

EDIH

European Digital Innovation Hubs Network

Driving the EU's digital transformation



Sweden

11

Members

4/11

*EDIHs



7/11

**SoEs



29

Sectors

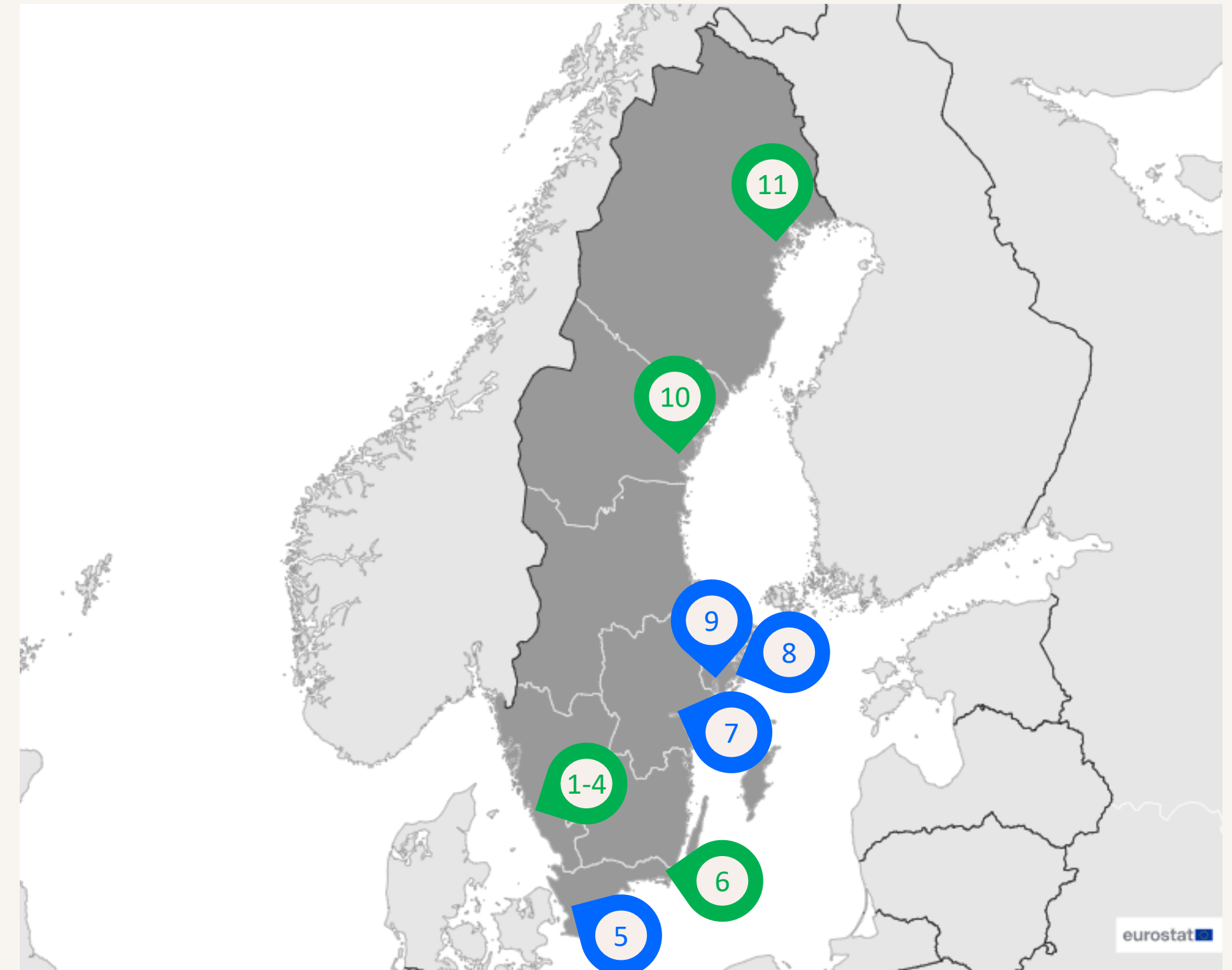
EDIHs in Sweden

Focus on key sectors such as manufacturing, automotive, metalworking, and industrial production. Highlight the critical role of digital innovation in these traditional industries and their significant potential for transformation through technology.

