2 coordination meetings per year are envisaged in January and June. Continuous communication is foreseen to take place via digital means
	Task 2.2 Conduct awareness campaign **on applicability of AR/VR/XR for business generation** (via social media of all stakeholders involved).
	Task 2.3 Organize **Regional Business VR Days**
Work Package 3 Sustainability	Task 3.1 Stakeholders meeting to discuss continuation of the action and establish a partnership agreement

5.6 BUDGET BREAKDOWN FOR THE ACTION

Category of funding	Expenditure Amount
Salaries (in kind contributions)	5,850 Euros€
Overheads, *calculated at 15 % of staff costs (in kind contribution)*	878 Euros
Travel & Subsistence	0 Euros
External expertise	5,000 Euros
Building/renovation / refurbishment	0
Equipment	0
TOTAL	11,728 Euros

5.7 VIABILITY AND SUSTAINABILITY

The action is implemented in partnership with 2 main local Universities (UPT and UAV), each playing a dedicated role in the economy of the action and each contributing with specific know-how.

Viability of the project shall be easily ensured by capitalising on the competences of each partner:

- West RDA shall continue to facilitate links among digital providers and companies in all sectors and ensure support in correlating digital strategies for SMEs and the funding available at regional level, particularly Regional Operational Programme 2021- 2027 with dedicated allotment for such digitalisation projects and innovation incentives. Furthermore, in implementing the RIS3 strategy, West RDA shall ensure exploitation of the Virtual Hub to enhance innovation in manufacturing sector of West Region, prominently in automotive sector. In all its actions, West RDA will be able, through its mandate, to enhance collaboration through the 2 Regional Clusters: ICT and Automotive, linking the needs of multi-stakeholder members of the Cluster with virtual solutions providers supported through the Virtual Hub, thus supporting stronger correlations between needs of regional actors and the innovations of digital providers, specifically by exploiting the VR technologies.

- Polytechnic University of Timisoara and Aurel Vlaicu University of Arad shall co-own the continuation of the project by providing access to their technological infrastructure and expertise in organizing co-creation workshops and collaborative technical projects. Also they will provide specific industry technical service within digitalisation projects of regional companies benefiting from the Virtual Hub and funded through ROP 2021-2027, either as third party collaborator or as partners.
- The pilot action will enable SMEs to identify opportunities of collaboration to achieve their digitalisation goals, closing the gap between offer and demand and thus benefit the regional companies in becoming more competitive by exploiting latest technical innovation but also by forming new international business partnerships.

Sustainability of the Action

At the end of the pilot, by end of 2022, West RDA shall initiate a stakeholders meeting to set up the sustainability measures for continuation of the initiative in a cooperative fashion. The scope will be to:

- Analyse the success and impact of the initiative and define a business plan for the initiative together with stakeholders engaged (establishing roles, rights and ownership, budget contributions and cost effectiveness, branding, etc.).
- Define a partnership agreement among regional stakeholders involved in this shared activity, defining clear roles and contribution of each party and responsibilities regarding the co-organization of the annual events dedicated to AR/VR/XR capitalizing on resources and competences of each party
- Identifying new sources of EU financing, and defining new projects to further capitalize on success stories achieved during Action implementation.

Impact on the policy instrument addressed:

Improved governance of the Regional Development Plan 2021-2027

The action directly supports the creation of a continuous platform for SMEs to exchange knowledge and know-how by making use of latest virtual collaboration tools, making international participation in innovative projects faster and more efficient. This will thus contribute to improved competitiveness of SMEs, in alignment with the main objectives of the Regional Development Plan of West Region.

Improved governance of the Smart Specialisation Strategy of West Region 2021-2027 and

In particular, the action shall address the links between ICT and manufacturing sector in order to stimulate the generation of more added value by regional manufacturers on the entire value chain, a core goal of West Region's RIS. Correlating the West RDA's international links, Universities capabilities of technology industrial support and innovation capacities of companies in West Region, the action thus further supports the development of synergies among sectors using latest technologies and resources and instruments that foster collaboration worldwide to enhance the competitiveness of West Region.

