

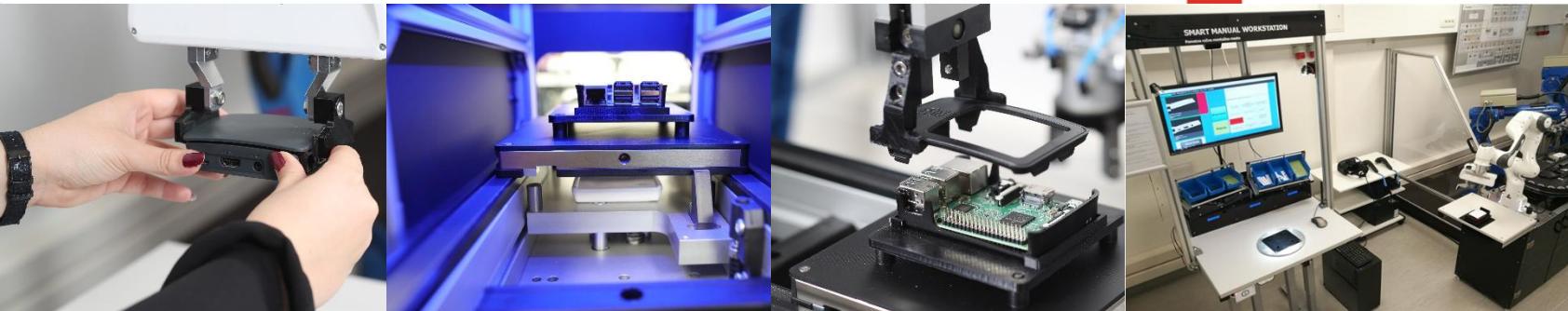


REPUBLIC OF SLOVENIA  
MINISTRY OF ECONOMIC DEVELOPMENT  
AND TECHNOLOGY

University of Ljubljana  
Faculty of Mechanical Engineering



EUROPEAN UNION  
EUROPEAN REGIONAL  
DEVELOPMENT FUND



**LASIM**  
LABORATORY FOR HANDLING, ASSEMBLY AND PNEUMATICS

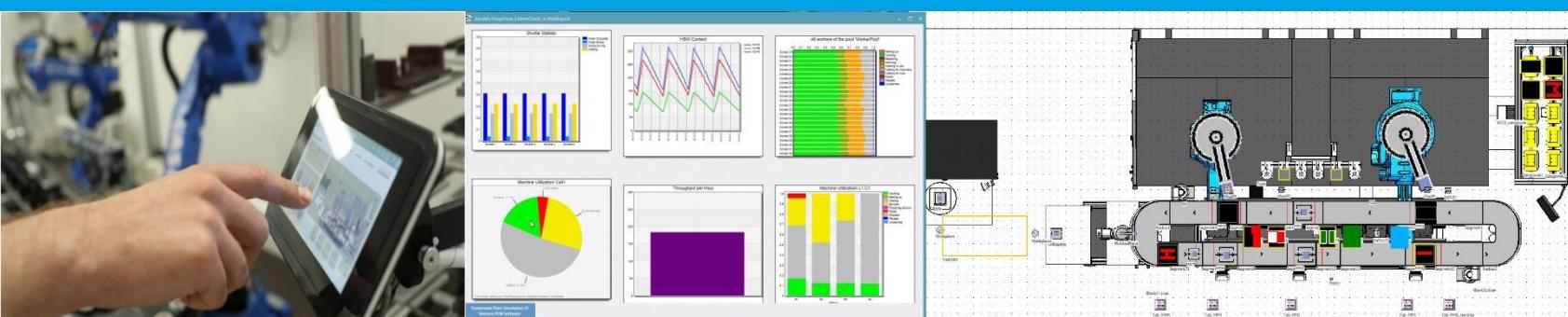


Strategic Research Innovation Partnership  
FACTORIES OF THE FUTURE

# Demo Center – Factory of the Future

Marko Šimic

University of Ljubljana, Faculty of Mechanical Engineering, Laboratory LASIM



 **Jožef Stefan  
Institute**

 **kcstv**  
competence centre for  
advanced control technologies

 **TEC**  
RAZVOJNI CENTER ORODJARSTVA SLOVENIJE  
SLOVENIAN TOOL AND DIE DEVELOPMENT CENTRE

 **Gospodarska  
zbornica  
Slovenije**

# The vision, main purpose of the Demo center »FoF« - LASIM



**RESEARCH & DEVELOPMENT**

**Education and training of students**

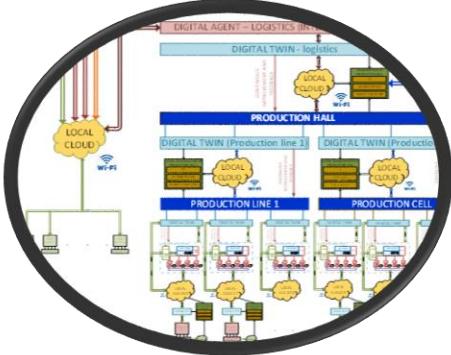
**Project work and Technology testing**

**DIH-DiTMaPS**

**Education and workshops for industrial partners**

The central image shows a robotic assembly line in a laboratory setting. Two industrial robots, one white and one blue, are working on a