CIDAI Centre of Innovation for Data tech and Artificial Intelligence

BSC AI Factory

Masterclass

"BSC AI Factory: IA i supercomputació per a startups i pimes"

DIH4CAT Digital Innovation Hub de Catalunya
AI Connect

CIDAI Centre of Innovation for Data tech and Artificial Intelligence

BSC AI Factory

Masterclass

"BSC AI Factory: IA i supercomputació per a startups i pimes" (i sector públic)

DIH4CAT Digital Innovation Hub de Catalunya
AI Connect

Contents of the session

1. About AI Factories in EU
2. What's the BSC AI Factory
3. What's in it for me? how to access it?
4. BSC AI Factory Ecosystem activation
5. Recap
6. Q&A



European AI Factories



BSC AI Factory

European Vision



Europe considers AI a strategic capability for its technological sovereignty and competitiveness.

European strategy:

- Reduce external technological dependence
- Promote safe and reliable AI
- Accelerate the adoption of AI in the economic fabric

AI Factories are a key element in realizing this vision

https://commission.europa.eu/topics/competitiveness/ai-continent_en

BSC AI Factory

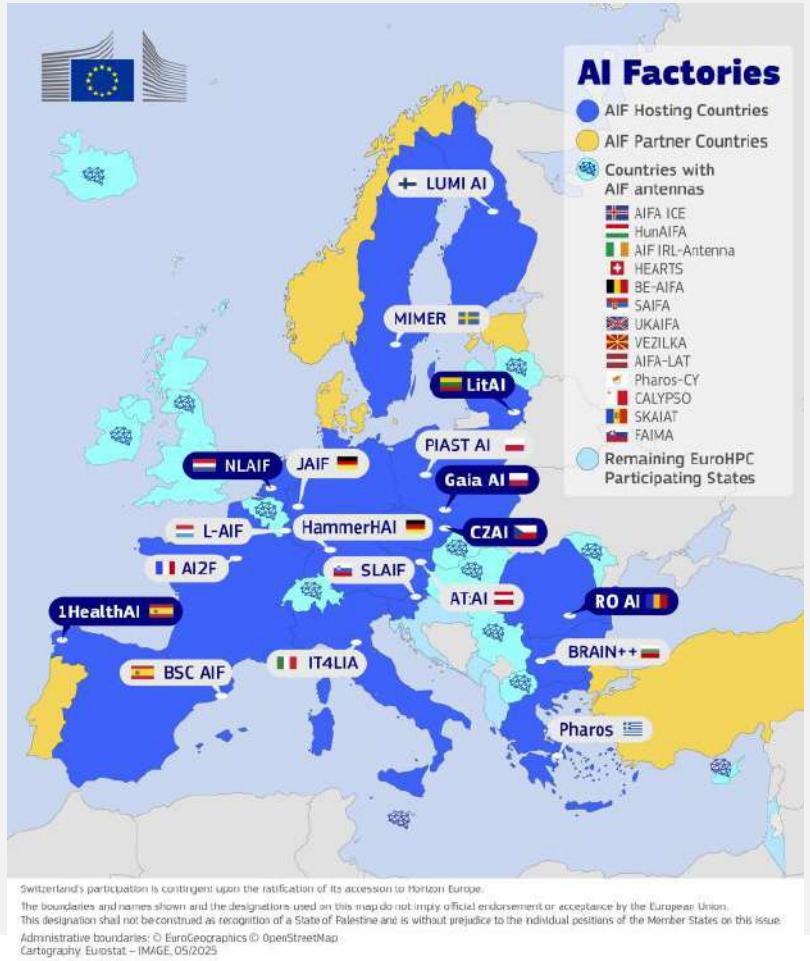
AI Factories

19 AI Factories in Europe

Serving: Startups, SMEs and Public Sector entities

Key capabilities

- Supercomputing for AI
- Scientific-technical collaboration
- Ethical and regulatory safeguards

