

TRANSNATIONAL WORKSHOP FOR THE PILOT EVALUATION

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1. TRANSNATIONAL WORKSHOP FOR THE PILOT EVALUATION

Date: 29th March 2022

Time: 14:00h

Location: Online (MS Teams)

Number of Participants: 20

2. Agenda

14:00-14:10h Welcome & Introduction

Dr. Florian Maurer

Vorarlberg University of Applied Sciences

Mr. Luc Schmerber

Baden-Württemberg Connected e.V. & Interreg CE Chain Reactions

14:11-14:20h Support of and investment into Small and Medium Enterprises: the transnational DIH of the region of Emilia-Romana

Mrs. Marcella Contini

CNA Emilia-Romagna

Mrs. Arianna Fantesini

RE:Lab

14:21-14:30h Facilitation of regional digital revolution via DIH services - iLaBB 43300 case study

Patrycja Węgrzyn

Regional Development Agency Bielsko-Biala

International Project Specialist

14:31-14:40h Innovation meets manufacturing: the Fab Lab experience

Mag. Vojtech Jira

DEX Innovation Center

Consult

14:41-14:50h DIH Business Intelligence & Innovation, Vorarlberg, Austria

Prof. (FH) Dr-Ing. Jens Schumacher

Vorarlberg University of Applied Sciences

Head of Reserach Department Business Informatics

14:51-15:00h How to increase digital maturity in companies - challenges and solutions

Urška Spitzer

Chamber of Commerce Slovenia

Consult

15:01-15:10h The Virtual Dimension Center

Prof. Dr.-Ing. Dipl.-Kfm. Christoph Runde

Vitor Macedo



VDC Fellbach
Managing Director

15:11-15:20h From Digitalization to Resilience - analytical case from CE SME survey

Dr. Balázs Barta
Pannon Business Network
Managing director

15:21-15:35h Round table discussion, about „how is and what is the Digital Innovation Hub contributing to ...

- Sustainability? (including environmental, economic, and social sustainability aspects)
- Human-centricity? (including workers' health, wellbeing, and empowerment, as well as re-skilling and up-skilling activities) and the
- Resilience of industry? (including technological and process/supply chain/organizational aspects)

15:36-15:40h Conclusion & wrap-up

Dr. Florian Maurer
Vorarlberg University of Applied Sciences

Mr. Luc Schmerber
Baden-Württemberg Connected e.V. & Interreg CE Chain Reactions

3. Presentations

Each partner of the project presented their results, conducted events and actions and discussed their future plans for each respective Digital Innovation Hub. There was room for questions at the end of each presentation as well as a round table discussion about the contributions of the Digital Innovation Hubs towards sustainability, human-centricity, and resilience of industry at the end of the event. During the presentations the participants of the event had the chance to rate the presented Digital Innovation Hubs and add remarks and comments about each hub to a shared document.



A.1. Support of and investment into Small and Medium Enterprises: the transnational DIH of the region of Emilia-Romana

MACKATHON

The Mackathon is a format structured in a one-day event involving previously selected providers of digital solutions and potential client companies in a five-step co-design aimed at providing an initial prototype on subjects related to the context of digital services.

The project idea arises from the need for companies to develop a structured dialogue with technology providers that take into account their needs and those of the end user.

Objectives:

- Offer digital solution providers an opportunity to present and promote their activities and expertise;
- Facilitate companies that have expressed a need for digitization in identifying partners with whom to implement their projects;
- Develop "tailor-made" proposals related to the context of digital services through the experimentation of co-design models and build an initial prototype.

TAKING COOPERATION FORWARD

THE CO-DESIGN METHODOLOGY

- 1. Big IDEA & empathize**
The supplier verifies the client's needs, examines the solution idea that the client has defined independently and develops a project plan with the client to imagine the challenge that they will have to face in the next phase to define at the concept and prototype phases.
- 2. Define the challenge**
The supplier and the client focus on the final user who will have to interact with the digital solution. The client and the supplier conduct a workshop on the current and future scenarios and outline the keywords to be used during the concept and prototype phases.
- 3. DISCUSSION & solution concept**
The supplier and the client discuss a conceptual solution that considers the previous phases. The supplier develops the concept and presents it to the client. Together they go through the details and assess the risks and benefits.
- 4. PROTOTYPING**
This phase deals with developing the idea. The objective is to present the idea of the digital solution with its macro-functionality and a rough quantification of time and costs for its realization. The supplier should also prepare an outline visualization of the simplified proposal. It is presented at the conclusion of the design.
- 5. PROTOTYPING presentation**
The supplier in this phase presents his prototype to the client who can ask questions of clarification (but cannot ask to modify the features).

TAKING COOPERATION FORWARD

RESULTS

The event led to the six clients choosing as many providers and doing the design work to create six prototypes. The solutions proposed to the customer have included a brief description of the prototype, the macro-functionality and the quantification of time and costs of realization.

