



# ManuLearn

LEARNING THROUGH  
MANUFACTURING  
CHALLENGES

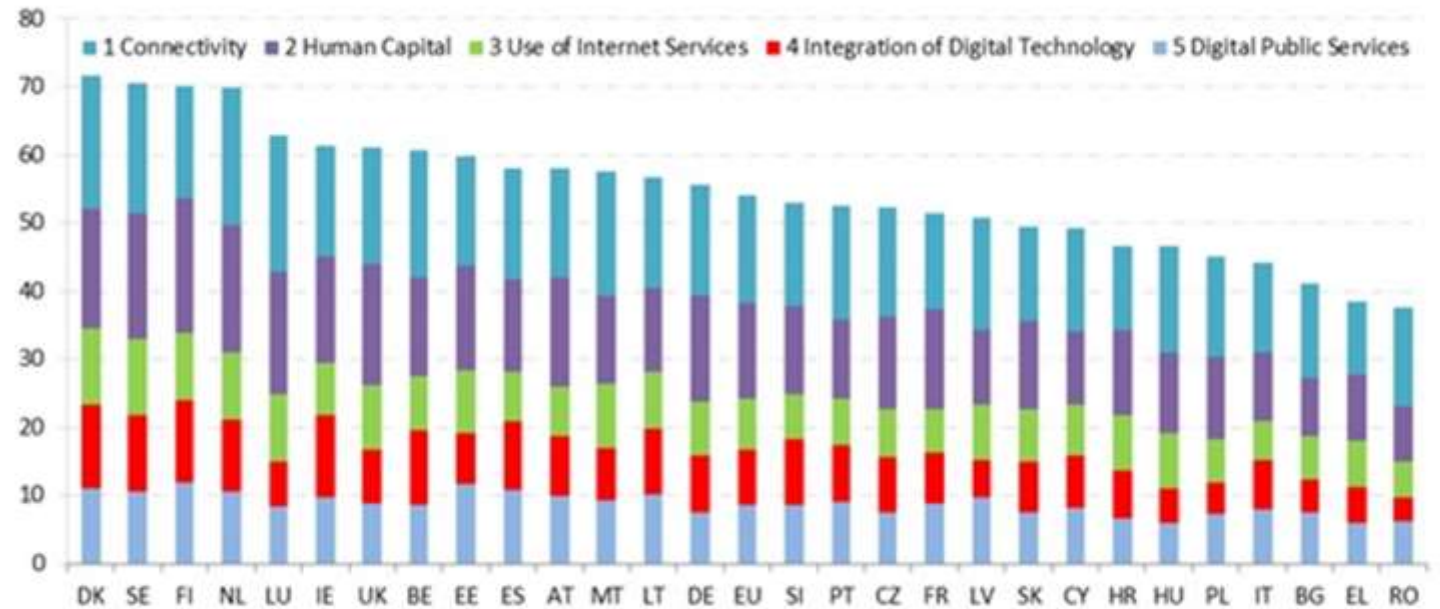
EUROPEAN  
MANUFACTURING  
INNOVATION



## THE CHALLENGE

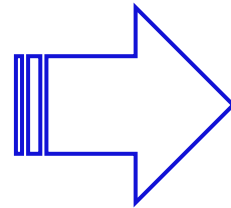
Lower performance of EIT RIS countries than the EU average regarding the development of advanced digital skills and the integration of Industry 4.0 technologies in companies

