



HMI2MARKET IN ACTION

From Regional Hackathons to Learning Factories



Over the past months, HMI2MARKET has moved from ecosystem building to practical implementation, creating strong regional momentum around human-machine interaction, robotics, embodied AI, entrepreneurship and human-centred Industry 5.0 innovation. Across the consortium, partners have engaged students, researchers, startups, industry representatives, technology parks, companies and innovation communities around a shared objective: accelerating HMI solutions that can support safer, more inclusive and more future-ready workplaces in labour-intensive industries.

The current phase of HMI2MARKET shows a broader and more important result: the project is building a regional pathway that connects university knowledge, entrepreneurial learning, industrial challenges, hands-on experimentation and practical innovation opportunities.

IMPACT AT A GLANCE



3

**Hackathons
implemented**

creating practical spaces for students, startups and innovation teams to respond to real technological and industrial challenges.



410+

**Hackathon applications
received**

confirming strong interest in robotics, deep tech, embodied AI and HMI-related innovation.



53

**Countries
engaged**

through modules, hackathons, workshops, student activities, robotics demonstrations and partner-led events.



1250+

learners

completed HMI2MARKET modules through the project's online platform.

The project is now entering its next major engagement phase, with Learning Factory activities and the remaining 2 hackathons opening new opportunities for companies, students, startups, researchers and ecosystem partners to take part.



HACKATHONS AND ENGAGEMENT ACTIVITIES AS DRIVERS OF APPLIED INNOVATION

Challenge-based formats connecting students, partners, technology and industry needs

The HMI2MARKET hackathon series has become one of the project's strongest formats for moving from academic knowledge to applied innovation. Across partner ecosystems, participants have worked with robotics, embodied AI, entrepreneurship, human-centred design and industry-linked challenges, creating practical entry points for students, researchers, startups, mentors and companies.

• INNOVATION IN PRACTICE •



Robotics · Embodied AI · Deep Tech

48H ROBOTICS / EUROPE EMBODIED HACKATHON

Organised with RoboTUM, TUM International, START Munich and ESRA, this 48-hour hackathon created an intensive space and connected deep-tech talent with applied robotics challenges, from Vision Language Model-based robots to autonomous inspection systems and reinforcement learning for real-world flight.



Robotics · Precision Agriculture

AGRI-BOT HACKATHON

Teams explored how autonomous robotics can support precision agriculture, with a focus on crop monitoring, pest detection and smart farming. Organized in collaboration with Confindustria Serbia, Arduino, ETF, ETF Robotics, Palace of Science, hackathon connected technical skills, mentoring and applied problem-solving with agricultural and industrial needs.



Industry challenge · Human-Centred Design

STP Belgrade Hackathon: ReDesign R&D for Her

Students worked on a real company-defined challenge, moving from academic thinking to practical innovation through mentoring, ideation and pitching. The activity placed people, especially women, at the centre of the innovation process, showing how industry needs can guide more inclusive and market-oriented solutions.

WHY THIS MATTERS



Together, these hackathons show HMI2MARKET in practice: students, mentors, universities and companies working together to turn ideas into applied solutions. From robotics and embodied AI to precision agriculture and human-centred design, each activity brought the project closer to real innovation needs.

• JOIN THE HMI2MARKET COMMUNITY •



WEBSITE
hmi2market.eu

Explore project updates, partner activities and public information in one place.



**LEARNING
PLATFORM**
lms.hmi2market.eu

Access six learning modules and follow opportunities.



LINKEDIN
@HMI2MARKET

Follow announcements, calls, event recaps, partner stories and innovation highlights.



FACEBOOK
@HMI2MARKET

Stay close to the community and keep track of updates.



BEYOND HACKATHONS: EXPANDING HMI LEARNING

Partner-led activities and the next Learning Factory opportunities

Beyond the hackathons, HMI2MARKET partners continued to expand learning and engagement through interdisciplinary activities, practical digital skills formats and student-industry interaction. The next step is the Learning Factory, with further activity announcements starting in September.

• HMI LEARNING IN ACTION •

Bringing Disciplines Together



HYBRID LAUNCH EVENT BY YET

Interdisciplinary launch in Thessaloniki bringing IT, business, health, marketing, design and UI/UX together around HMI innovation.

Student Innovation Meets Industry



SSST POSTER PRESENTATION

Graduation projects presented to academic staff and industry representatives, bringing student innovation closer to real contexts.

Building Practical AI Skills



ETF ROBOTICS WORKSHOP

Hands-on AI agents workshop with MongoDB, linking reasoning, tools, memory and search capabilities with practical digital skills.

Robotics Learning in Practice



ROBOTICS LEARNING AND EXCHANGE AT FSB

Robotics learning linked with industrial systems, advanced manufacturing and international exchange with TH Ingolstadt.

LEARNING FACTORIES: From HMI Knowledge to Real-World Application

The next engagement format connecting learning, company needs, mentoring and applied innovation

Learning Factories will connect online learning, real company and ecosystem needs, mentoring and practical teamwork around HMI challenges. They are designed to help students, companies and ecosystem actors move from learning modules toward ideas that can be explored, developed and tested in real-world contexts.

MORE THAN AN ONLINE COURSE

Learning Factories combine learning modules, challenge definition, company and ecosystem engagement, teamwork, mentoring, demos and feedback.

WHO CAN GET INVOLVED?



STAY TUNED

Further information and announcements on Learning Factory activities will begin in September.