Participants rated the experience positively, taking into consideration the following elements:

- Challenge;
- Networking;
- Personalized result-oriented dialogue;
- Concrete business opportunity and investment;
- Development of a customized solution based on actual needs.

TAKING COOPERATION FORWARD

A.2. Facilitation of regional digital revolution via DIH services - iLaBB 43300 case study

OVERVIEW OF PILOT ACTION (1)

Development of DIH

04. 03. 2021 - EU Industry Week: Industry 4.0 Making Locally Going Globally

- Awareness raising event & signature of Letters of Intent with DIH partners
- annual flagship event of the European Commission + local events
- innovative format - professional studioTV - live on YouTube channel
- the local dimension in global value chains **building regional competitiveness**
- link to the video: https://youtu.be/L_Z7z8G0h28

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OVERVIEW OF PILOT ACTION (2)

Showroom facility

- Based on the infrastructure of FabLab - fabrication laboratory equipped with
- Purchase of equipment - two robotic arms
- Installation of robotic arms in FabLab
- Relevant training for FabLab manager
- Visit in showroom facility of hubIndustry - good practice exchange

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OVERVIEW OF PILOT ACTION (3)

Showroom facility

- Participation in **technology related events** - eg. robotic arms booth on BBDays4.IT festival
- Organisation of Technology Breakfast
- Individual meetings - **tailored technological consultations**

WEBINAR

Obsługa i programowanie robotów przemysłowych

TAKING COOPERATION FORWARD



A.3. Innovation meets manufacturing: the Fab Lab experience

PILOT ACTION IN CZECH REPUBLIC

Creation of educational concepts for managers for transformation towards Industry 4.0.

- I. Concept transformable into other workshops and seminars
- II. Suitable for small and large companies
- III. Support for other companies considering digital transformation - a source of information

PILOT ACTION IN CZECH REPUBLIC

FabLab workshops for SMEs demonstrating exploitation of rapid prototyping using advanced manufacturing

- I. 10.12.2021 -Basics of CNC and engraving
 - I. introduction to CNC
 - II. creation of models for CNC and plotter
 - III. operation of equipment
- II. 4. 2. 2022 - 3D printing for SMEs and freelancers
 - I. Introduction to 3D printing for small and medium-sized enterprise
 - II. 3D modelling
 - III. Creating models
 - IV. Operating 3D printers (SLS, SLA, FDM)

PILOT ACTION IN CZECH REPUBLIC

Match-making event creating linkages among Industry 4.0 SMEs 30. 3. 2022

- I. 25 companies in one place
- II. representatives of the chambers of commerce and the region
- III. a joint meeting of technology suppliers and companies that want to digitalize their processes in National centre of I4.0

Keep your fingers crossed for us!

DIH Business Intelligence & Innovation, Vorarlberg, Austria

DIGITAL APPEARANCE

- Hub Homepage
- S3 Platform
- Wiki, Service Guidelines & Experience
- DIH of the Month

THE HUB IN ACTION

- Resource definition & integration (New building, facilities, labs & maker spaces)
- Service definition & development (3 services + sub-services, matchmaking & networking)
- Event organization (several events for business & industry organized and/or supported)
- National & international networking, cooperation & collaboration; digital marketplaces, cooperation with projects

THE HUB IN ACTION

- Industrial research; scientific research; publication and dissemination (e.g. 2x CAIDE, Best e-cont., 2x Pro-Vis, 19th, ON-ARY...)
- Awards and prizes (Hub of the month, ELISALP youth, Best Poster...)
- Videos
- Lectures, trainings & education
- Project proposals (incl. Social Business & Industry)
- Promotional activities (4Steps lunch box)



A.4. How to increase digital maturity in companies - challenges and solutions

STRUCTURED INTERVIEW: DIGITAL MATURITY


- Vertical and horizontal systems integration
- Shop-floor connectivity (IoT)
- Manufacturing planning and control
- Automatization
- ERP and MES intelligence
- Digital strategy
- Human resource digital development

+ INFORMATION REGARDING PUBLIC PROJECTS CALLS AND OTHER FINANCING OPTIONS

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LECTURE: INDUSTRY 4.0

- Automation and robotics
- Artificial intelligence
- Internet of things
- Data and data analytics
- Blockchain
- Quantum computer science



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CONTEXT

- 10 digital assessments and coaching of different manufacturing SME's
- Seat of the company + online
- GOAL: to provide information of industry 4.0 and the digital transformation in theory + inform the company of their digital readiness and digital maturity level and to give them an understanding of their progress

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A.5. The Virtual Dimension Center

OPERATOR 4.0 - APPROACH

- Analyse initial concepts for the Operator 4.0 in today's industrial environment
 - Consulting
 - Information and contacts for operator 4.0 technologies
 - Kept up to date on trends