Digital Economy and Society Index (DESI) 2018 ranking

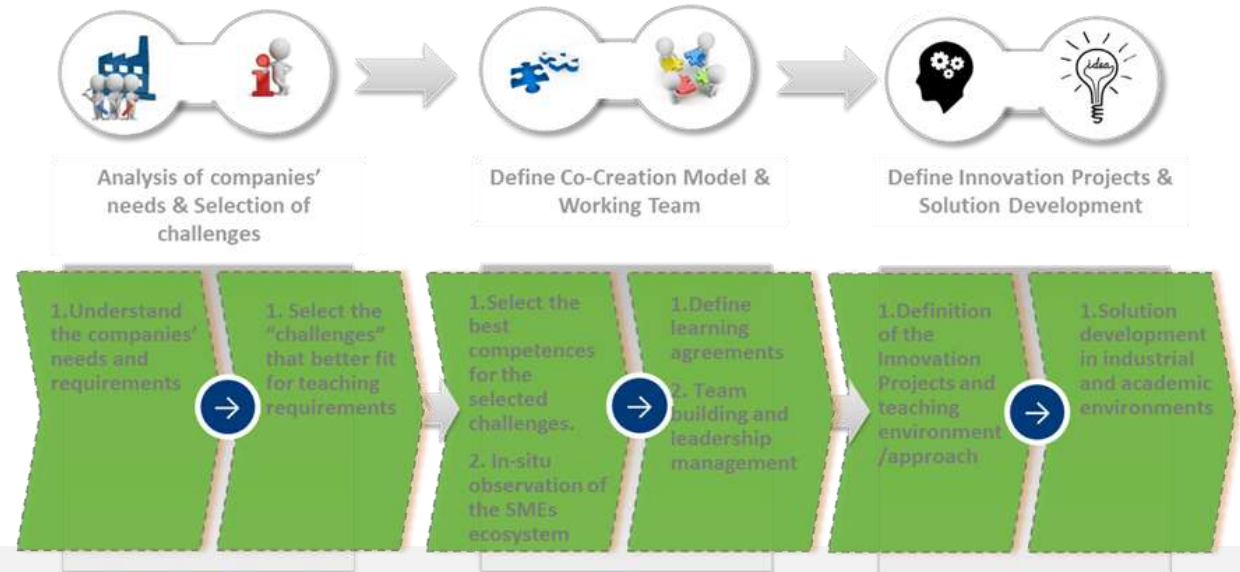
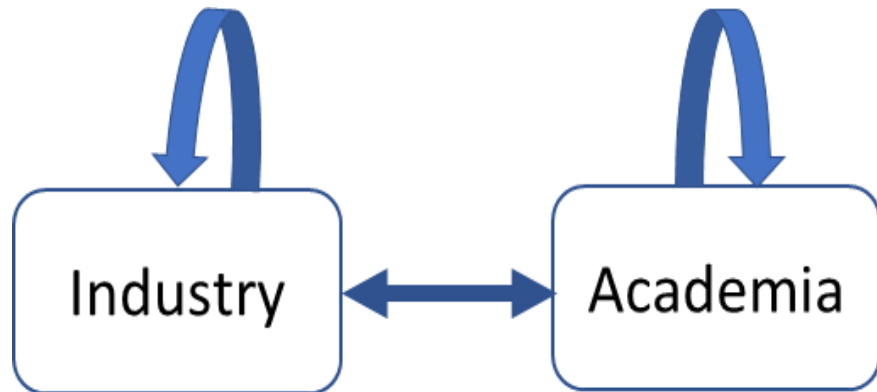


Source: <https://ec.europa.eu/digital-single-market/en/news/digital-economy-and-society-index-2018-report>

**STRENGTHEN INNOVATION POTENTIAL OF PARTICIPATING EIT RIS COUNTRIES BY IMPROVING REMOTE EDUCATIONAL FRAMEWORK AND PROMOTING DIGITAL CAPABILITIES**



ManuLearn aims to deliver a program where students, researchers, and manufacturing practitioners work together to manually develop their skills through co-created solutions to real manufacturing challenges combining the concepts of Teaching and Learning Factories with an Open Innovation Event



## 5 TOPICS

- 1) Modelling, Simulation and Digital Twin
- 2) Control System and Optimization
- 3) Manufacturing Intelligence: Robot Calibration & Robots in Advanced Manufacturing Processes
- 4) Extraction of data from the Conventional Pinacho lathe for Cloud monitoring (EPCloud)
- 5) Industrial Challenges to become Digital Manufacturer: Experiences of EU Companies

## 4 LEARNING SCHEMES

- 1) “Academia to Industry” Teaching Factory
- 2) “Industry to Academia” Teaching Factory
- 3) “Academia to Academia” Learning Event
- 4) “Industry to Industry” Learning Event