conveyor belt. A control station with a monitor and a large control panel are visible in the background. The image is divided into four colored sections: orange at the top left, blue at the top right, green at the bottom left, and yellow at the bottom right. The orange section contains the text "RESEARCH & DEVELOPMENT" and a gear icon. The blue section contains the text "Education and training of students" and a graduation cap icon. The green section contains the text "Project work and Technology testing" and icons for Project, Testing, and Verification. The yellow section contains the text "Education and workshops for industrial partners" and a person icon. A blue banner with the text "DIH-DiTMaPS" is overlaid on the central image.

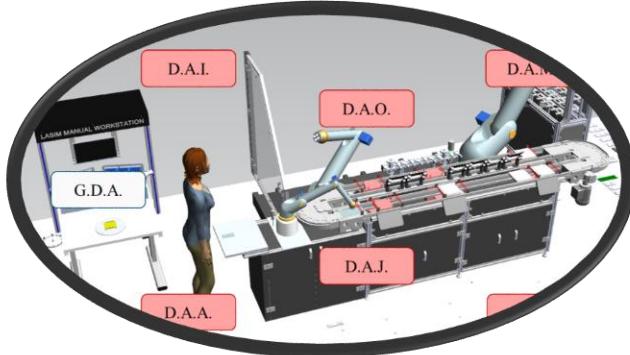
# Key Technologies in demo center LASIM



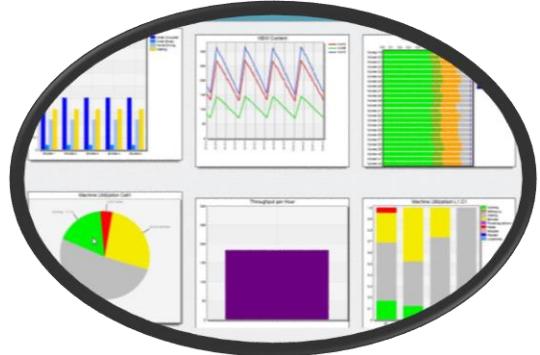
Architectural Models  
of Smart Factory



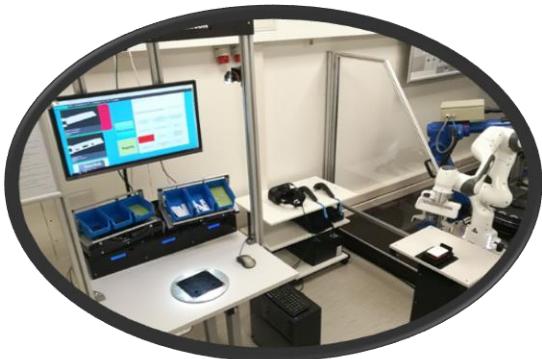
Distributed  
Systems and EC



DIGITALIZATION  
Digital twin and digital agents



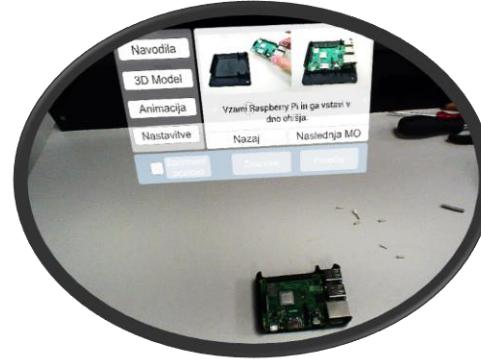
Data analytics



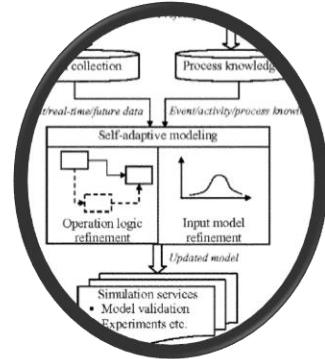
Smart manual  
assembly



Human-robot  
interaction (Cobotics)

