

BOOSTING

ROBOTICS INNOVATION

IN THE EAST NETHERLANDS

THROUGH EDIH: A TECHNOLOGICAL LEAP FORWARD →

Revolutionizing the Robotics Landscape in the East Netherlands

In the age of digital transformation, robotics and automation stand as powerful pillars of innovation, propelling industries towards newfound possibilities. In Europe, a visionary initiative is taking centre stage, breathing new life into the robotics sector and fostering a vibrant ecosystem of technological advancement—the European Digital Innovation Hub (EDIH). Within the East Netherlands, cutting-edge Fieldlabs and knowledge institutes are connecting their powers to reshape the future of robotics and ignite Europe's technological landscape. Embracing the spirit of collaboration, these institutions have united to propel innovation through a multifaceted approach that encompasses diverse offerings. Among

these offerings are skills-building and training programs, test-before-invest projects, and investment support. This holistic approach nurtures a thriving robotics ecosystem, positioning the East Netherlands as a trailblazer in technological excellence and an inspiration for Europe's innovation landscape.

Unravelling the EDIH Ecosystem

Amidst the rapidly evolving technological landscape, the EDIH sets its sights on the core pillars of 'Robotics & Sensing' within the region's most vital sectors: Manufacturing, Agrifood, and Health. It is a clarion call to companies—both established players and startups—to seize the unparalleled opportunities this innovative ecosystem presents. EDIH is driven by a compelling mission: to future-proof over

350 SMEs in these sectors by fostering digital maturity and raising awareness about digital transformation among 1500 SMEs.

In the heart of this technological revolution lies the EDIH BOOST Robotics initiative, a supportive haven for SMEs looking to take the leap into the digital age. The journey commences with a crucial foundation: awareness creation. Through a technology assessment scan, vital insights into the current state are gained. This essential step seeks to answer fundamental questions that lay the groundwork for the SME's transformative path. What are the company's specific needs and aspirations for digitization? What objectives do they hope to achieve in the short or long term? How can cutting-edge technologies be harnessed to elevate their operations to unprecedented heights?

Benefiting the Journey of a Company

The technology scan serves as a guiding compass, aligning the company's aspirations with the vast array of offerings and opportunities provided by EDIH BOOST Robotics. By gaining clarity on their digitalization goals, the company is better equipped to explore potential projects and opportunities that precisely resonate with their vision.

This critical phase benefits the company throughout the entire EDIH journey and well into its future endeavours. With a thorough understanding of their unique requirements, the SME can navigate the landscape of transformative projects with purpose and confidence. As they delve into the digitalization process, the technology scan will provide the roadmap towards the specific goals and needs of the company. Within the EDIH this can result in the continuation of the journey through a skills and training programme,

investment strategy and support, or a tailored project execution, encompassing one of the four potential topics:

Technology Benchmarking, conducting in-depth assessments of cutting-edge digitalization opportunities;

Feasibility Study, exploring the practicality and viability of implementing specific digitalization solutions;

Technology Assessment, adapting and integrating digitalization within the company's production environments; and

Technology Testing, validating and refining state-of-the-art digitalization solutions.

