

CLUST-ER INNOVATE SUSHI-TECH TOKYO 2025



EMILIA - ROMAGNA DELEGATION



CLUST-ER INNOVATE



The **Service Innovation Clust-ER** is an association of public and private bodies: **companies, research centers** and **education institutions** that share skills, ideas and resources to support the **competitiveness of the ICT sector**

The Clust-ER, in its role of aggregator and catalyst of **innovation stakeholders**, carries out a series of activities and services to support its members, without having any revenue: our purpose is to be a booster for the territory and the members competitiveness and level of innovation

NUMBERS:

132 Member

6 Value Chain

45 Events & Forum

8 Working Group

2 White Paper

20 National and EU Projects

IMOLA INFORMATICA



Organization Name: Imola Informatica S.p.A.

Organization Type: IT consulting company

Website: www.imolainformatica.it/en

Contact person: Filippo Bosi, CEO

fbosi@imolainformatica.it / comunicazione@imolainformatica.it

What we do: we support companies through change and digital transformation. We provide IT advisory services and introduce new skills to organizations.

Strengths, Technologies and Methods that distinguish us:

- Values: we share our vision of making innovation beneficial for people, businesses and communities. We are committed to the responsible development of local communities and smart cities.
- Independence: we are free from commercial product or brand constraints. Every piece of advice is tailored to a specific goal.
- Approach: continuous support and direct experimentation of emerging innovations in the IT world to avoid fleeting trends.
- Over 40 years of experience in IT consulting.
- Research & Development: internal projects, laboratory activities and collaborations with universities, innovation networks and clients.
- Sectors: Banking (55%); Insurance (28%), Facility management services, Healthcare, Finance, Large Scale Retail Trade and Manufacturing (17%).

Our specialties:

IT Architectures: we design streamlined, flexible architectures and guide the evolution of complex information systems.

DevOps & Platform Engineering: we help IT organizations in the development and delivery of application and infrastructure services.

Data Solution & AI: we address the challenges of artificial intelligence, support governance processes, and manage the data and model lifecycle.

Cybersecurity, Data Privacy & Protection: we educate organizations on security culture, creating new awareness and opportunities.

Quality & Performance Engineering: we enhance performance and optimize processes and tools to support application services. Application Innovation: we design and innovate technical services and applications to support the business.

TWO OF OUR EXPERIENCES:

IPPODAMO: a Digital Twin solution for the maintenance management of public buildings and roads in the Metropolitan City of Bologna realized in collaboration with Rekeep and the University of Bologna.

<https://cris.unibo.it/retrieve/a103f4ec-1e36-49b4-b012-27329659627c/ai-02-00014-v2.pdf>

<https://www.rekeep.com/servizi/citta/ippodamo-platform>

AGROADVISOR: an integrated platform for farm registry management, enhanced with weather detection, satellite analysis of evapotranspiration, soil composition analysis, production forecasting, environmental impact assessment, and recording of cultivation operations, for the certification of the organic supply chain.

For more details: <https://agroadvisor.it/>

What we are searching for:

Partnership: with research centers, training institutions and companies.

We are looking for contacts and collaborations through academic and industry networks to promote an open innovation approach.

MAGIVEX



Organization Name: Mavigex

Organization Type: Laboratory

Website: mavigex.com

Contact person: Luca Cavina - luca@mavigex.com

Andrea Lugli: andrea@mavigex.com

What we do : Mavigex is a technology company and research laboratory specializing in middleware development, particularly for IoT and smart mobility solutions. We integrate systems across different protocols, ensuring seamless communication between devices and platforms. With a skilled team of senior, middle, and junior developers, we offer tailor-made, high-quality solutions that address the specific needs of each client. Our services include IoT integrations, AI-based solutions, and cloud support for Amazon AWS, focusing on delivering innovative, scalable, and reliable products.

We have a strong history of involvement in European research projects and are currently working with international partners. Our strategy focuses on expanding globally by partnering with startups and IT companies, offering our expertise as a trusted technology partner in the IoT and AI sectors.

Strengths, Technologies and Methods that distinguish us:

Mavigex offers a range of products and services tailored to meet the needs of businesses looking to innovate and integrate their systems.

