HealthHub Finland EDIH services by Region

HealthHub Finland EDIH Services

Test-before-invest
- Digital Maturity Assessment (DMA)
- HealthHub clinic pop-up
- HealthHub expert (group) consultation
- EU Act assessment tool (AI & Data act) (upcoming)

Skills and Training
- Hytki opas

Innovation ecosystem and Networking
- Access to showcasing
- Networking events

Digital Maturity Assessment (DMA)

Summary of the service

The digital maturity assessment (DMA) tool is used European wide by EDIHs to measure the current level of digitalisation within an organisation (SME) and provides a structured pathway to digital transformation and maturity. The tool is designed to assess your organisation's level of digital development and integration. It allows you to identify areas where you can become more agile, allowing you to respond quickly to market changes and capitalise on emerging trends. The tool is free of charge.

- **Services offered:** Digital maturity assessment (DMA)
- **Target audience:** SMEs and Public Sector entities
- **Price list/pricing model (if applicable):** Free
- **Service provider**: HealthHub Finland EDIH
- **Contact information**: info@healthhubfinland.eu
- **Website:** https://healthhubfinland.eu/services/dma-tool/

Service output example

- Evaluation your level in 1) overall digital maturity, 2) digital business strategy, 3) digital readiness, 4), human-centric digitalisation, 5) data management, 6) automation & artificial intelligence, and 7) green digitalisation

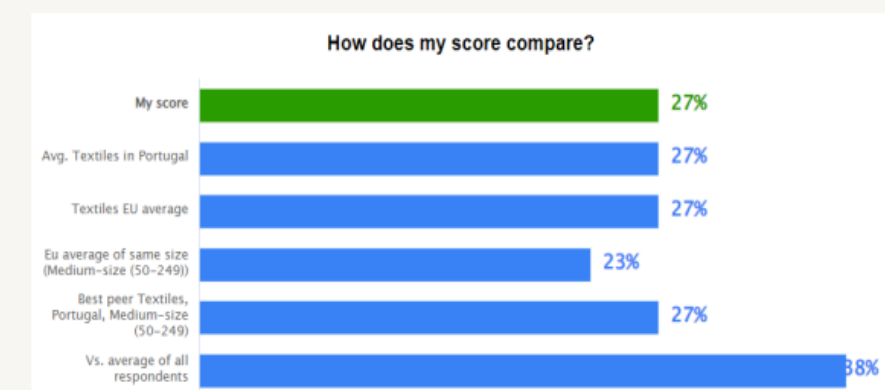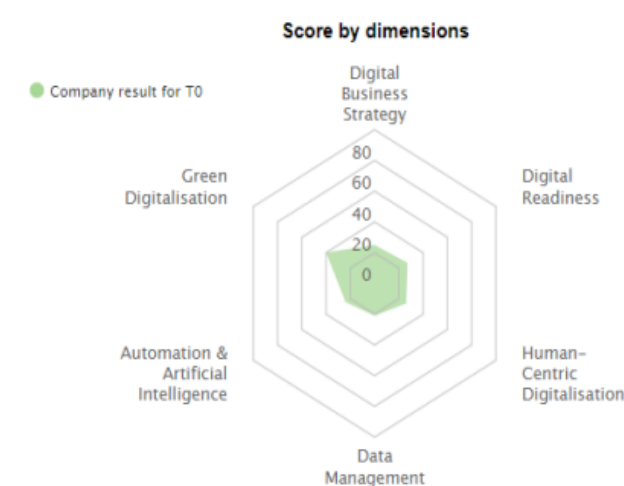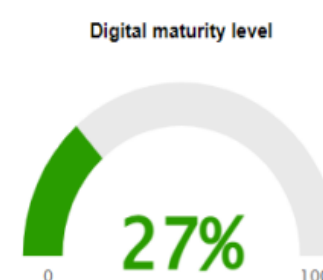- Comparison against other SMEs in the industry, region and Europe

HealthHub Finland EDIH pop-up clinic

Summary of the service

The innovation hub HealthHub Finland EDIH (HHFIN) offers free consultation clinics, including needs analysis and service matching to create a unique service package for the customer. The consultation sessions aim to assist healthcare industry customers in overcoming challenges and achieving their goals in data-based health technology innovations.

In each session, HealthHub Finland's team of experts will conduct an initial assessment and provide support in different areas of expertise. The advisory group is composed of professionals with expertise in areas such as clinical research, commercialisation, data and regulations, matchmaking and patient engagement, design and development.

