



THE EMERGING TECHNOLOGIES: the drivers for digital transformation in business and education

SID 2024

Sibiu Innovation Days

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The innovation needs for 5.0 transition

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Agenda

- CoDEMO Project overview
- Research on innovation needs for 5.0 transition – goals & scope
- Regional & sectoral innovation needs for 5.0 transition
- Recommendations



CoDEMO Project overview

Co-Creative Decision-Makers For 5.0 Organizations



- Enhancing the **innovation capacity** of the EU by creating national cooperation networks for the development of 5.0 Organisations
- Building an ecosystem to support the development of new **pro-innovation skills** for decision-makers, with a particular focus on Industry 5.0 and Society 5.0.





Goals & scope of the CoDEMO survey

- Identification of the 5.0 transition **drivers of innovation** on the 4 dimensions



RESILIENT



Green-oriented



DIGITAL-ORIENTED



Human-oriented

- Analysis of the innovation needs of EU socio-economic actors (CoDEMO partners)



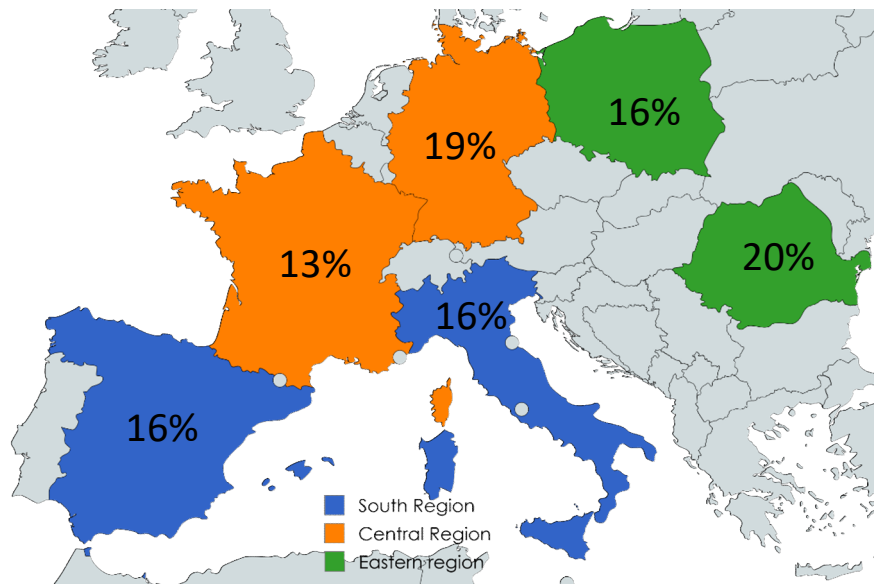
Methodology

- **Respondents:** 75 participants from 6 EU countries
- **Tool:** Computer-Assisted Web Interview (CAWI)
- **Form:** questionnaire in national languages
- **IT tool:** EUSurvey (on-line)
- **Data collection period:** 04.12.2023 - 12.01.2024



Regional innovation needs for 5.0 transition

Regions overview



Source: CoDEMO own study

South Region

Spain - Moderate Innovator (performance at 89.9%)*

Italy - Moderate Innovator (89.6%)



Central Region

France - Strong Innovator (104%)

Germany - Strong Innovator (111.6%)

Eastern Region

Romania - Emerging Innovator (34%, below the average 48%)

Poland - Emerging Innovator (65.9%, above the average)

*) of the EU average in 2024

Source: European Commission, *European Innovation Scoreboard 2024*,
European Union, 2024.



Regional innovation needs for 5.0 transition



Emerging Innovator

- business management
- leadership
- co-creation through networking
- methods and tools for market analysis
- technology for network activities



Moderate Innovator

- effective work in collaborative network
- innovation-oriented competences
- problem identification and solving



Strong Innovator

- effective work in collaborative network
- innovation-oriented competences
- leadership



Regional innovation needs for 5.0 transition



DIGITAL-ORIENTED



Emerging Innovator

- data protection and management
- use of new technologies to support work
- digital identity management
- communication and collaboration with AI
- digital tools supporting learning



Moderate Innovator

- analysis and creation of digital content
- use of digital technologies to extract knowledge from text and support decision-making
- use of web & cloud technologies



Strong Innovator

- use of digital technologies to extract knowledge from text and support decision-making

Source: <https://www.mapchart.net/>



Regional innovation needs for 5.0 transition

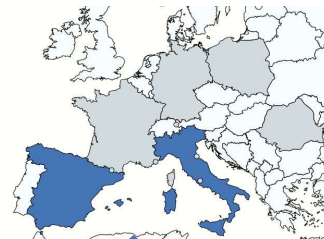


Green-oriented



Emerging Innovator

- evaluation of production efficiency and environmental and social impact
- design and use of resource-efficient technologies



Moderate Innovator

- green agriculture development,
- evaluation of the environmental and social impact of products
- design and use of resource-efficient technologies