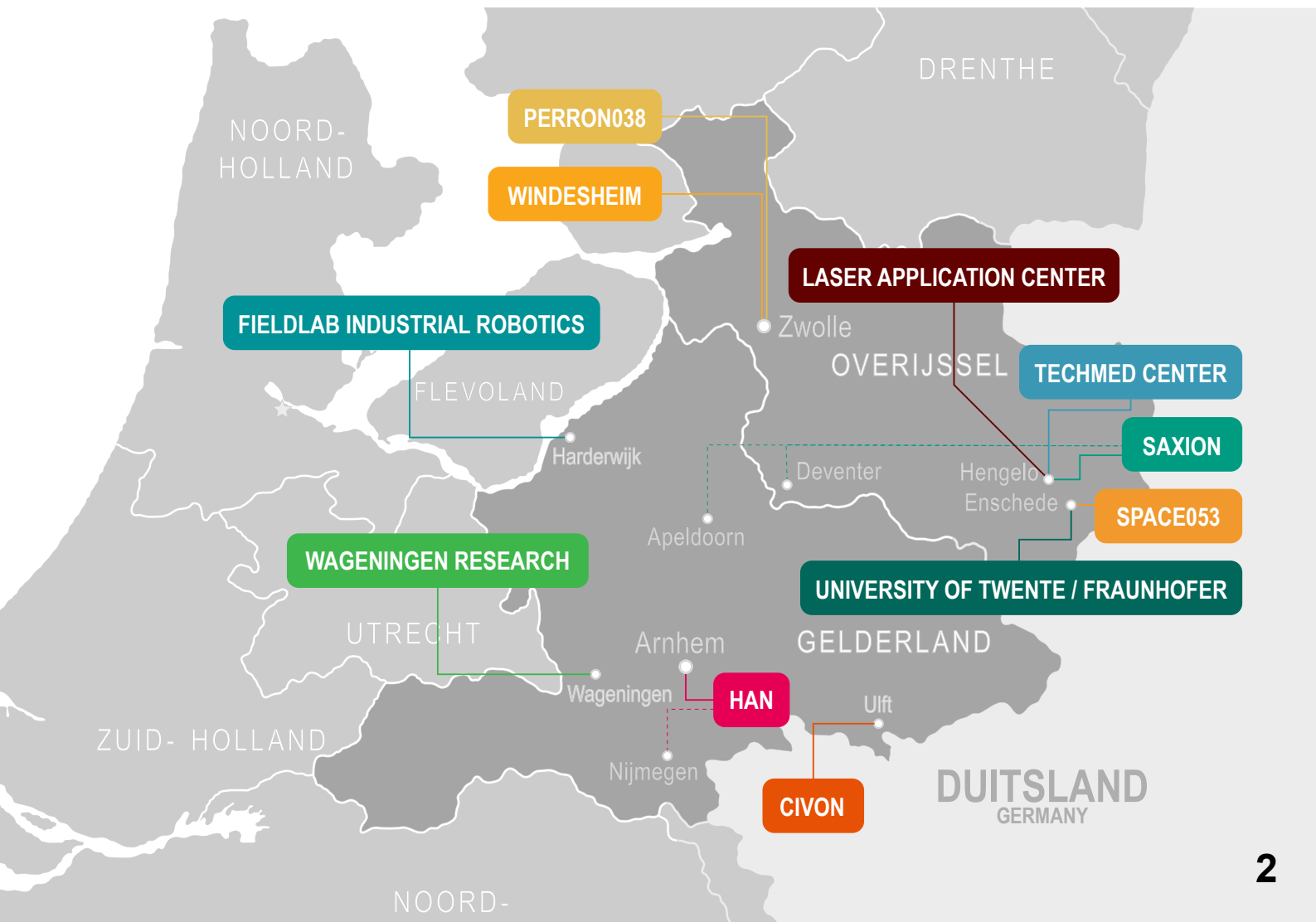
With expert guidance, companies can adapt, integrate, and implement digitalization strategies tailored to their unique production environments. Through

EDIH's backing, SME's have the freedom to explore, train, and find the funding opportunities matching their roadmaps.

EDIH BOOST ROBOTICS: A Regional Dynamo



EDIH BOOST ROBOTICS emerges as a luminary within the EDIH constellation, with a mission to infuse unparalleled vigour into the robotics domain within the East Netherlands region. Nestled within the provinces of Gelderland and Overijssel, the East Netherlands has long been celebrated as a beacon for manufacturers, and EDIH BOOST ROBOTICS adds a captivating new dimension to its legacy by clustering available expertise. At the forefront of this powerful ecosystem, the EDIH programme for 'Robotics & Sensing' encompasses 11 Fieldlabs and knowledge institutes, each with its unique capabilities and remarkable achievements.





Perron038

Perron038 connects high-tech companies with educational and research institutions, by facilitating innovative R&D projects where talent development is key. Machine builders and technical product developers work together with students to develop innovative demonstrators, prototypes and modules of high-tech machines. Through a multidisciplinary approach, Perron038 has facilitated groundbreaking projects like the implementation of robotics and IoT in smart manufacturing, and the optimization of logistics and supply chain processes through advanced sensing technologies.

Location: Zwolle, NL

Technology skill sets:

X Additive Manufacturing

X Robotics & Logistics

X Vision & Optics

X Artificial Intelligence

X Digitalisation



Windesheim

Windesheim University of Applied Sciences is an education and knowledge partner that offers personalised education and innovative projects. Windesheim has been at the forefront of advancements in robotics and sensing technologies. By integrating robotics in healthcare applications and developing autonomous vehicles for agricultural tasks, Windesheim has contributed significantly to the region's expertise in these domains.

Location: Zwolle, NL

Technology skill sets:

X Robots & Cobots

X Machine Learning

X Digital Twinning

X Factory of the Future



Laser Application Center

Laser Application Center (LAC) specializes in laser technology applications across various industries. Their projects have included precision laser cutting in manufacturing processes and robotic laser welding training and applications techniques.