- **Services offered:** Consultation clinic (30 minutes)
- **Target audience:** SMEs
- **Price list/pricing model (if applicable):** Free
- **Service provider:** HealthHub Finland EDIH
- **Contact information:** info@healthhubfinland.eu
- **Website:** https://healthhubfinland.eu/services/healthhub-finland-edih-clinic/

Service output example

- Evaluation of testbed need (Test-before-invest)
- Other services
  - Skills and training
  - Support to find investments
  - Innovation ecosystem and networks

Turku region HealthHub Finland EDIH Services

EDIH Services

Test-before-invest
- Auria Clinical Informatics (DIH) (Varha)
- Access to Biobank samples and data Fingenious (FINBB)
- Research plan assessment and data evaluation (Varha)
- Synthetic Health Data Testbed (upcoming) (Varha)

Skills and Training
- Artificial intelligence & cybersecurity MOOC (2 ECTS)
- Introduction to Programming University of Turku (5 ECTS)
- Statistical Data Analysis University of Turku (5 ECTS)
- Acquisition and Analysis of Biosignals University of Turku (5 ECTS)
- Data Analysis and Knowledge Discovery University of Turku (5 ECTS)

Support to find investment
- Facilitating Access to Investment and Venture Capital (Investment Readiness Process -programme)
- Financial instruments awareness raising (Free consultation sessions)

Innovation ecosystem and Networking
- HealthHub ProHealth Growth Programme (Mentoring)
- HealthHub Brokering Service (Enterprise Europe Network)
- HealthHub Researcher Network (upcoming) (FINBB)

Other Turku region services

- TERTTU Collaboration service
- Turku Bioscience
- Centre For Intelligent Computing (CIC)
- National drug development center
- Nutrition and Food Research Center (NuFo)
- Health Tech Lab TuAMK
- EuroBioimaging
- PET Center
- Turku Brain and Mind Center (TBMC)
- Turku Bioscience & InFlames

HealthHub Finland EDIH

Auria Clinical Informatics (DIH)

Summary of the testbed

We support research and scientific innovations. We want to challenge ourselves and the entire healthcare sector to renew itself and innovate. Auria Clinical Informatics operates in connection with the Hospital District of Southwest Finland which we help become the best Finnish hospital district deploying data-driven management practices. Through us, researchers get access to the data at the Hospital District of Southwest Finland.

- **Services offered:** Auria Clinical informatics Health data
- **Target audience**: SMEs and researchers
- **Price list/pricing model (if applicable):** EDIH subsidized up to 80%
- **Service provider:** Varha
- **Contact information:** lotta.ekholm@varha.fi
- **Website:** https://www.auria.fi/tietopalvelu/en/index.html

Customer case example

Customers

- In-house researchers
- Academic researchers from universities
- Pharma companies
- Clinical research organizations (CROs)
- Legal entities, such as EMA, Fimea and Findata, the Finnish data permit authority

Provided service

We provide insight and services for regional, national and EU-level

- Scientific research,
- Development activities,
- Innovation work and
- Teaching.

Fingenious® Services

Summary of the testbed

Fingenious® service is the gateway to Finnish Biobanks and Biomedical Research. We provide researchers with a one-access service for availability, feasibility, and access requests, research coordination, and contract services. In clinical trials, the role of the Fingenious Service is to help you find study subjects. We enable you to find the right patient for the study with the help of a unique recall service. We also help you to choose the right partners for your research. Reach all public biobanks in Finland with a centralized feasibility and access request and one contract. Fingenious Service provides an easy way to access Finnish public biobank biospecimen, data and study participants.

- **Services offered:** Fingenious® services
- **Target audience:** Researchers from academia and industry
- **Price list/pricing model (if applicable):** EDIH subsidized up to 80%
- **Service provider:** FINBB
- **Contact Information:** johanna.makela@finbb.fi
- **Website:** Fingenious® – Your digital gateway to Finnish biobanks and biomedical research | Fingenious® – Your gateway to Finnish biobanks and biomedical research

Customer case example

Risk Profiling Provides Tools to Predict Outcomes of Liver Disease at Population Level.