1

**WORKFORCE UPSKILLED  
THROUGH TF OFFERED  
BY ACADEMIA**

2

**STUDENTS DEVELOP  
DIGITAL SKILLS THROUGH TF**

3

**INSTITUTES INNOVATE THE  
WAY THAT EDUCATION  
DELIVERED**

4

**COMPANIES LEARN EACH  
OTHER**

5

**ACADEMIA DRIVES THE  
RESEARCH BASED ON  
REAL INDUSTRIAL NEEDS**

# ManuLearn: The Role of EIT Funding and Support

## ESTABLISHMENT OF 4 LOCAL NODES

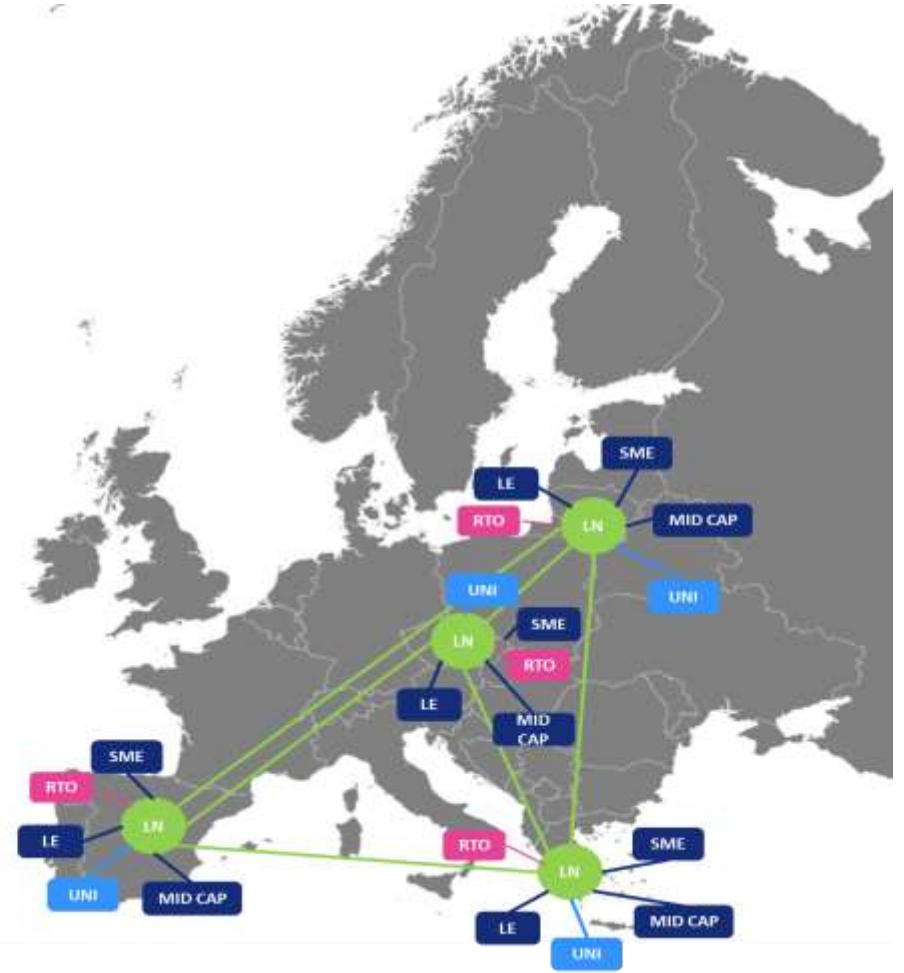
**GREECE**  
 Laboratory for Manufacturing Systems and Automation, University of Patras

**LITHUANIAN**  
 LINPRA  
 Intechcentras

**SPAIN**  
 Tecnia  
 IMH

**CZECH REPUBLIC**  
 Czech Technical University in Prague

*“EIT support for the activity is important because it provides funding and disseminates the results and benefits of the project to potential stakeholders in order to involve more stakeholders in the EIT community”*





# ManuLearn: Results so far & Next Steps

## 3 TEACHING FACTORY PROJECTS

- ✓ 3 different manufacturing topics
- ✓ more than 60 participants
- ✓ Across 4 European Countries

## 1 ACADEMIC LEARNING EVENT

- ✓ 1 manufacturing topic
- ✓ Combining TF and LF concepts
- ✓ More than 40 students
- ✓ Across 3 European Countries

## 1 INDUSTRIAL LEARNING EVENT

- ✓ Share knowledge, discuss and co-create solutions
- ✓ more than 18 companies
- ✓ Across 5 European Countries



**Next Steps..**



1

**RAISE THE AWARENESS AND EXCHANGE KNOWLEDGE WITH NON EIT RIS PARTNERS**

2

**IMPROVE THE PROGRAM TAKING INTO ACCOUNT PARTICIPANTS FEEDBACK**

# ManuLearn

For more information please visit our website:

 <http://manulearn.eu/>

Follow us on the social networks!

 <https://www.facebook.com/ManuLearn>

 <https://www.linkedin.com/company/manulearn/>



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## PROJECT PARTNERS:

