

PROJECT PARTNERS

The FACTS4WORKERS project is composed of 15 partners from 8 different European countries:

Virtual Vehicle Research Center	Austria
Hidria TC Tehnološki center d.o.o.	Slovenia
Universita degli Studi di Firenze, Department of Industrial Engineering	Italy
Technische Universität Wien	Austria
ThyssenKrupp Steel Europe AG	Germany
Hidira Rotomatika d.o.o.,	
Industrija Rotacijskih Sistemov	Slovenia
iMinds VZW	Belgium
Sieva d.o.o.	Slovenia
University of Zurich, Department of Informatics	Switzerland
Thermolympic S.L.	Spain
EMO-Orodjarna d.o.o.	Slovenia
Evolaris Next Level GmbH	Austria
Itainnova - Instituto Tecnologico de Aragon	Spain
Schaeffler Technologies AG & Co. KG	Germany
Lappeenranta University of Technology	Finland

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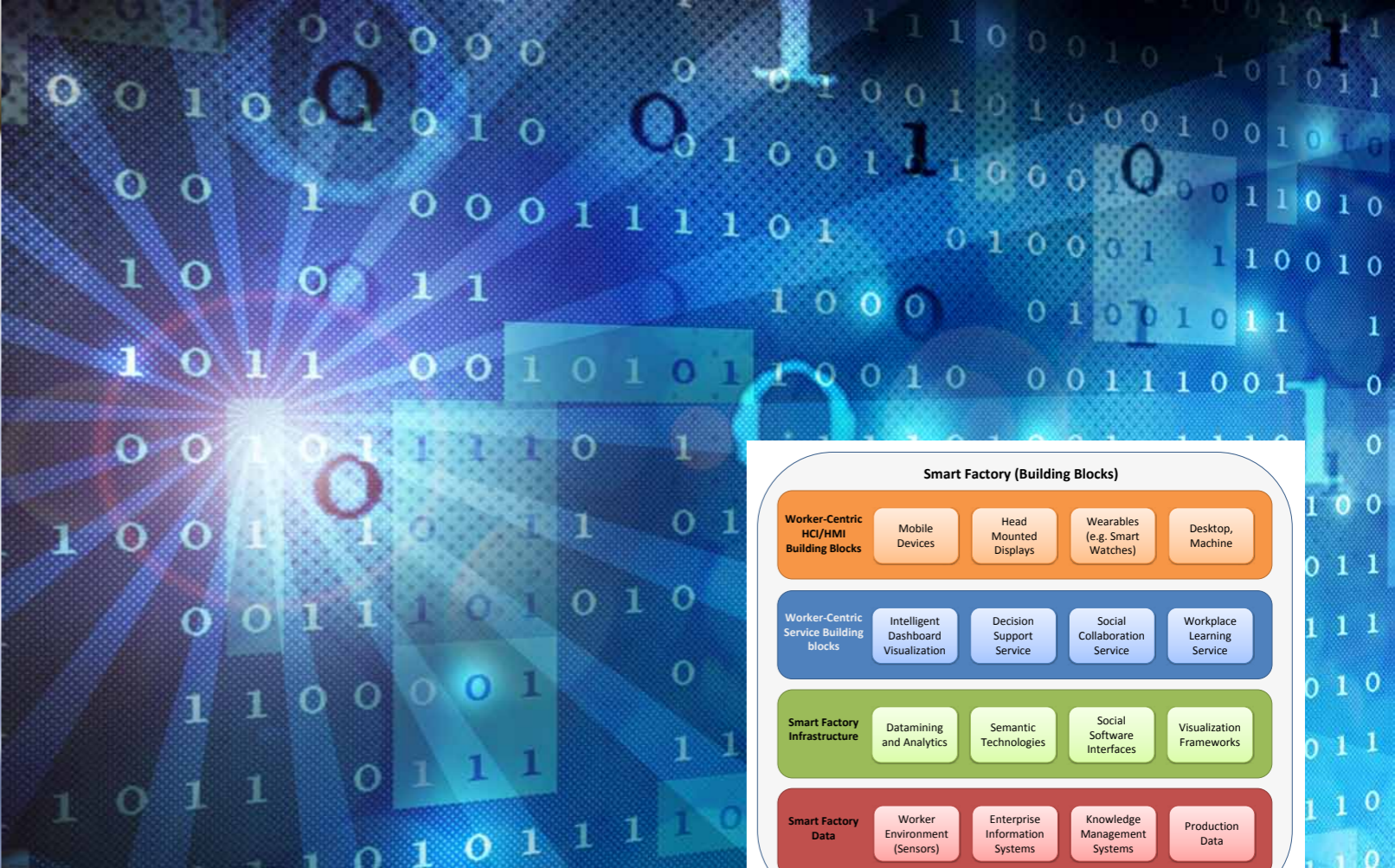


FACTS4WORKERS



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www.facts4workers.eu



ABOUT THE PROJECT

The high ambition of the project FACTS4WORKERS is to create Factories of the Future with a pervasive, networked information and communication technology that collects processes and presents large amounts of data. This smart factories will autonomously keep track of inventory, machine parameters, product quality and workforce activities.