The number of patients with liver disease is steadily increasing. Risks for fatty liver diseases are associated with lifestyle such as alcohol use, obesity, and type 2 diabetes, which is often caused by obesity. Also genetic risk factors play a role in liver pathogenesis. This study investigates whether the incidence and progression of different forms of liver disease can be predicted at the population level. Clinical measurement, questionnaire, genome and biomarker data collected in large Finnish cross-sectional population surveys were used in combination with national health registry data for analyses.

The results of more than ten years of follow-up time showed that alcohol consumption predicts the risk of liver disease in the general population, especially when combined with central obesity (Sahlman et al. 2020). The effect of alcohol was more harmful for individuals with fatty liver disease, since even low intake of alcohol was shown to be associated with increased risks for advanced liver disease and cancer (Åberg et al. 2019).

- All FINBBs public customer use cases can be found at https://site.fingenious.fi/en/use-cases

Oulu region HealthHub Finland EDIH Services

EDIH Services

Test-before-invest
- OuluHealth Labs / Oamk SimLab
- OuluHealth Labs / OYS TestLab
- OuluHealth Labs / Pohde WellbeingLab
- Medical Imaging Teaching and Test Laboratory (MittLab)
- 5G Test Network Finland (DIH)
- 6G Flagship Experimental Platform
- DigiHTA

Skills and Training
- Bioinformatics and data analysis (25 ETCS)
- DigiHealth studies module
- Introduction to Artificial Intelligence (Johdatus tekoälyyn, 521160P)
- Principles of Machine Learning in Medicine (Koneoppimisen käytön perusteet lääketieteessä, 080930S)
- Data-analytiikka liiketoiminnan tukena (812364A)
- Thesis work (Bachelor, Master & PhD)

Support to find investment

Innovation ecosystem and Networking
- HealthHub Best Practices and Experience Sharing
- Arctic Drone Labs (DIH)
- Super IoT (DIH)

Other Oulu region services

- PrintoCent Pilot Factory
- Oulu DataLab
  https://www.ouludatalab.fi/

Co-funded by the European Union

Oamk SimLab

OYS TestLab

OULU HEALTH LABS

Mittlab

Pohde WellbeingLab

OYS TestLab - If you want to develop your solution in a hospital environment

A test environment for specialized health care products and services in the heart of its provider, Oulu University Hospital. It offers all you need to test and develop your product or service in an authentic hospital environment and with genuine users.

Pohde WellbeingLab - If you want to develop your solution in real social and healthcare processes and facilities

Pohde WellbeingLab enables developing your solution and innovating with real end-users: customers, patients and professionals in social and healthcare centers and homes. This model has been co-created by social and healthcare services in the City of Oulu.

OAMK SimLab - If you want to develop your solution in simulated health and social environments

Oamk SimLab provides versatile possibilities for testing and developing products and services and training the staff. It is possible to utilize both students' from different study programs and teachers' feedback during research and innovation processes.

Mittlab - If you want to develop your solution in the field of medical imaging

Mittlab is a medical imaging teaching and test laboratory on the premises of Oulu University Hospital. It offers wide variety of physical and virtualized medical imaging tools for research, education and product development purposes.

OULUHEALTH LABS LABELS

More information: https://ouluhealth.fi/services/testing-co-creation/

HealthHub
Finland EDIH

Co-funded by
the European Union

Tampere region HealthHub Finland EDIH Services

EDIH Services

Test-before-invest
- Health and Assistive Technology (HeAT) Laboratory
- Regea Cell and Tissue Center
- TAMK Virtual Lab for Social and Health Care
- Tampere Center for Skills Training and Simulation
- Visaxion (vision lab)
- CIVIT (immersive visual experience lab)

Skills and Training

Support to find investment

Innovation ecosystem and Networking
- Challenge roadmap

Other Tampere region services

- Spark Education: HealthTec & Life Science R&D
- National Care Effectiveness Center
- FHAIVE Testing
- X-Ray Microtomography lab
- FiCan Mid
- Tays Cancer Center
- Genomics and Biomedical Informatics
- Tampere Genomics Facility
- Bioinformatics Facility
- Systems Physiology and Modelling
- Biomaterials and Micro and Nanodevices
- Microfabrication facility
- Biomaterials and their applications laboratories
- Mass Spectrometry Facility

HealthHub Finland EDIH

Co-funded by the European Union

Tampere region HealthHub Finland EDIH Services

HEATLAB

HeAT – Health and Assistive Technology laboratory

Palvelemme yrityksiä terveysteknologian alalla, joka ulottuu fysiologisiin mittauksiin, signaalianalyysiin, laskennalliseen mallintamiseen. Yritykset voivat käyttää HeATia uusien tuoteideoiden kehittämiseen, uusien tuotteiden testaamiseen ja validointiin sekä käytettävyystutkimusten tekemiseen.

