

WG 2: Supporting the low digitalised SMEs

Introduction

Smart Industrial Remoting: remote working in non-digitalised industries – Pilot Project

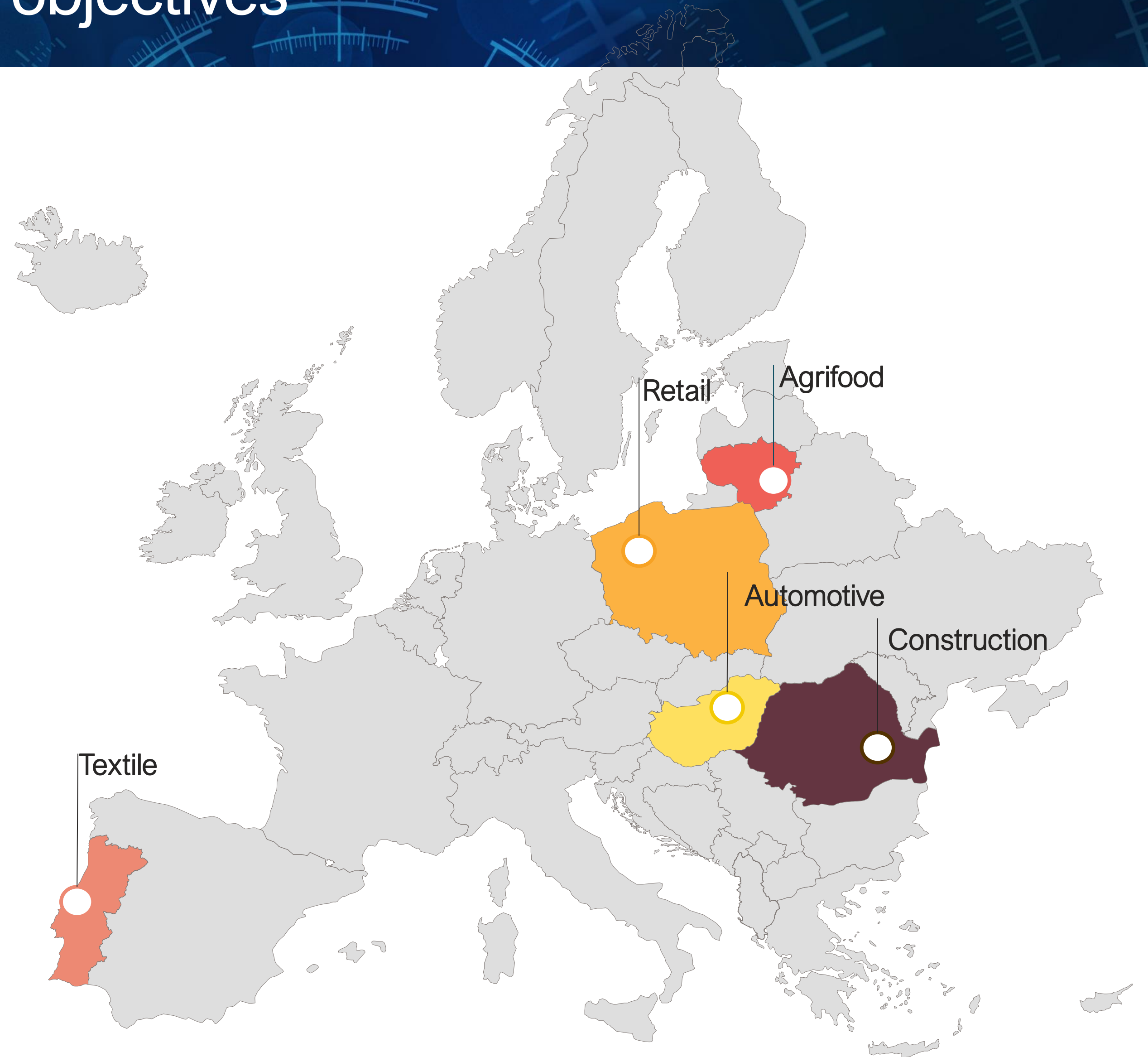
WG2 agenda

11:00 – 11:10	Introduction <i>Dr. Heidi Cigan, Senior Policy Officer, DG CNECT</i>
11:10 – 11:30	Digitalisation of SMEs: main findings from digitalisation pilots <i>Rūta Gabalina, Senior Researcher, PPMI</i>
11:30 – 12:10	Hub-SME collaboration: recipe for successful digitalisation <i>Barbora Kudzmanaite, Research Manager, PPMI (moderator)</i> <i>Kristina Šermukšnytė-Alešiūnienė, Director of Agrifood Lithuania</i> <i>Anca Sandu, Managing Partner of Unith2B</i> <i>Rūta Gabalina, Senior Researcher, PPMI</i>
12:10 – 12:20	Questions with the audience <i>Barbora Kudzmanaite, Research Manager, PPMI</i>
12:20 - 12:30	Wrap-up and closing <i>Dr. Heidi Cigan, Senior Policy Officer, DG CNECT</i>

Study objectives

Delivering **user-friendly** and **targeted advice** on **digitalisation** for 5 industries in 5 EU countries:

- Construction in Romania
- Textile in Portugal
- Retail in Poland
- Automotive in Hungary
- Agrifood in Lithuania



Study approach

Gap analysis



Problem identification



Best practice collection



Digitalisation pilots



Digitalisation toolbox