Include sectors such as healthcare, life sciences, and personal services to showcase Sweden's dedication to digital solutions in these areas, which are vital for advancing public health and improving the quality of services.

Address sectors such as education, energy, environment, and transportation to highlight the essential role of digital innovation in enhancing education, promoting sustainability and improving transportation infrastructure.

EDIH SoE



*European Digital Innovation Hubs

**Seal of Excellence (SoE)

*Funded under Digital Europe Programme

Network overview: 11 members – 4 EDIHs



Aero EDIH



DigIT Hub Sweden



Health Data Sweden (HDS)



ShiftLabs

Network overview: 11 members – 7 SoE

Agrihub
Sweden

Agrihub Sweden

AI Sweden
EDIH

AI Sweden EDIH

AM-EDIH

AM-EDIH

 Digital Impact North

Digital Impact North (DIN)


European
Digital Innovation
Hubs

IndTech


Mid Sweden Industry and GovTech EDIH

MIGHTY EDIH

 Sweden Secure
Tech Hub

 Co-funded by
the European Union

 IDEON
SCIENCE PARK

 SCIENCE
PARK

 Swedish Agency
for Economic and
Regional Growth

 UTVECKLA
NORRBOTTEN
EN SÄL AV REGION NORRBOTTEN

 BLUE
SCIENCE
PARK

 Lindholmen
Science Park

 REGION
BLEKINGE

 VÄSTRA
GÖTALANDSREGIONEN

 LINKÖPING
SCIENCE
PARK

 kista
SCIENCE CITY

Sweden Secure Tech Hub
by Sweden ICT



33 Technologies

Swedish EDIHs emphasise additive manufacturing, highlighting a strong interest in advanced manufacturing technologies.

While the focus on artificial intelligence is relatively low, it remains an important area of involvement for Swedish EDIHs.

EDIHs are deeply engaged in a broad range of technologies, including robotics, simulation engineering, modelling, and the internet of things (IoT), underscoring their commitment to technological advancement and industrial transformation.



Services

Swedish EDIHs prioritise facilitating technological innovation and technology transfer, helping businesses adopt the latest advancements.

A strong focus on supporting SMEs reflects Swedish EDIHs' dedication to driving digital transformation and enhancing competitiveness in various sectors.

Although the focus on the circular economy is relatively lower, the services provided by Swedish EDIHs are geared toward fostering innovation and competitiveness across multiple industries.

Success stories

A new era in blood sampling: transforming the future of diagnostics

EDIH

HDS
Health Data Sweden

CUSTOMER

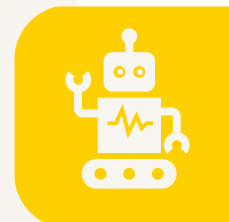
- Blood Simpling
- Website
- Micro-sized enterprise with 1-9 employees.

BLOOD SIMPLING | blood sampling made simple



Service type

Test before invest



Technologies

Artificial intelligence and decision support



Sectors

Healthcare



Challenges

Blood Simpling AB faced the challenge of **high failure rates in venous blood sampling, especially for patients with difficult veins**. This led to discomfort for patients and wasted time and resources in healthcare settings, as multiple attempts were often needed to complete a successful blood draw. The company aimed to address this inefficiency and improve the overall patient experience through innovation.



Solutions

EDIH Health Data Sweden helped Blood Simpling AB **develop a prototype for an innovative device to improve blood sampling:**

- supported the development of an improved blood sampling prototype;
- gathered feedback from healthcare professionals to enhance the device's design;
- provided expert mentorship and guidance during product development.

