

HARVESTING AGENDA ON CAMI4.0 FOR TREND & INNOVATION NETWORKS / POLICY INTELLIGENCE DASHBOARD

D.T2.1.2 - A report and selection grid for
best-in-class use of identified outputs and
results in WPT1

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08 2020





Document Control

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| Dissemination Level | | |
|----------------------------|---|----|
| PU | Public | |
| PP | Restricted to other programme participants | |
| RE | Restricted to a group specified by the consortium | |
| CO | Confidential, only for members of the consortium | CO |

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1. Executive Summary

1.1. Project Overview

CEUP 2030 aims to generate stable innovation networks which foster better understanding on Central Europe Advanced Manufacturing and Industry 4.0 (“CAMI4.0”) topics, to generate improved knowledge resource exchange on these technologies leading to an upgraded framework for policy-making and implementation.

Ultimately CEUP 2030 creates and tests a common method to promote improved knowledge dissemination to policy-making stakeholders using a collaborative exchange framework based in physical and digital-methods. These methods and the technology show-cases disseminated within these method structures are harvested from existing, high-quality innovation know-how in the CE area.

The project focuses on:

- Identifying the highest-quality innovation know-how in the CE Area, on the CAMI4.0 Topics.
- Enhancing skills capabilities and knowledge of people in charge of local, regional, and (trans)national RTI Policies, associated to the CAMI4.0 Topics.
- Creating a sustainable structure for awareness-raising and shared-sustainable RTI knowledge resource use to enhance policy decision support.
- Anticipating and fast-tracking policy / strategy policy pilot actions to promote a joint RIS3 for CAMI4.0 Excellence in CE/EU.

1.2. Work Package and Activity Overview

The overall objective of WPT2 is to upgrade and establish strong partnerships around the 4 main CAMI4.0 topics in order to raise awareness and ensure a shared sustainable responsibility on using RTI knowledge resources in CE/EU for enhancing policy decision support. This will be pursued by establishing sustainable structures of stakeholders called Trend Innovation Networks (TIN) as well as practicable, efficient policy tools, the so-called Policy Intelligence Dashboard (PID). Both those instruments will be exploited by the partners to select and channel appropriate decision-relevant information out of the daily big data cloud, assess it and provide understandable knowledge in a compact and high-quality format.

Practically speaking, in each partner region a TIN will be established and it will work on future foresight, technology trend monitoring and scouting. These activities will also feed the PID with the gained data to produce Tech Radars and other insights able to support decision making.

The specific activity which is of relevance for this document is Activity A.T2.1, which covers the preparation of the Harvesting activity which all PPs must participate in, to choose the outputs and results of exceptional CE and EU projects to inspire and put the basis for the design of the WP’s Key Outputs (Trend and Innovation Networks and Policy Intelligence Dashboard)

Specifically, the practical activities which are supported in this document are:

- the appropriate selection, adaption and fine-tuning of proven tools, instruments and methodologies, so called “Harvesting”, during A.T2.1, which will trigger the generation of WPT2 Outputs (i.e. TIN - Trend and Innovation Networks and PID - Policy Intelligence Dashboard)

1.3. Scope of Document & Deliverable Summary

This document contains the contributions from all PP regions on research, results & policy instruments from complementary initiatives. Based on its previous experience, each partner delivered inputs on good practices and models to be further developed in WP2 for the



implementation of TINs and PID. In particular, for WPT2 harvesting actions, partners were required to deliver, at least, 1 Methodology for Trend and Innovation Networks set-up, 1 Good practice for TINs workshop orchestration and 1 Tool for Policy Intelligence Dashboard design.

| Name of Harvesting Aspect | Additional Comments | PP's Individual Obligation | CEUP 2030's Combined Obligation |
|--|--|----------------------------|---------------------------------|
| Methodology for Trend and Innovation Networks set-up | Should help inspire the set-up and management of the Trend and Innovation Networks considering both the regional and interregional interactions. | 1 | 10 |
| Good practice for TINs workshop orchestration | Should help inspire interactive dialogue meetings methods for Trend and Innovation Network | 1 | 10 |
| Tool for Policy Intelligence Dashboard design | Should help inspire the design and development of the Policy Intelligence Dashboard. | 1 | 10 |
| Total Number of Inputs | | 3 | 30 |

Figure 1 Harvesting Agenda, Overview of Inputs per Topic and per partner

1.4. Audience

This document is directed to all project partnership members. All PPs will be asked to review their results portfolio and provide input to the CEUP 2030 WPT2 Harvesting Agenda, according to the templates shared in D.T2.1.1. Additionally, it could provide external audience a complete overview of the good practices analysed to be exploited and upgraded for CEUP2030 objectives.

1.5. Change Control Procedure & Structure

The Deliverable Responsible: AFIL - Associazione Fabbrica Intelligente Lombardia (AFIL/PP6), created this guidance document which is hosted on the Project's common repository in the appropriately named deliverable folder ([D.T2.1.2 Harvesting Agenda on CAMI4.0 for Trend & Inno Networks / Policy Intelligence Dashboard](#)).

The document is under project deliverable change control protocols whereby partners are requested to give feedback on the draft version according to the timing proposed in the final section of this document. Feedback will be incorporated and the final version will be issued by AFIL.

At any time, partners believe a project methodology should change, the request should be brought to the Deliverable Responsible and the Work Package Leader (AFIL/PP6) to consolidate feedback from other partners, and then further integrate and disseminate the final agreed changes. A new version of the document should be created and recorded in the document's "Document History" table.



2. Abbreviations

| Abbreviation | Explanation |
|--------------|---|
| AF | Application Form |
| ASP | Associated Partner (i.e. Strategic Partner) |
| CAMI4.0 | Central European Advance Manufacturing and Industry 4.0 |
| TIN | Trend and Innovation Network |
| PID | Policy Intelligence Dashboard |
| PLL | Policy Learning Lab |
| PP | Project Partner |
| RIS3 | Regional Innovation Strategy for Smart Specialisation |
| S3 | Smart Specialisation Strategy |

3. Introduction

The purpose of the **harvesting agenda on CAMI4.0 for Trend & Innovation Networks / Policy Intelligence Dashboard** is to have a 1 Selection Grid for evidence-based proven trend & inno nets & tools for data screening/assessing to push high level capitalisation & upgrading for TINs & the PID right from the start; use/develop further the quick step-in modus & IT visualisation of T1. This document will serve as input for the other activities envisaged in WPT2, namely *A.T2.2 Trend & Innovation Networks on CAMI4.0*, *AT2.3 Establish PID to translate TINs work into future policy & strategy building* and *A.T2.4 WPT2 Impact Controlling & Evaluation of TINs & PID to prove Strategy & Policy relevance*.

4. Methodology

This section provides insight on an agreed methodology which partners followed to deliver inputs for the Deliverable and thus for the design of WPT2 activities. The Methodology process is also described in D.T2.1.1

- Definition and discussion of guidance for harvesting activity coordinated by AFIL
- Consolidation and sharing of the templates for **Methodology for Trend and Innovation Networks set-up, Good practices for TINs workshop orchestration and Tools for Policy Intelligence Dashboard design**
- Creation of one example for each template by WP Leader AFIL
- Check of collected examples from project partners by AFIL and request of eventual integration and/or revision



- Elaboration of the deliverable including partners' inputs
- Sending the DRAFT to the PP, collecting feedback completing the deliverables
- Consolidation of the FINAL version of the deliverable for approval.

7.1. Template 1: Result Harvest for WPT2 Methodology for Trend and Innovation Networks set-up

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|---|---|
| Name of the PP | Choose your PP Name |
| What is the name of the harvested result (aka the output/activity name from the project)? | [Free Text Response] |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | [Free Text Response] |
| A short description of the result: [Free Text Response - limit to 2000 characters] | |
| A short description how it worked: [Free Text Response - limit to 2000 characters] | |
| A short description of the key lesson learnt: [Free Text Response - limit to 2000 characters] | |
| A short description of how the result can be "upgraded" for CEUP 2030 method: [Free Text Response - limit to 2000 characters] | |

7.2. Template 2: Result Harvest for WPT2 Good practices for TINs workshop orchestration

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|---|---|
| Name of the PP | Choose your PP Name |
| What is the name of the harvested result (aka the output/activity name from the project)? | [Free Text Response] |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | [Free Text Response] |
| A short description of the result: [Free Text Response - limit to 2000 characters] | |
| A short description how it worked: [Free Text Response - limit to 2000 characters] | |
| A short description of the key lesson learnt: [Free Text Response - limit to 2000 characters] | |
| A short description of how the result can be "upgraded" for CEUP 2030 method: [Free Text Response - limit to 2000 characters] | |

7.3. Template 3: Result Harvest for WPT2 on Tools for Policy Intelligence Dashboard design

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|---|---|
| Name of the PP | Choose your PP Name |
| What is the name of the harvested result (aka the output/activity name from the project)? | [Free Text Response] |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | [Free Text Response] |
| A short description of the result: [Free Text Response - limit to 2000 characters] | |
| A short description how it worked: [Free Text Response - limit to 2000 characters] | |
| A short description of the key lesson learnt: [Free Text Response - limit to 2000 characters] | |
| A short description of how the result can be "upgraded" for CEUP 2030 method: [Free Text Response - limit to 2000 characters] | |

Figure 2. Templates for Harvesting Agenda on CAMI4.0 Trend and Innovation Networks/ Policy Intelligence Dashboard

5. Harvesting Agenda

The Harvesting Agenda has three input sets:

- **Input 1 = Methodology for Trend and Innovation Networks set-up**, or methods and experience which can create a fast start on Trend and Innovation Networks set-up and management.
- **Input 2 = Good practices for TINs workshop orchestration** that can contribute to the design and definition of a shared methodology for TINs meetings organisation and orchestration
- **Input 3= Tools for Policy Intelligence Dashboard design**, or platforms or models that can be adopted or upgraded to deliver CEUP2030 Policy Intelligence Dashboard



| | | | | | | |
|---|---|---|---|---|--|---|
| Partner | 1_KRAKOW TECHNOLOGY PARK LTD (KPT) | 2_PROFACTOR GmbH (PRO) | 3_Association Industry 4.0 Austria (PIA) | 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU) | 5_Karlsruhe Institute of Technology (KIT) | 6_Lombardy Intelligent Factory Association (AFIL) |
| Methodologies for TINs set-up | | | | | | |
| Title of good practices | KACE WORKING GROUP | BIZ UA H2020 ERFA H2020 | Haus der Digitalisierung | Smart ³ Ideenmarktplatz (marketplace for ideas) | Synergic Networking Activities | GREENOMED Platform |
| Harvested Project/ Programme | 3DCENTRAL INTERREG CE | BIZ UP Initiative | DIHELP Programme | BMBF - Zwanzig20-Programme German Ministry for Education and Research | SYNERGY INTERREG CE | GREENOMED INTERREG MED |
| Good practices for TINs workshop orchestration | | | | | | |
| Title of good practices | SISCODE CO-CREATION JOURNEY WORKSHOPS | GMAR Workshop Series | AI Focus of Platform Industry 4.0 Austria | Strategy Workshops together with "Go-Cluster" Programme | Synergy Regional and International Workshops | Technology and Innovation Camp (TIC) |
| Harvested Project/ Programme | | Funded by Austrian Ministry | No connected programme | Clusterplattform Germany | SYNERGY INTERREG CE | 3DCENTRAL INTERREG CE |
| Tools /Platform for PID | | | | | | |
| Title of good practices | DIHnet.eu platform | EFFRA – European European Factories of the Future Research Association, Innovation Portal | Green Tech Radar | Technologieplattform (technology platform) | Synergy Profiling Tool | 3DC-HyperTree |
| Harvested Project/ Programme | S3HUBSINCE INTERREG CE | PPP | No connected programme | BMBF - Zwanzig20-Programme German Ministry for Education and Research | SYNERGY INTERREG CE | 3DCENTRAL INTERREG CE |
| Partner | 7_SIIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT) | 8_Pomurje Technology Park (PTP) | | 9_Pannon Business Network Association (PBN) | 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG) | |
| Methodologies for TINs set-up | | | | | | |
| Title of good practices | PLUG-IN platform | KACE WORKING GROUP | DIH2 Network | DIH network (DIHNET.EU) – S3HubsinCE Community | | |
| Harvested Project/ Programme | MIUR | 3DCENTRAL INTERREG CE | H2020 | S3HUBSINCE INTERREG CE | | |
| Good practices for TINs workshop orchestration | | | | | | |
| Title of good practices | ENTRUST Energy System Transition Through Stakeholder Activation, Education and Skills Development | Tech & Innovation Camps (TIC) | Robotdays (DIH2) | Local Robot Days – DIH2 project | Smart Factory: Digital Croatia | Local Capacity building seminars for intermediaries |
| Harvested Project/ Programme | H2020 | 3DCENTRAL INTERREG CE | H2020 | DIH2 H2020 | SMART FACTORY HUB Interreg CE | ODEON, Interreg MED |
| Tools /Platform for PID | | | | | | |
| Title of good practices | Cloudmanufacturing marketplace for digital engineering | Hypertree | RAMP (DIH2) | Mapping Tool P-tech | CRM System – 4STEPS project | Mapping Tool |
| Harvested Project/ Programme | H2020 | 3DCENTRAL INTERREG CE | DIH2 (H2020) | Smart Factory Hub Danube Transnational Programme | 4STEPS (Interreg Central Europe Program) | SMART FACTORY HUB Interreg CE |

Figure 3 Overview Input of Harvesting Agenda



5.1. Trend and Innovation Networks

Definition: The Trend & Innovation Networks are **communities of stakeholders established/anchored around the 4 main topics of CAMI4.0: Production Systems, Automation & Robotics, Smart & New Materials and Artificial Intelligence** (Refer to D.T1.1.1 and D.T1.1.2 for detailed description of CAMI4.0 topics). Each PP will invite representatives of the triple-helix who will discuss and share trend and innovation foresights on the targeted topics, contributing to the four CEUP2030 TINs. Those communities will build on the stakeholders involved in the PLL in WPT1 and will be enriched with key experts identified by each partner. Although TINs will be arranged as a digital community, 40 regional meetings will be organised fostering interregional connection and with the aim to build on the inputs collected during PLL to generate relevant inputs for a future robust policy implementation, in the form of technical reports on technology trends for WPT3. Accordingly, PPs will organise one workshop per each CAMI4.0 topic during the period from November 2020 to November 2021.

In the following figures, a summary of the harvesting results is reported to complete the overview provided in Figure 3, highlighting for each good practices the relevance for CEUP2030 activities and how each result could be upgraded.

| Trend and Innovation Networks set-up | |
|---|---|
| 1_KRAKOW TECHNOLOGY PARK LTD (KPT) | |
| KACE WORKING GROUP (3DCentral project - Interreg CE) | CAMI Sub-topics might be identified following the KACE two-steps methodology: design & development. Once defined topics, KACE implementation pillars might be considered: <i>1) Leader, 2) Core Group, 3) Transferable Knowledge, 4) Opportunities for Transfer, 5) Opportunities for Transfer, 6) Awareness of future potential</i> - TINs can be organized according to the following principles: 1) to meet periodically on the basis of group’s priorities or opportunities for projects, 2) to generate an open, stable community of companies, RTOs, policy makers, universities and associations, 3) to create an open structure to foster the innovation network 4) to promote the development of project ideas. |
| 2_PROFACTOR GmbH (PRO) | |
| BIZ UA H2020 ERFA H2020 | Having a limited number of participants, all experts in the targeted field, allows to organise successful meetings with interesting and high-level key speakers (from Industry and/or Commission). Topics must be also come from the participants and from the Host. |
| 3_Association Industry 4.0 Austria (PIA) | |
| Haus der Digitalisierung | <ul style="list-style-type: none"> • Mixture of a top down and a bottom up approach when setting TINs up • TINs should ideally be sustainable with a long-term perspective, so they would ideally be set up with a 2-3 years plan in mind. • Regional “knots” of competences for creating content/for gathering information • Regular online meetings could serve as a practical solution for connecting regional stakeholders. |
| 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU) | |



| | |
|--|---|
| Smart³ Ideenmarktplatz (marketplace for ideas) | The marketplace was set up to promote and connected ideas that have not found their way into “formal” research project. In the same way during CEUP2030 an ideas and/or exchange marketplace can be set up for CAMI 4.0 topics and connecting Central European partners. |
| 5_Karlsruhe Institute of Technology (KIT) | |
| Synergic Networking Activities (SYNERGY - Interreg CE) | For the purposes of CEUP 2030 building a competence map, on the existing partnership is already an underway activity. It could prove useful to create a similar competence map for associated partners of the CEUP 2030 partnership to help identify prospective partners or organisation for the network building activities in each region. This could help build a large and extensive network. |
| 6_Lombardy Intelligent Factory Association (AFIL) | |
| GREENOMED Platform (GREENOMED - Interreg MED) | <ul style="list-style-type: none"> • Creation of a shared database • Exploitation of existing templates for the creation of the database • Initial list of potential stakeholders • Integration of the list during project lifetime |
| 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT) | |
| PLUG-IN platform (MIUR) | The methodology applied for data collection in the mobility, transport & logistics application domain can be applied to CAMI topics too. In particular, information were collected using multiple sources, such as professional users, special instruments, sensors... |
| 8_Pomurje Technology Park (PTP) | |
| KACE WORKING GROUP (3DCENTRAL - Interreg CE) | <ul style="list-style-type: none"> • KACE system, with knowledge axis, good practices, solution providers and experts can be replicated following the multi-step approach. • Exploitation of the set of tools identified within 3DCentral project |
| DIH2 Network (DIH2 - H2020) | <ul style="list-style-type: none"> • Cross-fertilization or exchange of experience potential as both projects are still in progress. • Self-sustainability orientation |
| 9_Pannon Business Network Association (PBN) | |
| DIH network (DIHNET.EU) (S3HubsinCE - Interreg CE) | Establishing a community on DIHNET.EU - which is controlled by the EU - can be very fruitful , it can attract the attention of other communities as well and the platform can give place for a wide range of dissemination. The experiences of the S3HubsinCE community can help to develop the TIN networks in CEUP: both the “technical” implementation and the methodology of building a community can be exploited. |
| 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG) | |

Figure 4 Overview on “Take-aways” for TINs set-up

| Trend and Innovation Networks orchestration | |
|--|--|
| 1_KRAKOW TECHNOLOGY PARK LTD (KPT) | |
| SISCODE CO-CREATION JOURNEY WORKSHOPS | <ul style="list-style-type: none"> • Bottom up approach • Equal role in the process and open access: it is necessary to identify wide target group and enable them participation in the process at the same level, no matter which stakeholder they are representing. • Neutral facilitator |



| | |
|--|---|
| | <ul style="list-style-type: none"> • Tailored tools and co-design workshops • Flexibility • Design thinking and living lab methodology can be introduced to create a joint understanding and vision at first, then for developing the relevant policy and financial instruments; introducing Public Engagement (PE) and Responsible Research and Innovation (RRI) approach into discussion; organizing thematic roundtables, destroying sectarianized approach to STI policy making; introducing design methodologies and tools can inspire policy makers for developing perspective conditions for SMEs; emerging operationalization of CAMI4.0 introduction from vision to new policies and tailored instruments implementation in future EU finance programming." |
| 2_PROFACTOR GmbH (PRO) | |
| GMAR Workshop Series | The success of the GMAR Robotik Talks is the variation of different formats, so that periodically every customer group is addressed. Important is periodic marketing, thorough preparation and a lot of advertising. The results must also be prepared and reported back to the participants. |
| 3_Association Industry 4.0 Austria (PIA) | |
| AI Focus of Platform Industry 4.0 Austria | <ul style="list-style-type: none"> • Focus on specific content, not general, to attract stakeholders interest. • Assume a neutral perspective on topics • Include different perspectives to involve different stakeholders having different interest. |
| 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU) | |
| Strategy Workshops together with "Go-Cluster" Programme | When setting up the TINs and when orchestrating workshops for the stakeholders involved, the following lessons learnt should be considered: <ul style="list-style-type: none"> - Gather data - Workshop - Repeat - Neutral facilitator |
| 5_Karlsruhe Institute of Technology (KIT) | |
| Synergy Regional and International Workshops | <ul style="list-style-type: none"> • Interactive workshops are a proven means to directly involve relevant stakeholders into a projects specific research questions; • The concept of design thinking as a new co-creation process proved as an incentive for active participation of stakeholders; • The participation of external experts is an effective way for enriching the content of the workshops, as well as attractive for more stakeholders; • The iterative nature of the Synergy workshops (regional followed by international) allowed the initial workshops to inspire and improve the quality of the international workshops." |
| 6_Lombardy Intelligent Factory Association (AFIL) | |
| Technology and Innovation Camp (TIC) | <ul style="list-style-type: none"> • Consolidate a share a common agenda structure for TIN workshop • Focus on matching session to foster new project ideas in specific CAMI4.0 topics/sub-topics |
| 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT) | |
| ENTRUST Energy System Transition Through Stakeholder Activation, Education and Skills Development | <ul style="list-style-type: none"> • direct contact with the participants • collect the feedback in person/verbally, in order to be sure to dissipate doubts |



| | |
|---|--|
| 8_Pomurje Technology Park (PTP) | |
| Tech & Innovation Camps (TIC) | <ul style="list-style-type: none"> • Exchange of best practice and knowledge and demonstrate the potential of cooperation among large interregional networks. • Partners presentations and project ideas matching • Presentation of solution providers • Panel discussion • Showcasing the solutions • Opportunity for direct B2B meetings Matching - Workshop" |
| Robotdays (DIH2) | <ul style="list-style-type: none"> • Latest technologies showcase from expert also to give insights to policymakers that might consider introduction of this into industry by offering supportive measurements for SMEs; • Policy level stakeholders presenting their vision and obtain bottom-up feedbacks; • not only solutions but also tools and platforms are given to policy level stakeholders to test the appropriateness for their purposes. • invite SMEs to learn more about the thematic and find good practices." |
| 9_Pannon Business Network Association (PBN) | |
| Local Robot Days - DIH2 project | <ul style="list-style-type: none"> • Interactive workshops combined with physical demonstrations on latest technologies and solutions. • Establishment of personal connections between the DIHs and the audience in order to know, where and how to obtain more information. |
| 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG) | |
| Smart Factory: Digital Croatia | Panel discussion or similar knowledge exchanging events with actors from the triple-helix learning environment are necessary to help the dialogue between the actors and establish a common ground of understanding for strategic technology-oriented policy-making |
| Local Capacity building seminars for intermediaries | That kind of workshop involving several actors from the quadruple-helix and providing different perspectives can be used to raise awareness and importance, but also to exchange knowledge on the CAMI 4.0. topics. In addition, something similar to HACKATON can be organized too. |

Figure 5. Overview on “Take-aways” for TINs orchestration

5.2. Policy Intelligence Dashboard

Definition: The Policy Intelligence Dashboard monitors, fine-tunes and streamlines policy relevant data on technology trends for a fast-track assessment based on a solid data gathering and evaluation. Practically speaking, in each partner region a TIN will be established, and it will work on future foresight, technology trend monitoring and scouting in all the CAMI4.0 topics. These activities will also feed the PID with the gained data to produce Tech Radars and other insights able to support decision making.

In particular, the Policy Intelligence Dashboard [PID] is crucial to select & channel appropriate decision-relevant information out of the daily big data and it can therefore increase the innovation capacity of a region if properly exploited.

Finally, PID will also set the basis for the joint policy exploitation with pilots as well as a future planning for 2021-2027 in T3 and beyond the project’s end.

In the following figures, a summary of the harvesting results is reported to complete the overview provided in Figure 3, highlighting for each good practices the relevance for CEUP2030 activities and how each result could be upgraded.



| Policy Intelligence Dashboard design | |
|--|---|
| 1_KRAKOW TECHNOLOGY PARK LTD (KPT) | |
| DIHnet.eu platform | <ul style="list-style-type: none"> • improving competences and technical skills among listed above groups of stakeholders, • raising the competences and knowledge of those responsible for regional and supra-regional research, technology and innovation policies, • building long-term coherent strategies to support the development of new technologies under RIS3 policies creating a data base of good practices and ideas and concepts for joint strategy and action plans for the future initiatives of CE regions, • establishing and strengthening links between DIHs representing different regions and relevant policy makers, • identification of possibilities of implementing joint concepts and tests, • cooperating on elaboration of common projects on the CE level related to CAMI4.0, • anticipating trends and potential technological risks in order to develop effective support mechanisms. |
| 2_PROFACTOR GmbH (PRO) | |
| EFFRA – European European Factories of the Future Research Association, Innovation Portal | The Innovation portal uses the results of EU projects (FOF...) to communicate to its member organizations: The message for the members is that they have an access to project results and topics and can follow industry developments or trends elaborated in funded projects. |
| 3_Association Industry 4.0 Austria (PIA) | |
| Green Tech Radar | GTR approach to develop reviews can be seen as a “Minimum Viable Product” for the PIDs, combining i) expert interviews and ii) a technology analysis, leveraging for instance on software tools to scout trends, such as “Mapegy” (www.mapegy.com) and “Techmeter” (www.techmeter.at) tools. Mapegy uses a worldwide database with different sources and offers graphical analysis and individual innovation news. Techmeter looks at patents and has a more scientific view on different technologies |
| 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU) | |
| Technologieplattform | The Technologieplattform can enrich the input of the CEUP2030 project. It can be used as a data base /technology radar for the TINs, especially by the TIN on “Smart and Advanced Materials”. |
| 5_Karlsruhe Institute of Technology (KIT) | |
| Synergy Profiling Tool | Exploitation of the tool to foster the creation of new partnerships |
| 6_Lombardy Intelligent Factory Association (AFIL) | |
| 3DC-HyperTree | This instrument can be exploited to derive guidelines for policy makers focusing on the CAMI4.0 topics and enriching the database available with inputs coming form the TINs networks that will be established in CEUP2030 |
| 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT) | |
| Cloudifactory marketplace for digital engineering | This instrument can be exploited to match demand and offer in the manufacturing field and enriching the database available with inputs coming from the TINs networks that will be established in CEUP2030. |



| | |
|---|--|
| 8_Pomurje Technology Park (PTP) | |
| Hypertree | <ul style="list-style-type: none"> • showcase different solution providers. • helping SMEs, that are looking for concrete and tested solutions on the market, identifying best practices and address solutions providers |
| RAMP (DIH2) | Very meticulously planned approach how to establish/set-up the tool, so future tools by CEUP2030 could use this approach or event to consider how to link with this and similar platforms to have all topics access from one tool or at least an entry point with same front-end. RAMP tool itself could be useful to cover at least one of the CAMI topics (Robotics & Automation). |
| Mapping Tool P-tech | This mapping tool cover the supply and demand, showcasing different technologies and solutions from different regions and supporting SMEs to find their perfect match. |
| 9_Pannon Business Network Association (PBN) | |
| CRM System - 4STEPS project | CRM was useful to monitor the results. This instrument can be exploited to gain & show the interests of the involved triple-helix stakeholders, and to connect them with the main topics /results of CEUP2030. |
| 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG) | |
| Mapping Tool | The database should be filled regularly and updated so that interested stakeholders can receive information that they are searching for. The platform can be expanded with data from other countries that are not currently involved |

Figure 6. Overview on "Take-aways" for PID design



6. Conclusions & Next Steps

The purpose of this document has been to provide a Selection Grid for the exploitation of results/outputs to support the start of TINs and PID.

30 examples/Best practices have been collected and are available for the next steps. The analysis based on the Quick Step in Mode (*Figure 7, Figure 8 and Figure 9*) shows that majority of the results have been harvested from Interreg projects (CE, MED, Danube Region, Alpine Space) and few of them from H2020 projects or national programmes. The results harvested have also been evaluated according to their relevance for different stakeholders: policy (policy makers); R&I (research and development), Ind (industry) and Int (intermediaries), where 1=strong relevance 2=Medium relevance and 3=only information.

| TIN set-up | Harvested result | Project (Type) | Description | Target group | | | | |
|--|---|--|---|--------------|-----|-----|-------|-------|
| | | | | Policy | R&I | Ind | Inter | Other |
| KACE WORKING GROUP | Modular system for the management of knowledge, cooperation | INTERREG CE | The WG was identified starting from the inputs delivered by each partner and were open to the inclusion of new stakeholders during the activities development reaching a critical mass for each target group | 2 | 1 | 1 | 1 | 2 |
| Haus der Digitalisierung | Online Platform | DIHELP Programme | It is the flagship initiative of the Austrian region Lower Austria. It offers an online platform providing different tools (i.e. Regional news regarding digitalization, Events, awareness on "digitalization terms", overview of universities and regional research centres active on the topic, crowdfunding, matchmaking...) | 2 | 2 | 2 | 2 | 2 |
| Smart³ Ideenmarktplatz (marketplace for ideas) | Ideas Marketplace | BMBF - Zwanzig20-Programme German Ministry for Education and Research | The Marketplace supports project members in finding solutions or applications for their solutions / technologies for existing problems. It was created to allow members and non-members a space to exchange ideas outside formal projects or consortias. | 2 | 1 | 1 | 2 | 2 |
| Synergic Networking Activities | Methodology and tools for networks establishment | SYNERGY INTERREG CE | Synergy focuses on the creation of 3 Synergic Networks following a well-defined methodology: mapping & benchmarking activity of PP projects, stakeholder profiling approach to identify and collect information on thematic relevant projects and innovation actors. The compiled information in the SYNERGY database formed the basis to identify and group relevant stakeholders within the 3 KPAs which in turn formed the basis for the Synergic KPA-related networks. Within the SYNPRO tool, the competence map facilitates a visual overview on the relevant networks members locations and competences across Europe. | 1 | 1 | 1 | 1 | 1 |
| GREENOMED Platform | Methodology and tools for networks establishment | GREENOMED INTERREG MED | Database of stakeholders generated by partners involved in GREENOMED project that supported the creation of communities around topics of interest in the MED area. Thanks to a structured approach and shared tools it was possible for all the regions involved to set up and then update the communities in a coordinated way. | 1 | 1 | 1 | 1 | 1 |
| PLUG-IN platform | Methodology for data collection | MIUR | PLUG-IN platform collects and integrate traffic data from heterogeneous sources of information including the systems for the management of company fleets, personal mobile devices, innovative sensors, and railway signaling systems. | 3 | 3 | 3 | 3 | 3 |
| DIH2 Network | Established network | H2020 | A network of 26 DIHs from 26 EU countries, cooperating to support the development of novel robotics-based solutions for Agile Production, automating processes that involve different actors in the value chain. It will provide the tools and procedures to start fruitful cross-border cooperation, delivering a common methodology to identify top innovators and a common service portfolio. | 2 | 1 | 1 | 1 | 2 |
| DIH network (DIHNET.EU) – S3HubsinCE Community | EU platform | S3HUBSINCE INTERREG CE | DIHNET.eu is a digital platform which supports Digital Innovation Hub Networks across Europe. It boosts the collaboration between DIHs, DIH networks and DIH related stakeholders. S3HubsinCE partnership created their own community on the platform with the participation of national DIHs and stakeholders. Their goal is to provide marketing information about DIH's events and developed services to each other and to the registered stakeholders. | 2 | 2 | 2 | 1 | 1 |
| BIZ UA H2020 ERFA H2020 | Established network | Biz Up Initiative | The challenges in the EU's Horizon 2020 research framework programme are diverse and often recurring. In three rounds of exchange of experience over the course of this year, participants have therefore discussed possible solutions and built up practical knowledge. Valuable input on the contents defined jointly in advance was provided not only by the Business Upper Austria funding experts present, but also by impulse lectures by external speakers. | 2 | 2 | 2 | 2 | 2 |

Figure 7. Quick step in modus for Stakeholder for TINs set-up and for pre-selection of TINs Best practice examples



| TINs orchestration | Harvested result | Project (Type) | Description | Target group | | | | |
|---|-----------------------------|-------------------------------|--|--------------|-----|-----|-------|-------|
| | | | | Policy | R&I | Ind | Inter | Other |
| SISCODE CO-CREATION JOURNEY WORKSHOPS | Event/workshop | n/a | The project aims to introduce methodology and tools, as design thinking and living lab methodology to the planning and responsible management of research and innovation. In particular, experimentations are conducted in 10 co-creation labs across Europe. Living labs with wide involvement of stakeholders groups implement various concepts of co-creation and practical solutions answering specific challenges of local communities. The scope of experimentation covers different regional challenges. The co-creation journey is divided into 4 phases: phase (1) analyse the context; phase (2) reframe the problem; phase (3) envision alternatives; phase (4) develop and prototype. In parallel, two continuous activities have been identified and run to better support each journey: understanding, scanning and analysis with the local context, and connecting stakeholders networks | 1 | 1 | 1 | 1 | 1 |
| AI Focus of Platform Industry 4.0 Austria | Community management/events | n/a | PIA's work to integrate AI into the organization focuses on expert groups dealing with different topics connected to Industry 4.0. The following activities were/are organized in PIA's different expert groups: A) Interviews with works council and heads of production in order to gather information about the success factors and issues connected to the establishment of AI in production companies (expert group "Mensch in der digitalen Fabrik", project "AI4Good") B) Technology profiles and insights through experts about certain technologies connected to AI (expert group "Neue Geschäftsmodelle") C) Deep dive workshops on specific production developments enabled through AI (expert group "Forschung, Entwicklung und Innovation") | 2 | 1 | 1 | 1 | 2 |
| Strategy Workshops together with "Go-Cluster" Programme | Event/workshop | Clusterplattform Germany | Strategy Workshops for networking activities and best practice exchange with the most powerful innovation clusters from Germany and Europe. They are externally monitored by VDI/E and are divided in three steps: 1) Step – comprehensive survey 2) Establishing and benchmarking the Status Quo 3) Comprehensive workshop together with VDI/E. | 2 | 1 | 1 | 1 | 2 |
| Synergy Regional and International Workshops | Event/workshop | SYNERGY INTERREG CE | Regional and transregional workshops on 'Simulated Crowd Sharing' (to Transform the identified Synergic consortia into active Synergic Networks) and 'Design thinking idea meetings' (To identify and finalise the needs and requirements of the Synergy stakeholders for the creation of the Synergy Crowd Innovation Platform). Concrete concepts for both workshops were drawn up by the Synergy PPs with clear goals and output requirements from the workshops drawn up. PP has freedom to design the workshops based on existing preferences, with general feedback form for evaluation. | 2 | 1 | 1 | 1 | 2 |
| Technology and Innovation Camp (TIC) | Event/workshop | 3DCENTRAL INTERREG CE | Tech and Inno Camps (TIC) were events dedicated for mutual learning, experience exchange and enhancement of know-how in the 11 KACE topics. The agenda was structured as follow: - Partners introduction and project ideas matching; - Presentation of solution providers. - Panel discussion relevant topics - Opportunity for direct B2B meetings. - Matching – Workshop: development of project ideas (Project Partners, KITTS, other companies and institutions) | 1 | 1 | 1 | 1 | 1 |
| ENTRUST Energy System Transition Through Stakeholder Activation, Education and Skills Development | Community management/events | H2020 | The project aimed to improve understanding of how people's energy-related behaviour is shaped by technological systems and socio-demographics. It developed community engagement tools to stimulate dialogue and break down barriers to communities changing their behaviour and adopting new technologies. | 2 | 2 | 2 | 2 | 2 |
| Robotdays (DIH2) | Event/workshop | DIH2 H2020 | Events aimed at raising awareness about the Network services to Manufacturing SMEs all around Europe to identify crossborder Agility Challenges at EU Level. It addresses experts in robotics and SMEs with needs for such solutions also national and transnational policy level stakeholders are addressed to align potential joint "road-mapping". technical workshops organized by the DIHs for their local communities. The organizers introduce practical cases, showcases, good practices, available technologies to the audience and demonstrators are also presented on these events. Networking and promotion of DIH2 project activities can also take place on Local Robot Days. Also physical demonstration of robotic solutions could be presented, were very popular among the target groups. | 2 | 1 | 1 | 1 | 2 |
| Smart Factory: Digital Croatia | Event/workshop | SMART FACTORY HUB Interreg CE | Event to raise awareness of the public to the importance of Industry 4.0 and existing smart solutions in the industry. | 1 | 1 | 1 | 1 | 1 |
| Local Capacity building seminars for intermediaries | Event/workshop | ODEON, Interreg MED | Training activities addressed to the quadruple helix. HAMAG-BICRO has organized Open Data Day which covered one thematic workshop. The objective was to have a discussion with the present shareholders. This big event covered many areas of open data usage, social, economic, political, business, etc. All relevant stakeholders from quadruple helix were present and the aim of the seminar was to transfer knowledge and technologies on the Data Economy, and also to introduce the opportunities from the use/re-use of OD/LOD. | 1 | 1 | 1 | 1 | 1 |
| GMAR Workshop Series | Event/workshop | Funded by Austrian Ministry | The GMAR Robotic Events consist of the GMAR Robotic Talks, the Robotic Talks reloaded, the ARW (Austrian Robotic Workshop) and some "Social events". The following details about the events • Robotic Talks: Take place in 1 -2 month intervals. They consist of 3 -5 scientific or industrial presentations as well as embedded news from clusters or the public sector. Invitations are sent out centrally via GMAR and through staff channels. Preference is given to physical meetings, but due to the CORONA crisis these events are increasingly taking place online. • Robotic Taks Reloaded: Usually takes place at the end of the year and consists of invited Key Talks (The Best of Robotic Talks) • ARW (Austrian Robotics Workshop): This takes place once a year and is usually organised by a scientific organisation. The Austrian Robotics Workshop aims to bring together researchers, experts and practitioners working on various robotics topics to discuss current developments and challenges in robotics and its applications. The programme includes four invited talks, oral and poster presentations of reviewed contributions in plenum and parallel sessions. This will provide opportunities to share ideas and discuss technical details. • „Social events“: These take place before larger talks, before the ARW or as independent events within the framework of important events such as the Forum Alpach (https://www.alpbach.org/en/) (Robotic Ribs, Robotc Punch) | 2 | 1 | 1 | 1 | 2 |

Figure 8. Quick step in modus for Stakeholder for TINs orchestration and for pre-selection of TINs Best practice examples



| PID design | Harvested result | Project (Type) | Description | Target group | | | | |
|--|------------------|--|---|--------------|-----|-----|-------|-------|
| | | | | Policy | R&I | Ind | Inter | Other |
| DIHnet.eu platform | Online Community | S3HUBSINCE INTERREG CE | The DIHNET.EU online community https://dihnet-community-1.fundingbox.com/ is part of the DIHNET.EU project activities. The online infrastructure of it is powered by FundingBox, partner of the project. DIHNET.EU network creates the inspirational, fact and know-how based space as well as place for improving competences and technical skills and sharing best practices. The goal of the project and platform itself is to coordinate and integrate wide variety of initiatives, boost EU economies and initiate and ensure best possible support to SMEs and midcaps. Thanks to DIHNET.EU platform the participant can get access to three interconnected communities: (S3HubsinCE, DIHNET.eu and FundingBox). | 1 | 1 | 1 | 1 | 1 |
| Green Tech Radar | Online Tool | n/a | The "Green Tech Radar" (GTR) is a service of the Green Tech Cluster of the Austrian region of Styria provides to its members. It consists of documents describing the different technologies and the procedures that are applied. It also shows the potential of the technology, the competition around it, the development periods and the barriers of adoption. | 1 | 2 | 2 | 2 | 2 |
| Technologieplattform (technology platform) | Online Community | BMBF - Zwanzig20- Programme German Ministry for Education and Research | The technology platform smart ³ supports the members of smart ³ network to publish their technologies. Visualization and publication of research results makes a significant contribution to the transfer to the economy. The aim is thereby to enable the active exploitation of innovative technologies and products. | 1 | 1 | 1 | 1 | 1 |
| Synergy Profiling Tool | Online Tool | SYNERGY INTERREG CE | IT tool produced as a result of the synergy networking and profiling activities that can be used for analysing project features to find aspects and competencies that can create synergies between different regional actors, defining common areas of interest. It is a software tool that analyses multiple project features and organizations competences in order to create synergy effect between entities looking for new contacts, wanting to establish wider international cooperation, and which are interested in finding a partner in the fields of additive manufacturing, micro- and nanotechnologies and industry 4.0. | 1 | 1 | 1 | 1 | 1 |
| 3DC-HyperTree | Online Tool | 3DCENTRAL INTERREG CE | The IT Tool (Hypertree) helped to identify potential transfer processes and to connect "islands of innovation" to a stable network of regions for innovation. Users were able to identify target groups, Best Practice examples and experts in different contexts and in different region. They can identify possibilities for future knowledge & innovation transfer leveraging on the competences available in the Central Europe Network. Regions and Topics were selected as driver to search for specific ongoing project activities, organisations, experts and Good practices, | 2 | 1 | 1 | 1 | 1 |
| Cloudifufacturing marketplace for digital engineering | Marketplace | H2020 | Cloudifufacturing marketplace integrate platforms offering cloud- or HPC-based ICT solutions to SMEs, so that companies can access all platforms through one channel. It empowers different stakeholders to become members of the community to offer their ICT solutions or consultancy services through an additional distribution channel, or to access advanced cloud-based services and expert knowledge to boost the company's competitiveness. | 2 | 1 | 1 | 2 | 2 |
| RAMP (DIH2) | Marketplace | DIH2 (H2020) | A marketplace as one-stop-shop for SMEs to access essential services for digital transformation including business modelling, technical support, access to skills and finance. The DIH ² Marketplace builds upon existing work that has been conducted in the framework of other EU-funded project, more specifically the L4MS Marketplace. | 2 | 1 | 1 | 2 | 2 |
| Mapping Tool P-tech | Online Community | Smart Factory Hub Danube Transnational Programme | It is an online interactive platform established for identifying PROVIDERS OF TECHNOLOGICAL SOLUTIONS and selected GOOD PRACTICES (or reference projects) in the field of manufacturing (INDUSTRY 4.0). It provides a visual presentation of the possibilities of cooperation and a supportive environment for the implementation of TECHNOLOGICAL TRANSFER. The platform allows searching by the following CRITERIA: 1. List of ORGANIZATIONS by: a) States b) type of organization c) sector d) the provision of services. 2. List of PROJECTS with descriptions of service offers 3. List of FUNDING SCHEMES to support technology transfer 4. List of PRODUCTS / SERVICES in industry 4.0 5. CONTACT POINTS by country | 1 | 1 | 1 | 1 | 1 |
| CRM System – 4STEPS project | Online Tool | 4STEPS (Interreg Central Europe Program) | Within the project, a CRM was developed in order to create a common system where all partners can conduct the questionnaire, and the main administrators can monitor the process of SME involvement in every region. In particular, the partnership agreed to gain data from 350 manufacturing companies across the project regions. The form focused on both SMEs' needs and their level of adaptation to Industry 4.0 themes, in order to see which interventions could be implemented to them. | 2 | 2 | 2 | 2 | 2 |
| Mapping Tool | Online Community | SMART FACTORY HUB Interreg CE | An interactive platform to support SMEs by providing a geographic overview and give some information about actors, good practices, projects, and facilitators, and, thus, foster the match between the demand and supply tendencies. The platform contains data about: - Organizations, - Projects, - Funding schemes, - Products and services in industry 4.0., - Contact points. | 1 | 1 | 1 | 1 | 1 |
| EFFRA – European European Factories of the Future Research Association, Innovation Portal | Online Platform | EU PPP | In the EFFRA Innovation Portal you will find information about manufacturing research & innovation projects, results and demonstrators. The Innovation portal is divided into several sections like: Dashboard, Wiki, Pathways, Projects, Results and Demos | 1 | 1 | 1 | 1 | 1 |

Figure 9. Quick step in modus for Stakeholder for PID design and for pre-selection of PID Best practice examples

Next Steps: As already anticipated, this deliverable will serve as input to start the other activities in WPT2 related to TINs establishment and TINs workshop organisation as well as PID design. More in details, the results harvested and outlined in this deliverable will be the basis for the elaboration of:

- DT2.2.1 Coaching Guidance for CAMI4.0 Trend & Innovation Networks
- DT2.3.1 PID design & elaborate technology radars to improve CE/EU policy making

Moreover, the start-up of activity A.T2.4 Impact Controlling & Evaluation and the elaboration of the guidance document (D.T2.4.1) will be based on the outcomes of the harvesting activities



7. Annex

7.1. Partner Contributions on Trend and Innovation Networks set-up

7.1.1. 1_KRAKOW TECHNOLOGY PARK LTD (KPT)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|--|---|
| Name of the PP | KPT |
| What is the name of the harvested result (aka the output/activity name from the project)? | KACE WORKING GROUP |
| What is the name and programme of the harvested project (in English)? | 3DCENTRAL (INTERREG CE) In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.interreg-central.eu/Content.Node/3DCentral/3DCentral-KACE-system.pdf |
| A short description of the result: | |
| <p>The KACE (Knowledge Axis for CENTRAL Europe) is conceived as a modular system for the management of knowledge, cooperation & transfer involving a critical mass of target groups/ stakeholders for policy relevant solutions and their broad anchoring. The system starts with 11 CE leading edge knowledge axes for smart engineering & rapid prototyping that are replicable & expandable for other topics, too.</p> <p>A two-step methodology has been identified for the design and development of Knowledge Axis for CENTRAL Europe System.</p> <ul style="list-style-type: none"> 1st Step: KACE design - identification of the relevant topics for the KACE System 2nd Step: KACE development - definition of the actions to be implemented for the consolidation and improvement of the system. <p>For the effective and standardized development of the KACE System, a set of tools have been identified to be developed and implemented in the project framework.</p> <p>One of them was KACE WORKING GROUP selected for each of 11 Knowledge Axis. These working groups have been identified starting from the inputs delivered by each partner and were open to the inclusion of new stakeholders during the activities development. All 3DCentral partners expressed their interest in contributing to the development of the KACE contents with different roles according to the knowledge level of the partner in this specific context. This decision was mainly based on regional interest, competences and topics and it was established that all partners had to contribute as KACE leader and KACE supporter. Besides the identification of the responsible for the KACE development, it was clear that all the partners contributed to the different knowledge axis according to their interest and experiences declaring their commitment in contributing to the concrete development of the KACEs.</p> | |
| A short description how it worked: | |



The starting situation was the matrix of KACE topics with its responsible KACE LEAD partners and the KACE working groups, based on the competence profiles of the 11 partners, which of course also reflect to the actual trends, demands and initiatives within the EU. All 3DCentral partners expressed their interest in contributing to the development of the KACE contents with different roles according to the knowledge level of the partner in this specific context.

Once defined the topics to be considered for the foundation of the transnational Knowledge System for Central Europe and on which to build the cooperation activities, the focus was transferred to the identification of the key elements for the KACE implementation that were:

- **KACE Leader:** For each topic area, identified a KACE Leader
- **Core Group:** Created core group of subject-matter experts/stakeholders across the development path of a subject area.
- **Transferable Knowledge:** Identification of transferable knowledge within different network of stakeholders.
- **Opportunities for Transfer:** Raise awareness on opportunities for transfer generating a common methodologies and prioritizing such opportunities
- **Multiple types of integration:** Development of the transfer actions through multiple integration types (i.e. vertical and horizontal)
- **Awareness of future potential:** Maintain awareness on future collaboration potential and funding opportunities connecting knowledge, expertise and capital.

A short description of the key lesson learnt:

Thanks to KACE WORKING GROUPS partners have identified 11 specialized topics/subtopics which served as a base for a roadmapping process and the development of action plans. These 11 Topics built the knowledge structure for cooperation activities of 3DCentral partners. In order to comply with the objectives of the 3DCentral project, the topics of interest were restricted according to the priorities of Central Europe area and the partner competences. For the KACE development purpose the partners with more operative experience on the topic acted as knowledge receiver or facilitator of the transfer activities addressed in the KACE framework, while the less experienced partner acted as knowledge receiver contributing to the diffusion of knowledge and best practices among Central Europe regions.

In this sense, also partners that reported no operative experience were actively involved in the working group with the aim to receive fundamental knowledge for the development of the topic inside the organization or to contribute with the experience of other regional stakeholders to be engaged. Thanks to the Good Practices/Lessons learnt collected earlier, it was easier to identify the knowledge base related to the different regions and the stakeholders with competences and expertise related to smart engineering and rapid prototyping. Action plans have built a solid ground for joint activities and projects. The competence and knowledge outputs identified jointly by project partners and key stakeholders (policy makers, universities and startups, SMEs and LEs) have inspired further cooperation and became foundations for CEUP2030.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The results can be valuable to integrate into the CEUP 2030 for Methodology for Trends & Innovation Networks set up. The CEUP 2030 project can help raise the awareness among regional actors on the CAMI 4.0. topics through the activities carried out by the TINs. These KACE working groups can be further developed and upgraded by the CEUP 2030 project to create TINS which can act as content generators/receivers in the context of CAMI 4.0 topics and can be orchestrated by CEUP2030 partners, who will promote the activities of regional CAMI 4.0. Working Groups can be organized according to the following principles:

- to meet periodically on the basis of group’s priorities or opportunities for projects,



- to generate an open, stable community of companies, RTOs, policy makers, universities and associations,
- to create an open structure to foster the innovation network
- to promote the development of project ideas.

7.1.2. 2_PROFACTOR GmbH (PRO)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|--|---|
| Name of the PP | PRO |
| What is the name of the harvested result (aka the output/activity name from the project)? | BIZ UA H2020 ERFA H2020 |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: [No connected programme, it's an Initiative of BIZ UP] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.biz-up.at/news-presse/detail/news/erfolgreiche-erfa-runden-horizon-2020/ |
| A short description of the result: | |
| <p>The results of the ERFA round are:</p> <ul style="list-style-type: none"> • Exchange of experience and feedback from experienced project managers • First-hand information (EU experts from Brussels) on the latest trends in the Framework Programme • Possibilities to influence the programme • Feedback to the BIZ Upper Austria • Harmonisation with national and regional funding bodies • Project Partnerships | |
| A short description how it worked: | |
| <p>The challenges in the EU's Horizon 2020 research framework programme are diverse and often recurring. In three rounds of exchange of experience over the course of this year, participants have therefore discussed possible solutions and built up practical knowledge. Valuable input on the contents defined jointly in advance was provided not only by the Business Upper Austria funding experts present, but also by impulse lectures by external speakers.</p> | |



The event series has been running since 2015 and 4 workshops on current topics of the H2020 framework programme are held every year. The focus of this year's workshops was also increased on the new framework programme "Horizon Europe".

Einladung zum 3. H2020-Erfahrungsaustausch
Liebe*r H2020 ERFA-Teilnehmer*in!

Wir freuen uns, dich zum 3. H2020-Erfahrungsaustausch einladen zu dürfen. Das Thema **„Von der Finanzplanung bis zum Reporting“** wird zwei Themenblöcke beinhalten.

Themenblöcke

- Abrechnung und Audits in Horizon 2020
Was ist bei der Abrechnung von H2020-Projekten besonders zu beachten (Kostenberechnung, Nachweise, Fristen etc.)? Welche Arten von Audits gibt es und wie laufen diese ab?
- Neuerungen zu Finanzen und Reporting in Horizon Europe
Welche Änderungen sieht das neue Programm „Horizon Europe“ hinsichtlich Kostenabrechnung und -nachweise vor? Wird es Neuerungen im Bereich Reporting geben?

Der Erfahrungsaustausch findet von **15 bis 18 Uhr** statt und wird **online** abgehalten. Zwei externe Referenten werden praktische Einblicke geben.

Wir bitten dich um **verbindliche Anmeldung** mittels unten angeführtem Anmeldebutton **bis Freitag 13. November 2020**. Die Agenda und den Link zum Treffen erhältst du anschließend per Email.

[ANMELDUNG](#)

29. September 2020, 15:00 bis 18:00 Uhr

Thema: „Aktuelles zu Horizon Europe“
Moderation: Abteilung Forschungs- & Innovationsförderberatung

Treffpunkt: Virtuell – MS-Teams

Das neue Rahmenprogramm für Forschung und Innovation geht mit Jahresbeginn 2021 an den Start. Die Vorbereitungen laufen auf Hochtouren und einige Schlagworte sind schon im Umlauf. Doch was hält es alles für uns bereit? Welche Informationen sind schon vorhanden? Und wie kann man sich schon jetzt darauf vorbereiten? Diese Fragen stehen im Mittelpunkt des Erfahrungsaustauschs mit Fokus auf die folgenden zwei Themenbereiche:

- Open Access / Open Data / Open Science
- Missions

Im Rahmen von zwei Impulsvorträgen werden wir uns mit diesen Themen näher auseinandersetzen, gemeinsam diskutieren und aus erster Hand Informationen von den beiden Experten bekommen.

| | |
|-------|--|
| 15:00 | Begrüßung & Vorstellung neue Teilnehmer/-innen Kurzeinführung in das neue EU-Rahmenprogramm „Horizon Europe“ |
| | Impulsvorträge mit anschließenden Diskussionen: Open Access / Open Science / Open Data Mag. Daniel Spichtinger, M.A. Senior Experte für EU Research Policy & Projects, Open Science Spezialist |
| | Mission „Climate-Neutral and Smart Cities“ DI Martin Russ Geschäftsführer der AustriaTech & Mission Board Member |
| 18:00 | Resümee & Ausblick |

Invitation 3rd ERFA Round 2020, Agenda second ERFA Round 2020

Participants come from leading companies and research institutes from Upper Austria, all of whom have many years of experience in handling funded H2020 projects

A short description of the key lesson learnt:

If there is a limited number of participants which are all experts in the field of H2020 the success depends really interesting and high-level key speakers (from Industry and/or Commission). Topics must also come from the participants and from the Host.

A short description of how the result can be “upgraded” for CEUP 2030 method:

Participation in the ERFAs is not free of charge (430,- €/year) and it is per invitation only. All participants are experts in H2020 projects and have to fulfill some requirements (one is to be a regional player). Anyone interested with the necessary experience can join the ERFA workshops contacting the BIZ UP.

Regular online meetings could serve as a practical solution for connecting regional stakeholders in a COVID-19-approved manner



7.1.3. 3_Association Industry 4.0 Austria (PIA)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|--|---|
| Name of the PP | PIA |
| What is the name of the harvested result (aka the output/activity name from the project)? | Haus der Digitalisierung |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: DIHELP Programme (https://dihelp.eu/) |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.virtuelleshaus.at/ |
| A short description of the result: | |
| <p>“Haus der Digitalisierung” (“House of Digitalization”, HdD) is the flagship initiative of the Austrian region Lower Austria. It offers an online platform providing different tools for the region, including</p> <ul style="list-style-type: none"> • Regional news regarding digitalization • Events connected to the topic • The explanation of different “digitalization terms” that are explained with local examples • An Overview of universities and regional research centres interacting with the topic • Different other services (e.g. crowdfunding, matchmaking...) <p>The platform is updated constantly with relevant regional and national news. Also, the services of the platform are regularly expanded or reduced, depending on the demand of the stakeholders involved.</p> <p>Over the last two years, the HdD took part in an EU project (DIHELP) and initiated and established one of Austria’s national Digital Innovation Hubs (DIHOST).</p> | |
| A short description how it worked: | |
| <p>The HdD was initiated through the federal state of Lower Austria. The regional government saw the need for an institution/platform connecting the various actors around the topic of digitalization in a centralized way. The task of establishing the HdD was given to the regional development/business agency called ECOPLUS.</p> <p>While the long-term goal for the project was set up by the regional government, ECOPLUS was free to decide on how to reach that goal. This created the space for the people responsible for the HdD to design it in a way that fits the needs of the local stakeholders.</p> | |



The HdD was promoted by several departments of the regional government, by the regional development/business agency and by different mayors all of which were involved early on in order to get the support needed for guaranteeing the impact of the project.

A short description of the key lesson learnt:

Taking an external perspective, the project relies on a couple of different success factors:

- Commitment of the regional government (top down): Different departments of the regional government agreed on putting their digitalization efforts into one initiative funded by the regional government.
- Generating information from regional stakeholders (bottom up): For content creation for the platform, the region is divided into sub regions and into competence centres (“knots”) which meet on a regular basis in order to discuss the content and structure of the platform.
- Long-term planning: The HdD was laid out as a project with different parts connected to each other (e.g. establishment of a “physical” HdD in 2022) which gave participating stakeholders a long-term perspective and the possibility to get involved in the most fitting work packages.

Apart from those factors, motivated people were chosen in order to run the HdD. While this cannot be seen as an aspect that could be leveraged easily, it is still an important success factor.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The success factors of the HdD can be leveraged for the establishment of the TINs: In order for the TINs to be successful, there needs to be a mixture of a top down and a bottom up approach when setting them up. Also, the TINs should ideally be sustainable, i.e. be continued after the end of CEUP 2030 as an Interreg project. In order to give stakeholders participating in a TIN a long-term perspective, the TINs would ideally be set up with a 2-3 years plan in mind.

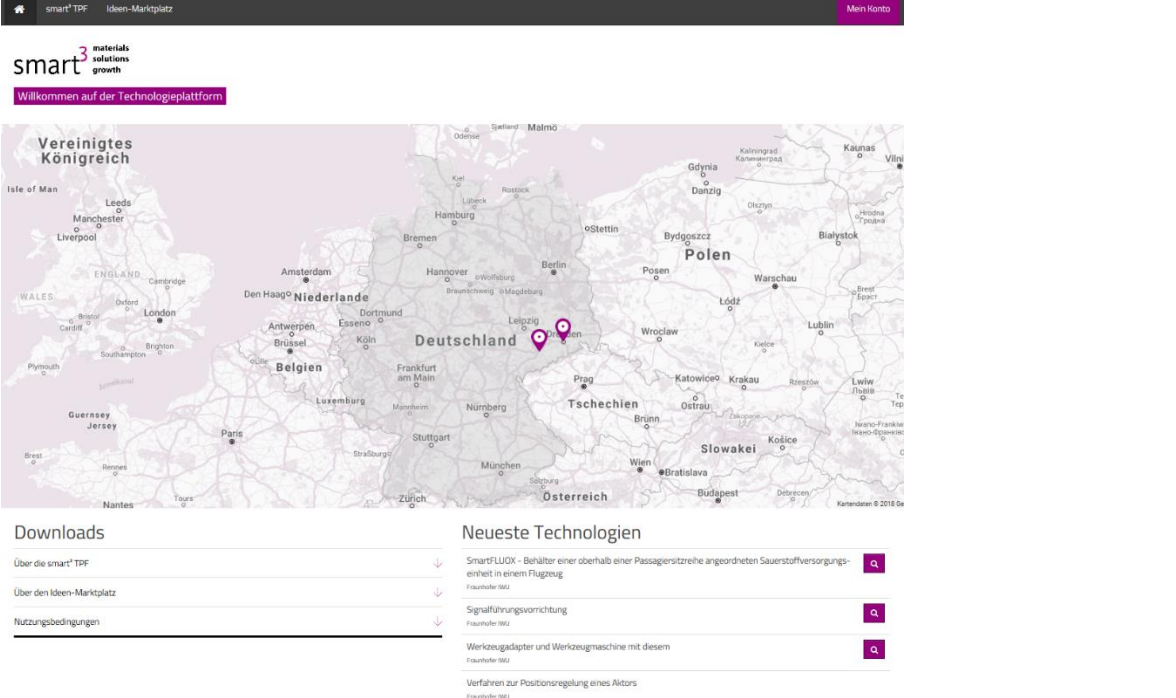
Also, the approach used in the HdD - regional “knots” of competences for creating content/for gathering information - can be used in CEUP 2030: For each TIN, a process can be initiated in which regional competence centres are approached for their participation.

Regular online meetings could serve as a practical solution for connecting regional stakeholders in a COVID-19-approved manner.



7.1.4. 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|--|--|
| Name of the PP | IWU |
| What is the name of the harvested result (aka the output/activity name from the project)? | Smart ³ Ideenmarktplatz (marketplace for ideas) |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: BMBF, German Ministry for Education and Research, Zwanzig20-Programme |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | www.smarthoch3.de |
| A short description of the result: | |
| <p>The aim of smart³ is to create a scientific, technical, economic and ecological roadmap for smart materials with pilot products and pilot markets and to develop and work on projects for their implementation.</p> <p>The Ideenmarktplatz of "smart³ TPF" supports the members of smart³ e.V. in finding solutions or applications for their solutions / technologies for existing problems. According to the principle of a "bulletin board", the exchange between researchers and users is stimulated and can thus ensure a significant contribution to the transfer between research and industry.</p> | |
| A short description how it worked: | |
| <p>Use of the Ideenmarktplatz is free of charge and it is only subject to acceptance of the user agreement for the ideas marketplace and the technology platform (smart³ TPF). No registration is required. Anyone interested (regardless of membership in the smart³ association) can both search for ideas and offer ideas on the ideas marketplace.</p> | |

The screenshot shows the start screen of the 'Ideen-Marktplatz' (Ideas Marketplace) website. At the top, there is a navigation bar with 'smart³TF Ideen-Marktplatz' and a 'Mein Konto' button. Below the navigation bar, the 'smart³' logo is displayed with the tagline 'materials selections growth'. A purple banner reads 'Willkommen auf der Technologieplattform'. The main content area features a map of Europe with a red pin on Germany. Below the map, there are two columns: 'Downloads' and 'Neueste Technologien'. The 'Downloads' column contains three links: 'Über die smart³TF', 'Über den Ideen-Marktplatz', and 'Nutzungsbedingungen'. The 'Neueste Technologien' column lists several technologies with search icons, including 'SmartFLUOX - Behälter einer oberhalb einer Passagiersitzreihe angeordneten Sauerstoffversorgungseinheit in einem Flugzeug', 'Signalführungsvorrichtung', 'Werkzeugadapter und Werkzeugmaschine mit diesem', and 'Verfahren zur Positionsregelung eines Aktors'.

Fig 1: The start screen of the Ideenmarktplatz

To find and or present ideas, there are two separate columns available for this: "Search for ideas" and "Offer ideas":

2.1 Section: "SEARCH IDEAS"

The "Search ideas" section offers users the opportunity to actively search for possible solutions to existing problems. Anyone who has a solution can get in direct contact with the "seeker".

After selecting the heading "SEARCH IDEAS", a "pin board" opens with the searches entered by the users. The existing ideas are shown as "Post-it" on this pin board. The "Post-it" can be displayed by clicking on it in a detailed view with a possibly stored image / sketch. The user can enter his / her request under "Create new request". Key words can be selected from a preset list that was agreed by the consortium (e.g. actuators, dielectric elastomer actuators (DEA), shape memory alloys, (SMA), etc.).

Preset terms can also be selected as contact requests, such as: Development support, "Exchange, Contact mediation or Financing.

2.2 Section: "OFFER IDEAS"

The "Offer ideas" section gives users the opportunity to actively offer existing technologies / approaches for various applications / purposes. Those who cannot yet define an application can offer the technology "open to application". An interested party can get in direct contact with the "offering".

The mechanism to offer ideas works similar to the "search ideas" function: After selecting the "OFFER IDEAS" section, a "pin board" opens with the offers that were entered by the users.

The existing offers are also shown as "Post-it" on this pin board. The "Post-it" can be displayed by clicking on it in a detailed view with a possibly stored image / sketch. The user can enter his / her request under "Create new request".



Contact details are mandatory to "Offer ideas" (* mandatory information):

Key words can be selected from a preset list that was agreed by the consortium (e.g. actuators, dielectric elastomer actuators (DEA), shape memory alloys, (SMA), etc.). Preset terms can also be selected as contact requests, such as: Development support, "Exchange, Contact mediation or Financing.

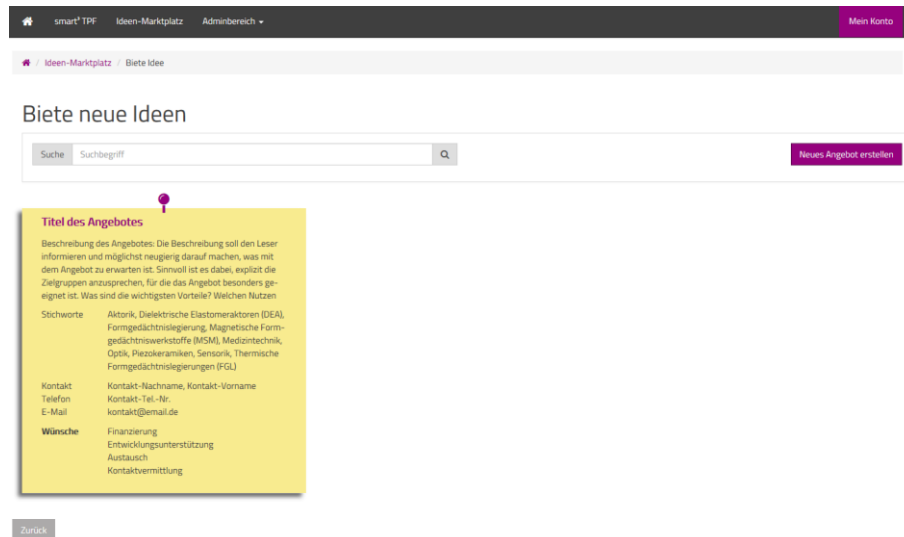


Fig. 2: Screenshot of „Offer Ideas“ with Idea on pin board

A short description of the key lesson learnt:

The Ideenmarktplatz was created to allow members and non-members a space to exchange ideas outside formal projects or consortias.

During the creation of the space we learned several lessons:

- The Ideenmarktplatz needs to be open and free of charge. Also non-members should be able to use it. They only have to agree to the conditions user agreement
- It is mandatory to guide the user through the Ideenmarktplatz. Hence we have a set of agreed Key Words and preselected requests.
- A lot of advertisement is needed to bring the Ideenmarktplatz in use. While students and researchers were more open to present their ideas on the Ideenmarktplatz, we still struggle to get companies and other relevant RIS3 actors to make use of it.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The Ideenmarktplatz was set up for the smart³ consortium to promote and connect ideas that have not found their way into “formal” research projects. In the same way during CEUP2030 an ideas and/or exchange market place can be set up for CAMI 4.0 topics and connecting Central European partners.



7.1.5. 5_Karlsruhe Institute of Technology (KIT)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|--|---|
| Name of the PP | KIT |
| What is the name of the harvested result (aka the output/activity name from the project)? | Synergic Networking Activities |
| What is the name and programme of the harvested project (in English)? | SYNERGY (INTERREG CE) |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | Results are not public knowledge, but documented in project internal deliverables |
| A short description of the result: | |
| <p>One of the ideas within Synergy was to build a network of stakeholders related to the 3 KPAs: As a first step, an extensive analysis of PP projects (previous and current) complemented by an in-depth profiling of the involved institutions was conducted to form the basis of the 3 Synergy Consortia/Networks. Upon having established the basic consortia, activities were undertaken to invite/activate the identified stakeholders to participate actively in the activities of the SYNERGY project.</p> <p>The project created first methodologies on how to identify and collect the relevant project & stakeholder information, plus on how to interact/invite stakeholders and maintain/grow the initial networks.</p> | |
| A short description how it worked: | |
| <p>One of the goals in Synergy is the creation of 3 Synergic Networks within the three main Key Project areas:</p> <ol style="list-style-type: none"> 1. Additive Manufacturing 2. Micro and Nanotechnology related processes and Materials 3. Industry 4.0 <p>The methodology was established describing first the mapping & benchmarking activity of PP projects followed by a desktop and personal stakeholder profiling approach to identify and collect information on thematic relevant projects and innovation actors. This formed the basis for the network creation. Network expansion was conducted through follow-up activities within the project (workshops, online pilot actions etc.).</p> <p>The first step of which was conducting research on all relevant projects and stakeholders who work within the KPAs. The research on Projects was done firstly internally through the projects that each PP was involved in, and then also externally through databases such as Cordis, the Interreg Database, Eurostars, Eureka and other national and regional databases.</p> | |



For the identification of potential network members, coordinators and relevant PP from the identified projects were profiled, complemented by PP individual networks. PPs scoured through their own internal networks first through their own PPs from other projects, companies that they collaborate with, other associated partner networks, as well as internal databases and events such as conferences and seminars. Externally PPs investigated national/regional clusters and tech parks, national/regional agencies and ministries. Lastly publicly available sources such as company annual reports, national infrastructure databases and events were also encouraged as potential sources of information.