Dissemination

WG 2: Supporting the low digitalised SMEs

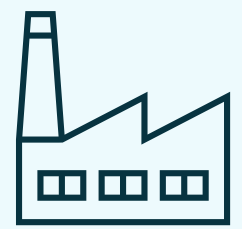
Digitalisation of SMEs: main findings

Smart Industrial Remoting: remote working in non-digitalised industries – Pilot Project

Contents of the presentation



1. Brief introduction to study objectives & approach



2. Description of the five digitalisation pilots



2. Presentation of the main outcomes of the study



The study team

PPMi

&

Digital Innovation Hubs

AgriFood **DIH**
Lithuania



Summary of the piloting phase

Objective

Test digitalisation good practices in a real-world context and contribute to the development of a Digitalisation toolbox

Selection

- Matro Gépgyártó (HU)
- Surfoteka (PL)
- Unifardas (PT)
- 50 Acres of Work and Joy (LT)
- UNITH2B (RO)

6 months

Piloting took place between October 2022 and March 2023 and companies were supported and monitored by DIHs and the study team

Results

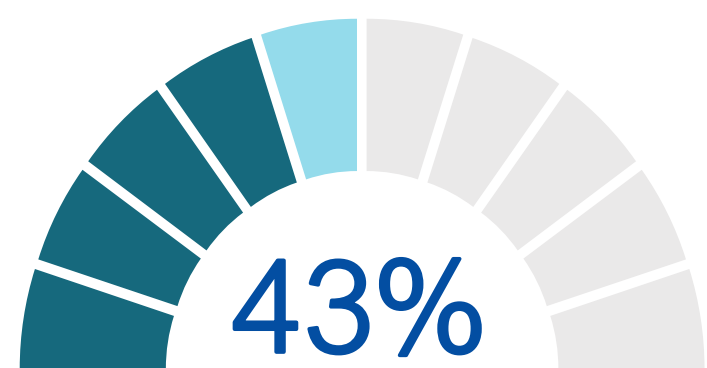
All companies improved their DMA scores during the piloting phase; 27 horizontal takeaways were identified



The five digitalisation pilots

Matro Gépgyártó Kft.

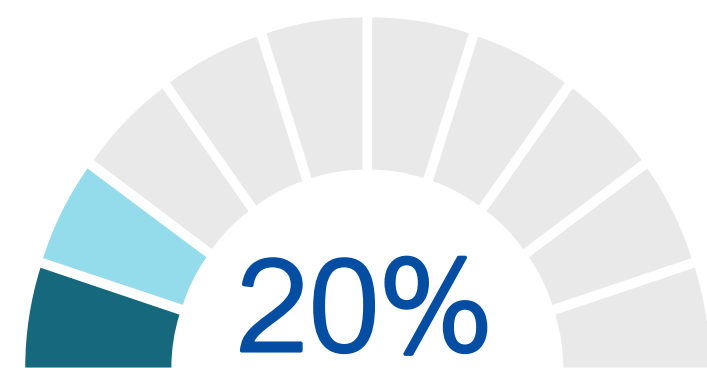
50 data collection systems are installed, improving troubleshooting, and reducing unit cost and production time



