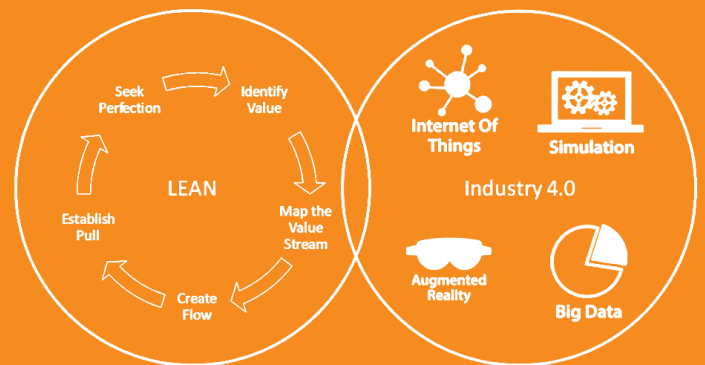




LEAN 4.0 is a collaborative initiative between four leading HEI and four industry partners with the objective to integrate Industry 4.0 smart technologies with the proven Lean Manufacturing paradigm. LEAN 4.0 will educate the operations managers of the future in the best practices in the field of Lean and Industry 4.0.



Main Objectives

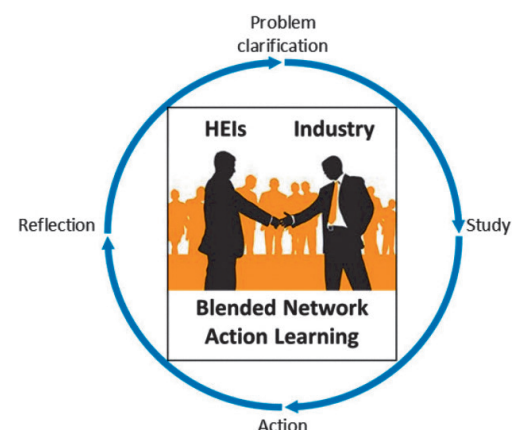
LEAN 4.0 outputs will become the foundation for innovation and knowledge creation in future collaborative improvement and research projects.

LEAN 4.0 will bring HEI closer to the labour market and facilitate the development of future curricula and the skillsets of the future operations managers which will improve the transparency and coherence of qualifications of students.

A main output is an open knowledge sharing platform to organize Blended Network Action Learning in practice. Lean 4.0 also provides digital teaching content for the new and growing 'Lean 4.0' community.

Project partners

All project partners belong to large networks in the field of higher education, consulting and training in the manufacturing and technology industries. Their commitment has been proven through a decade of previous joint projects and provides a solid foundation for future work within the field of Smart Lean Operations.



Work structure

WP 1 | Mapping Smart Technologies for Lean Manufacturing

In this WP we study the link between Lean Manufacturing and Industry 4.0.

We collect theories developed by scholars about the use of smart Industry 4.0 technologies within a Lean Manufacturing context, as well as current applications of smart technologies which support the leanness of manufacturing companies.

WP2 | Mapping learning practices in Smart Operations and Lean Manufacturing

In this work package we map current learning practices in industry and the scholarly state of the art on Network Action learning. The focus will be on the specific practices for Network Action Learning, open process innovation, and other collaborative methods as they relate to Lean manufacturing and Smart technologies and the synergy between the two.

WP4 | Process Innovations for Smart Lean Operations

This work package will focus on solving problems and developing process innovations for Smart Lean Operations.

The activities in this work package will be used to guide the execution of the pilot projects in WP6, and the experiences from the initial phase of the pilot projects will be used to further develop and refine the process innovations related to Smart Lean Operations.

WP3 | Blended Network Action Learning Methodology

The aim of this work package is to conceptualize and develop a methodology for Blended Network Action Learning (Blended NAL) in the context of Smart Lean Operations.

The methodology will be used to solve actual and relevant challenges in the field of Smart Lean Operations through the development and operation of networks (consisting of enterprise and HEI staff).

WP5 | LEAN 4.0 Learning Platform

The aim of this work package is to build a web-based platform that supports the Blended NAL methodology developed in WP3.

The platform will be designed to include different layers for different types of user, including internal project layers as well as associated partner and general member layers.

WP6 | Pilot Project learning process descriptions

This phase of the project will bring the theoretical, conceptual, and infrastructural elements (WP1-WP5) into practice. Pilot projects will be carried out within the industrial partners in this phase, in order to further develop, test, and refine the Blended Network Action Methodology and LEAN 4.0 Platform, as well as the Smart Lean Operations theory and practices.

WP7 | Reference Model for Smart Lean Operations

The aim of this work package is to conceptualize and develop a reference model for Smart Lean Operations.

The model will provide a standard cross-industry diagnostic tool for the design and implementation Smart Lean Operations in European industry.

Sharing our knowledge and results

All project information and open online materials will continue to be available via the project LEAN 4.0 website. www.lean4zero.com. Partners will publish and present project results in relevant journals and at academic and industrial conferences. Project outputs will become part of the curricula for Bachelor, Master and PhD programs. Social Media will be used to make results available to the manufacturing companies, HEI and individuals. Content such as the YouTube instruction videos will stay available after the project is finished.

LinkedIn www.linkedin.com/company/lean4zero/
Facebook www.facebook.com/Lean4Zero/
Twitter @lean4zero

With the support of the
Erasmus+ Programme
of the European Union