Our offerings include:

- **System integration:** Ensuring seamless communication between different platforms and systems.
- **Middleware creation:** Developing bespoke middleware solutions, particularly for IoT and smart mobility applications.
- **Mobile app development:** Crafting native and cross-platform mobile applications.
- **Custom platform development:** Building tailored platforms that meet specific business requirements.
- **IoT device integration:** Connecting and managing IoT devices across diverse protocols.
- **AI projects:** Implementing artificial intelligence solutions to enhance automation and data-driven insights.

These services are designed to help businesses leverage cutting-edge technologies for digital transformation.

We will present 2 case history developed with our expertise

Case History: Middleware for IoT Vehicles

Mavigex developed an advanced middleware solution for IoT vehicle integration, simplifying communication between various providers and the client's software infrastructure. Using an ingestion architecture that supports both TCP and MQTT protocols, the system normalizes data from e-bikes, scooters, and microcars into a unified data model. This approach enables the seamless addition of new devices without modifying the core service. The middleware is already compatible with vehicles from a series of producers like Segway, Hongji, Teltonika, OMNI, eMoped, and MOBILIZE.

Case History: Mobility Monitoring Infrastructure

Mavigex partnered with an accredited TSP (Telematics Service Provider) for the Move-In project (Monitoring of Polluting Vehicles), active in Lombardy, Piedmont, Emilia-Romagna, and Veneto, to track the kilometers driven by polluting vehicles in restricted traffic zones (ZTLs).

We designed an infrastructure to collect and decode circulation data from Arlo and Teltonika devices, storing it in an AWS S3 data lake for mileage aggregation. We also managed the creation and manipulation of shapefiles using Python Geopandas and QGIS.

What we are searching for

Partnership: We seek partnerships with software houses or large system integrators that leverage our expertise in middleware, IoT, AI, and system integration to enhance digital transformation projects on a large scale.

Clients:

Our target clients include:

- **Smart vehicle manufacturers:** We integrate their proprietary protocols into our middleware or develop tailored solutions for their partners or clients.
- **Startups:** We assist in developing MVPs or refactoring existing platforms to scale quickly.
- **SMEs:** We support digital transformation efforts, building custom portals, configurators, and improving business processes.
- **Corporate enterprises:** We provide system integration services to ensure seamless communication between platforms.

RE-LAB



INTERACTION ENGINEERING

Organization Name: RE:LAB

Organization Type: Company, Private Research Center

Website https: [//www.re-lab.it/](https://www.re-lab.it/)

Contact person : **Federica Crolla**, HMI Project Manager - federica.crolla@re-lab.it

CC: **Francesco Tesauri**, co-founder - Francesco.tesauri@re-lab.it

What we do: We are an Interaction Engineering company: we join human factors and engineering backgrounds to design, develop, and validate Human-Machine Interaction Systems to help machines help people. We support people, when they move, work or have fun; this brought us into industries as diverse as Automotive, Off-highway machinery, Motorcycles, Aviation & Defence, Railways, Household appliances, Industrial Automation.

Strengths, Technologies and Methods that distinguish us (and application field):

With 20+ years of experience, we design, prototype, develop and test interaction solutions for various systems, addressing User Experience (UX) and Human Factors and Ergonomics (HFE) issues through every stage, from wireframing to final implementation and usability testing.

Our research efforts run across domains, but we think we have a knack for sustainable mobility. We strive to tap autonomous systems to improve travellers' safety and experience, through adaptive automation and generative HMI.

What we are searching for

Partnership: Companies and research centres for mid- and long-term international R&D projects on mobility and human-robot interaction.

Clients: Automotive / Mobility (4-, 2-, N-wheelers, rail, aerospace) OEMs, home automation manufacturers, industrial machinery manufacturers, household appliances makers.

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SEARCH ON MEDIA GROUP



Organization Name: Search On Media Group - We Make Future Expo

Organization Type: Trade Show

Website: <https://en.wemakefuture.it/>

Contact person: Vito Esposito vito.esposito@searchon.it

What we do:

WMF - We Make Future - International Fair on Artificial Intelligence, Technology, and Digital

June 4th - 6th, 2025, in Bologna, Italy, the WMF - We Make Future, the international fair fully dedicated to innovation, returns. A global attraction, it annually gathers the best of digital, AI, tech and social innovation, international players, startups, scale-ups, investors, institutions, universities, and non-profit organizations. With over 70,000 attendees from 90 countries in 2024, over 700 exhibitors, more than 1,000 speakers and guests from around the world, 3,000 startups and investors, and partners involved in a portfolio of investments totaling \$1.3 Billion, over \$60 billion in financed operations, and more than 13,000 investment rounds managed, WMF is the leading international fair for the innovation world.