Location: Hengelo, NL

Technology skill sets:

X Welding Automation

X AI in (welding) Production

X Manufacturing Systems



TECHMED CENTRE

TechMed Center

The Technical Medical (TechMed) Center is a frontrunner in the integration of robotics and sensing technologies in healthcare. The TechMed Center is equipped with state-of-the-art infrastructure, including research laboratories, preclinical testbeds, and simulated hospital environments, driving technological advancements in healthcare. Their projects have focused on surgical robotics, rehabilitation through exoskeletons, and AI-driven medical diagnostics.

Location: Enschede, NL

Technology skill sets:

X Digitization

X Knowledge & Technology Transfer

X Experimenting & Testing



SAXION UNIVERSITY OF APPLIED SCIENCES

Saxion

Saxion University of Applied Sciences is a knowledge institution that provides test-before-invest facilities through its various Fieldlabs on (circular) innovations in manufacturing, as well as in its involvement in T-Valley, the robotics and mechatronics Fieldlab in Twente and Garden of Kairos, the Fieldlab on big data, AI and IoT-technologies.

Location: Enschede, NL

Technology skill sets:

X Smart Industrial Robotics

X Connected Embedded Systems

X Applied data science for situational awareness

X Augmented Interaction



SPACE⁵³

Space053

Space053 has emerged as a hub for space-related technology development, including robotics for satellite maintenance and space exploration applications. The aim is on creating the preliminary conditions for the successful development and application of unmanned systems with the combination of high-tech knowledge and skills, facilities for testing and experimentation.

Location: Enschede, NL

Technology skill sets:

X Technology Development

X Testing & Training

X Technology Application



Advanced Manufacturing Centre by Fraunhofer Innovation Platform for Advanced Manufacturing at the University of Twente

Managed by the Fraunhofer Innovation Platform for Advanced Manufacturing at the University of Twente, the Advanced Manufacturing Centre (AMC) excels in fostering collaboration between academia and industry to drive innovation in manufacturing processes. With state-of-the-art facilities and a strong team of expert researchers, the AMC pioneers cutting-edge projects in robotics, automation, and additive manufacturing.

Location: Enschede, NL

Technology skill sets:

X Industrial Additive Manufacturing

X Digital Twinning

X AI in Manufacturing

X Computer Aided Engineering and Manufacturing

X Manufacturing Systems



HAN

The HAN Academy of Engineering and Automotive is host to 3 large research groups: automotive research, balanced energy systems, and Lean & world class performance. The aim is on application of Robotics and Data Science in production processes.

Location: Arnhem (Nijmegen), NL

Technology skill sets:

X AR, vision and manufacturing

X Application of Robotics in Manufacturing

X Process Mining and Machine Learning in Manufacturing

X Process Management



CIVON

The Center for Innovative Craftsmanship East Netherlands (CIVON) strengthens the manufacturing industry in the field of High Tech Systems and Materials. The focus is mainly on Middle Management Engineering and (Smart) Industry with crossovers to education, healthcare, ICT, and construction.

Location: Ulf, NL

Technology skill sets:

X Digital Twinning

X AI in Industry

X Robotics



Wageningen Research

The Fieldlab AgriFoods builds on the Wageningen University & Research (WUR) shared research facilities. The platform is developed in close collaboration between WUR and FoodValleyNL to represent all phases of the innovation process: from research and product development, to demonstration, upscaling and production facilities.

Location: Wageningen, NL

Technology skill sets:

X Sensing and Robotics

X AI Applications

X Computer Vision



Fieldlab Industrial Robotics

The Fieldlab Industrial Robotics (FIR) focuses on empirical research into best practices for industrial robotization, development of knowledge into teaching material, and assurance of quality level of knowledge in the field. They have facilitated projects like the integration of cobots in assembly lines and advanced robot-based quality control systems.

Location: Harderwijk, NL

Technology skill sets:

X Robotics

X Concept Testing

X Workshops and Trainings

Embrace the Future with EDIH BOOST Robotics

Are you ready to unlock the full potential of your business and lead the charge into the future of robotics and digitalization? The European Digital Innovation Hub (EDIH) BOOST Robotics beckons you to join a dynamic ecosystem of innovation, collaboration, and transformative possibilities. Take the first step on an empowering journey of awareness where your company's unique aspirations and objectives for digitization will be harnessed with expert precision. Benefit from our array of cutting-edge Fieldlabs, each specializing in real-life testing, implementation, and scalability of new digitalization technologies. ■

To start your journey, please visit:

<https://boostsmartindustry.nl/nieuws/edih-boost-robotics-east-netherlands>



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