SOTE VIRTUAL LAB

Palvelumme yrityksille
- esitestaus vakioidussa Lab-ympäristössä
- testaus ja tuotekehitys autenttisissa ympäristöissä, Living Labeissa
- referenssit ja pilottitutkimukset
- pop-up tila ja showroom teknologioille

TAITOKESKUS

TAITOKESKUS
Tampere Centre for Skills Training and Simulation

Todellisuutta vastaavissa simulaatiotiloissa jäljitellään vuodeosaston, ensiavun, teho-osaston, leikkaussalin tai synnytyssalin oikeaa toimintaa. Uuden ratkaisun tuominen osaksi hoitoprosessia.

BREAKTHROUGH WRIST-WORN SOLUTION FOR CARDIAC ARRHYTMIA DIAGNOSIS

HEALTH TAMPERE

WHAT WAS TESTED?

Optical heart rate (HFR) technology company PulseOn's wearable innovative arrhythmia screening and monitoring solution with cloud-based monitoring was tested in Tampere University Hospital.

Several clinical investigations and usability studies were executed together with various departments at Tampere University Hospital including anesthesiology unit, vascular surgery ward, and department of neurophysiology.

WHAT ARE THE RESULTS?

Testbeds in Tampere area have helped PulseOn greatly throughout the company's journey as one of the first MDR certified products for cardiac arrhythmia diagnosis. These environments have offered a great testbed to the diverse needs of an agile medical start-up.

PULSE ON

Arrhythmia Monitor System
TOOLS FOR DOCTORS

CE certified (MDR class IIa)

HealthHUB
Finland EDIH

Tampere region HealthHub Finland EDIH Services

VISAXSION

Innovaatio-, asiantuntija-, testaus- ja tuotekehitysympäristöt monipuoliseen tutkimuskäyttöön. silmälääketieteen sekä ihmisen ja teknologian vuorovaikutuksen asiantuntemus. Lisäksi käytössämme on laaja monialainen asiantuntijaverkosto. Ympäristöä voidaan hyödyntää työ- ja liikennenäön teemojen lisäksi mm. erilaisiin silmälääkkeiden, piilolinssien ja optisten apuvälineiden käytettävyystutkimuksiin.

TAMPERE BIOPANKKI

Tampereen Biopankki luovuttaa näytteitä ja niihin liittyviä tietoja biolääketieteen sekä kliinisen ja terveystieteellisen tutkimuksen tarpeisiin. Näytteitä voidaan luovuttaa myös tuote- ja menetelmäkehitykseen. Palvelemme niin akateemisia tutkijoita kuin yrityksiä.
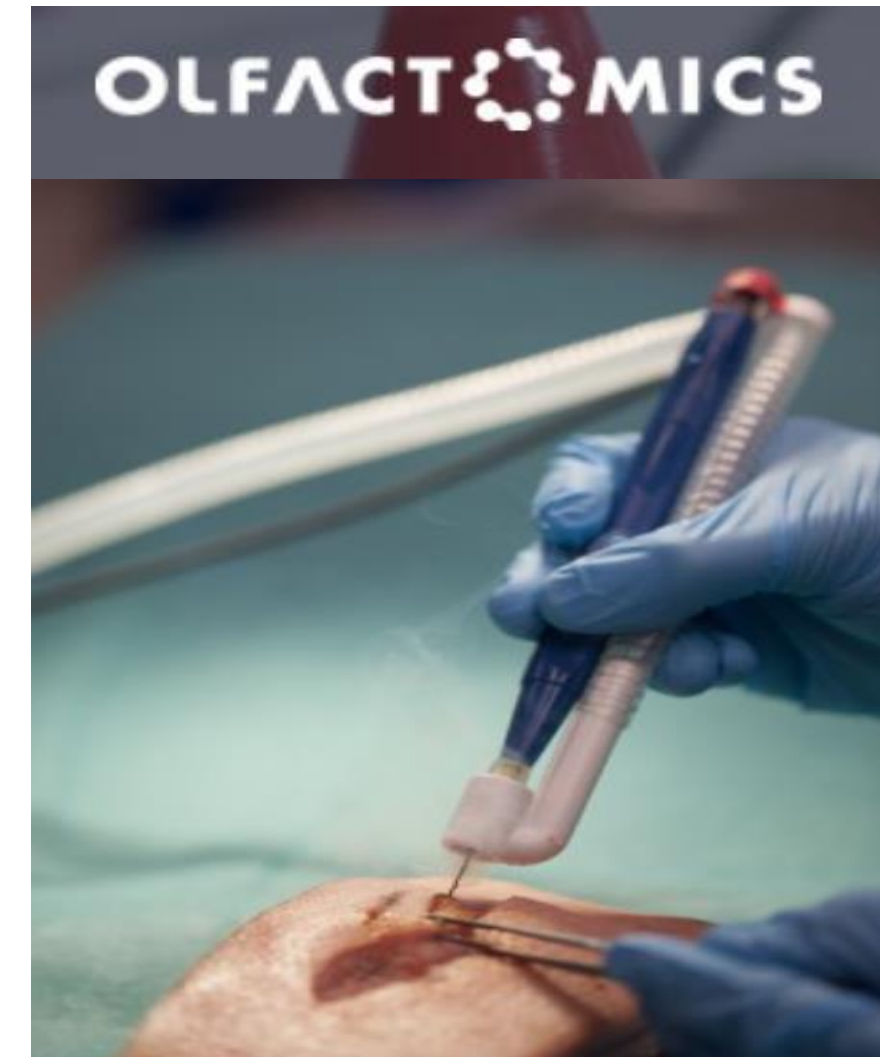
REGEA KUDOS-JA SOLUKESKUS