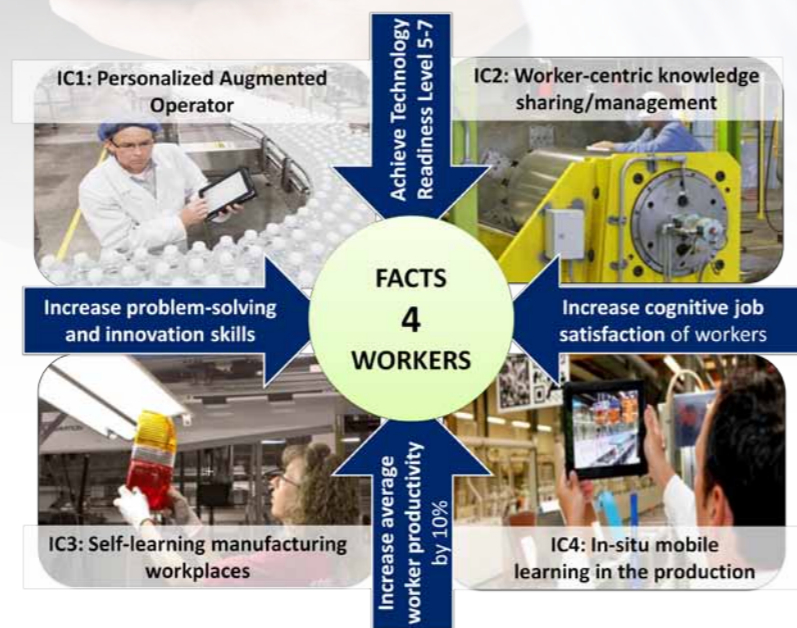
But at the same time, the worker will play the central role within the future form of production. The ambition of the project is to create »FACTories for WORKERS« (FACTS-4WORKERS), to strengthen human workforce on all levels from shop floor to management since it is the most skilled, flexible, sophisticated and productive asset of any production system and this way ensure a long-term competitiveness of manufacturing industry. Therefore a serious effort will be put into integrating already available IT enablers into a seamless and flexible Smart Factory infrastructure based on work-centric and data-driven technology building blocks.

This solutions will be developed according to the following four industrial challenges which are generaliseable to manufacturing in general:

- Personalized augmented operator,
- Worker-centric rich-media knowledge sharing management,
- Self-learning manufacturing workplaces,
- In-situ mobile learning in the production.

PROJECT VISION

The vision of FACTS4WORKERS project is to leverage the large potential added value of manufacturing data, information and knowledge in a worker-centred way to achieve worker empowerment, resulting in higher worker satisfaction and increased worker productivity.



FACTS4WORKERS OBJECTIVES

FACTS4WORKER's objectives in terms of measurable indicators are:

This solutions will be developed according to the following four industrial challenges which are generaliseable to manufacturing in general:

- To increase problem-solving and innovation skills of workers participating in pilots at industrial partners' factories, as measured by e.g. innovation capability test scores.
- To increase cognitive job satisfaction of workers participating in the pilots, as measured by an increased score on relevant factors on a Spector Job Satisfaction Survey (JSS) 8, and to improve their working conditions in terms of safety, work organization and well-being.
- To increase average worker productivity by 10% for workers participating in pilots, as measured by a mix of proven and newly developed metrics enabled by the smart factory concept and the evolving role of the worker.
- To achieve TRL 5-7 on a number of worker-centric solutions through which workers become the smart element in smart factories, interacting by deploying a flexible smart factory infrastructure.

KEY SOLUTION

We propose a worker-centric smart factory solution, satisfying the workers' goals. As technical solution, FACTS-4WORKERS will develop a modular smart factory infrastructure, interlinking a number of building blocks.

Smart Factory Worker- Centric HCI/HMI building blocks provide workers with novel ways to interact with information and knowledge inside the working environment adopting the latest devices.

Worker Centric Service Building Blocks provide the content for the selected worker-interface, unfolding the treasure of manufacturing data, information and knowledge to the worker via APIs.

Smart Factory Infrastructure is the back-end infrastructure including the latest developments in data enrichment and aggregation, including semantics and linked data, datafication and analytics, and visualization frameworks. Smart Factory Data is the hidden "treasure" to be unfolded by our developed technologies and services, ranging from multiple data sources and data formats.