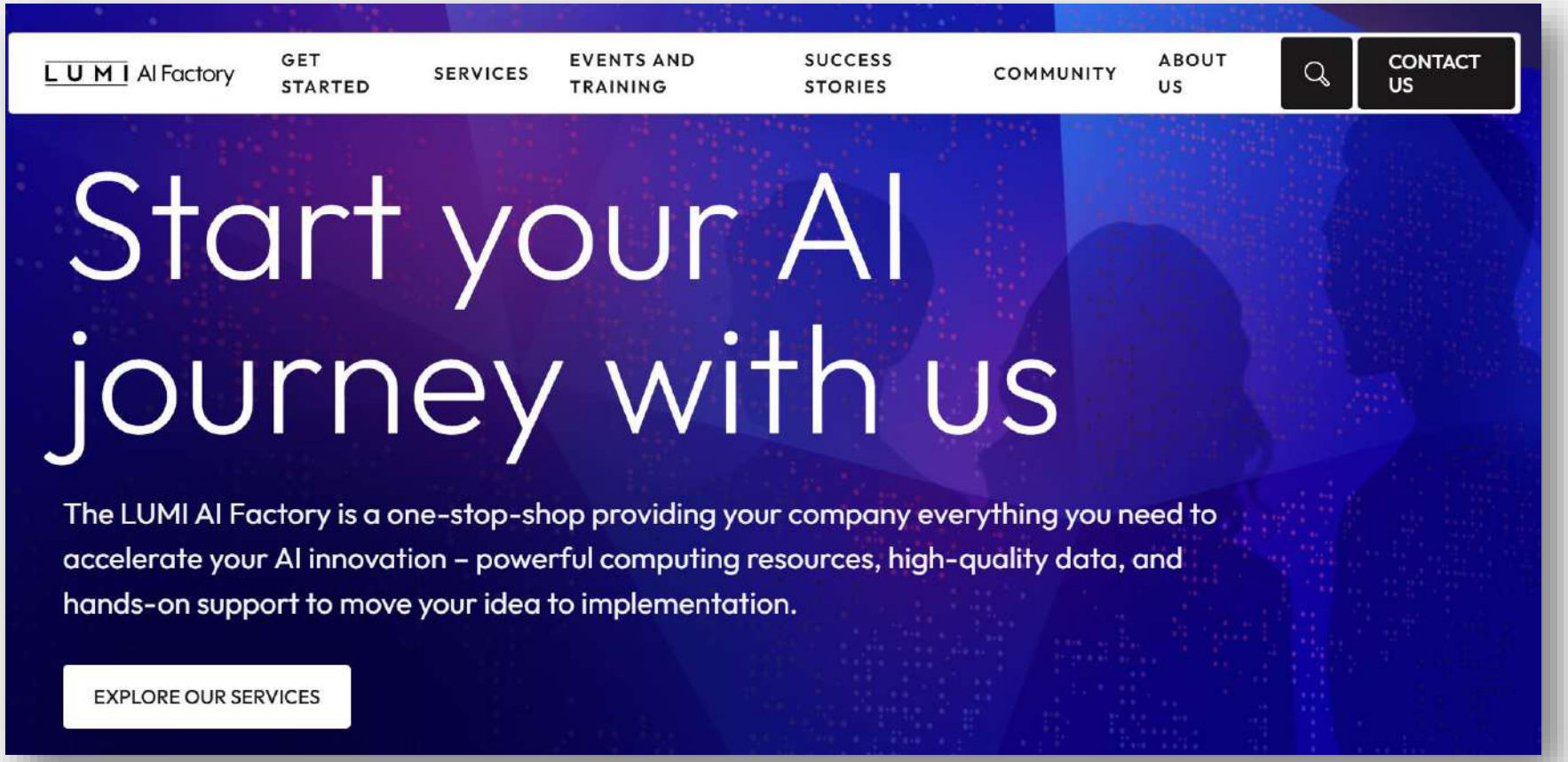


AI Factories do not replace the market; they create the technological foundation to scale the European ecosystem.