Regea talteenottaa ja jakelee kudossiirteitä kliiniseen käyttöön sairaaloihin erilaisten sairauksien ja vammojen hoitamise Valmistaa kantasolupohjaisia kudosmuokkaustuotteita. Tarjoaa laadunhallintajärjestelmän rakentamiseen ja laitekvalifiointeihin liittyviä palveluita, puhdastilojen vuokrausta sisältäen koulutuksen, perustarvikkeet ja erikseen sovittuja palveluita.

Tampereen yliopisto-lähtöisiä BioTech yrityksiä

- Biomateriaalit
  - Stemsight – kantasolujen ja biomateriaalien avulla hoitoja sarveiskalvon sokeuteen
- Älykkäät instrumentit
  - Älyneula Injeq, tunnistaa aivo-ja selkäydinnesteen, tukee vaativien potilaspistojen tekemistä turvallisesti
  - Sähköveitsi Olfactomics analysoi syöpäkudoksen alku-ja loppupistettä kudoksessa (T&K)

Kuopio region HealthHub Finland EDIH Services

EDIH Services

Test-before-invest
- Digicenter Northern-Savo
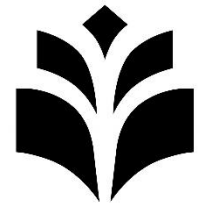- Kuopio Living Lab

Skills and Training

Support to find investment
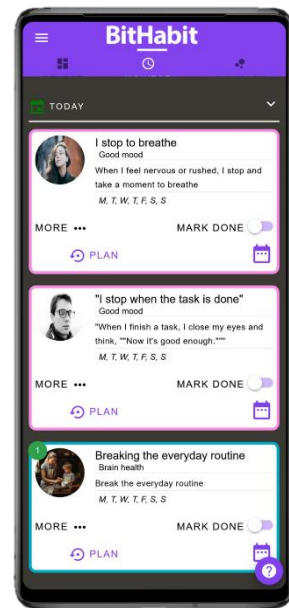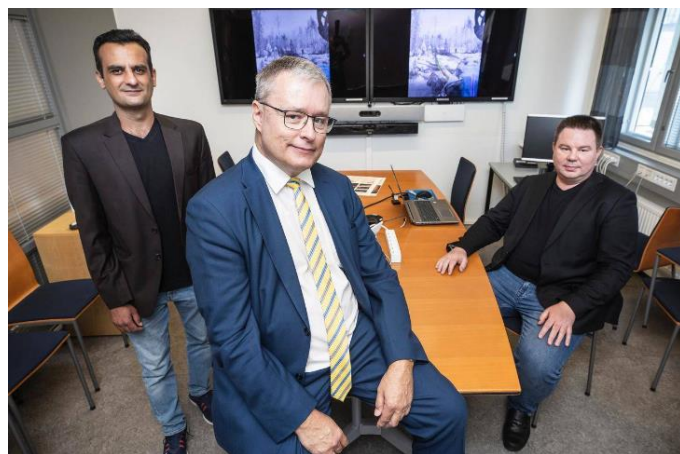- Speed dating with investors (annually in Tahko Ski Lift Pitch event)