Search On Media Group - Humans Leading Innovation

Since 2004, the company has aimed to spread digital culture by managing communities, supporting sharing activities, and providing strategic and operational consulting through Search On Consulting in Digital Marketing and Digital Transformation for large companies. From the expertise and professionalism of Search On Media Group, the Education Business Unit was born, organizing WMF and other training events, as well as the ibrida.io platform, managing customizable and flexible online, hybrid, and offline events.

Strengths, Technologies and Methods that distinguish us (and application field):

We Make Future is one of the top 5 expo in Europe on digital innovation, technology and AI. A door to the european and italian innovation market, a place where training, education and B2B opportunities meet.

What we are searching for

Partnership: Partnering with open innovation Stakeholders, Venture Capital, Corporate Venture Capital, Funds, Accelerators, Incubators ecc... so as Innovation Networks and Events all around the world to create a global network of entrepreneurs and innovators.

Clients: Corporates interested in sponsoring tech events in Europe, National Development Agencies supporting delegations of startups, founders and companies interested in expanding their markets, founders interested in meeting VC & funds, National Business Agencies interested in attraction of the investment in their countries.

TOUHLABS - PROGETTO SURGEREE



Organization Name: TOUCHLABS BOLOGNA / PROJECT SURGEREE

Organization Type: Software House / Software specialized in Medicine and Surgery

Website: www.noi.it / www.surgeree.com

Contact person: Andrea Bortolotti andrea@touchlabs.it / andrea@surgeree.com

What we do: TOUCHLABS is a software house located in Bologna, Italy.

We specialize in crafting software products based on the 3D technology with a tailor made approach in order to develop software solutions and platforms such as virtual reality experiences, augmented reality tools, real time 3D configurators and rendered images & videos.

PROJECT SURGEREE:

XR Software Solution for Human and Vet Market.

Strengths, Technologies and Methods that distinguish us (and application field)

TOUHLABS:

We are proud suppliers and partners of very well known and respected Companies operating within a wide range of different markets, meaning that our solutions are totally suitable to any Company no matter how big they are or what their core business is.

All of our products will run on every possible device (smartphone, tablet, PC, Mac, Meta Quest and Apple Vision Pro), as well as on every possible OS (iOS, OSx, VisionOS, Android, Windows).

SURGEREE:

- **Specialized Distributors:** Crucial for market access, sales, logistics, and potentially acting as Marketing Authorization Holder (MAH).
- **Local Manufacturers/CDMOs:** Offer production benefits, supply chain resilience, and co-development opportunities.
- **Academic/Hospital Institutions:** Vital for clinical validation, local data generation, and Key Opinion Leader (KOL) access.
- **Complementary Tech Companies:** Enable integration of advanced features like AI or sensors.
- **Consulting Firms:** Provide strategic, regulatory guidance, and can act as independent MAHs. A multi-partner approach, potentially phased, is recommended to cover all needs, especially securing the mandatory MAH.

What we are searching for

-Partnership (describe types)

SURGEREE:

- **Specialized Distributors:** Crucial for market access, sales, logistics, and potentially acting as Marketing Authorization Holder (MAH).
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Schema of Potential Partner Types for Surgerees in Japan:

I. Specialized Medical Device Distributors

- **I. Role:** Market access, importation, registration (potential MAH/DMAH), marketing, sales, logistics, final customer distribution (hospitals, clinics).
- **II. Key Assets:** Established sales networks, pre-existing relationships with hospitals and KOLs. *
- **Evaluation Factors:** Specialization in Surgerees's surgical area, geographic coverage, capacity/ experience as MAH/DMAH.
- **III.Examples:** Century Medical, Inc. (CMI), Muranaka Medical Instruments Co., Ltd., Gadelius Medical K.K., IMI Co., Ltd.