https://digital-strategy.ec.europa.eu/en/policies/ai-factories

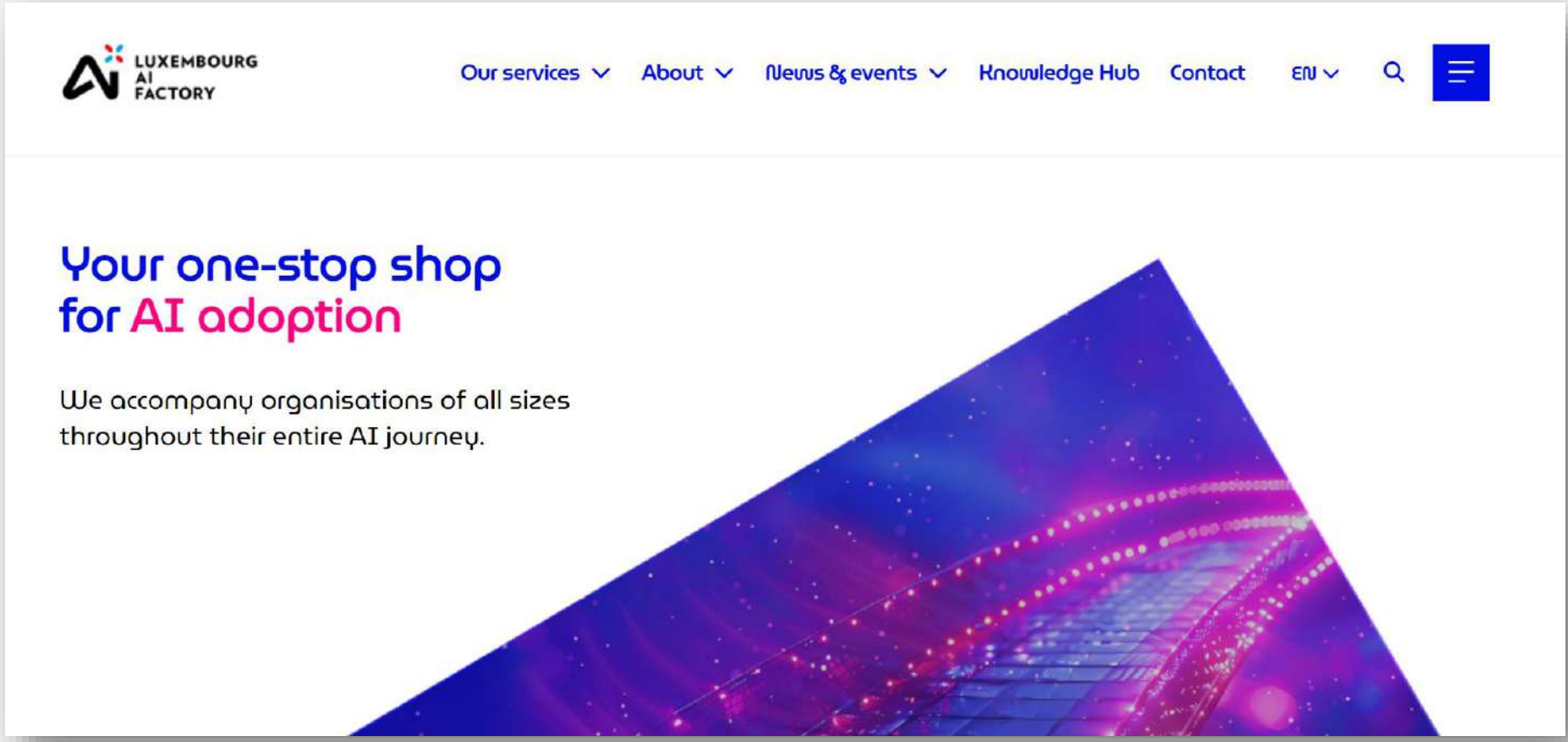
BSC AI Factory