Success stories

A new era in blood sampling: transforming the future of diagnostics



Thanks to EDIH Health Data Sweden the SME achieved:

- **accelerated product development:** Blood Simpling AB was able to significantly speed up the development process of their blood sampling device. This included refining the design and making the prototype more viable for real-world applications, bringing them closer to a market-ready product much faster than anticipated;
- **incorporated real-world insights:** feedback from healthcare professionals helped refine the prototype, ensuring the device met practical needs;
- **improved user-friendly design:** thanks to the feedback and expert guidance, Blood Simpling AB created a more intuitive and ergonomic design. This made the device easier to use in clinical environments, improving efficiency and reducing strain on medical professionals.



Results and benefits

Reduced failure rates in venous blood draws

The improved device addressed the core problem, lowering the number of unsuccessful blood draws, which is crucial for reducing patient discomfort and improving efficiency in healthcare settings.

Minimised patient discomfort

By reducing the need for multiple attempts, the device significantly improved the patient experience, especially for those with challenging veins.

Enhanced healthcare efficiency

The new device saved time and resources by reducing the need for repeated procedures.



Lessons learnt

- ✓ **User-centred design:** involving healthcare professionals in the development phase is crucial for creating a device that meets real-world needs.
- ✓ **Iterative prototyping:** the process of refining prototypes through iterative testing and feedback accelerates product development and ensures a better end product.

Good practices

Smart maintenance technologies: challenges, solutions and benefits

EDIH

SHIFT
LABS

Services

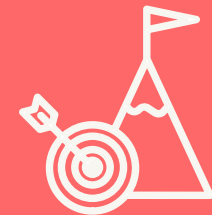
Networking and access to innovation ecosystems, test before invest and training and skills development

Technologies

Internet of things, simulation engineering and modelling, cloud services, virtual reality

Sectors

Manufacturing and processing



Challenges

Implementing smart maintenance technologies in the manufacturing industry comes with several hurdles. Many organisations struggle with a **lack of understanding of Industry 4.0 technologies, such as IoT, AR, and AI**, which makes it difficult to **know what data to collect and monitor effectively**. Cybersecurity is another major concern, as protecting data and systems is crucial. Additionally, aligning these new technologies with existing company goals can be challenging, making it hard to fully capitalise on the benefits of smart maintenance.



Solution

- To address these issues, a **test bed for smart maintenance** was created to demonstrate how Industry 4.0 technologies can be applied effectively.
- This includes **IoT sensors, AR for remote maintenance, AI for data analysis**, and **autonomous robots**.
- All these elements are seamlessly integrated using systems like OPC-UA and MQTT. Additionally, a lab for No-code AI was developed to make it easy for anyone to create AI **models without needing to code**, as users choose the type of AI model to upload data and train the model, **making solutions more accessible for maintenance teams**.

Good practices

Smart maintenance technologies: challenges, solutions and benefits



Results and benefits

Enhanced maintenance

AR improves accuracy, smart sensors enable predictive maintenance, and No Code AI simplifies decision-making.

Social and economic impact

Shiftlabs merges technology with human skills, boosting efficiency and reducing downtime.

Measurable knowledge growth

Shiftlabs significantly reduced knowledge gaps in areas like AI and IoT. Participants gained a deeper understanding of these technologies, improving their ability to implement smart maintenance practices effectively.



Lessons learnt

- ✓ **Prioritise in-person sessions:** facilitates richer discussions and networking.
- ✓ **Adaptability:** be flexible with online sessions when in-person sessions are not feasible.
- ✓ **Encourage interaction:** allocate time for open discussions and questions.
- ✓ **Provide clear next steps:** ensure attendees know how to engage further, with easy access to resources.
- ✓ **Communicate EDIH value:** clearly explain EDIHs, their services and client journeys to SMEs.