(+3pp)

Surfoteka

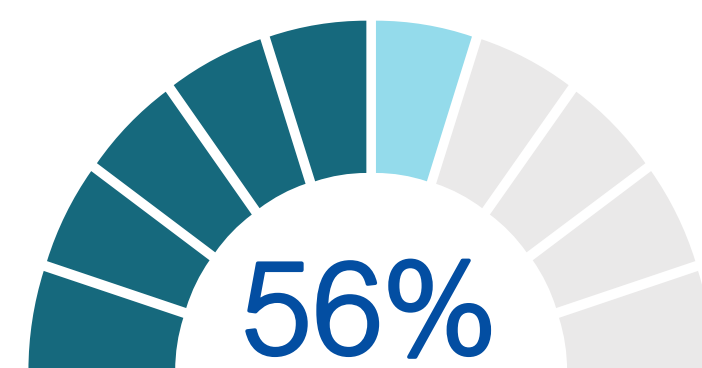
All sales databases are integrated and order processing is streamlined, reducing errors and boosting efficiency



(+12pp)

Unifardas

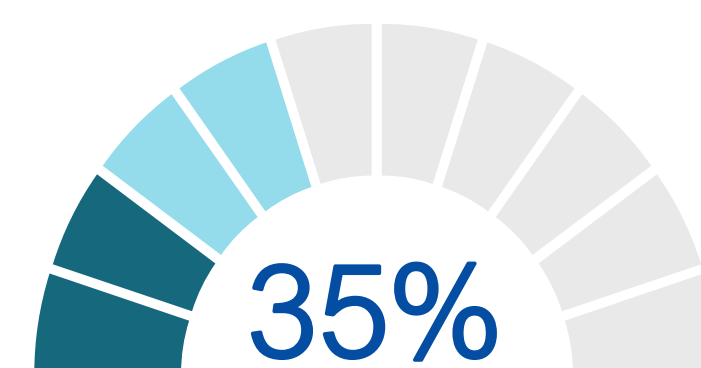
A parametric model is built for one of the products and an order platform is launched automating the final price calculation



(+2pp)

50 Acres of Work and Joy

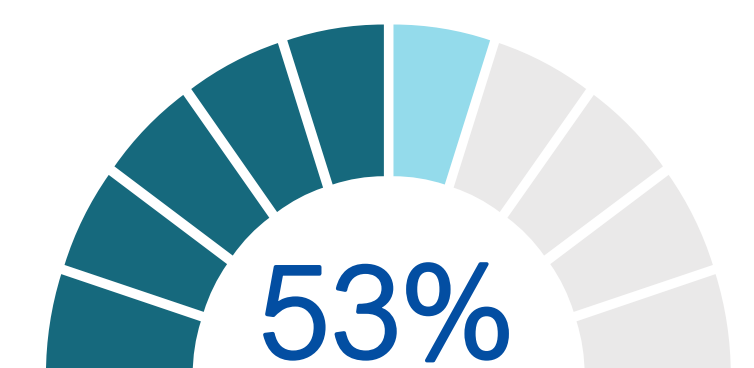
A quantity and quality farm management system AgroSmart is implemented, digitalising procurement, planning and monitoring



(+19pp)

UNITH2B

Procedure for BIM model development is improved, new BIM collaboration method is learned, and new BIM use cases are being implemented



(+3pp)