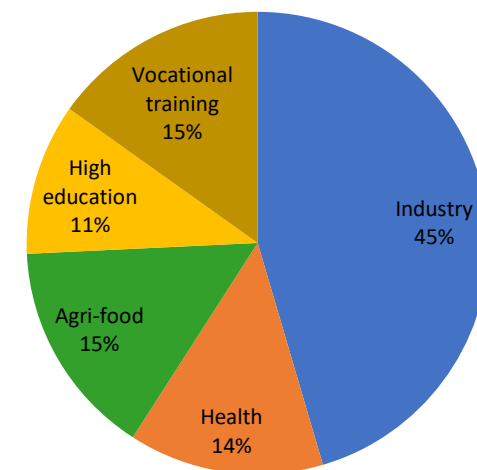
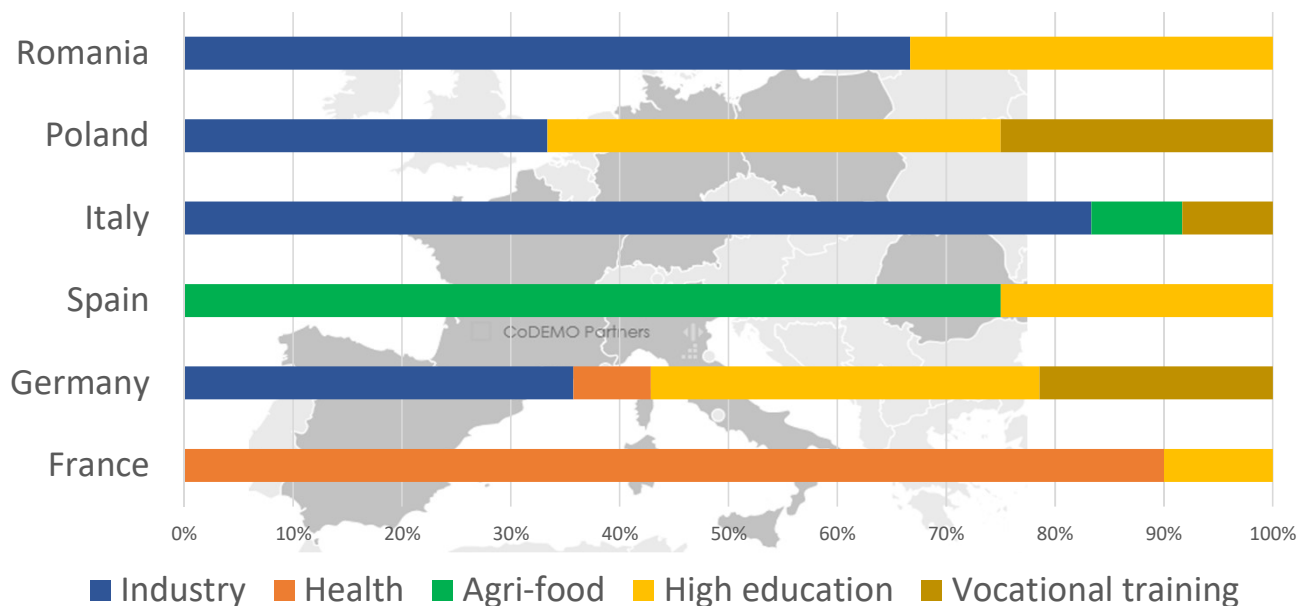
Strong Innovator

- promotion of pro-ecological initiatives and trainings
- development of pro-ecological attitudes of employees
- sustainable design of products or services



Sectoral innovation needs for 5.0 transition

Sectors overview



Source: CoDEMO own study



Sectoral innovation needs for 5.0 transition



Industry

- training on business management (i.e.: strategic, risk, change management, business modelling)
- effective work in collaborative network



Health

- leadership development
- effective work in collaborative network



Agri-food

- leadership development
- development of competences needed to identify and solve problems



DIGITAL-ORIENTED

Sectoral innovation needs for 5.0 transition



Industry

- training on business management (i.e.: strategic, risk, change management, business modelling)
- data protection & management
- communication and collaboration with AI



Health

- training on business management (i.e.: strategic, risk, change management, business modelling)
- digital content analysis & creation
- communication and collaboration with AI



Agri-food

- training on business management (i.e.: strategic, risk, change management, business modelling)
- digital content analysis & creation
- cloud technology



Green-oriented

Sectoral innovation needs for 5.0 transition



Industry

- training on environmental management
- sustainable designing products or services
- design and use of resource efficient technologies



Health

- training on environmental management
- develop of green-oriented attitudes of employees
- support in evaluation of environmental and social impact of product



Agri-food

- develop of green-oriented attitudes of employees
- support in evaluation of environmental and social impact of product
- design and use of resource efficient technologies



Recommendations - *Innovation boosters*

- Enhancement of leadership
- Development of skills and infrastructure for networking
- Development of digital capabilities & skills
- Increasing the ability to understand and use digital technologies
- Development of problem-solving competencies
- Increasing to design and use of resource-efficient technologies
- Providing intensive trainings on value creation and management



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