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OPERATOR 4.0 - APPROACH

Operator 4.0 Typologie



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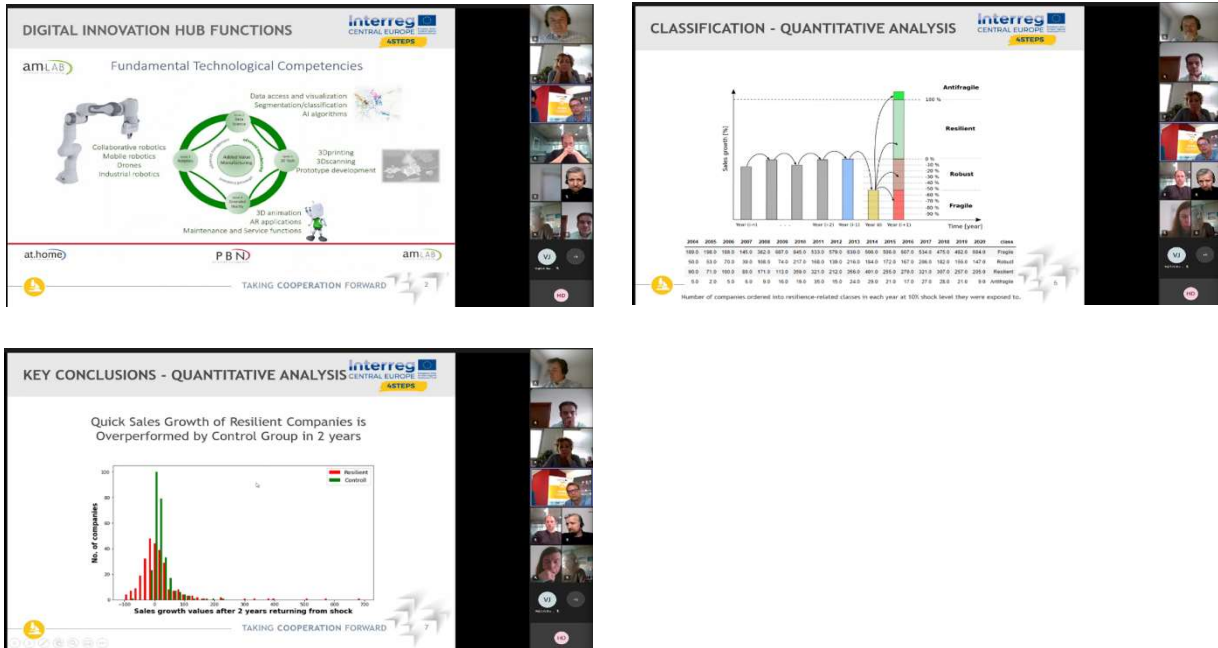
OPERATOR 4.0 - APPROACH

- Demonstrations of portable devices for use in an industrial context
 - Hardware
 - Software
 - Use Cases
- AR Service (tablet)
- AR use cases (tablet + HoloLens 2)
- Logistics smart glass (glasses + wearable scanner)
- VR production planning

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A.6. From Digitalization to Resilience - analytical case from CE SME survey



A.7. Round table discussion, about „how is and what is the Digital Innovation Hub contributing to ...





Remarks and comments for the Digital Innovation Hub

PP01 & PP02: Italy

Strengths	Opportunities
<ul style="list-style-type: none"> • Human-centricity by collaborative approach • Pilot cases makes it possible to engage many people - from heterogenous disciplines 	<ul style="list-style-type: none"> • Give your hub a name/brand and identification

PP03: Poland

Strengths	Opportunities
<ul style="list-style-type: none"> • technological testing opportunities • innovative format • smart ideas: such as technology breakfast • Showroom from customer experience; use it as training center • Good visibility by attending events 	<ul style="list-style-type: none"> • to extend the use of TV settings and tools • Give your hub a name/brand and identification

PP03: Czech Rep

Strengths	Opportunities
<ul style="list-style-type: none"> • important connection with investors • very well declined • Close contact to business and industry 	<ul style="list-style-type: none"> • Give them more tools and methods

PP04: Austria

Strengths	Opportunities
<ul style="list-style-type: none"> • very concrete approach • digital factory • many tasks performed 	<ul style="list-style-type: none"> • Get closer to industry



PP05: Slovenia

Strengths	Opportunities
<ul style="list-style-type: none"> • very interesting the digital development of HR • nice the impact also on the tidiness of factories 	<ul style="list-style-type: none"> • Give your Hub a name and/or a brand • Get closer to industry

PP06: Germany

Strengths	Opportunities
<ul style="list-style-type: none"> • interesting the application to specific sectors • Well established and grounded in the community • A tailored service portfolio for the customers and 4Steps target groups 	<ul style="list-style-type: none"> • portable devices can be adopted by many SMEs • Go for Horizon Europe • Best case studies with names of participating companies (e.g. from business, ...)

PP07: Hungary

Strengths	Opportunities
<ul style="list-style-type: none"> • interconnection among different technologies • selection of the best potential customers • emphasis on positive approach to change • Very specialized on resilience 	<ul style="list-style-type: none"> • Specialization on resilience would also give the opportunity to work on methods and tools to increase resilience and innovation • deep analysis and use of data