Improved governance of the Regional Operational Programme 2021-2027

The action is the result of consultations with stakeholders and addresses the need to support greater capacity to innovate, where the ROP 2021-2027 allocated 30% of it funds to SMEs carrying out innovation projects by adopting new technologies. Through the action, SMEs will access new technologies and partnerships that improve the success and quality of their innovation projects. The international cooperation is a core requirement to ensure connectivity to extended business partnerships, access to latest technologies and support environments that ensure access to know-how and instruments that maximise potential for successful adoption and adapting of digital solutions. Such activities, eligible for funding under the ROP 2021-2027 and thus will enhance the quality of the innovation projects funded by the ROP 2021-2027 and thus contribute to the success of the program implementation.

5.8 IMPACT EXPECTED

The impact estimated in terms of reachout during action implementation is as follows:

- *No of SMEs reached:**100***
- *No of SMEs supported to implement VR solutions for business development: **2***
- *No of young entrepreneurs developing VR solutions for industry: **20** / 2 hackathon*

At the end of Phase 2 the Virtual Hub of West Region is expectedto have an established identity and represent the West Region's gateway to virtual technologies for industry. Not only linking regional providers and adopters, but also multi stkaeholder cooperation at regional level, through encoiragement of participation in intenrational joint actions for further developing, since VR is an emerging technology high customizable and highly dynamic. As such, as awarness regarding VR technologiy usage in industry incrrases in the region, it is expected that at least 2 SMEs will benefit

from support in adopting VR technologies or acess the VR Hub for new business partnerships per year.

5.9 MONITORING ACTIVITIES IN PHASE 2

During Phase 2 of DEVISE project the following monitoring activities are planned:

1. In each semester - record progress on action implementation using the project form (questionnaire developed by project partner SEAMK)
2. At end of each year - application of impact questionnaire, to all stakeholders involved (Tehimpuls (DIH), Universities, ICT Cluster) as well as beneficairies SMEs.

In each phase achivement of estimated inidcators shall be addressed together with succesful steps together with any obstacles and unforseen risks identified and corrected during implementation.

At the end of Phase 2 a separate report shall be made regarding the sucessful adoption of the instrument and its concrete sustainability plan (following decision at stakeholder's level).

Approval of Action Plan

I, Sorin Maxim, as Director General of West Regional Development Agency, responsible with the elaboration and implementation of regional development policy for West Region, agree to implement the Action Plan for the DEVISE project as detailed above. I confirm that I have the required authorisation to do so and that the required authorisation process has been duly carried out.

On behalf of: West Regional Development Agency

Signed: Sorin Maxim Semnat digital de Sorin Maxim Data: 2021.01.21 16:02:50 +02'00'

Name: Sorin Maxim

Position in Organisation: General Director

ANNEXES

ANNEX 1 - LIST OF MAIN ACTIVITIES AND MEETINGS WITH THE LOCAL STAKEHOLDERS

ACTION 1 - Instrument for harvesting digital projects to support the development of future EDIH service

Activity/meeting	Date	Stakeholders involved
Stakeholder meeting	24 April 2019	ICT Cluster (public authorities, Innovation entities, universities, companies - digital providers)
Consultations with companies	14th of May 2019	Local companies (digital providers and adopters)
Stakeholder meeting for DIH brainstorming	1st August 2019	Companies local companies, universities, local authorities (digital providers and adopters)
Staff Exchange at SEAMK University, South Ostrobothnia	1-2 October 2019	West RDA representative, West Region stakeholder company, SEAMK management, representatives of IoT Kompass DIH, of university departments involved in digital services provision, 2 local companies visited
Stakeholder consultation via email	9 - 27 April 2019	Regional ICT Cluster members

ACTION 2 - Development of the Virtual Reality Collaboration Hub

Activity/meeting	Date	Stakeholders involved
Staff Exchange at Laval Mayenne Tehnopole	20-22nd March 2019	West RDA representative with stakeholder company *Laval Mayenne Technopole* representatives, local companies, visit to Laval Virtual Fair
Staff Exchange Timisoara	10-12 December 2019	Visit to local companies and universities, meeting with local companies in brokerage session
Virtual Staff Exchange Laval	15t - 16th September 2020	Representative of *Pays de la Loire region, Laval Mayenne Technopole* representatives, Laval stakeholders, West RDA representative with one stakeholder