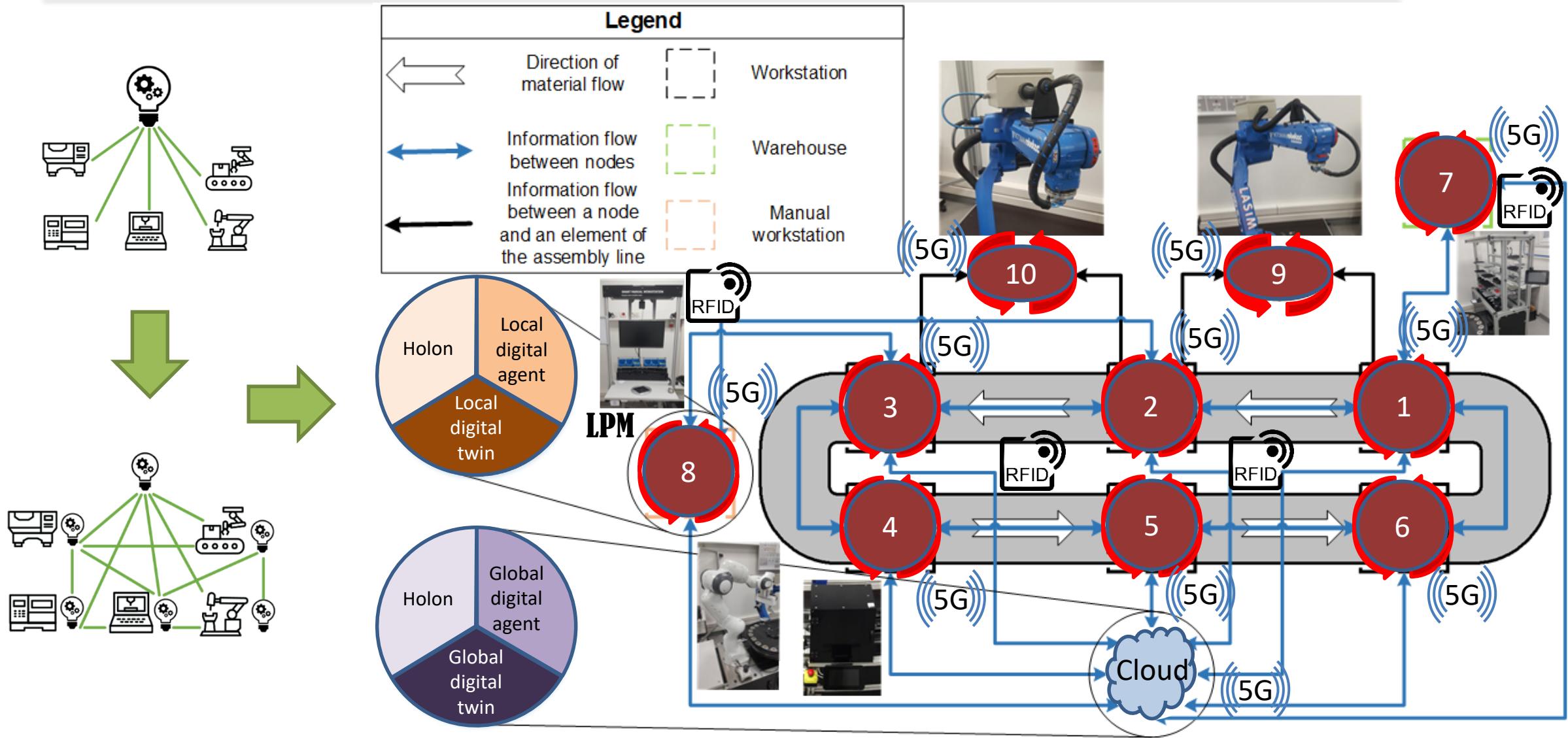


AR and VR



AI-based  
algorithms

# Distributed systems and Edge Computing





# Thank you for your attention!

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<https://web.fs.uni-lj.si/lasim/index.php?page=home>

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