 Inception DMA score

 DMA score improvement after the 6-month pilot

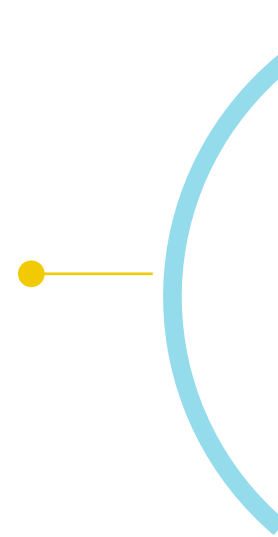
Summary of horizontal takeaways

Planning

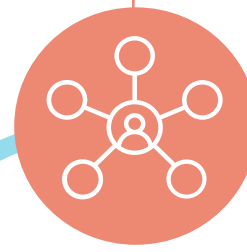
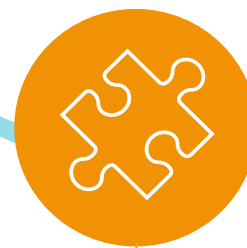
The selected companies and hubs saw room for improvement in both long-term and intervention-specific planning



01



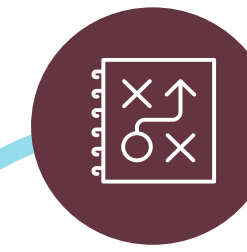
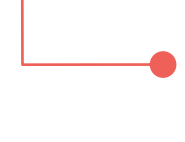
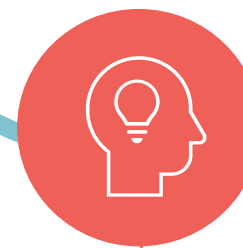
02



03



04



05



Cooperation

SMEs face barriers in engaging the wider ecosystem & Hubs can help them navigate it

Management

Intervention management, ensuring sustainability and harnessing potential positive spillovers were highlighted as important

Capacity building

External expertise is often necessary, which makes knowledge transfer crucial

Implementation

Identifying a solution that fit their needs, finding a 'common language' with solution providers and overcoming initial productivity losses during implementation were common issues

A recipe for successful collaboration (1/2)



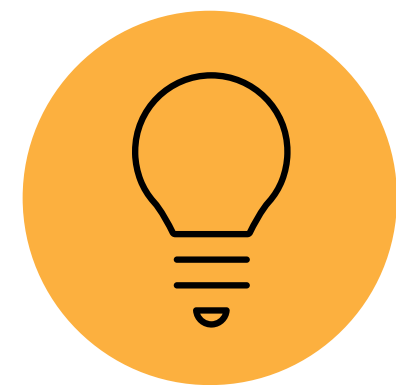
Overcoming risk-aversion

SMEs have limited capacity to take on risk and even small projects can be challenging. SMEs can benefit from support in identifying relevant funding opportunities



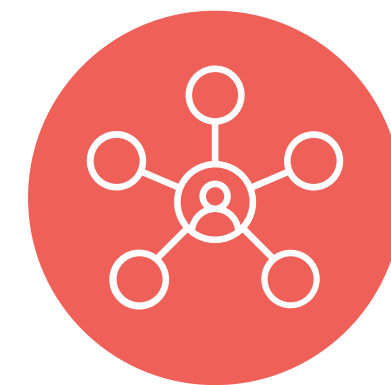
Designing for success

Support from the beginning of interventions is important establish trust and help with needs identification, financial planning and strategy definition



'Quick wins'

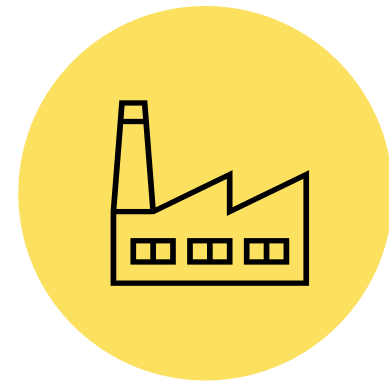
Relatively low-cost options (e.g. retrofitting, 'downgraded' solutions) and 'quick wins' can be a good place to start for SMEs at the beginning of their digitalisation journeys



Navigating the ecosystem

Hubs can help connect SMEs to the rest of the ecosystem and navigate the resources and tools available to support digitalisation

A recipe for successful collaboration (2/2)



Business value

Hubs can help SMEs in interpreting how technology trends relate to day-to-day operations and add business value



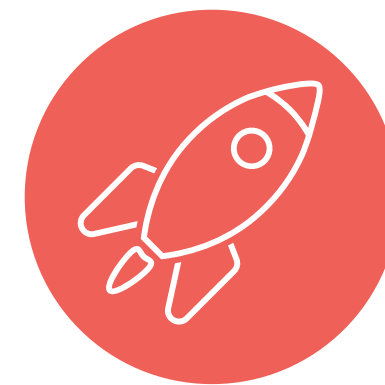
Tailored support

Size, digital maturity, industry and capacity constraints all influence company support needs