Strict criteria for the collection of projects and profiling of innovation actors were set up. 240 projects and an initial number of 277 Innovation actors/stakeholders were analysed, and the results stored in the Synergy portal (SYNPRO IT-Tool). Based on these projects and stakeholder profiles, the Project developed a competence mapping and matching tool in their online portal that allowed for the easy identification of potential new partners in the different KPA sectors.

A short description of the key lesson learnt:

The compiled information in the SYNERGY database formed the basis to identify and group relevant stakeholders within the 3 KPAs which in turn formed the basis for the Synergic KPA-related networks. Within the SYNPRO tool, the competence map facilitates a visual overview on the relevant networks members locations and competences across Europe.

For Synergy, the analysis of the projects helped create data for the clustering algorithm which formed a vital part of the Synergy Profiling tool, as it enabled the matchmaking features.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The competence map has shown room for improvement. For the purposes of CEUP 2030 building a competence map, on the existing partnership is already an underway activity. It could prove useful to create a similar competence map for associated partners of the CEUP 2030 partnership to help identify prospective partners or organisation for the network building activities in each region. This could help build a large and extensive network.



7.1.6. 6_Lombardy Intelligent Factory Association (AFIL)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|---|--|
| Name of the PP | AFIL |
| What is the name of the harvested result (aka the output/activity name from the project)? | GREENOMED Platform |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: GREENOMED - INTERREG MED |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | Project Deliverable |
| A short description of the result: | |
| GREENOMED Platform is a database of stakeholders generated by partners involved in GREENOMED project that supported the creation of communities around topics of interest in the MED area. Thanks to a structured approach and shared tools it was possible for all the regions involved to set up and then update the communities in a coordinated way. | |
| A short description how it worked: | |
| Based on a common template, GREENOMED partners mapped diverse stakeholders in their regions according to their type, competences and interests. Thanks to this initial database, it was possible to better arrange WGs meetings during the project duration and to identify synergies among stakeholders. The mapping was not limited to the initial stage but the database was constantly monitored and updated according to the progresses achieved and the activities implemented. | |
| A short description of the key lesson learnt: | |
| A mapping activity is fundamental to set-up community of stakeholders in order to ensure inclusivity and heterogeneity. Having specific target group to include in the community allowed to expand the interaction with stakeholders of different types fostering their dialogue and collaboration. | |
| A short description of how the result can be “upgraded” for CEUP 2030 method: | |
| The mapping activity in GREENOMED and its Platform were organised around the topic of Green Manufacturing, but the same exercise can be done in CEUP2030 considering CAMI4.0 topics and targeting Central Europe regions. | |



7.1.7. 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|--|--|
| Name of the PP | SIIT |
| What is the name of the harvested result (aka the output/activity name from the project)? | PLUG-IN platform |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: MIUR |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | N.A: |
| A short description of the result: | |
| PLUG-IN platform collects and integrate traffic data from heterogeneous sources of information including the systems for the management of company fleets (TPL, taxis, transporters, logistics operators), personal mobile devices (including devices onboard), innovative sensors, and railway signalling systems. | |
| A short description how it worked: | |
| Providing information processing and decision support functionalities: extracting summary information about the state of the network of urban traffic; developing methods and models for short-term forecasting of the state of traffic; supporting the mobility operators in taking decisions about control strategies of real-time traffic (in standard operating conditions, in the presence of congestion, in case of exceptional events and logistics flows of particular intensity, etc.). | |
| A short description of the key lesson learnt: | |
| The methodologies used for the integration of information sources, the prediction of traffic status and real-time management were innovative not only from a technical point of view but also from a scientific point of view. Traffic prediction and control data were collected from multiple sources; among them are professional users (Fire Brigade, Municipal Police, 118, etc.), vehicles equipped with special on-board instruments, sensors for the analysis of traffic scenes (which make up for the lack of "traditional" sensors like spire and AVM). The different sources have also been integrated from a semantic point of view. | |
| A short description of how the result can be “upgraded” for CEUP 2030 method: | |
| The project is related to the mobility, transport & logistics application domain, but the same exercise can be done in CEUP2030 considering CAMI4.0 topics and targeting Central Europe regions. | |



7.1.8. 8_Pomurje Technology Park (PTP)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|---|---|
| Name of the PP | PTP |
| What is the name of the harvested result (aka the output/activity name from the project)? | The KACE (Knowledge Axis for CENTRAL Europe) |
| What is the name and programme of the harvested project (in English)? | 3DCENTRAL (INTERREG CE) In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.interreg-central.eu/Content.Node/3DCentral.html |
| A short description of the result: | |
| <p>KACE (Knowledge Axis for CENTRAL Europe) system provides a strategy & management support tool with a strong stakeholder commitment to improve tech & inno cooperation. It guides innovation actors to establish, further develop and extend connections focused on technology axis starting from 11 CE leading focus areas on smart engineering & rapid prototyping. Partners of the project managed to provide interpretation of the transferable good practices for Central European excellence in smart engineering and rapid prototyping, and associated lessons learnt that use evidence-based case management, which are relevant for their region. All together more than 20 good practices were presented in the Central European region. In addition, project partners managed to list more than 200 solution providers, which were all included into the KACE system. Good practices and solution providers were just the first step of the tool, which was followed by the preparation of the expert's pool. The whole KACE system, with knowledge axis, good practices, solution providers and experts is an essential and necessary tool to support the delivery of the immediate project, and assist in multiplying the project effects across many years to come. The system is the basis for other two thematic work packages in the project, since good practices and experts will be involved into transfer activities and also capitalization of the project.</p> | |
| A short description how it worked: | |
| <p>Summarising from the D.T1.3.1, a two-step methodology has been identified for the design and development of Knowledge Axis for CENTRAL Europe System.</p> <ul style="list-style-type: none"> • 1st Step: KACE design - identification of the relevant topics for the KACE System • 2nd Step: KACE development - definition of the actions to be implemented for the consolidation and improvement of the system. | |

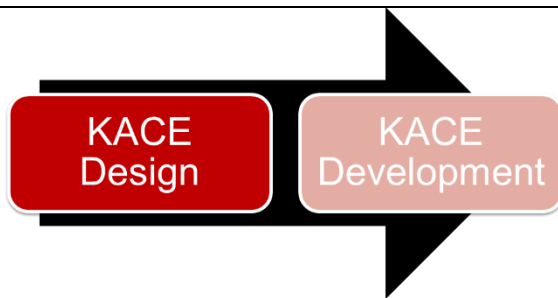


Figure 10. KACE 2-steps methodology

Once defined the topics to be considered the foundation of the transnational Knowledge System for Central Europe and on which to build the cooperation activities of 3DCentral partner, the focus was transferred to the identification of the key elements for the KACE implementation that are:

- **KACE Leader:** For each topic area, identify a KACE Leader who will manage the activity development together with the contribution of a KACE support.
- **Core Group:** Create core group of subject-matter experts/stakeholders across the development path of a subject area.
- **Transferable Knowledge:** Identification of transferable knowledge within different network of stakeholders.
- **Opportunities for Transfer:** Raise awareness on opportunities for transfer generating a common methodology and prioritizing such opportunities (Relevant, Long-Term, Resilient)
- **Multiple types of integration:** Development of the transfer actions through multiple integration types (i.e. vertical and horizontal)
- **Awareness of future potential:** Maintain awareness on future collaboration potential and funding opportunities connecting knowledge, expertise and capital.

Accordingly, a multi-step approach was proposed taking into account all the relevant elements identified. The following figure graphically represents this approach considering that besides the application related to the project purposes it is potentially extensible to other topics due to its modular structure.

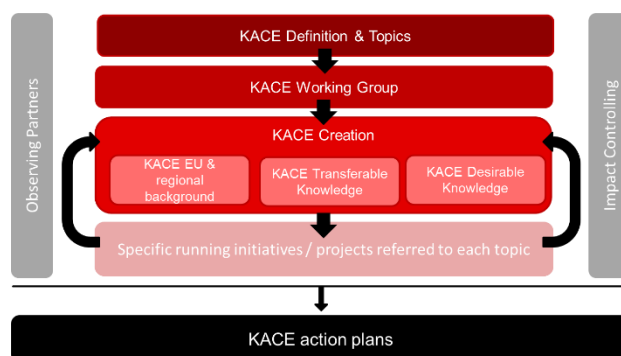


Figure 11. KACE development modules

For the effective and standardized development of the KACE System, a set of tools have been identified to be developed and implemented in the project framework (Figure3).

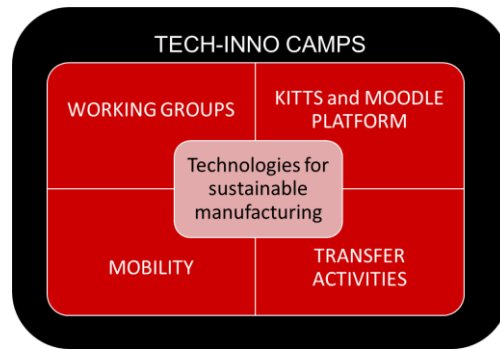


Figure 12 KACE System tools

A short description of the key lesson learnt:

Within the 3DCENTRAL project we were building on KACE (Knowledge Axis for the Central Europe), where we first defined different technological and development areas. Among pre-defined ones, partners were able to select those that best fit them regards to the regional strategies or market orientation. At Pomurje Technology Park we selected topic of Value-added Virtual Supply Chain, since our target groups (mainly small and family-oriented SMEs) are part of the bigger value chain with large enterprises. Taking this into account, new technologies and services that supports them is an added value. The project group can summarize the importance of transnational cooperation, as necessary tangible and intangible resources (knowledge for technology & innovation, cooperation & transfer, business performance) in CE are ubiquitous available but not sufficiently structured and therefore less accessible & usable. A transnational effort to anchor these available resources within the KACE system in order to structure, connect and pool these resources in a practicable, cooperative manner to transform CE into a better place for a knowledge and innovation based economy is a way forward, which is also expressed by all stakeholders through the evaluation form at the project meetings, workshops and trainings. Lessons learned within this development/implementation process is, that neither the less if the region is highly developed, there are still opportunities to learn from others and gain new experience.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The whole KACE system, with knowledge axis, good practices, solution providers and experts were an essential and necessary tool to support the delivery of the immediate project, and assist in multiplying the project effects across many years to come. The system was the basis for other two thematic work packages in the project, since good practices and experts were involved into transfer activities and also capitalization of the project.

Result Harvest for WPT2 Methodologies for TINs set-up

| | |
|---|---------------------|
| Name of the PP | PTP |
| What is the name of the harvested result (aka the output/activity name from the project)? | DIH2 Network |



| | |
|---|--|
| <p>What is the name and programme of the harvested project (in English)?</p> | <p>DIH2 (H2020) In case of other, please clarify project & programme name, in English: [Free Text Response]</p> |
| <p>Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found)</p> | <p>http://www.dih-squared.eu/</p> |
| <p>A short description of the result:</p> | |
| <p>DIH² is a network of 26 DIHs, with a target to reach over 170 DIHs. The sole aim of the network is to spark incremental (cut 50% cost of advance robotics solutions, double the growth of robotics market) and disruptive (maximum productivity & optimum agility) Members deeply rooted in their regional Smart Specialization Strategy (bringing €5M additional funding on top of EU funds), ensuring ‘working distance’ services for every SME in Europe - whichever the sector, wherever the location, whatever the size.</p> <p>A Corporate Sponsorship Program from equipment and automation suppliers committed with the network to get access to wider market and latest research in robotics. DIH² will transform this network into a self-sustainable non-profit association with members all over Europe. DIH² will demonstrate that public funded research can help SMEs & Mid-Caps achieve digital excellence and global competitiveness through adopting advanced robotics solutions in Agile Production.</p> | |
| <p>A short description how it worked:</p> | |
| <p>Phase 1. Setting up the DIH2 Network (the vehicle to address the market)</p> <p>A network of 26 DIHs from 26 EU countries, cultures and backgrounds will cooperate in bringing support to the development of novel robotics-based solutions for Agile Production, automating processes that involve different actors in the value chain. DIH2 will engage with all these actors, from Governments to Corporates, and will provide the tools and procedures to start fruitful cross-border cooperation, delivering a common methodology to identify top innovators in the ecosystem with whom to build a catalogue of Robotic-based Open Standard Enablers helping to materialize a Common Platform Reference Architecture for Agile Production (ROSE-AP and COPRA-AP). DIH2 will be a comprehensive package of services offered to DIHs which comprises the following services:</p> <p style="text-align: center;"><u>DIH2 Network’s Value Proposition for DIHs</u></p> <ul style="list-style-type: none"> • A Marketplace of knowledge and singular facilities described below: • A Common Open Platform Reference Architecture for Agile Production [COPRA-AP] which can be instantiated to serve the needs of any Manufacturing SME by means of selecting and integrating a set of Robotic-based Open Standard Enablers [ROSE-AP] • An industry-lead catalogue of courses, facilitating the adoption of Agile Production culture and technologies, | |



- offered through a MOOC platform
- A **Community of Practices** build around a number of **Local Evangelizers in Robotic [LERs]**
- A **Technology Transfer Program**⁷ bringing support to the best-in-class Technology Transfer Experiments
- [TTEs] selected at European level which will help to identify, develop and demonstrate the above mentioned Robotics-based Open Standard Enablers for Agile Production [ROSE-APs]
- A **Sponsorship Program** to support DIHs in **liaising with Components & Robots suppliers, and system integrators.**

Phase 2. Identifying cross-border Agility Challenges with standardisation potential in the manufacturing domains (the discovering process)

- DIH2 is a powerful network with access to more than 300,000 Manufacturing SMEs across Europe. This aggregated capability, as a Network, will allow us to identify, with a cross-border and pan European perspective, the Agility Challenges that SMEs are facing in the prioritized domains⁸.
- To this end, **two Open calls** will be launched to identify those Agility Challenges following a bottom-up approach. The information collected by all the SMEs submitting (TTE) proposals to our calls will be valuable information to identify the most common ‘Agility challenges’ at EU level. The **260 best scored proposals**, measured in terms of potential usage of existing (ROSE-APs) or the creation of new ones, will be selected and will receive cross-border support to carry out **Agility Audits**. The **aggregated data** that will result from the Audits performed will bring relevant information regarding potential ROSE-APs which would be useful to develop the solutions that will support these SMEs in addressing their challenges.

Phase 3. Developing standard robotics solutions for Agile Production (the proof of market)

- The most promising **26 TTEs** -again measured in terms of impact and potential adoption of existing ROSE-APs or creation of new ones- will receive full support throughout the **Technology Transfer Program** during 10 months. On the one hand, the **Technology Transfer Program** will support involved **Manufacturing SMEs and Mid-Caps** in experimenting how they can improve their processes and address identified challenges.

DIH2 Network’s Value Proposition for Manufacturing SMEs

- Financial support up to **€218,000**.
- **Technical and non-technical support** with access to “premier-class” technology provided by **DIH2 Nodes**
- Support on **ethical, data privacy and cyber-security** issues by **EU experts**
- **Re-skilling and up-skilling** on Agile Production by **ISDI (INTERNETSIA, S.L.)**
- Support on **raising public funding and loans banks** provided by **DIH2 Nodes** and **BLM (BLUMORPHO SAS)**.

On the other hand, the Technology Transfer Program will also support solution integrators in the standardisation and commercialisation of **Robot Open Standard Enablers for Agile Production [ROSE-AP]** developed within the selected TTEs.

DIH2 Network’s Value Proposition for System Integrators



- **Financial support up to €30,000.**
- **Mentoring on how to use and contribute to COPRA-AP and support on the ROSE-AP commercialisation as de-facto standard leveraging on the connection to IDSA (INDUSTRIAL DATA SPACE EV), FIWARE and ROS-2 communities.**
- **Top class fundraising services, by BLM (BLUMORPHO SAS), with access to a network of more than 1024 private investors**
- **A direct access to components providers and leading research organizations, such as Schneider, Astic, Hamamatsu Photonics, among other for adoption of the developed Agile Production solutions.**

The Program implementation becomes a proof of market to measure DIH2 capacity to bring cross-border added value services to Manufacturing SMEs, while supporting innovative Solution Integrators in developing standards solutions on Agile Production and its rapid commercialisation. This market-oriented approach will allow the exponential replicability of robotics for Agile Production, which is one of the main goals of the project.

Phase 4. Incorporation of a self-sustained and organically growing network of DIHs (sustainability & governance)

The tools, procedures and support programs developed with EU funds, will continue afterwards by means of creating a non-profit association (leveraging on the experience of the FIWARE foundation or IDSA). This will be formed before the end of the project by core members, based on the business plan built on the specific value proposition for each one of its type of members.

DIH2 Network's Value Proposition for DIHs:

- 'Access to exclusive tools and vibrant Community'.
- **for System Integrators:** 'New market development and customers acquisition'
- **for Manufacturing SMEs & Mid-caps:** 'Access to premier class technical and non-technical services'.
- **for Components and Robots Manufacturers:** 'Access to a EU-wide sales force'
- **for Regional Governments:** 'Accelerate the agile automation of your industry'

Promotion of the DIH2 network among Digital Innovation Hubs, Large Industrial players, Regional Authorities and other stakeholders will be done. Particularly, Regional Governments across Europe will be approached with the DIH2 Network as a main instrument for contributing to their regional Smart Specialization agenda.

And, all this with a solid foundation for a long-term sustainability based on the high commitment already shown by the 26 DIHs partnering with the project.

DIHs have jointly decided to co-fund the project at an average of 50% (€5M). In other words, the DIHs will finance (with own resources or by means of Regional Authorities support) local operations, using the EU Funds only for those activities which are strictly cross-border and providing added value to regional DIHs.

The basis of this innovation action is so consistent that relevant Large Manufacturers have already committed with it in a Sponsorship Program, which becomes an additional pillar for the Network Sustainability.



The sponsoring program will contribute to bring access for Manufacturing SMEs to industrial solutions to be implemented in their own processes while leveraging in their differentiation with the support of DIHs. The Sponsoring program will generate a virtuous cycle in accelerating robotics adoption. It has been initiated from the inception of DIH² Network and will showcase its value for corporate to further encourage private investment in DIH² Network to support its sustainability.

A short description of the key lesson learnt:

As the project is still on-going, so the practices are evolving, and novel information and experiences are build-in setting up the structure of the network as principles of getting involved (to become a member) are subject to changes. So far practices from other programmes and projects from involved partners are important inputs where through consensus criteria/conditions are changing. By the end of the project we shall obtain final (viable) version of the network and its functionalities.

So far partners are involved in creating a database with competences (preliminary in robotics) and where specific solutions (practices with known tech. providers) are catalogued and will be part of a tool called RAMP - market place for providers and searchers of robotic solutions build on open source programming. Different business models are yet on table to ensure sustainability of DIHs based on services and tools developed and offered via PAMP tool.

There is no regional or country limit to join the network and offer solutions, in fact there is an open call for competences (DIHs invited), to contribute to the development of robotic community and thus novel robotic building bricks.

A short description of how the result can be “upgraded” for CEUP 2030 method:

Actually we see a x-fertilization or exchange of experience potential as both projects are still in progress, yet DI2 is a “higher” level and part of latest cascade funding logic from H2020, where similar ideas of future supporting measures are also considered by other programmes, including Interreg Central Europe, so we might include mutual exchange of experiences by the end of both projects’ duration. Definitely DIH2 is more self sustainably oriented so some thinking might be useful also in CEUP2030 as future recommendations for policy level stakeholders to adopt and set up similar instruments, tools and logic in order to bring regional industry to same understanding of digital transition importance and to have enabled access to knowledge and funds to foster such KTT into region.



7.1.9. 9_Pannon Business Network Association (PBN)

| Result Harvest for WPT2 Methodologies for TINs set-up | |
|---|---|
| Name of the PP | PBN |
| What is the name of the harvested result (aka the output/activity name from the project)? | DIH network (DIHNET.EU) - S3HubsinCE Community |
| What is the name and programme of the harvested project (in English)? | S3HUBSINCE INTEREG CE) In case of other, please clarify project & programme name, in English: |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://dihnet-community-1.fundingbox.com/ |
| A short description of the result: | |
| DIHNET.eu is a digital platform which supports Digital Innovation Hub Networks across Europe. It boosts the collaboration between DIHs, DIH networks and DIH related stakeholders. S3HubsinCE partnership created their own community on the platform with the participation of national DIHs and stakeholders. Their goal is to provide marketing information about DIH's events and developed services to each other and to the registered stakeholders. | |
| A short description how it worked: | |
| Every S3HubsinCE project partner had to facilitate the registration of 10 external stakeholders to the S3HubsinCE Community. It is a heterogeneous stakeholder group, but they have one thing in common: their willingness for innovation through digitalization. Every S3HubsinCE PP had to create an introductory post about their own/regional DIH which is also registered to the community. Other posts should promote events, workshops or activities which are useful for the DIHs and stakeholders and can lead to new connections. The members of the community are receiving notifications at every new post. | |
| A short description of the key lesson learnt: | |
| The Community was established in 2020 - S3HubsinCE project lasts until February 2022 - so the partnership can explain just about the very first experiences. The involvement of external stakeholders is ongoing, the first news, DIH introductory posts have just been created and published. In general, the idea of establishing a community on DIHNET.EU - which is controlled by the EU - can be very fruitful, it can attract the attention of other communities as well and the platform can give place for a wide range of dissemination. | |
| A short description of how the result can be "upgraded" for CEUP 2030 method: | |
| It is useful to have a platform where the members of the community can see each other's profiles, connections, fields of interest etc. The experiences of the S3HubsinCE community can help to develop the TIN networks in CEUP: both the "technical" implementation and the methodology of building a community can be exploited. Moreover, having an own community on a website controlled by the EU can make the project more visible. | |



7.1.10. 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG)



7.2. Partner Contributions on Trend and Innovation Networks orchestration

7.2.1. 1_KRAKOW TECHNOLOGY PARK LTD (KPT)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|--|---|
| Name of the PP | KPT |
| What is the name of the harvested result (aka the output/activity name from the project)? | SISCODE CO-CREATION JOURNEY WORKSHOPS |
| What is the name and programme of the harvested project (in English)? | SISCODE (H2020) In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.kpt.krakow.pl/o-nas/akademia-kpt/smart-cities/ |
| A short description of the result: | |
| <p>Siscode project is a 3 years long on-going project (1 more year ahead). Its aim is to introduce methodology and tools, as design thinking and living lab methodology to the planning and responsible management of research and innovation. The project proves and builds the bridges between Public Engagement (PE) and Responsible Research and Innovation (RRI).</p> <p>Project partners are deeply involved in planning, conducting, monitoring and disseminating high-impact experiments in real life contexts to investigate the potential of co-creation for the better implementation of RRI. The experimentations are conducted in 10 co-creation labs across Europe (Spain, Italy, Denmark, France, Germany, Greece, Ireland, Poland, Portugal and Serbia). Living labs with wide involvement of stakeholders groups implement various concepts of co-creation and practical solutions answering specific challenges of local communities. The scope of experimentation covers different regional challenges: data property rights, circular economy, healthcare, social inclusion, air pollution, precision agriculture etc.</p> <p>KTP as one of the living labs taking part in the project runs regional journey aimed at improvement of the air quality in the Malopolska region by co-creating and prototyping new version of the strategic regional document Air Protection Programme for Małopolska Region. This was done in strong cooperation with the regional authorities, and involvement of extended group of stakeholders, including policy makers, business, academia, NGOs and inhabitants directly. A set of workshops has been organized and moderated by the KTP team in order to reframe the problem and envision alternatives for the possible regulations and methods which should be introduced in the region in order to protect the air.</p> | |
| A short description how it worked: | |
| <p>The co-creation journey is divided into 4 phases: phase (1) analyse the context; phase (2) reframe the problem; phase (3) envision alternatives; phase (4) develop and prototype. In parallel, two continuous activities have been identified and run to better</p> | |



support each journey: understanding, scanning and synergising with the local context , and engaging stakeholder networks.

The co-creation workshops has been conducted in the 2nd and 3rd phase. In order to prepare successful process the main goals of the workshops has been deeply analysed and discussed between project team and regional authorities responsible for the management of the Air Protection Programme. Second challenge was to identify the target group. The workshops has been opened for all interested stakeholders, so the crucial part was to identify the dissemination activities.

The workshops were conducted with the use of design thinking methodology and canvas relevant for particular phases of the project. The creative methods used by facilitators encouraged participants to actively share their opinions, experiences and suggestions.

More than 50 participants in each workshop were divided in to small 6-8 persons groups. The division between groups was done, taking into consideration, equal involvement of particular stakeholders, representing business, public administration, civic society organisation, academia and inhabitants. Each group has been working on selected cases, using personas and canvas prepared by facilitators. Working in the smaller groups enabled better activation of every participant. Each group has presented the results of their work to the public and there was also a chance to discuss it over.

The canvas used for the workshops gave the chance to: 1) identify the problems and needs in terms of air pollution in the region 2) create a bunch of ideas for the solution of the identified problems 3) prioritise and select the most possible and most innovative ideas 4) prepare an initial business model for these selected solutions.

A short description of the key lesson learnt:

1. Bottom up approach

Using design thinking and living lab methodology for bottom up creation of new policies, procedures and instruments brings measurable and scalable benefits for policy making processes and is much more effective when it comes to the policies implementation. The policies and procedures are better approved and implemented when are created with early involvement of relevant multiple group of stakeholders with public administration, private sector, universities and community interacting one with another.

2. Equal role in the process and open access

In order to conduct effective workshops it is necessary to identify wide target group and enable them participation in the process at the same level, no matter which stakeholder they are representing. The biggest success of the workshops was the created platform for exchanging the opinions and discussing the problems from different perspectives of different stakeholders. This generated a bunch of new recommendations and innovative ideas.

It was also important that the workshops were opened for all interested stakeholders, and they were also informed about the results and next steps. The document with recommendation and conclusions from the workshops was sent to all participants, who were asked for feedback.

3. Neutral facilitator



Following the above point it is also important to take the role of neutral moderator of the creative process. The facilitators should not push their opinions and ideas, in order to provide the participants possibility to share their suggestions and recommendations.

4. Tailored tools and co-design workshops

The co-creation process included a customization of tools and methods according to the local context, and took benefit from important diversity of practices.

Testing tools in the reality proved complexity of the process and in a few cases directed to some adjustments and modifications.

5. Flexibility

Co-creation process is a living laboratory, where some changes in the ongoing activities may occur. It is necessary to be opened for this modifications as they can be very effective for the whole process.

A short description of how the result can be “upgraded” for CEUP 2030 method:

1. the design thinking and living lab methodology can be introduced to the TINs to create a joint understanding and vision at first, then for developing the relevant policy and financial instruments
2. by introducing Public Engagement (PE) and Responsible Research and Innovation (RRI) approach into discussion how to foster the development of policies, initiatives and instruments addressed to support CAMI4.0
3. understanding of co-creation among researchers and policy makers by organizing thematic roundtables, destroying sectarianized approach to STI policy making
4. introducing design methodologies and tools in Industry 4.0 related technology priority areas and TINS can inspire policy makers for developing perspective conditions for SMEs boost by proving scalability, replicability, data driven implementation.
5. emerging operationalization of CAMI4.0 introduction from vision to new policies and tailored instruments implementation in future EU finance programming.



7.2.2. 2_PROFACTOR GmbH (PRO)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|--|---|
| Name of the PP | PRO |
| What is the name of the harvested result (aka the output/activity name from the project)? | GMAR Workshop Series |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: [No connected programme, it's an Initiative of several partners with some funding of the Austrian Ministry] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | http://www.gmar.at/aktuell/ http://www.gmar.at/ |
| A short description of the result: | |
| <p>Die Resultate sind vorwiegend Technologie Updates, wissenschaftlicher Austausch und Netzwerkbildung.</p> <ul style="list-style-type: none"> • Robotic Talks: Exchange between science and industry to coordinate topics, create new topics and bring them closer to the public funding agencies. Presentation of the service portfolio of the participants. • Robotic Taks Reloaded: Focused exchange of key players to discuss already more concrete issues. • ARW (Austrian Robotics Workshop): Scientific exchange and promotion of young students and robotics, creating of scientific impact. • „Social events“: Pure network building, arousing the interest of stakeholders from science, research and the public sector | |
| A short description how it worked: | |
| <p>The GMAR Robotic Events consist of the GMAR Robotic Talks, the Robotic Talks reloaded, the ARW (Austrian Robotic Workshop) and some "Social events". The following details about the events</p> <ul style="list-style-type: none"> • Robotic Talks: Take place in 1 -2 month intervals, either at companies (preferred) or at premium members of GMAR. They consist of 3 -5 scientific or industrial presentations as well as embedded news from clusters or the public sector. Invitations are sent out centrally via GMAR and through staff channels. Preference is given to physical meetings, but due to the CORONA crisis these events are increasingly taking place online. • Robotic Taks Reloaded: Usually takes place at the end of the year and consists of invited Key Talks (The Best of Robotic Talks) | |



- **ARW (Austrian Robotics Workshop):** This takes place once a year and is usually organised by a scientific organisation. The Austrian Robotics Workshop aims to bring together researchers, experts and practitioners working on various robotics topics to discuss current developments and challenges in robotics and its applications. The programme includes four invited talks, oral and poster presentations of reviewed contributions in plenum and parallel sessions. This will provide opportunities to share ideas and discuss technical details.
- **„Social events“:** These take place before larger talks, before the ARW or as independent events within the framework of important events such as the Forum Alpach (<https://www.alpbach.org/en/>) (Robotic Ribs, Roboitch Punch)

A short description of the key lesson learnt:

The success of the GMAR Robotik Talks is the variation of different formats, so that periodically every customer group is addressed. Important is periodic marketing, thorough preparation and a lot of advertising. The results must also be prepared and reported back to the participants.

Key Lessons learned:

- Interesting programme
- Different formats to address different customers
- Good preparation and follow-up
- Obtain feedback

A short description of how the result can be “upgraded” for CEUP 2030 method:

GAMR robotic talks could be used as a format that CEUP 2030 can use in terms of network sustainability. The different workshop formats can be used within WPT2, depending on the needs of the different stakeholders within the national TINs.



7.2.3. 3_Association Industry 4.0 Austria (PIA)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|--|---|
| Name of the PP | PIA |
| What is the name of the harvested result (aka the output/activity name from the project)? | AI Focus of Platform Industry 4.0 Austria |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: No connected programme |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://plattformindustrie40.at/ |
| A short description of the result: | |
| <p>The topic of Artificial Intelligence (AI) is considered crucial and is seen as a key technology for future economic success in Austria. Therefore, PIA was approached by various stakeholders, including representatives of the Austrian government, to integrate the topic into the organization.</p> <p>PIA’s work focuses on expert groups dealing with different topics connected to Industry 4.0, e.g. Security or New Business Models. However, AI was considered to be a topic that affects all of PIA’s expert groups. Therefore, the topic was set as a general theme that all expert groups are supposed to interact with in order to cover the different perspectives of AI.</p> <p>Among other things, the following activities were/are organized in PIA’s different expert groups:</p> <ul style="list-style-type: none"> • A) Interviews with works council and heads of production in order to gather information about the success factors and issues connected to the establishment of AI in production companies (expert group “Mensch in der digitalen Fabrik”, project “AI4Good”) • B) Technology profiles and insights through experts about certain technologies connected to AI (expert group “Neue Geschäftsmodelle”) • C) Deep dive workshops on specific production developments enabled through AI (expert group “Forschung, Entwicklung und Innovation”) <p>While PIA’s approach does not aim to be fully holistic, it made it possible to cover the various aspects of AI through different means for different target groups.</p> | |
| A short description how it worked: | |



PIA is a membership-based organization. PIA's members include companies from the Austrian industry and its connected sectors, research institutions, workers representatives and intermediaries (e.g. state agencies). Each member organization appoints people that represent the organizations in PIA's different expert groups. The expert groups consist of those people as well as experts beyond PIA's members, from external organizations and companies.

The members of the expert groups are invited to participate in PIA's different workshops and formats.

The integration of AI into the expert groups with the methods mentioned above was achieved in the following way:

- A) The interviews for the project AI4Good were conducted in a 1:1 setting in order to give workers representatives and heads of production the possibility to state their experiences and opinions in a detailed way. While the interviews obviously take time, the potential output will cover a perspective on AI not covered before in Austria. Therefore, experts were/are willing to take part in the project.
- B) In order to adapt business models to emerging technologies, "neutral" knowledge about those technologies is important. The technology profiles were created by reaching out to members and by doing research on emerging technologies. The profiles were provided to members, which consider them a benefit as they have the possibility to use them in their organizations. Apart from that, "Technology Insights" are one-hour expert talks in which selected experts (from members and external sources) talk about a specific technology and elaborate its consequences for the Austrian industry.
- C) A deep dive workshop focuses on one specific topic relevant in an industrial context offering different keynote speeches on the topic. The format is organized together with industry experts and experts from academia. Ideally, a golden thread, that is designed together with an expert previous to the workshop, guides participants through the workshop.

A short description of the key lesson learnt:

PIA's lessons learned are the following:

- Specific content: The more general the content, the less attractive it is for PIA's members. The more specific the content (e.g. consequences of Quantum Informatics on the Austrian industry in 5 years), the more interested are the participants.
- Neutral perspective on topics: While many organizations have an incentive to promote certain forms of technology, a neutral perspective on emerging technologies (i.e. a perspective with different viewpoints, not necessarily connected to a sales argument) is highly appreciated by PIA's members.
- Including different perspectives: As mentioned above, PIA's members are highly diverse, e.g. employer and employee representatives are part of the organization. Obviously, this diverse set of stakeholders leads to certain discussions and processes might take longer to be established. However, the



inclusion of different perspectives in all different workshop formats is a USP of PIA as an organization and works for the benefit of all stakeholders involved.

- Keeping the formats open: Although PIA's members finance the activities of the organization, external experts and participants are invited to the different formats regularly. This leads to a healthy mixture among the participants and to new connections among them, which is seen as an advantage by the members as well.

While including the topic of AI within PIA can be considered a successful endeavour, it is a challenge to focus on the topic in different expert groups that normally deal with different topics. This was possible, as PIA maintains an intense relationship with its members.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The lessons learned above can be considered when setting up the TINs and when orchestrating workshops for the stakeholders involved.

PIA's members and existing expert groups (for more information see <https://plattformindustrie40.at/schwerpunkte/>) can be used within CEUP 2030 as a source of information for building the TIN's and for selecting potential members.

The different workshop formats (i.e. A, B and C) can be used within WPT2, depending on the needs of the different stakeholders within the national TINs.



7.2.4. 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|---|---|
| Name of the PP | IWU |
| What is the name of the harvested result (aka the output/activity name from the project)? | Strategy Workshops together with “Go-Cluster” Programme |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: Clusterplattform Germany |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.clusterplattform.de/CLUSTER/Navigations/DE/Bund/go-cluster/go-cluster.html |
| A short description of the result: | |
| <p>The Strategy Workshops together with the “Go-Cluster”-Programme allow us:</p> <ul style="list-style-type: none"> - Networking activities and best practice exchange with the most powerful innovation clusters from Germany and Europe - Integration and increased visibility in federal and regional economic policy initiatives - increased national and international awareness among decision-makers from politics, business and administration - Presentation of the cluster work and selected innovation successes to the public - Participation in seminars on current cluster and management topics | |
| A short description how it worked: | |
| <p>The smart³ Network established a regular strategy updates together with the support of the “Go-Cluster” programme. The aim of this is to develop a future-oriented, sustainable strategy for the smart³ innovation network.</p> <p>The Strategy Workshops were externally monitored by VDI/E and are divided in three steps:</p> <ol style="list-style-type: none"> 1. Step - comprehensive survey <p>This was done both through online tools but also through qualitative consultation of a percentage of the members of the network (the so called Unternehmensbesuche”).</p> <ol style="list-style-type: none"> 2. Establishing and benchmarking the Status Quo | |



The aim of this was to establish the status quo and the current position of smart³ in an (inter)national comparison. IT results in a benchmarking process together with the VDI/E in which smart³ was compared to other comparable European cluster initiatives. The results were put-down in a detailed benchmarking report.

3. Comprehensive workshop together with VDI/E

The report was presented by VDI/E to the consortium during comprehensive workshops. After a analytical presentation of the results, the participants were divided into groups and discussed sustainable strategies for the network, services offered by the network, etc.

The results of this workshop flows into the work of the network office of smart³ and are discussed during yearly strategy updates together with the members of the network and with the board. Its aim is to execute a future-oriented, sustainable strategy for the smart³ innovation network.

A short description of the key lesson learnt:

1. Gather data

Thinking about optimizing your strategy, it is vital to first know where you stand. This is done best through a mixture of quantitative and qualitative methods, i.e. surveys, benchmarking but also interviews and discussions. This data needs to be processed into a concise report.

2. Workshop

The results of your report should presented to members of the network (including the board) but also discussed within working groups.

3. Repeat

It is vital to regularly repeat this process to establish whether you have progressed in your strategy.

4. Neutral faciliator

In this whole process it is vital to include a neutral facilitator. Being outside the network they can moderator the process and are unbiased.

A short description of how the result can be “upgraded” for CEUP2030 method:

The lessons learned above can be considered when setting up the TINs and when orchestrating workshops for the stakeholders involved. The experiences of the smart³ network and the formats can be used within CEUP2030 as an inspiration when depending the needs of the different stakeholders.



7.2.5. 5_Karlsruhe Institute of Technology (KIT)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|--|--|
| Name of the PP | KIT |
| What is the name of the harvested result (aka the output/activity name from the project)? | Synergy Regional and International Workshops |
| What is the name and programme of the harvested project (in English)? | SYNERGY (INTERREG CE) |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | Results are not public knowledge, but documented in project internal deliverables. There is a publication in progress that will be presented at the KES virtual conference in September 2020 authored by PP KIT |
| A short description of the result: | |
| <p>The two major goals of Wp 2 in Synergy were to</p> <ol style="list-style-type: none"> (1) Transform the identified Synergic consortia (SC) into active Synergic Networks which would facilitate more regional, transregional and international cooperation. (2) To identify and finalise the needs and requirements of the Synergy stakeholders for the creation of the Synergy Crowd Innovation Platform (SCIP). <p>Both these goals in WP2 were completed through the conduction of regional as well as transregional workshops on ‘Simulated Crowd Sharing’ as well as ‘Design thinking idea meetings’.</p> | |
| A short description how it worked: | |
| <p>Firstly concrete concepts for both workshops were drawn up by the Synergy PPs with clear goals and output requirements from the workshops drawn up. Agendas were suggested as well as the duration, audience and thematic topics to discuss were suggested. However, each PP also had to freedom to design the workshops based on existing preferences. A general feedback form was created for enabling the harmonised evaluation of all workshops.</p> <p>The workshops on Design Thinking and Simulated Sharing were conceptualised to complement each other by providing separate approaches to solving the question on the design and required functionalities of the SCIP. While one of the drivers behind conducting a Design thinking workshop was that Learning and applying Design Thinking as a new approach to innovation also provides an essential incentive for companies and other Synergy stakeholders to contribute towards the project goals with respect to the SCIP requirements and to start “real” networking activities within the Synergic consortia</p> | |
| A short description of the key lesson learnt: | |



Firstly, Interactive workshops are a proven means to directly involve relevant stakeholders into a projects specific research questions whilst providing an additional benefit for the participants in terms of novel networking possibilities and the acquisition of new knowledge provided by experts from relevant scientific fields.

Secondly the concept of design thinking as a new co-creation process proved as an incentive for active participation of stakeholders, since professional design thinking experts were used to ‘teach’ the technique to the participants of the workshop and it is well regarded by many as a tool for ideation and problem solving. Which leads to

Thirdly, the participation of external experts such as for the conducting of the design thinking workshop, or for providing expert technical seminars on topics proved as an effective way for enriching the content of the workshops, as well as attractive for more stakeholders to actively participate in the workshop.

The iterative nature of the Synergy workshops (regional followed by international) allowed the initial workshops to inspire and improve the quality of the international workshops. Feedback received from each regional workshop was used collected with deficiencies addressed in each next step. Thereby establishing a ‘continuous improvement’ methodology for workshop organisation

A short description of how the result can be “upgraded” for CEUP 2030 method:

The Synergy workshops were conducted largely successfully, however one of the issues was attracting larger audiences to the workshops. Targeted marketing and communication efforts may have helped in this regard.

The need for experts in the respective fields giving seminars, prove to be highly effective not only in increasing the quality of the workshops as a whole, however, to also increase attendance and audience interaction and participation. Thereby creating an ‘active’ networking atmosphere.

In areas where activities for ideation are required. Currents trends such as design thinking can be used.



7.2.6. 6_Lombardy Intelligent Factory Association (AFIL)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|---|--|
| Name of the PP | AFIL |
| What is the name of the harvested result (aka the output/activity name from the project)? | Technology and Innovation Camp |
| What is the name and programme of the harvested project (in English)? | 3DCENTRAL (INTERREG CE) In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | N/A online but the deliverable can be accessible through 3DC Partners |
| A short description of the result: | |
| <p>The system of Tech & Innovation Camps (TIC) is a result-oriented training concept which addresses and unites multifarious target groups, experts and stakeholders to gain excellent results in spreading the knowledge about smart engineering technologies in CE.</p> <p>Tech and Inno Camps (TIC) were events dedicated for mutual learning, experience exchange and enhancement of know-how in the 11 KACE topics.</p> <p>The main aims of the Tech & Inno Camps (TIC) were:</p> <ul style="list-style-type: none"> • to transfer practical know-how within the 11 KACE topics • to enable exchange and networking opportunities in order to strengthen the cooperation opportunities among project partners • to promote 11 KACE topics among stakeholders, experts, decision makers on regional, national and transnational level • to promote best practices and lessons learnt related to 3DCentral objectives <p>Target groups: TICs were dedicated to a variety of target groups and stakeholders in order to foster learning appropriate for policy improving. Accordingly, the main target groups for TICs were:</p> <ul style="list-style-type: none"> • solution providers and receivers (Large enterprises, SMEs, start-ups) • higher education and research institutions • education/training centres and schools • regional and national public authorities • interest groups including NGOs • business support organisations • clusters • agencies in charge of knowledge development and transfer | |
| A short description how it worked: | |



Each PP organised an event dedicated to one of the KACE topic identified in the 3DCentral project. Tech & Inno Camp were organised following specific structure guidelines:

- **Partners introduction and project ideas matching:** Short presentations of regional partners, that include f.eg. relevant experiences and competences, project ideas, interest in future cooperation.
- **Presentation of solution providers.** Short pitches on innovative, new solutions, actual trends and activities in the relevant KACE topic
- **Panel discussion on at least one of 11 KACE relevant topics.** The discussion should focus on the technology trends and forecasts but also on opportunities and possibilities for CE development and cooperation
- **Showcasing the solutions.** Small stands with opportunities for solution providers to show the possible customers their products/ solutions
- **Opportunity for direct B2B meetings.** Dedicated space for networking in a highly interactive and dynamic ambience to come together with field experts and participants.
- **Matching - Workshop:** development of project ideas (Project Partners, KITTS, other companies and institutions)

A short description of the key lesson learnt:

3DCentral TICs allowed to:

- enable exchange and networking opportunities in order to strengthen the regional/national/european cooperation opportunities among participants
- raise awareness on at least one KACE topic in terms of technological development
- involve additional regional/ national stakeholders (and if possible international partner)

A short description of how the result can be “upgraded” for CEUP 2030 method:

Considering the expected output and results of CEUP2030 project, the proposed structure for the agenda should be a bit customised in order to focus specifically on future technology trend and related needs. So that, thanks to TIN workshop it would be possible to derive some inputs that could be useful for policy makers in shaping future programming period.