II. Local Manufacturers and Contract Development/Manufacturing Organizations (CDMOs)

- **I. Role:** Production, potential co-development for the Japanese market, supply chain resilience, possible MAH function.
- **II. Why:** Reduced production costs, access to advanced manufacturing expertise.
- **III.Examples:** Large MedTech: Olympus, Terumo. Specialized CDMOs: Nissha Medical Technologies, Takashima Sangyo, Röchling Medical. * Others with capabilities: Hirata Precisions, Murata, Hamamatsu Photonics.

III.Academic Research Institutions and Major Hospitals

- **I. Role:** Clinical validation, local data generation (valued by PMDA/physicians), R&D collaboration, access to influential KOLs.
- **II. Why:** Building scientific credibility, supporting regulatory and reimbursement applications.
- **III.Examples:** University of Tokyo Hospital (Todai), Osaka University Hospital (Handai), National Cancer Center (NCC), Cancer Institute Hospital of JFCR, Nippon Medical School Hospital, Keio University.

IV. Complementary Technology Companies

- **I. Role:** Integration of advanced functionalities (e.g., AI for image analysis, decision support; sensors for monitoring; connectivity for data/telemedicine).
- **II. Why:** Creating more competitive and differentiated solutions.
- **III. Examples:** Fujitsu, potentially specialized AI, sensor, or digital health platform companies.

V. Market Entry and Regulatory Consulting Firms

- **I. Role:** Strategic market research, PMDA regulatory pathway assessment, submission support, QMS compliance consulting, identification of local partners, potentially acting as an independent MAH/DMAH.
- **II. Why:** Reducing risks and time-to-market in the complex Japanese environment.
- **III. Examples:** Pure Global, TÜV SÜD, Emergo by UL, CMIC Group, MCRA (via Vorpall Technologies K.K.), Parkdale Group, ZS Associates, Eliquent Japan, Titan Consulting, MedTech Partners, various Contract Research Organizations (CROs).

Clients:

HUMAN MEDICINE:

University Hospitals / Academic Medical Centers: These institutions represent the pinnacle of advanced clinical care, medical research, and specialized training. They are often pioneers in adopting new technologies and manage complex clinical cases requiring advanced planning, high precision, and potentially, tele-mentorship. Their threefold mission (care, research, training) aligns perfectly with the functionalities offered by Surgeree (surgical precision, data analysis, simulation). Well-known examples include Tokyo Women's Medical University (active in the development of SCOT), the Utsunomiya Neurospine Center (with an advanced neurosurgical focus), Keio University Hospital, Nihon University hospitals, Mie University Hospital, and others. The direct involvement of Japanese university hospitals in the development and implementation of cutting-edge surgical technologies confirms their role as early adopters and potential strategic partners. They possess the infrastructure, manage clinical complexity, and demonstrate the open mindset necessary to evaluate and adopt innovative platforms like Surgeree.

Specialized Hospitals and Clinics: Centers focused on specific high-complexity disciplines such as neurosurgery, surgical oncology, orthopedics (particularly joint replacement and spinal surgery), or cardiovascular surgery. In these contexts, the millimeter precision, detailed 3D imaging-based planning, and advanced intraoperative visualization offered by Surgeree are particularly valuable. Examples include centers like the Utsunomiya Neurospine Center, Kamiyacho Neurosurgery Clinic, and institutions adopting specific technologies like NextAR for orthopedics.

Medical Research Institutes: Centers focused on surgical innovation, the development and validation of new techniques, medical simulation, the application of AI in healthcare, or advanced medical imaging analysis. Often, these institutes are affiliated with university hospitals.

VETERINARY MEDICINE:

Veterinary Teaching Hospitals / University Veterinary Faculties: As in the human sector, these are the main centers for advanced care, specialized training (interns/residents), and research. They are the most likely candidates for the early adoption of sophisticated platforms. Examples include the University of Tokyo Veterinary Medical Center, Nihon University, and potentially institutions affiliated with the leadership of scientific societies such as JSVAS/JSVES.

Large Specialized/Referral Private Hospitals/Clinics: Large private facilities employing specialist veterinary surgeons (board-certified or with equivalent training) offering complex procedures (orthopedics, neurosurgery, oncology, MIS). These facilities typically invest in advanced diagnostic and surgical equipment. An example could be the Luca Animal Medical Center, led by the president of JSVES.

Veterinary Research Centers: Institutions focused on animal health research, which might include the development of surgical techniques, comparative medicine studies, or the use of animal models.

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