The focus of the Up-Skill

project is to develop a better understanding of how businesses, particularly in industrial and manufacturing environments, can lever value from human and machine integration, and change the way we understand technology implementation from being a substitution of skilled human work to one of human-machine inter-augmentation.

The project will address the implications of Industry 5.0 and the relationship between automation, skilled work and organisational systems. The research will establish how automation and human input plays out in a range of industrial settings, creating comparative case studies to capture effective implementation strategies.



Partners: Milardelen D

































Up-Skilling for Industry 5.0 Roll-Out



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CALL: HORIZON-CL4-2021-HUMAN-01 TOPIC: HORIZON-CL4-2021-HUMAN-01-26

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Specific Objectives

- 1 Identify the nature of the different business, industrial and market contexts in which skilled workers are likely to continue to add and be valued.
- 2 Identify how skilled and creative workers act to ensure their continued place in the value chain.
- **3** Identify and detail good practices in organisations that continue to mobilise human skill, ingenuity and creativity as a source of value and competitive advantage.
- **4** Examine the specific organisational and managerial competencies needed in contexts where skilled and creative roles meet autonomous, semi-autonomous and intelligent systems.
- Develop pathways for integration of Industry5.0 and craft skills for different case studies.
- **6** Test the developed pathways in related companies.
- 7 Develop and carry out proper dissemination, communication and exploitation strategies to maximize the beneficial impacts of the project outcomes, ensuring a successful scaling-up and market uptake to boost European industry competitiveness.
- **8** Design of management training course content and course modules for Industry 5.0 introduction for management and workers.



Expected Impacts

a data repository and Decision Support System (DSS) that will store the compiled research data and

Development of the Up-Skill Platform,

convert it into information that can be utilised by businesses for technological integration and decision making.

Cost savings in primary manufacturing through the efficient implementation of human-machine augmentation. **Improved quality of output and pro- ductivity** by addressing production methods, development cycles of new products and the reproducibility of products in conjunction with the artisan skill needed for certain specifications.

Waste reduction by enabling higher levels of reproducibility, defining specification tolerances and the use of software to make more efficient use of components that may have otherwise been unutilised.

Longevity of demand for skilled labour and craftmanship through enabling better quantification of the added value provided by skilled workers via a reference framework which can be used to understand and express employee value across all levels of the business.