7.2.7. 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|---|---|
| Name of the PP | SIIT |
| What is the name of the harvested result (aka the output/activity name from the project)? | ENTRUST Energy System Transition Through Stakeholder Activation, Education and Skills Development |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: H2020 |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | - |
| A short description of the result: | |
| <p>The project aimed to improve understanding of how people's energy-related behaviour is shaped by technological systems and socio-demographics (e.g. gender, age and socio-economic status). It developed community engagement tools to stimulate dialogue and break down barriers to communities changing their behaviour and adopting new technologies.</p> <p>Central to the project were an in-depth engagement with five communities across Europe, who were invited to be co-designers of their own energy transition</p> | |
| A short description how it worked: | |
| <p>Building on the existing projects and networks of the consortium members, communities were selected as arenas for energy citizenship action-research. The communities were recruited such that the participants were gender balanced and display a range of socio-economic, geographic and energy use profiles.</p> <p>The research team engaged in collaborative production/co-creation of knowledge with these communities throughout the project.</p> | |
| A short description of the key lesson learnt: | |
| <p>These events were organized targeting a public of non-expert people and had as outputs a series of emerging themes, keeping in mind social factors. These sessions enabled exchange among participants as well as with the organizers and it raised awareness about energy transition and user engagement.</p> <p>What ease the organization was the alliance with different energy initiatives like FPG, ICTA, Engineers without borders, which helped spreading the word. Also, the direct contact with the people and long one to one session with semi structured interviews were largely used</p> | |



A short description of how the result can be “upgraded” for CEUP 2030 method:

Given the difference in topic and expectancy from CEUP2030, the lesson that will be exploited from ENTRUST is the direct contact with the participants and to collect the feedback in person/verbally, in order to be sure to dissipate doubts.



7.2.8. 8_Pomurje Technology Park (PTP)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|---|---|
| Name of the PP | PTP |
| What is the name of the harvested result (aka the output/activity name from the project)? | Tech & Innovation Camps (TIC) |
| What is the name and programme of the harvested project (in English)? | 3DCENTRAL (INTERREG CE) In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.interreg-central.eu/Content.Node/3DCentral.html |
| A short description of the result: | |
| The system of Tech & Innovation Camps (TIC) is a result-oriented training concept which addresses and unites multifarious target groups, experts and stakeholders to gain excellent results in spreading the knowledge about smart engineering technologies in CE. | |
| A short description how it worked: | |
| <p>Objectives. Tech and Inno Camps (TIC) were events dedicated for mutual learning, experience exchange and enhancement of know-how in the 11 KACE topics. Main aims of the Tech & Inno Camps (TIC) were:</p> <ul style="list-style-type: none"> • to transfer practical know-how within the 11 KACE topics • to enable exchange and networking opportunities in order to strengthen the cooperation opportunities among project partners • to promote 11 KACE topics among stakeholders, experts, decision makers on regional, national and transnational level • to promote best practices and lessons learnt related to 3DCentral objectives <p>The Tech & Inno Camps have focus on at least 1 of the relevant KACE topics:</p> <ul style="list-style-type: none"> • Additive manufacturing • 3D Design/Engineering/Scanning/Simulation • Smart and functional materials • Digital life • Technologies for sustainable manufacturing • Virtual and augmented reality for manufacturing • Value-added virtual supply chains • Smart services • Robotics (components, machines and intelligent robot) | |



- Mechatronics (sensor, monitoring and control)
- CE Brain Base (Knowledge management, Innovation Management, Transfer Management, Tools)

All regional/national/cross-border TICs together have cover all or at least most of the thematic KACE. There was no strict scenario, but it has been recommended to include as part of the Tech & Inno Camp agenda the following elements:

- **Partners presentations and project ideas matching:** Short presentations of regional partners, that include f.eg. relevant experiences and competences, project ideas, interest in future cooperation.
- **Presentation of solution providers.** Short pitches on innovative, new solutions, actual trends and activities in the relevant KACE topic
- **Panel discussion** on at least one of 11 KACE relevant topics. The discussion should focus on the technology trends and forecasts but also on opportunities and possibilities for CE development and cooperation
- **Showcasing the solutions.** Small stands with opportunities for solution providers to show the possible customers their products/ solutions
- **Opportunity for direct B2B meetings.** Dedicated space for networking in a highly interactive and dynamic ambience to come together with field experts and participants.
- **Matching - Workshop:** development of project ideas (Project Partners, KITTS, other companies and institutions)

A short description of the key lesson learnt:

TICs has been an opportunity not only to exchange of best practice and knowledge in the technical fields that have been addressed by the KACE, but it also represents an opportunity to demonstrate the potential of cooperation among large interregional networks.

A short description of how the result can be “upgraded” for CEUP 2030 method:

From the CEUP perspective, it’s interesting the way how triple helix stakeholders have been involved:

- Experts from research organization has been invited to join the so-called KITTS network of the project, which was able to support the development of training programmes which were hosted on the MOODLE platform of the project
- SMEs from the region were included into TIC - Tech Inno Camps of the project in order to learn more about the thematic and find good practices from the region and abroad.
- Solution providers and different research organizations have been included into the project in order to showcase their best practices / solutions and try to develop new research projects either with project partners or with international network build around the project.



Result Harvest for WPT2 Good practices for TINs workshop orchestration

| Name of the PP | PTP |
|--|---|
| What is the name of the harvested result (aka the output/activity name from the project)? | Robotdays (join bigger events if possible) |
| What is the name and programme of the harvested project (in English)? | DIH2 (H2020) In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | http://www.dih-squared.eu/ |

A short description of the result:

The function of so called Robot Days is about raising awareness about the Network services to Manufacturing SMEs all around Europe to identify crossborder Agility Challenges at EU Level [WP 3. Cross-border Agility Challenges Identification], concretely we speak about outreach activities e.g. 4 EU-RobotDays; 104 Local-RobotDays (4 per DIH) organized and 62 events attended; 62 events covered at EU and National level

Additionally such events aside to address experts in robotics and SMEs with needs for such solutions also national and transnational policy level stakeholders are addressed to align potential joint “road-mapping” of future development of supporting measures/ecosystems and get familiar with latest trends to be massively introduced into industry in next years. Accordingly to follow novel technologies we upon open calls promoted identify experiments (potential good practices): concretely 2 Open Calls with 500 applications are expected (250 per Open Call); 260 applications selected in 1st Stage; 2 brokerages (one per call); 260 Agility Audits (10 per country); 2 Jurys Days, one per call; 52 applicants selected for the Jury Day; 26 finalists selected in 2nd Stage (1 per country, in average)

Supporting Manufacturing SMEs in their agile transformation, we contribute to standards demonstrators on Agile Production [WP4 Techn. Transfer Experiments & WP5 Robotics-based Open Standard Enablers for AP] enriching the base of solutions in online one-stop-shop “RAMP”.

A short description how it worked:

Task 3.1. Manufacturing SMEs reach out (M5-M8//M25-M28) [Leader: **LCM**, Involved: **DIHs&FBA**]. DIHs in the network and those affiliated later on, will concentrate on reaching as many Manuf. SMEs as possible.

Scouting process [LCM/DIHs]. LERs will have close contact with all SMEs identified in Task 2.1, and those coming through the ‘Extended DIH2 Nodes’ contacted in Task 2.2, which have a cross-border potential project and re-usability or standardisation potential. Also



the Manufacturers in the IAS and the Robots Manufacturers participating as Sponsors will contribute to the scouting process among the SMEs in their ecosystem. This activity will be executed against DIHs own resources as contacting with SMEs is part of its the day-to-day work *.

Local SMEsRobotDays [LCM/DIHs&Sponshorps]. The DIHs will organize a series of technical open cobuilding workshop for their local communities. These will introduce key robotic technologies for AM. Where appropriate, the DIH in charge of workshop organization will also provide lab space for hands-on exercises with access to latest robots solutions. Robots Manufacturers participating in the Sponsorship Program will have the ability to develop virtual and concrete showroom to present their solutions in those events. The RobotDays structure and standard material will be developed by LCM, in order to ensure a coordinated and homogeneous implementation in all DIHs. Additionally LERs will encourage ‘Extended Nodes’ to organize Local RobotDays also for the SMEs in their ecosystem, offering his/her support in organizing and even participating as main speaker.

European SMEsRobotDays [FBA&Sponshorps]. In parallel, a series of international, open co-building workshops for DIH2 promotion will be organized, with the participation of the Sponshops in the same format that in Local ones. For sake of efficacy, these workshops will be co-located with major industrial events or events from related networks like [euRobotics AISBL](#) or [SPARC](#). The workshops will feature invited speakers as well as success stories.

Digital events [Sponshorps]. The Manufacturers in the Sponsorship Program will organize digital events addressing European Manufacturing companies highlighting their solutions/products developed and disseminating DIH2 Network.

All these actions will be complemented by all communication actions described in Section 2.2.(b), which will guarantee a big impact in terms of communication and in potential Manufacturing SMEs interested in the DIH2 Services. An **Outreach Report [D3.1]** will be prepared, integrating the info from each DIH after each open call.

A short description of the key lesson learnt:

As the project is still ongoing we can report experiences so far, e.g. after 1.open call and selected 11 Technology Transfer Experiments. Partner used these events to address and animate SMEs in needs of robotic solutions, invited them to propose challenges and if they alone couldn't find technology solution providers, the consortium of DIHs with their members organized match-making phase and assisted the both groups to match and form project consortium to apply for a call published, where both partners participate as beneficiaries of grant up to 248.000€. What we learned is that around 85% of such consortiums were established without assistance of DIH network (usually beneficiaries already knew their solution providers and thus trust issue was overcome before it could affect the partnership), but in some cases, especially transnational cooperation were established via DIH partners Robot Days events with match-making sessions.

A short description of how the result can be “upgraded” for CEUP 2030 method:



Basically CEUP2030 could benefit from this practice in following way:

- Experts from robotics are coming to specialized events where latest technology show-cases are presented and thus give insights also to policy level stakeholders to learn and build awareness about latest technologies and to consider introduction of this into industry by offering supportive measurements for SMEs willing to implement such technology
- Next, at such events also policy level stakeholders have the ability to present their vision and obtain bottom-up feed-back from round tables, workshops or even bi-/multi-lateral meetings with other regions/countries representatives and to exchange their practical experiences and measures (and where possible to adopt, start introducing them into national ecosystem
- At the same time not only solutions but also tools and platforms are given to policy level stakeholders to test the appropriateness for their purposes
- SMEs from the region were included into TIC - Tech Inno Camps of the project in order to learn more about the thematic and find good practices from the region and abroad.



7.2.9. 9_Pannon Business Network Association (PBN)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|--|--|
| Name of the PP | PBN |
| What is the name of the harvested result (aka the output/activity name from the project)? | Local Robot Days - DIH2 project |
| What is the name and programme of the harvested project (in English)? | DIH2 (H2020) In case of other, please clarify project & programme name, in English: - |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | Events are collected on the website of DIH2 project: http://www.dih-squared.eu/news-and-events |
| A short description of the result: | |
| <p>DIH2 project focuses on building a sustainable network among robotic Digital Innovation Hubs (DIHs), in order to facilitate knowledge and technology exchange among them in the field of agile production.</p> <p>The project aims to introduce key robotic technologies to external stakeholders, especially to SMEs and mid-caps. Their goal is to generate innovation, widen the DIH2 network and boost the robotics market. Robot Days are appropriate solution for these purposes.</p> <p>Local Robot Days are technical workshops organized by the DIHs for their local communities. The organizers introduce practical cases, showcases, good practices, available technologies to the audience and demonstrators are also presented on these events. Networking and promotion of DIH2 project activities can also take place on Local Robot Days.</p> | |
| A short description how it worked: | |
| <p>DIH2 project partnership aims to reach 300.000 manufacturing SMEs and mid-caps across the European Union and plans to widen the DIH network from 26 European DIHs to 170 by 2022. The expansion of the DIH Network is right now in progress, where external DIHs can apply for an open call.</p> <p>Promotion of the DIH2 project activity and the DIH2 open calls were successful, among others thanks to the Robot Days. The open calls are funding opportunities for manufacturing companies which have the willingness of employing robotic solution(s) in their manufacturing processes. The calls were very popular across the European Union, and draw the attention of manufacturing companies to the industry4.0 opportunities.</p> | |



A short description of the key lesson learnt:

The Robot Days, where also physical demonstration of robotic solutions could be presented, were very popular among the target groups. The message of the events can be delivered more effective when the responsible DIH introduces the technologies face-to-face to the audience.

There needs to be a reliable basis (e.g. group of organizations, DIHs) who can help the interested companies with the new solutions. Lots of manufacturing companies have the basic knowledge about robotic solutions, but they don't know how to start the implementation of these processes.

A short description of how the result can be “upgraded” for CEUP 2030 method:

On the interactive workshops there should be physical demonstrations, if possible. Moreover, it is useful to have personal connections between the DIHs and the audience in order to know, where to go for more information about the topics presented on the workshops/events. Professional events are gaining the right stakeholders and give the floor for future cooperation, too.



7.2.10. 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG)

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|--|---|
| Name of the PP | HAMAG |
| What is the name of the harvested result (aka the output/activity name from the project)? | Smart Factory: Digital Croatia |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: SMART FACTORY HUB Interreg CE |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | http://www.interreg-danube.eu/approved-projects/smart-factory-hub/news |
| A short description of the result: | |
| Digital Croatia event helped raise awareness of the public to the importance of Industry 4.0 and existing smart solutions in the industry. Also, connected leading people in this area and showed Croatian entrepreneurship advanced in the field. The event offered great potential for networking and sharing of experiences. | |
| A short description how it worked: | |
| A short description of the Smart Factory Hub project was followed by a lecture on Industry 4.0 in Croatia from the founder and President of Lean management initiative and Head of the Croatian Industrialization Working Group. A panel discussion on the „Importance of Industry 4.0 for the Croatian economy and society “was presented by the key actor’s from the triple-helix learning environment. The event ended with presentation of Smart factory solutions from Croatia: CADCAM DESIGN CENTAR Ltd., CODEL Ltd., EAG Center Technologies Ltd., HSTec Ltd., HT-EUREP Ltd., ININ informatički inženjering Ltd., IZIT Ltd., MICRO-LINK Ltd., PROTON EL Ltd., TOPOMATIKA Ltd., VANADO Ltd. and X-LOGIC Ltd. | |
| A short description of the key lesson learnt: | |
| Even though Croatia is at the starting point all relevant actors have recognised the importance of Industry 4,0 and importance to increase productivity in manufacturing. The event was a starting point in connecting key actors for Industry 4.0 development in Croatia and one of the first events that presented existing Smart factory solutions from Croatia. The event was followed by several media ultimately helped define existing challenges and promote Industry 4.0. | |
| A short description of how the result can be “upgraded” for CEUP 2030 method: | |
| Panel discussion or similar knowledge exchanging events with actors from the triple-helix learning environment are necessary to help the dialogue between the actors and | |



establish a common ground of understanding for strategic technology-oriented policy-making.

| Result Harvest for WPT2 Good practices for TINs workshop orchestration | |
|--|---|
| Name of the PP | HAMAG |
| What is the name of the harvested result (aka the output/activity name from the project)? | Local Capacity building seminars for intermediaries |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: ODEON, Interreg MED |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://odeon.interreg-med.eu/ |
| A short description of the result: | |
| <p>The Data HUBs should provide training activities addressed to the quadruple helix: SMEs and economic operators are invited to technical seminars to learn about the ODEON Platform, the Data Economy and the business opportunities from the OD/LOD. Intermediary organizations and Sectoral Agencies dealing with Data Economy and/or the strategic MED sectors are participating in seminars to share knowledge, best practices and learn how to strengthen the eco-system of innovation for the Data Economy; through thematic workshop Policymakers are learning about the Data Economy, the e-government practices, the quality protocols. Training addressed to HUBs' members are increasing their skills in innovation management, finance, and marketing.</p> | |
| A short description how it worked: | |
| <p>HAMAG-BICRO has organized Open Data Day which covered one thematic workshop. The objective was to have a discussion with the present shareholders.</p> <p>This big event covered many areas of open data usage, social, economic, political, business, etc. There were present intermediaries, policy actors, and innovation stakeholders and business coaches. Discussions were long and fruitful. All the participants got new knowledge about open data and its potentials.</p> <p>All relevant stakeholders were invited, representatives of SMEs, public institutions, companies, research institutions, intermediaries, and NGO-s.</p> | |
| A short description of the key lesson learnt: | |



The aim of the seminar was to transfer knowledge and technologies on the Data Economy, and also to introduce the opportunities from the use/re-use of OD/LOD.

The different experiences and potential obstacles to the use of open data were exchanged among representatives of the stakeholders present. The feedback was very good because we have presented more ways of using open data (both private and public institutions).

Increased use of open data requires stronger cooperation between government and private companies and their exchange of experience. More needs to be listened to and cooperation between all stakeholders in the country should be encouraged.

A short description of how the result can be “upgraded” for CEUP 2030 method:

That kind of workshop can be used to raise awareness and importance, but also to exchange knowledge on the CAMI 4.0. topics. People in charge of local, regional and transnational policies who are associated with CAMI 4.0. topics should exchange knowledge regularly with their counterparts in order to enhance skills capabilities and knowledge.

Project ODEON is still on-going and it is planned to organize HACKATON where entrepreneurs will offer solutions that are based on big data for tasks that are given. The main result of the HACKATON will be:

- Public institutions will receive more information about open data,
- Entrepreneurs will receive free promotion of their solutions and access to investors,
- HAMAG will gain knowledge on how to organize such event.

Something similar can be organized for CEUP 2030.



7.3. Partner Contributions on Tools for Policy Intelligence Dashboard design

7.3.1. 1_KRAKOW TECHNOLOGY PARK LTD (KPT)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|---|---|
| Name of the PP | KPT |
| What is the name of the harvested result (aka the output/activity name from the project)? | DIHnet.eu platform |
| What is the name and programme of the harvested project (in English)? | S3HUBSINCE INTEREG CE |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.interreg-central.eu/Content.Node/S3HubsinCE.html |
| A short description of the result: | |
| <p>One of the outputs of ongoing project S3HubsinCE was to establish CERIS3 Digital Integration Toolkit (DIT). The aim of DIT was to provide collaborative knowledge & innovation exchange to enhance connectivity & understanding between RIS3 actors on the technology priority areas as i.e. advanced manufacturing systems & materials, ICT, nanotech, biotech & medical devices and to develop joint initiatives & actions which enable concrete bottom-up RIS3 implementation (WP T1 - SHAPE! Transnational Structures for Common RIS3 Knowledge & Innovation Exchange).</p> <p>Having analyzed existing best practices in past and current projects and follow up wide research on existing tools S3HubsinCE project partners decided to join forces and strengthen the DIHNET.EU platform to create added values for building expertise of complementary and synergistic projects and expand the network of networks.</p> <p>The DIHNET.EU project is a 3 years project (Nov 2018-Oct 2021) lead by TNO, the Netherlands Organisation for applied scientific research https://www.tno.nl/en, focused on building a network of networks involving hubs, competence centres, regional and national programmes and infrastructures. It is financed by Horizon 2020 research and innovation programme (H2020-EU.2.1.1. Grant agreement ID: 824640) and further expanded within S3HubsinCE.</p> <p>The DIHNET.EU online community https://dihnet-community-1.fundingbox.com/ is part of the DIHNET.EU project activities. The online infrastructure of it is powered by FundingBox, partner of the project. DIHNET.EU network creates the inspirational, fact and know-how based space as well as place for improving competences and technical skills and sharing best practices. The goal of the project and platform itself is to coordinate and integrate wide variety of initiatives, boost EU economies and initiate and ensure best possible support to SMEs and midcaps by:</p> <ul style="list-style-type: none"> - enhancing collaboration between stakeholders from the European DIH Community in order to better support SMEs in the digital transformation, - improving the awareness and understanding of joint challenges SMEs and Midcaps face in the digital transformation processes, - activating the ecosystem on DIHs challenges and possible solutions, | |



- offering DIHs an online infrastructure to facilitate their collaboration by developing on line platform with a wide range of services, information and tools that help DIHs to communicate, align, collaborate and synchronise activities,
- developing a clear overview of the DIH related services provided in Europe and align them,
- upgrading the DIH Catalogue: identifying activities in the DIH Community in coherence with regional, national and EU policies,
- creating a strategy to reinforce the specialization of tailored services to SMEs and MidCaps, as well as support its uptake by relevant DIH and DIH networks,
- creating a vision and strategy on a self-sustaining business model for network of DIHs.

Project partners are: TNO (leader), Tecnalia, Fundingbox, euRobotics, BluMorpho and FEDIL, all they have strong experience in DIHs and are well connected to the EU DIH community.

A short description how it worked:

DIHNET.EU infrastructure is the open platform that enables the coordination of European, national and regional initiatives directly supporting the digital transformation and Digital Innovation Hubs (DIHs). It brings together the most important stakeholders from Europe, working together to meet the challenge of increasing European competitiveness. In addition, it enables the coordination of European, national and regional institutions directly supporting digital transformation and Digital Innovation Hubs (DIH). It creates a sustainable pan-European network of networks, with a focus on regional DIHs, by developing a set of tools and boosting the collaboration of the different DIH networks, DIHs and other key DIH stakeholders in Europe.

Thanks to DIHNET.EU platform the participant can get access to three interconnected communities: (S3HubsinCE, DIHNET.eu and FundingBox). Each of them offers the organization and related stakeholders various opportunities for cooperation, which include, among others: the latest industry materials and articles, training, webinars, the possibility of implementing joint international projects and initiatives, exchange of knowledge and experience between partners from all over Central Europe, information about trade fairs and industry conferences. FundingBox is a guide for any entrepreneur striving for growth. Through specialized communities, it provides access to funding opportunities, knowledge and contacts.

S3HubsinCE community is a platform aimed at reaching like-minded organizations across Europe who are interested in supporting different technology areas and sectors to promote digital transformation and smart specialization. Thanks to this channel the partners are presenting and offering to wider technology oriented communities opportunity for joining webinars and focused pitches and thematic sessions organised under lessons DIH action plans, training and mobility actions or transfer & cooperation activities.



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Last message: 24 days ago

In this space, we will discuss best practices and ideas on how DIHs can support public administrations, smart cities...

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Last message: 2 months ago

Do you have questions? Do you have answers? Feel free to ask to the community members any doubt or concern you have...

How can DIHs help in times of COVID-19?
Last message: 3 months ago

Follow-up collaborative work after the webinar of 25/03/2020

DIHNET.EU/ Criteria to be part of DIHs catalogue
Last message: a year ago

Share with us your vision on what should be the criteria of the EC to include DIHs in the catalogue of DIHs created by...

Q&A DIH Champions Challenges 2020

Ask anything you need to know to participate in the Second edition of DIHs Champions Challenges. The Open call will be...