https://lumi-ai-factory.eu/



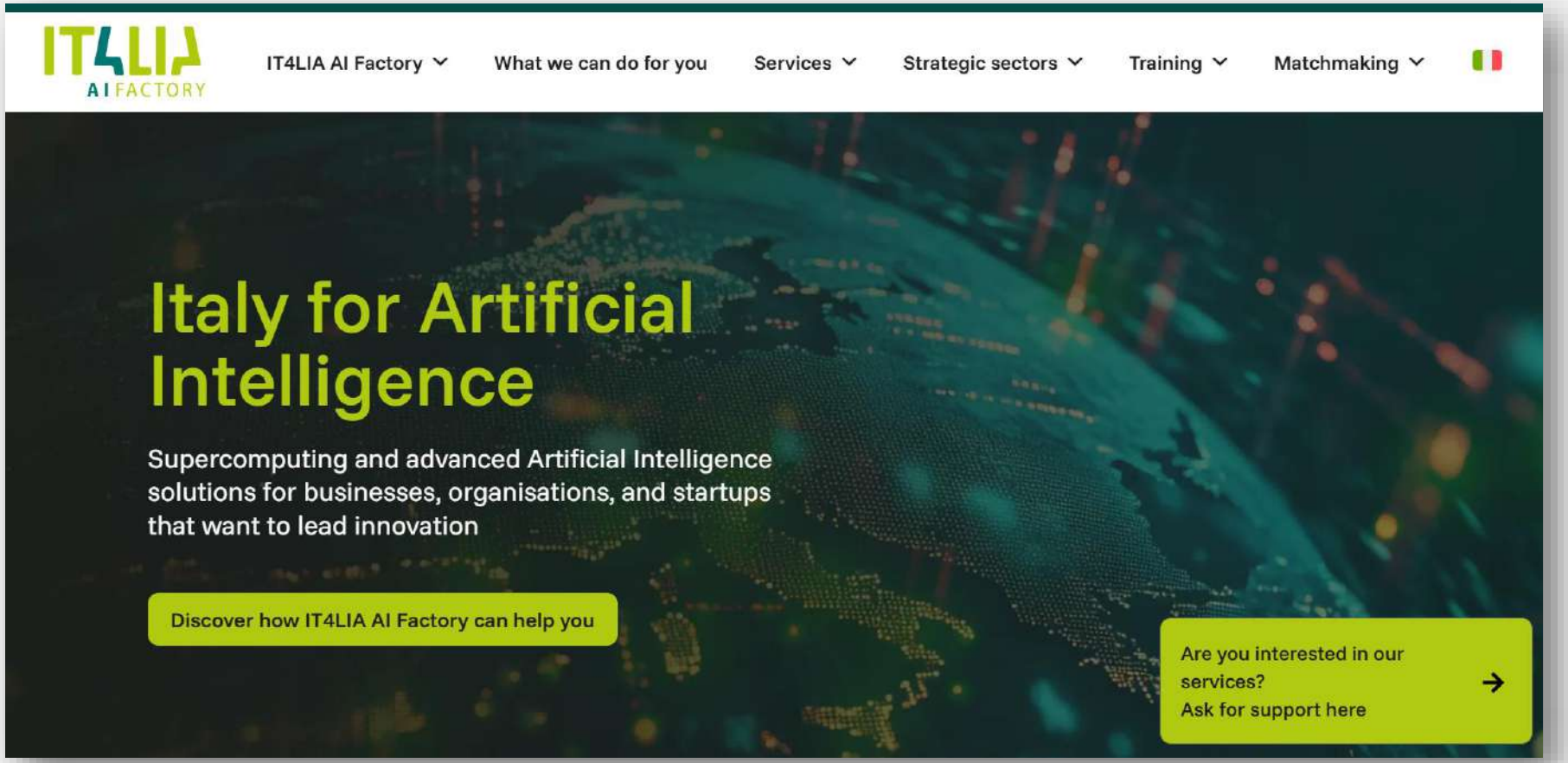
BSC AI Factory

https://aifactory.lu/