Innovation ecosystem and Networking
- Access to Kuopio Health ecosystem

HealthHub
Finland EDIH

Kuopio region HealthHub Finland EDIH Services

KUOPIO HEALTH

UNIVERSITY OF EASTERN FINLAND

Excellence in integrating **advanced AI solutions** to diverse products to elevate businesses for global markets

Wellpro

CASE 1:
Product: Science based support software to form healthy habits trough small actions
EDIH service: Make it AI driven, and implement conversational AI to the user interface
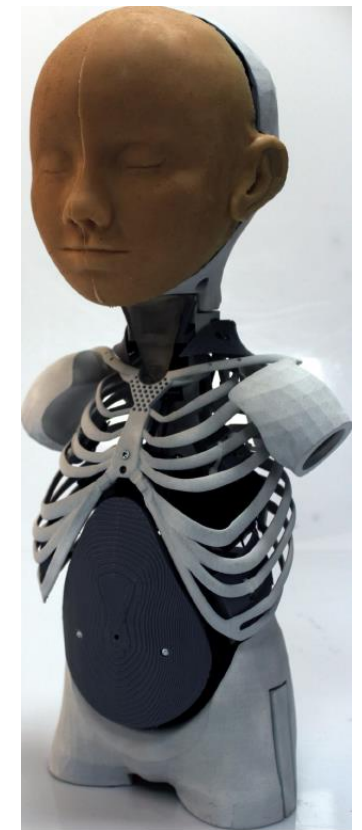**Benefit:** Head to global consumer markets

thinglink..

CASE 2:
Product: Online training platform for healthcare
EDIH service: Make the training creation AI driven
Benefit: No. 1 platform for realizing trainings in healthcare and any other industry

SAVONIA
University of Applied Sciences

- 3D printing
- XR/VR laboratory
- EMC testing

HealthHub Finland EDIH

DiGiCENTER NS
THE DIGITAL INNOVATION HUB OF NORTHERN SAVO REGION

KUOPIO LIVING LAB

Co-funded by the European Union

Kajaani region HealthHub Finland EDIH Services

EDIH Services

Test-before-invest
- AIKA Arctic Data Intelligence and Supercomputing Ecosystem (LUMI) (direct easy access to supercomputing)
- Cybersecurity tests and consultation (upcoming)

Skills and Training
- Digital strategy management training

Support to find investment
- Business model and value creation development

Innovation ecosystem and Networking

Other Kajaani region services

- Palvelut työelämälle - Kajaanin ammattikorkeakoulu (kamk.fi)
- Cemis

Co-funded by
the European Union

Aika Ecosystem services - KAMK

Summary of the testbed

AIKA DIH – Digital Innovation Hub is an ecosystem that offers companies support for the digital business transition and the development of new innovative solutions. Through the partners operating in the AIKA ecosystem, companies can benefit from the latest digital technologies such as artificial intelligence (AI), supercomputing and data analytics in business and product development.

- **Services offered**:
  - Test before invest in data analytics / AI
  - Access to LUMI Supercomputing Ecosystem (LUMI)
  - Consulting services e.g. digital strategy workshop, AI workshop
  - Training services: various digital strategy and digital tools trainings

- **Target audience**:
  - Small and medium sized companies, technology startups

- **Price list/pricing model** (if applicable): determined by case

- **Service Provider**: KAMK, CSC IT Centre for Science

- **Contact Information**: anas.alnatsheh@kamk.fi

- **Website**: https://aikaecosystem.com/

Customer case example

Iiwari Tracking Solutions Oy

- The end customer's application area for the company's service or product is classified in test before invest service at AIKA ecosystem.

- The technologies are image recognition, neural networks, programmatic positioning.

Stay informed

healthhubfinland.eu

LinkedIn: healthhub-finland-edih

Facebook: HealthHubFinland

X (formerly known as Twitter): HealthHubEDIH

HealthHub Finland EDIH

EDIH European Digital Innovation Hubs Network

BUSINESS FINLAND

Co-funded by the European Union