Expanding the network

Becoming a trusted partner and increasing their visibility can help hubs reach out to SMEs outside their network



Digitalisation momentum

Knowledge transfer and considerations to ensure sustainability of digital interventions can help companies harness digitalisation momentum

Study outputs

Gap Analysis report

Contains an assessment of the as-is situation in the five selected country-industry pairings: digitalisation level, policy, social and economic factors and external shocks.

Best Practice Collection report

Contains a description of 8 cross-cutting best practice principles derived from analysis of European 42 case studies.

Digitalisation Toolbox (forthcoming)

Will contain practical advice on industry digitalisation, with a focus on the five industries included in the study.

Problem Identification report

Contains a description of 2-3 typical problems and 1-3 companies experiencing these problems in each selected country-industry pairing.

Digital Pilot report

Contains a description of five digitalisation pilots (results, lessons learned) and 27 horizontal takeaways.

Workshop takeaways and recordings; insights

Step [#]. Upskilling and re-skilling of employees to use new technologies

Why is it important?

Ensuring sufficient human resources, employees' knowledge and ability to use new technologies is crucial for successful digitalisation. Reskilling and upskilling are among the main organisational determinants influencing the adoption of Industry 4.0 technologies among SMEs.

especially for SMEs, whose employees are often holding several job roles at once. This requires diverse skills arising from technology design to creativity, problem-solving and active learning.

One of the most effective ways to ensure that the right skills are present is by providing employee training in Industry 4.0 and ICT skills. Companies are more likely to successfully digitalise when they have enterprise-wide workforce planning and talent development practices.

Nevertheless, reskilling and upskilling employees and identifying training needs remain challenging for SMEs. A study from 2016 found that SMEs often decide to only invest in employee training when there is a direct business development need and rarely perform extensive needs analysis or planning of training.

Hybrid skills are becoming increasingly important.

Objectives

- Enable the transformation of business models and the use of new technologies in enterprises
- Have employees engaged, competent and able to contribute to organisational stability and tackle challenges
- Increase resilience and adaptability to the changing environment

Only 11% of EU SMEs provide ICT training to employees

According to Eurostat, 48% of large enterprises in the EU provided their employees with training to develop or upgrade their ICT skills in 2021, compared with only 11% of SMEs.

Practical example: learning-by-doing during digital access control system implementation

Escherle Automotive Body Kit is an automotive company from Hungary which recently introduced a digital access control system. One of the main challenges the company faced in this process was the lack of digital expertise. Escherle Automotive Body Kit did not have a dedicated employee who could manage the implementation process. Furthermore, the company also experienced some resistance from employees towards digitalisation, which can be attributed to limited knowledge and experience. However, the employees obtained the necessary experience through the implementation process itself. This reduced resistance and enabled the company to continue its digitalisation journey.

Top 10 emerging skills (ESCT)

1. Analytical thinking and innovation
2. Creative thinking and analysis
3. Complex problem solving
4. Systems analysis and reduction
5. Resilience, stress tolerance and flexibility
6. Active learning and learning strategies
7. Creativity, originality and initiative
8. Teamworking and team experience
9. Reasoning, problem-solving and decision-making
10. Attention to detail, thoroughness

Top job roles (ESCT)

1. Data analysis and visualisation
2. Business development and sales
3. AI and Machine Learning specialists
4. Database administrators
5. Network engineers

Highlighted resources

Type	Highlighted resources
📄	AI4E: AI4E provides short online learning courses for the employees in the automotive sector.
📄	CVETES Job role descriptions: emerging job roles in automotive with relevant skills, research, education, exams and certificates.
📄	Blueprint for sector cooperation: an skills action framework for improving skills in the automotive sector.

*Current spending on reskilling programmes are lacking development of skills under points 4, 6, 7 & 8 and 10 (ESCT)

For a full list of resources, please see Annex 4.

Thank you!