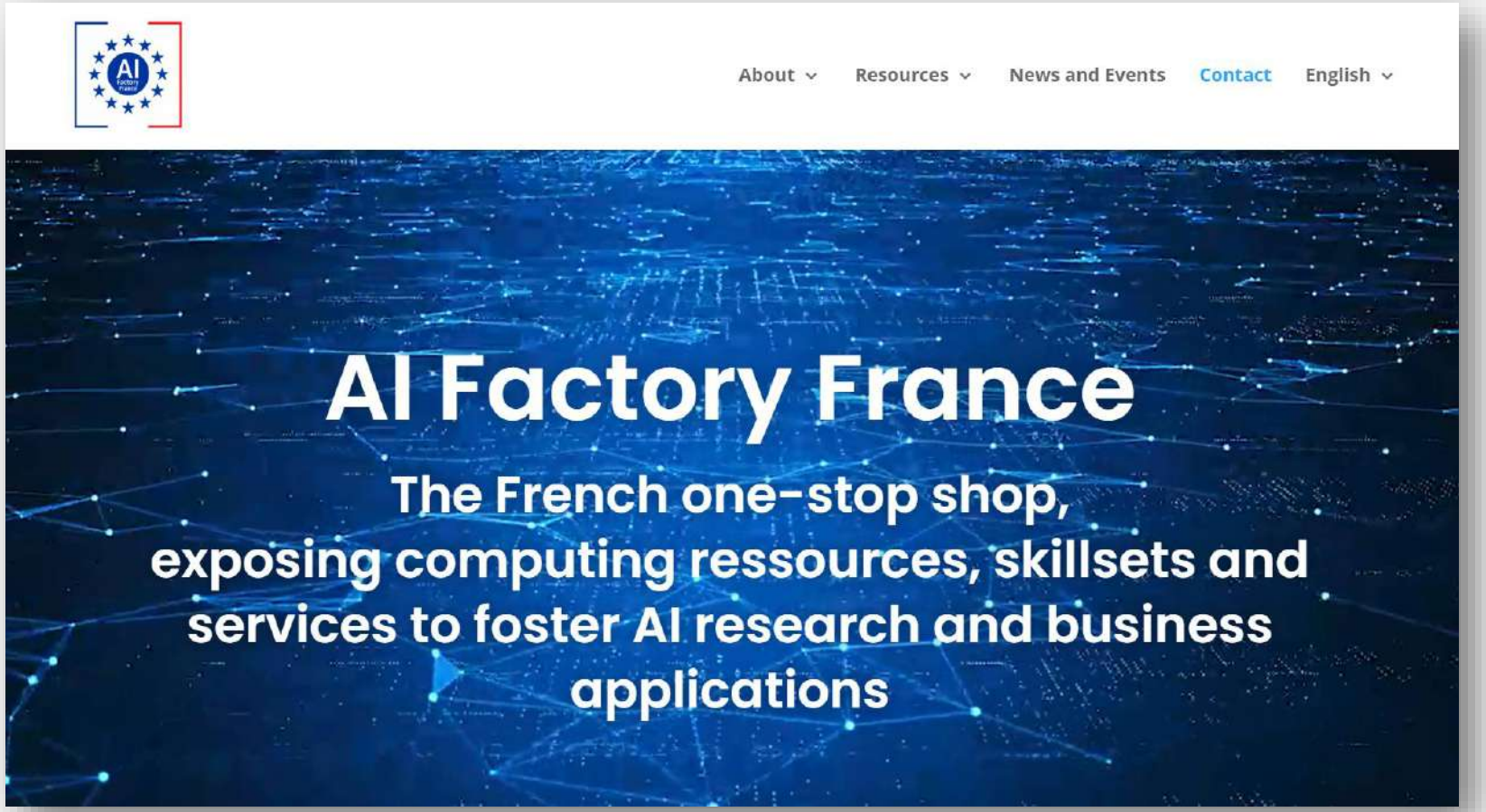
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https://it4lia-aifactory.eu