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06/01/2020 **quwocznik** shared an event in Events

FACTORY 4.0

FACTORY&PROCESS AUTOMATION

8TH JUNE 2020

8
JUN

Factory 4.0 Factory & process automation

Regional Training & Mobility Action

We would like to invite you, your DIHs teams and other RIS3 partners for our Webinar on Factory & process automation which is organized as part of our Regional Training & Mobility Action. The webinar will take place on 08.06.2020 at 13:00-15:00 and will be co-hosted by DIH KPT partner, ASTOR company, which

[Read more >](#)

DIHNET.eu / S3HubsinCE Community - By Invitation Only

The S3HubsinCE Community Space is "locked" and can be accessed by invitation only. This allows the community to have an opportunity to lead the discussion focused on improving Central European DIH exchange to promote Smart Specialisation, whilst being still connected to the DIHNET.eu platform where we can leverage its dissemination power to the broader pan-European platform.

Please provide a brief response to the survey below as the S3HubsinCE Partnership can invite you into the community for Central European Digital Innovation Hub exchange. Please note, you will need to be a member of the DIHNET.eu platform to be invited into the S3HubsinCE Community.

*Required

Are you registered on the DIHNET.eu Platform ?

If you answered "no", please follow this link, and register for the DIHNET.eu Platform: <https://dihnet.com/ceup/funding/ceup/ceup/> If you answered "yes", or have now registered, please press "complete" and move to the next question. *

Complete



A short description of the key lesson learnt:

- building open, stable community of companies, RTOs, policy makers, universities and associations is more productive and efficient when **based on real best practices and cases studies**,
- cooperation with listed above must be based on **regular, systematic thematical meetings as Policy Learning Labs** proposed in CEUP2030, they have to meet periodically on the basis of group's priorities or opportunities for projects,
- creating **open platform easily accessible** enhance direct collaboration between stakeholders from the varied EU DIH Communities,
- choosing priorities and allocating resources through **stakeholder participation** is essential successful implementation of the entrepreneurial process of discovery,
- identifying the **most promising areas for the future development** of the region and strategy by **offering incentives to encourage risk-taking** by SMEs and LE
- possibilities of implementation of new technologies in the **value chain at various levels**,
- showcasing **client-centered smart factories** based on technologies of the future supports and **encourages entrepreneurs to start digital transformation of their factories**,
- fact based, real presentations of implemented concepts, tests, projects.

A short description of how the result can be “upgraded” for CEUP 2030 method:

KTP, as other S3HubsinCE partners, introduced representatives of national and regional authorities, scientist, Business Supporting Organizations , SMEs and LE to join S3HubsinCE community.

The know-how, experience gained thanks to participation in DIHnet.EU community/ S3HubsinCE community will be used for upgrading for CEUP method by:

- improving competences and technical skills among listed above groups of stakeholders,
- raising the competences and knowledge of those responsible for regional and supra-regional research, technology and innovation policies,
- building long-term coherent strategies to support the development of new technologies under RIS3 policies creating a data base of good practices and ideas and concepts for joint strategy and action plans for the future initiatives of CE regions,
- establishing and strengthening links between DIHs representing different regions and relevant policy makers,
- identification of possibilities of implementing joint concepts and tests,
- cooperating on elaboration of common projects on the CE level related to CAMI4.0,
- anticipating trends and potential technological risks in order to develop effective support mechanisms.

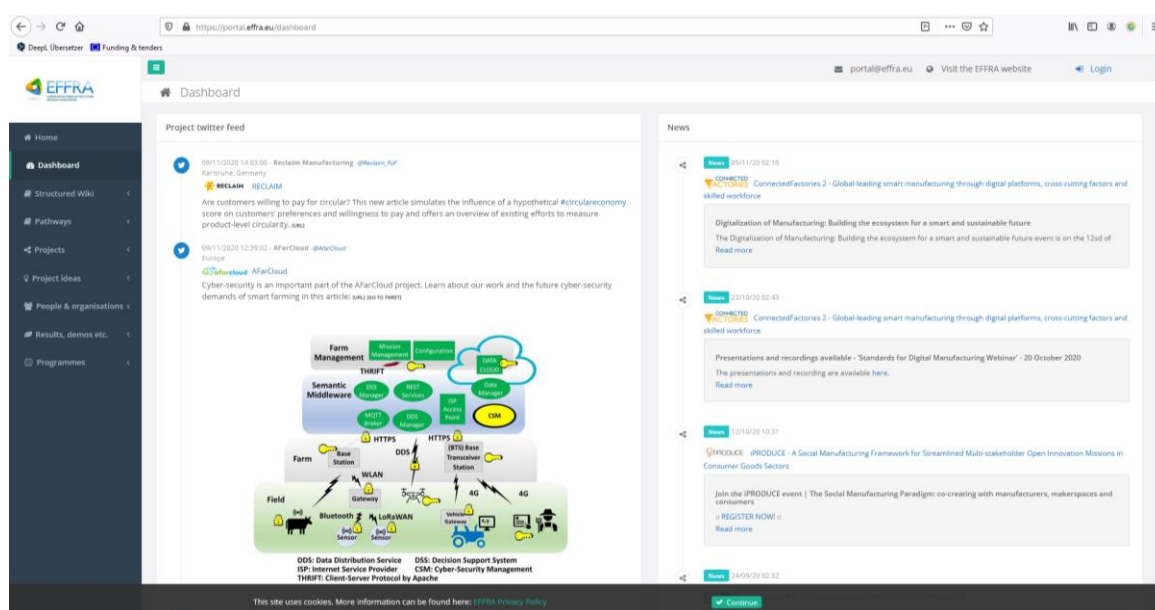


7.3.2. 2_PROFACTOR GmbH (PRO)

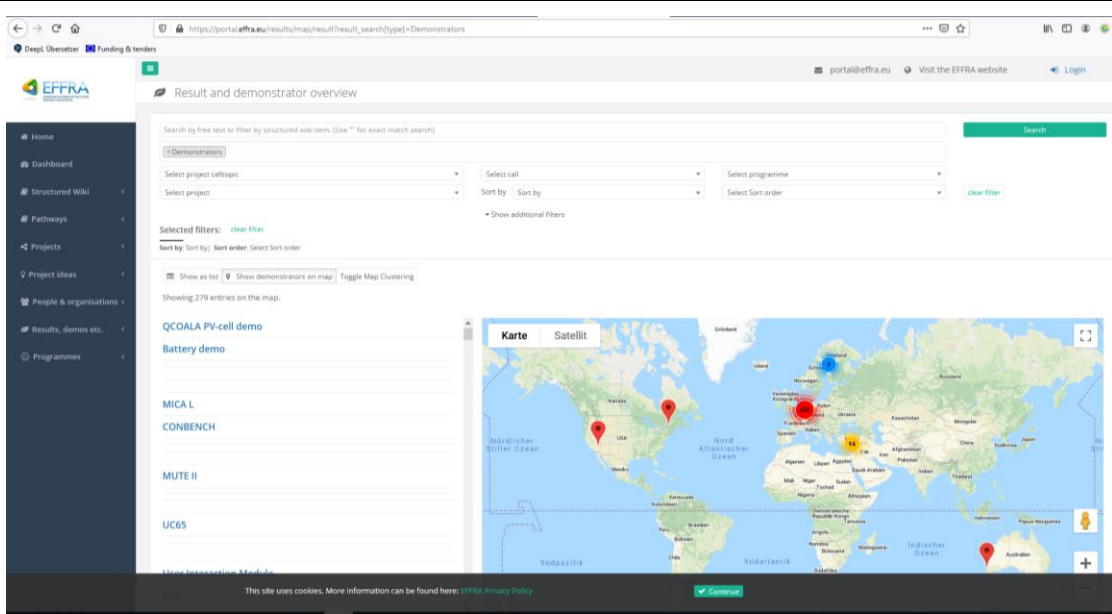
| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|--|---|
| Name of the PP | PRO |
| What is the name of the harvested result (aka the output/activity name from the project)? | EFFRA - European European Factories of the Future Research Association, Innovation Portal |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: [The European Factories of the Future Research Association (EFFRA) is a non-for-profit, industry-driven association promoting the development of new and innovative production technologies. It is the official representative of the private side in the 'Factories of the Future' public-private partnership.] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.effra.eu/ https://www.effra.eu/effra-innovation-portal |

A short description of the result:

In the EFFRA Innovation Portal you will find information about manufacturing research & innovation projects, results and demonstrators.



The Innovation portal is divided into several sections like: Dashboard, Wiki, Pathways, Projects, Results and Demos



Results: Projects and Demonstrators as map:

A short description how it worked:

The European Factories of the Future Research Association (EFFRA) is a non-for-profit, industry-driven association promoting the development of new and innovative production technologies. It is the official representative of the private side in the 'Factories of the Future' public-private partnership.

The key objective of EFFRA is to promote pre-competitive research on production technologies within the European Research Area by engaging in a public-private partnership with the European Union called 'Factories of the Future'.

EFFRA was established to shape, promote and support the implementation of the 'Factories of the Future' public-private partnership.

The partnership aims to bring together private and public resources to create an industry-led programme in research and innovation with the aim of launching hundreds of market-oriented cross-border projects throughout the European Union. Such projects will produce demonstrators and models to be applied in a wide range of manufacturing sectors.

From the start of the Factories of the Future PPP (FoF PPP), EFFRA deployed the '[EFFRA Innovation Portal](#)' in cooperation with the European Commission.

The main goal of the EFFRA Innovation Portal is to provide an online resource for sharing information about research and innovation projects and associated project results and demonstrators in the area of manufacturing.

A short description of the key lesson learnt:

The Innovation portal uses the results of EU projects (FOF...) to communicate to its member organizations: The message for the members is that they have an access to project results and topics and can follow industry developments or trends elaborated in funded projects.



CEUP 2030

With the software tools mentioned above, EFFRA is able to create a permanent service for its members.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The innovation portal could be used by the CEUP partners to present their projects but also for TIN related tasks. For a Use of a similar portal the CEUP 2030 project is too small.



7.3.3. 3_Association Industry 4.0 Austria (PIA)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|---|---|
| Name of the PP | PIA |
| What is the name of the harvested result (aka the output/activity name from the project)? | Green Tech Radar |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: No connected programme |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.greentech.at/ |
| A short description of the result: | |
| <p>The “Green Tech Radar” (GTR) is a service of the Green Tech Cluster of the Austrian region of Styria that the cluster organization provides to its members.</p> <p>The GTR scouts trends and observes markets regarding the development of specific technologies. The topics and technologies observed are derived from the strategy of the cluster and are based on emerging trends in innovation. For instance, the GTR has focussed on energy storage, additive manufacturing, life cycle analysis and digital machinery and plant engineering.</p> <p>The GTR consists of documents describing the different technologies and the procedures that are applied. It also shows the potential of the technology, the competition around it, the development periods and the barriers of adoption.</p> | |
| A short description how it worked: | |
| <p>GTR reviews are created regularly on specific topics (for more information, see https://www.greentech.at/print/) and are published on the website of the cluster. Members of the cluster have access to deeper analysis and individual consultation of the topic.</p> <p>For creating the GTR reviews, a mixture of methods is applied. On the one hand, the cluster involves experts and industry frontrunners in the creation of the documents - through interviews, experts point out their opinion on the development of certain technologies. On the other hand, software tools are used to scout trends: The Green Tech Cluster relies on the tools “Mapegy” (www.mapegy.com) and “Techmeter” (www.techmeter.at). Mapegy uses a worldwide database with different sources and offers graphical analysis and individual innovation news. Techmeter looks at patents and has a more scientific view on different technologies.</p> <p>In order to not only produce documents, the GTR reviews are also connected to workshops for the cluster’s member organizations. In the workshops, deep dives are</p> | |



offered for companies. The workshops build on the results of the GTR and are enriched through experts who provide personal views.

A short description of the key lesson learnt:

The Green Tech Cluster uses the GTR reviews to communicate to its member organizations: The message for the members is that they do not miss certain industry developments or trends because they are members of the cluster.

With the software tools mentioned above, the cluster was not able to create a permanent service for its members.

The documents themselves are used by the cluster as a marketing tool to show its competence. The workshops building on the documents are used as a service directly for its members.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The approach described above can be seen as a “Minimum Viable Product” for the PIDs. A combination of i) expert interviews and ii) a technology analysis (e.g. through the software tools mentioned above) could be used for the PIDs. Gathering inputs from all regions of CEUP 2030 could lead to interesting insights regarding certain technology trends.

PIA considers the method described as feasible and practical, as the documents created could serve as a proper outcome of CEUP 2030 while they could be used individually by participating organizations for their purposes.



7.3.4. 4_Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. for its Fraunhofer (IWU)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|--|---|
| Name of the PP | IWU |
| What is the name of the harvested result (aka the output/activity name from the project)? | Technologieplattform (technology platform) |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) BMBF, German Ministry for Education and Research, Zwanzig20-Programme |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | www.smarthoch3.de |
| A short description of the result: | |
| The technology platform smart ³ supports the <u>members</u> of smart ³ network to publish their technologies. Visualization and publication of research results makes a significant contribution to the transfer to the economy. The aim is thereby to enable the active exploitation of innovative technologies and products. | |
| A short description how it worked: | |
| Every member of the smart ³ network can search the “Technologieplattform” for technology entries and view the released details. To get to the technology entries, you can choose between four search categories: | |
| <ul style="list-style-type: none"> - "By members", - "According to subject areas / key applications", - "According to projects" and - "By keywords" | |



Fig. 1: Screenshot of the starting page of the technology platform with the 4 search categories

The technology platform allows its members the following operations:

Search for members: Here it is possible to search for the members who have created at least one technology entry.

According to subject areas / key applications: The subject areas and key applications of the consortium are stored at this point in order to be able to view the technologies of a special subject field / or a key application.

By projects: This search option enables all technologies of stored smart³ projects to be displayed. These projects are pre-allocated for selection by the association.

By keywords: The smart³ technology platform can be searched for in the keywords stored here. The list shows all stored keywords and the respective number of technologies that use the keyword.



smart³ TPF Ideen-Marktplatz Mein Konto

Technologie-Suche / Suche über Mitglieder / Detailsicht Mitglied / Technologie Detailsicht

Technologie Detailsicht


Technologie-Titel

Techn. Ansprechpartner

Name: Firma

Anschrift: Anrede Vorname Nachname
Kontaktfirma
Kontaktstraße Nr.
PLZ Kontaktort
+49 123456789
kontakt@mail.de

Illustration/Beispielbild



Projektdetails

| | |
|--------------------------------|---|
| smart³-Projekt | |
| smart³-Projekt Laufzeit | |
| Themenfelder / Leitanzwendung: | Smart Health / Intelligente Instrumente |
| Kurzfassung | |
| Stichworte | Formgedächtnislegierung, Medizintechnik |
| Dokumente | |
| Entwicklungsstand | Prototyp |
| Demonstrator | Link zur Demonstratorbeschreibung |
| Schutzstatus | keiner |
| Sichtbarkeit | Freier Zugang |

[Zurück](#)

Fig. 2: Screenshot of a technology presentation

A short description of the key lesson learnt:

A lot of **advertisement** is needed to bring the Technologiemarktplatz in use. While all the network members wanted to have an overall overview of the technologies, projects and members involved in the network, they are hesitant to present themselves or their technologies

We counter that twofold:

1. strict **data protection regulations** and opening the Technologieplattform **only for members** of the smart³-Network
2. Making a presentation on the technology platform a **formal requirement**, e.g. for the completion of a project, for the participation in a workshop etc.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The Technologieplattform can enrich the input of the CEUP2030 project. It can be used as a data base /technology radar for the TINs, especially by the TIN on “Smart and Advanced Materials”.



7.3.5. 5_Karlsruhe Institute of Technology (KIT)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|---|--|
| Name of the PP | KIT |
| What is the name of the harvested result (aka the output/activity name from the project)? | Synergy Profiling Tool |
| What is the name and programme of the harvested project (in English)? | SYNERGY (INTERREG CE) |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://synpro.e-science.pl/ technical design of the Tool is not public knowledge but documented in a project internal deliverable |
| A short description of the result: | |
| <p>The synergy profiling tool is an IT tool produced as a result of the synergy networking and profiling activities in WP1 of Synergy. It can be used for analysing project features to find aspects and competencies that can create synergies between different regional actors, defining common areas of interest (Key Project Areas).</p> <p>SYNERGY PROFILING TOOL is a software tool that analyses multiple project features and organizations competences in order to create synergy effect between entities:</p> <ul style="list-style-type: none"> - looking for new contacts, - wanting to establish wider, international cooperation, - which are interested in finding a partner in the fields of additive manufacturing, micro- and nanotechnologies and industry 4.0. | |
| A short description how it worked: | |
| <p>The tool is divided into three main sections: PROJECTS, ORGANIZATIONS and MAP. Additionally the tool delivers functionality to build and maintain matchmaking.</p> <p>Section PROJECTS is a living database of finalized and running projects located mainly in Central Europe. The projects are assigned to one (or more than one) of the three Key Project's Areas KPA:</p> <ol style="list-style-type: none"> 1. additive manufacturing and 3D printing, 2. micro- and nanotechnology-related processes and materials, 3. Industry 4.0. <p>Section ORGANIZATIONS is a database of entities taking part in the projects listed in the PROJECTS sections plus additional entities that signed up during the projects activities (workshop, online pilot actions etc.). The linkage between stakeholders an projects was the outcome of the initial mapping and profiling conducted in the project; all follow-signees can register their organizations within the tool separately; it was planned (but</p> | |



not yet realized) to have a quality assurance control implemented that should assess whether the new entry is fitting to the criteria and should be listed in the database

Section MAP presents records of organization based on selected criteria, it includes also visualization.

A short description of the key lesson learnt:

One of the key solutions that the Synergy Profiling tool provides is the matchmaking i.e., finding appropriate partners for cooperation.

The key lesson learnt from this result is that this form of matchmaking of organizations led to new partnerships within the organizations gathered around the Synergy project.

It was directly used during one of the online pilot actions on infrastructures sharing to connect infrastructure providers with infrastructure seekers to carry out research activities in the frame of the 3 SYNERGY KPAs

A short description of how the result can be “upgraded” for CEUP 2030 method:


The Synergy profiling tool is readily available through the above mentioned link and has been a proven method for an effective matchmaking between organisations that have similar areas of operation. However tracking of successful matchmaking can not be realised just by the database tool, but is integrated on a larger scale within the SYNERGY crowd innovation platform.

However, one of the issues that needed to be solved, is the need for a quality assurance strategy to keep the content of the database, meaning the details of the existing and novel organisations’ up-to-date. This need was identified within the partnership and plans created to address this issues. However implementation is still pending / realised on a different level of the crowd innovation platform. The issue was that, all the initial entries made in the beginning were created by the partnership during the building of the IT tool, afterwards there was not yet a quality assurance protocol established to manage novel entries or updates of existing entries.

Recruiting of new organisations / stakeholders is done by means of the PP individual efforts & networks in the frame of the SYNERGY pilot actions complemented by the projects communication channels. However, these efforts could benefit from a more profound marketing strategy to increase visibility and subscriptions to the online platform; enhanced communication tools for the platform users and of course quality assurance measures implemented for the database content.



7.3.6. 6_Lombardy Intelligent Factory Association (AFIL)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|--|---|
| Name of the PP | AFIL |
| What is the name of the harvested result (aka the output/activity name from the project)? | 3DC-HyperTree |
| What is the name and programme of the harvested project (in English)? | 3DCENTRAL (INTERREG CE) In case of other, please clarify project & programme name, in English: [Free Text Response] |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.interreg-central.eu/Content.Node/3DCentral/3DC-HyperTree.pdf https://www.interreg-central.eu/Content.Node/3DCentral/CE634-3DCentral-O.T2.1-fact-sheet--Hypertree.pdf |
| A short description of the result: | |
| The output consists in a mapping tool which will help to identify repeatable transfer & innovation processes. It will help users to identify preconditions, processes, required resources & expected results of replicating transfer & inno processes in different contexts. The tool will be structured in a way that it will be used also as a training instrument to empower stakeholders. All processes are assessed, validated & customised to the CE requirements & necessities. | |
| A short description how it worked: | |
| The IT Tool (Hypertree) helped to identify potential transfer processes and it helped to connect “islands of innovation” to a stable network of regions for innovation. In a second step the defined and validated process for transfer and innovation helped stakeholders to focus on important steps in a transfer & innovation process. The process is designed to fit for different organizations like research institutes, universities, companies, etc. |  <p>The screenshot shows the '3D Central' web application interface. At the top, there is a navigation bar with '3D Central', 'Care4Tech', 'Sign Out', and 'Admin panel'. Below the navigation bar, there are two tabs: 'Topic view' (selected) and 'Region view'. The main content area displays a central yellow circle labeled '3D Central' surrounded by several blue circles representing different topics: 'Mechatronics', 'Additive Man.', 'CE Brainbase', '3D DesignEn...', 'Robotics', 'Smart and fu.', 'Digital Life', 'Technologies...', 'Virtual and...', 'Value-added...', and 'Smart Servic...'. The interface is clean and modern, with a white background and blue accents.</p> |
| A short description of the key lesson learnt: | |



3DC-HyperTree tool users were able to identify target groups, Best Practice examples and experts in different contexts and in different region. The tool is structured in an easy way so that stakeholders can identify possibilities for future knowledge & innovation transfer leveraging on the competences available in the Central Europe Network.

Regions and Topics were selected as driver to search for specific ongoing project activities, organisations, experts and Good practices.

A short description of how the result can be “upgraded” for CEUP 2030 method:

This instrument can be exploited to derive guidelines for policy makers focusing on the CAMI4.0 topics and enriching the database available with inputs coming form the TINs networks that will be established in CEUP2030.



7.3.7. 7_SIIT S.c.p.a. Intelligent Integrated Systems Technologies (SIIT)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|--|---|
| Name of the PP | SIIT |
| What is the name of the harvested result (aka the output/activity name from the project)? | Cloudifactoring marketplace for digital engineering |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: H2020 |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.cloudifactoring.eu/marketplace/ |
| A short description of the result: | |
| The CloudiFactoring solution is designed to support manufacturing SMEs and their needs for advanced cloud- or HPC-based ICT solutions. Striving for maximal interoperability, this solution integrates manifold software and hardware platforms, which have emerged from previous projects and research initiatives. Through CloudiFactoring, manufacturing SMEs will be able to seamlessly access all these platforms as if it were just a single one. | |
| A short description how it worked: | |
| The CloudiFactoring Marketplace solution needs to support multiple services, in order to enable consumers and providers to get together and benefit from building business relationships with one another. The domain assists visitors in finding the proper services in a consistent manner. | |
| A short description of the key lesson learnt: | |
| The CloudiFactoring Solution empowers different stakeholders to become members of the community to offer their ICT solutions or consultancy services through an additional distribution channel, or to access advanced cloud-based services (e.g. simulation, analytics, optimisation, etc.) and expert knowledge to boost the company’s competitiveness. The openness of the CloudiFactoring Solution helps any end user in the context of the product development or production processes, any technology provider (ISVs, VARs, computing resources providers), and any consultancy company to join the CloudiFactoring Solution and to exploit the large network of purpose-affined members; thus, building and generating sophisticated added value. | |
| A short description of how the result can be “upgraded” for CEUP 2030 method: | |
| This instrument can be exploited to match demand and offer in the manufacturing field and enriching the database available with inputs coming from the TINs networks that will be established in CEUP2030. It will be available in late 2020 | |



7.3.8. 8_Pomurje Technology Park (PTP)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|---|---|
| Name of the PP | PTP |
| What is the name of the harvested result (aka the output/activity name from the project)? | Hypertree |
| What is the name and programme of the harvested project (in English)? | 3DCENTRAL (INTERREG CE) In case of other, please clarify project & programme name, in English: |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.interreg-central.eu/Content.Node/3DCentral.html |
| A short description of the result: | |
| <p>The IT Tool (Hypertree) helps to identify potential transfer processes and moreover it helps to connect “islands of innovation” to a stable network of regions for innovation. In a second step the defined and validated process for transfer and innovation helps stakeholders to focus on important steps in a transfer & innovation process. The process is designed to fit for different organizations like research institutes, universities, companies, etc.</p> <p>The overall goal of the Hypertree is to help to connect “islands of innovation” to a stable network of regions for innovation on smart engineering and rapid prototyping & develop, implement and anchor powerful, practicable, future-robust KACE system to tighten and boost the linkages and capacities amongst the relevant technology and innovation actors of smart engineering and rapid prototyping.</p> <p>To support this overall goal from WP1-WP3 we developed 5 different entities for the Hypertree:</p> <ol style="list-style-type: none"> 1. Topics 11 Kace Topics with a short definition 2. Organizations Different Organizations are involved in the Hypertree: local public authority, regional public authority, national public authority, higher education and research, education and training center, large enterprise, SME, Business 3. Good Practice Every Partner should include at least 2 Best Practices 4. Experts Every Partner should include at least 2 Experts | |



5. Projects

This entity connects WP3, where other associated projects are included

Showing different Good Practices, clustered by regions and knowledge axis help the KITTS (which are seen as multipliers) and the partners to see knowledge gaps in different regions on different topics.

A short description how it worked:

The process for transfer and innovation was created in 3 steps in order to guarantee that the process is repeatable for a number of different stakeholders. Therefore, in the first step a process was created and tested by the partners and stakeholders outside the project group (companies, research institutes, etc.). In a second step the process was evaluated and then refined. This procedure helped to get a better understanding of the stakeholders needs. Also the IT Tool (Hypertree) which supports this process, by demonstrating possibilities for transfer processes, was continuously updated according to the feedback. The process for transfer and innovation and the IT Tool is first adopted by partners and KITTS and should be adopted by more target groups in the future. During the project this process is still refined, due to the fact that we still gain experiences while working with this methodology. By addressing more and more people in Tech&Inno Camps, Conferences, open Foras and other dissemination activities the process, is transferred to stakeholders outside the partnership. By addressing new stakeholder groups, a lot of additional partners from other organizations/regions/countries will join the common usage & contribute for improving in the future. The IT Tool Hypertree is hosted and maintained on an Evolaris server during and after the project. Every project partner has to keep the data updated during and after the project

A short description of the key lesson learnt:

For the implementation of the transfer and innovation process we had to talk to different stakeholders in order to learn more about their needs. Moreover, we gained a lot of new experiences during the evaluation process. The supporting IT Tool has many features, which were very challenging during the software development. The full search looks for the word, that user wrote in search bar, in the database (i.e. if user wrote "Germany", it would return all entities that have Germany as country or written Germany as word inside). Normally, the node's names are usually longer than it should be. Therefore, there is a tooltip that displays full node's name to keep the visualization consistent and nice. The visualization can be zoomed in or out by using the mouse wheel and also it can be dragged to move it around the screen. There is an administration panel which helps admins with page administration. One thing that impressed me the most is to create circle around the node to represent which node was highlighted and whose data is displayed in the pop up.

A short description of how the result can be "upgraded" for CEUP 2030 method:

The benefit has been mainly showing through presentation on MOODLE platform, where we could showcase different solution providers. MOODLE platform is gathering different research materials and also different solutions that support selected KACEs. On other hand



technologies have been presented also within different TICs that were organized within the project.

What were the key lessons you learnt = The fact that there are state of the art solution providers in Slovenia, which are still at start of their career and can with help of this kind of projects find an international partner to further develop or test the solution. On other hand small SMEs are looking for concrete and tested solutions on the market, and usually do not have enough experience nor knowledge to select among the broad spectrum of them. So, the project can help them identify such cases and help them to easily test or implement them.

As stated above, the international network build around such projects can help SMEs or solution provider to easily find partners from other regions. To help with that we have built a hyper tree tool, which acts as a mapping tool in order to cover the supply and demand. On one hand we have been showcasing different technologies and solutions from different regions of the project, while on other hand we have been asking our small SMEs to join and enter the tool to find their perfect match.

Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design

| Name of the PP | PTP |
|--|---|
| What is the name of the harvested result (aka the output/activity name from the project)? | RAMP |
| What is the name and programme of the harvested project (in English)? | DIH2 (H2020) In case of other, please clarify project & programme name, in English: |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | https://www.ramp.eu/ramp/ |

A short description of the result:

RAMP (www.ramp.eu) A marketplace as one-stop-shop for SMEs to access essential services for digital transformation including business modelling, technical support, access to skills and finance.

Everything the DIH2 partnership develops as services will be integrated into one single tool with various sub-functionalities. The database is yet subject of completion (upload of contents: solution providers contacts, good practices,) in in order to become one-stop-shop in later stage - full functionality. There are going to be at least 9 specific robotic topics/challenges as identified in advance and further more are expected to be added till and beyond the project ending, as the tool and services around with participating interested DIHs are structure as sustainable and services to be part of future business model of DIHs (on national level we talk about so called LERs-Local Evangelists in



Residence, e.g. facilitators within participating DIH organization, to assist companies in need to find matching partner to solve their challenges, and facilitator to assist in finding appropriate funding opportunities.

The DIH² Marketplace builds upon existing work that has been conducted in the framework of other EU-funded project, more specifically the L4MS Marketplace. It therefore aims not to substitute existing work, but rather enhance and extend it with new features aimed to address the DIH² project objectives, and at the same time contributing to the development of an overall feature-complete platform which addresses effectively the need for enabling the digitization of manufacturing in Europe.

A structured elicitation, analysis and evaluation methodology was followed in order to derive a comprehensive set of the functions and tools that the DIH² Marketplace should implement, as well as to develop the full catalogue of the user requirements. Previous research has been exploited and expanded with new data which was used to re-analyse or confirm the previously extracted results on the requirements and desired functions and tools. These are then prioritized and planned for implementation in specific DIH² Marketplace releases, so as to first meet the most important stakeholder expectations, demonstrate successfully its added value and make clear the benefits to each stakeholder group.

A short description how it worked:

Yet in progress but first steps are taken and upon tool a potential business model is proposed. Upon further experiences we shall change the model:

DIH² Network Business Model Canvas

| | | | | |
|-----------------------|---|--|--|--|
| Key Partners | Key Activities | Value Propositions | Customer relationships | Customer Segments |
| DHIs | Brand recognition Populate OPAP | Access to exclusive tools and vibrant Community | Membership Agreement Subscription Agreement Services provision Agreement | Robotics DHIs |
| Network Members | Networking | Accelerate customers acquisition | Funding Framework Sponsorship Agreement | System Integrators Technology Suppliers |
| EU Regions | Dissemination Activities | Access to 'premier class' technical and non-technical services | Services Providers Agreement Investment Agreement | SMEs |
| EC | Customers acquisition | Accelerate digitisation of your industry | Channels | National/Regional Governments |
| | Key Sources | Access to a EU-wide sales force | Marketplace Members ecosystems Social Media | Large Manufactures |
| | Marketplace COPRA-AP Expertise Network connection | A EU window-shop for your services | Network Conventions Open Calls EU Projects | Network Core Services Providers |
| | | Multiply by 3 your investment | | EIF/EIB/Investors |
| Cost Structure | Personnel cost (office staff) Tech. support | MKT & Communication Office cost | Revenue Streams | |
| | | | Membership Fee Transaction-based | Pay-back Model Multi-Regional Fund |
| | | | | Sponsorsh InnovFin Technology Transfer Fund |

The baseline for the DIH² Marketplace from the system engineering perspective is that it includes the marketplace requirements, from functional perspective as well as from non-functional and qualitative perspective. The requirements are prioritized and planned to be implemented following the scope, plan and overall focus of the DIH² project. As the project progresses, this document serves as the guideline and backlog of the priority of additional functionalities which will be implemented, when deemed appropriate from the business perspective. The requirements were collected and elicited in a structured and disciplined approach, to ensure high quality and usefulness in the next steps of the development. Previous work implemented in the EU-funded project L4MS (Grant Agreement No 767642) is exploited, so that the efforts in DIH² are efficiently used to implement new features only. A handful of different techniques were utilized:

- Collaborative techniques: brainstorming, mind-mapping, workshops, interviews



- Legacy systems, system archaeology
- Document analysis, literature research
- Online questionnaire

The analysis concluded on a prioritization of the services that the DIH² Marketplace should offer in the short and long term:

1. Video on how robotics can change the production, catalogue of “Robotic-based Open Standard Enablers for Agile Production” (ROSE-APs), DIH² Network, catalogue of “Intellectual Property - Ethical, Legal and Socio-economic” (IP&ELS) experts
2. Training & webinars, supplier history, ratings & feedback
3. End users to find experts & consultants to take care of whole implementation, show clearly the applications & industries covered, user messaging, use cases and success stories
4. Solution providers to find expert & consultants depending on their experience with systems and their expertise, guidelines & tutorials, factory/process simulation
5. Post-sales (maintenance, spares etc.), automated recommendation of end-users to contact, funding information, demand advertisements, video on Marketplace benefits
6. Price tags on solution providers, industry & Marketplace news

These are further analysed and translated into 6 top-level system functions and new user requirements on extending the previously analysed in the context of L4MS (total user requirements: 95). The list of the planned functions includes:

- User customisation (User & organisation data storage, user dashboard)
- Communication (Messaging, Discussion boards, User support)
- Brokerage (Robotics Repository, Rating & Feedback, Service exchanges’ tracking, Active matchmaking, Demand advertising)
- Tools (Investment calculator, File repository, Open calls, IP&ELS Voucher)
- Training (Training platform)
- Content management (View content, Add content)

These functions are planned to be implemented in specific versions of the DIH² Marketplace, extending the existing L4MS Marketplace, following an incremental and iterative development approach.

A short description of the key lesson learnt:

As already stated, some of the actions are follow up of experiences in existing L4MS Marketplace as well as from other platform OPIL (for Logistics robotic solutions) and is similar to what DIH² intends to provide as COPRA and ROS-AP.

Very meticulously planned approach how to establish/set-up the tool, so future tools by CEUP2030 could use this approach or event to consider how to link with this and similar platforms to have all topics access from one tool or at least an entry point with same



front-end, where by need one (SME) can be redirected to most appropriate database and tool:

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Definitely there is a broad range of existing tools and data, what we need is just to have a single user interface (preferably user-friendly) and in the background growing community with competencies available.



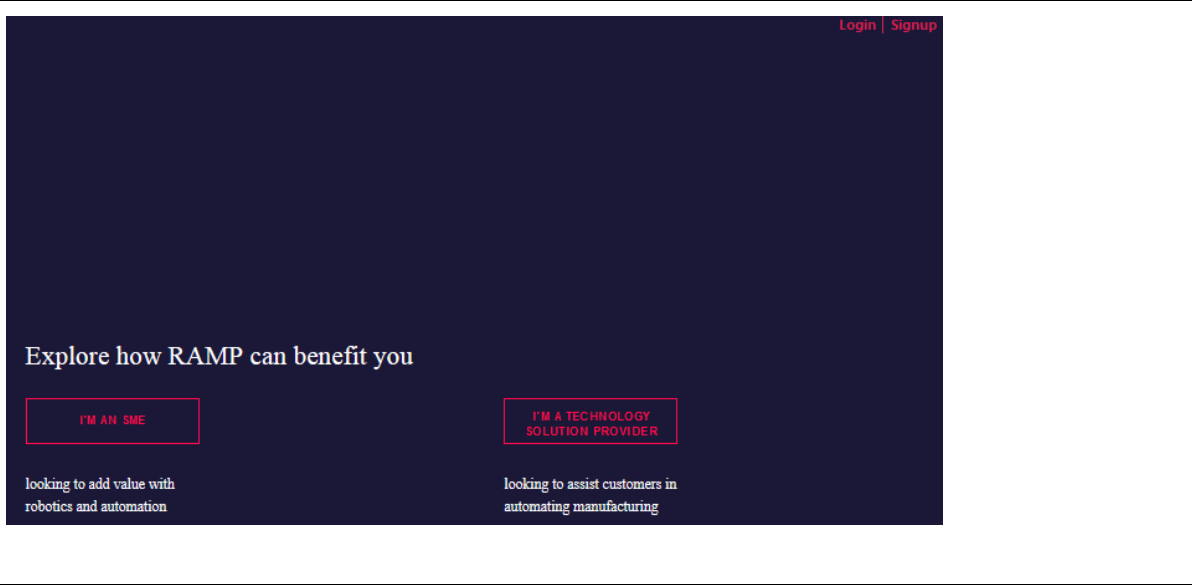
About us

Accelerating productivity with robotics

RAMP is the digital marketplace for robotics capable of accelerating productivity in Small and Medium-size Enterprises and of broadening markets for Technology Solution Providers. We achieve this by making it easy for SMEs and Solution Providers to work together in ways that benefit both parties:

As a manufacturing SME you gain access to robotics and digitisation technologies to improve efficiency and productivity.

As a Technology Solution Provider you reach customers faster and enjoy access to a far larger market.



A short description of how the result can be “upgraded” for CEUP 2030 method:

For the purposes of CEUP2030 we could use similar PR campaign to address policy level stakeholders as well as SMEs upon importance of the CAMI 4.0 topics on one hand and using tools available to cover at least one of CAMI 4.0 identified topics (Robotics & Automation) with competence of 26 DIHs from DIH2 project. Our topics shall join or address existing initiatives in order not to compete or duplicate things and so join similar events to promote aspect of bottom-up solutions to policy level.

Simply to copy the methodology and / or to link with this RAMP (Robotics and Automation Market Place) with CEUP2030 project - definitely with this platform we cover one specific CAMI 4.0 topic (Automation & Robotics).

Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design

| | |
|--|--|
| Name of the PP | PTP |
| What is the name of the harvested result (aka the output/activity name from the project)? | Mapping Tool P-tech |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: Smart Factory Hub, Danube Transnational Programme |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | http://www.p-tech.si/sfh-mapping/ |

A short description of the result:



The online interactive platform is established for the purpose of identifying PROVIDERS OF TECHNOLOGICAL SOLUTIONS and selected GOOD PRACTICES (or reference projects) in the field of manufacturing (INDUSTRY 4.0). It provides a visual presentation of the possibilities of cooperation and a supportive environment for the implementation of TECHNOLOGICAL TRANSFER, where interested manufacturing companies can find providers of technological solutions, selected good practices, available financial instruments under which it is possible to obtain funding for technology transfer and a list of projects. services. The platform is open and allows data entry of all interested solution providers to present their offer.

A short description how it worked:

The platform allows searching by the following CRITERIA:

1. List of ORGANIZATIONS by:
 - a) States
 - b) type of organization
 - c) sector
 - d) the provision of services.
2. List of PROJECTS with descriptions of service offers
3. List of FUNDING SCHEMES to support technology transfer
4. List of PRODUCTS / SERVICES in industry 4.0
5. CONTACT POINTS by country

The data and various graphic materials regarding the included organizations, projects, funding schemes, products and services and facilitators have been inputted via the Excel files and platform's back end by the selected facilitators who were named by every project partner. As of 12th March 2018, the platform is publicly accessible, contains the data of more than 1200 organizations, 180 projects, 100 funding schemes, 40 good practices regarding the manufactured products and services and 30 facilitators from 10 European countries. In addition, it is further expanding.

The main objective of such an endeavor is to link demand and supply tendencies in the field of mostly small and medium-sized enterprises and also other production based (including farms) and solutions (research and development, research centers, etc.) providing organizations which can then easily and quickly identify mutual interests, meet their cooperation, financial and knowledge/technology based needs, find partners and so on. This can also lead to a cluster formation.

A short description of the key lesson learnt:

The online platform is a living thing and should be further developed and somehow improved. The international network build around such projects can help SMEs or solution provider to easily find partners from other regions. This mapping tool cover the supply and demand. On one hand we have been showcasing different technologies and solutions from different regions of the project, while on other hand we have been asking our small SMEs to join and enter the tool to find their perfect match.



A short description of how the result can be “upgraded” for CEUP 2030 method:

As an industry 4.0 ecosystem, the web is also evolving. It will be important to determine the administrator of this platform and possible ways to review the functionality of the dashboard after the end of the project



7.3.9. 9_Pannon Business Network Association (PBN)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|--|--|
| Name of the PP | PBN |
| What is the name of the harvested result (aka the output/activity name from the project)? | CRM System - 4STEPS project |
| What is the name and programme of the harvested project (in English)? | OTHER (Please Clarify Below) In case of other, please clarify project & programme name, in English: 4STEPS (Interreg Central Europe Program) |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | 4STEPS project website: https://www.interreg-central.eu/Content.Node/4STEPS.html Public link to the questionnaire: https://4stepscrm.com/index.php?kitoltesboard&chooselang&kitoltes=542 |
| A short description of the result: | |
| <p>4STEPS project objective is to support the implementation of smart specialisation strategies and to foster the application of industry4.0 solutions in the project regions. Among the first steps, the partnership agreed to gain data from 350 manufacturing companies across the project regions in a form of a questionnaire. The form focused on both SMEs' needs and their level of adaptation to Industry 4.0 themes, in order to see which interventions could be implemented to them. The CRM was developed in order to create a common system where all partners can conduct the questionnaire, and the main administrators can monitor the process of SME involvement in every region (how many questionnaires have been filled in the region and when and by whom...)</p> <p>As planned, 50 companies/project region (mainly manufactures) of different RIS3 sectors filled in the questionnaire.</p> <p>“The analysis of the questionnaire will lead to the definition of a Technology Maturity Level Index to be applied to SMEs and evaluating their level of application of concepts and methodologies of Industry 4.0. The TML will ascribe to each company its degree of technology readiness and its innovation potential.” <i>(GUIDELINE: HOW TO USE THE ONLINE CRM SYSTEM FOR SME INVOLVEMENT - Complementary document for D.T1.1.2 definition of the transnational tool for the anyalysis)</i></p> <p>The TML has been integrated to the CRM system, so every PP had the opportunity to check the TML indexes of their companies, and comparing the results on national and transnational level as well.</p> | |
| A short description how it worked: | |



SMEs could fill in the questionnaire in an online way through the CRM with the preliminary given account (e-mail+password) or they can fill it in via public link. To those who were worried about data management because of the sensitivity of the data, the partnership offered opportunity to fill in the questionnaire in other way (e.g. via direct mail). Finally, all answers had to be uploaded in the CRM system in order to have the analysis. The progress of questionnaire filling can be monitored by each company (opened, in progress, closed).

Every partner had the possibility to translate the questionnaire within the CRM system into their local language, and as soon as the translation is ready, the questionnaire appears in local language when companies choose their country of origin on the public link.

Based on the replies received from the companies, the responsible Project Partner of 4STEPS (PBN) prepared numerous transnational figures where the companies' results were analysed and compared on partnership level. These transnational figures have been uploaded to the CRM system.

A short description of the key lesson learnt:

In the beginning of the establishment of the CRM system in the project, several technical problems occurred which had to be solved (problems with log-in, some functions were not working appropriately, public link was not working..)

It took time when partners (and their SMEs) could use the system in a smooth and confident way without any technical problems.

It was not possible to change the company answers in the system, but in some cases it might have been useful.

It was useful to monitor the results (how many companies filled in the questionnaire from which country and when).

The TML indexes are now visible which demonstrate a comparable result between 7 CE countries' SMEs.

A short description of how the result can be “upgraded” for CEUP 2030 method:

This instrument can be exploited to gain & show the interests of the involved triple-helix stakeholders, and to connect them with the main topics /results of CEUP2030.



7.3.10. 10_Croatian Agency for SMEs, Innovations and Investments (HAMAG)

| Result Harvest for WPT2 Tools for Policy Intelligence Dashboard design | |
|--|---|
| Name of the PP | HAMAG |
| What is the name of the harvested result (aka the output/activity name from the project)? | Mapping Tool |
| What is the name and programme of the harvested project (in English)? | Choose Good Practice Project Name In case of other, please clarify project & programme name, in English: SMART FACTORY HUB Interreg CE |
| Hyperlink to the result location (aka where more information on the strategy or workshop methodology can be found) | http://www.p-tech.si/sfh-mapping/ |
| A short description of the result: | |
| <p>The interactive platform is established to support SMEs by providing a geographic overview and give some information about actors, good practices, projects, and facilitators, and, thus, foster the match between the demand (production/manufacturing organizations) and supply (solution providers) tendencies. By providing a visual depiction of joint possibilities the tool is supposed to play a powerful role in guiding policy, planning, and strategic actions to joint solutions as well as B2B instruments. The platform is open and allows data entry of all interested solution providers.</p> | |
| A short description how it worked: | |
| <p>The platform contains data about:</p> <ul style="list-style-type: none"> • Organizations, • Projects, • Funding schemes, • Products and services in industry 4.0., • Contact points. <p>The tool supports SMEs by providing geographic overview of the available services, support schemes and supportive ecosystem across the regions.</p> <p>The main goal of this platform is to link demand and supply in the field of SMEs who are looking for solution and providers who are offering smart solutions. Also, on the platform different information about whom to contact regarding Industry 4.0. can be found.</p> | |
| A short description of the key lesson learnt: | |



The mapping tool is a living thing and bound to be further developed and improved or modified in the future. The initial and potential design, development, and implementation errors and flaws have already been fixed and revised.

A short description of how the result can be “upgraded” for CEUP 2030 method:

The database should be filled regularly and updated so that interested stakeholders can receive information that they are searching for. The platform can be expanded with data from other countries that are not currently involved.