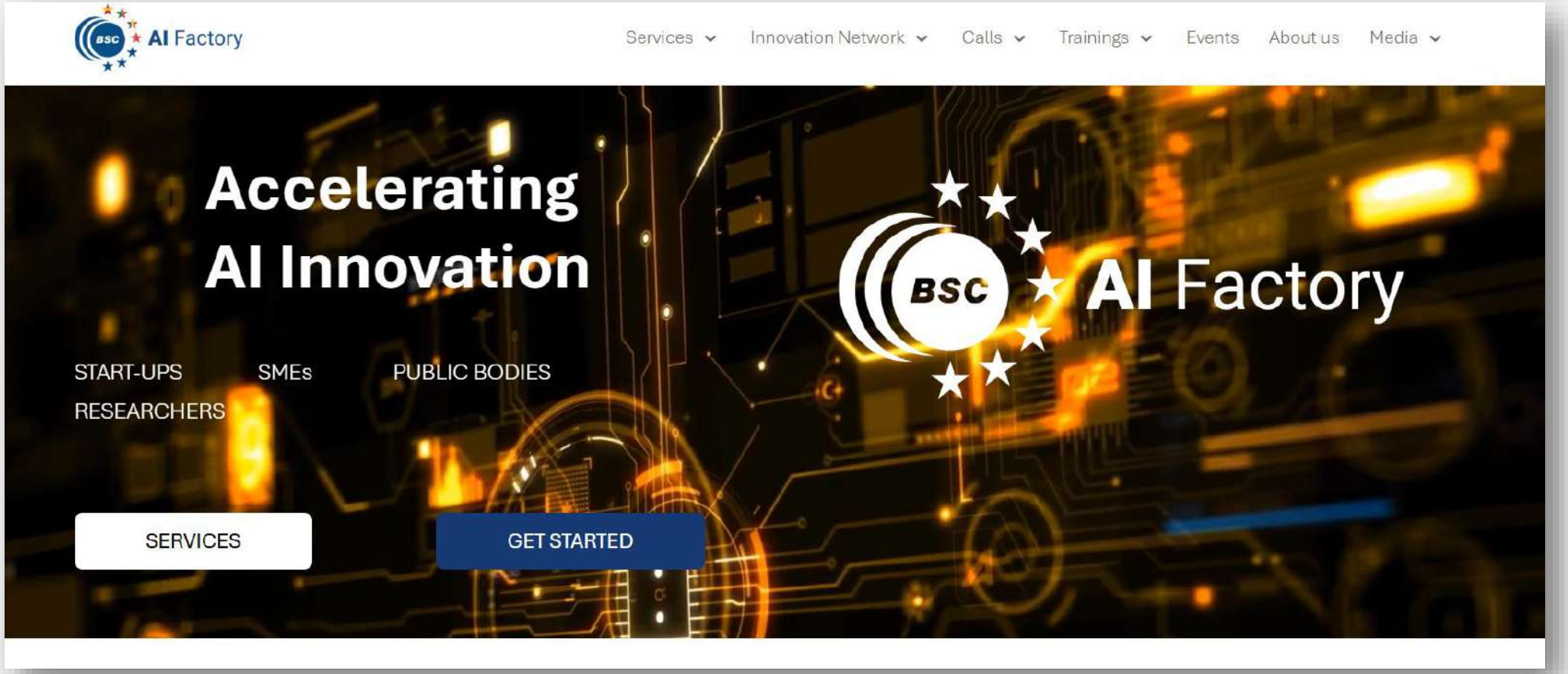
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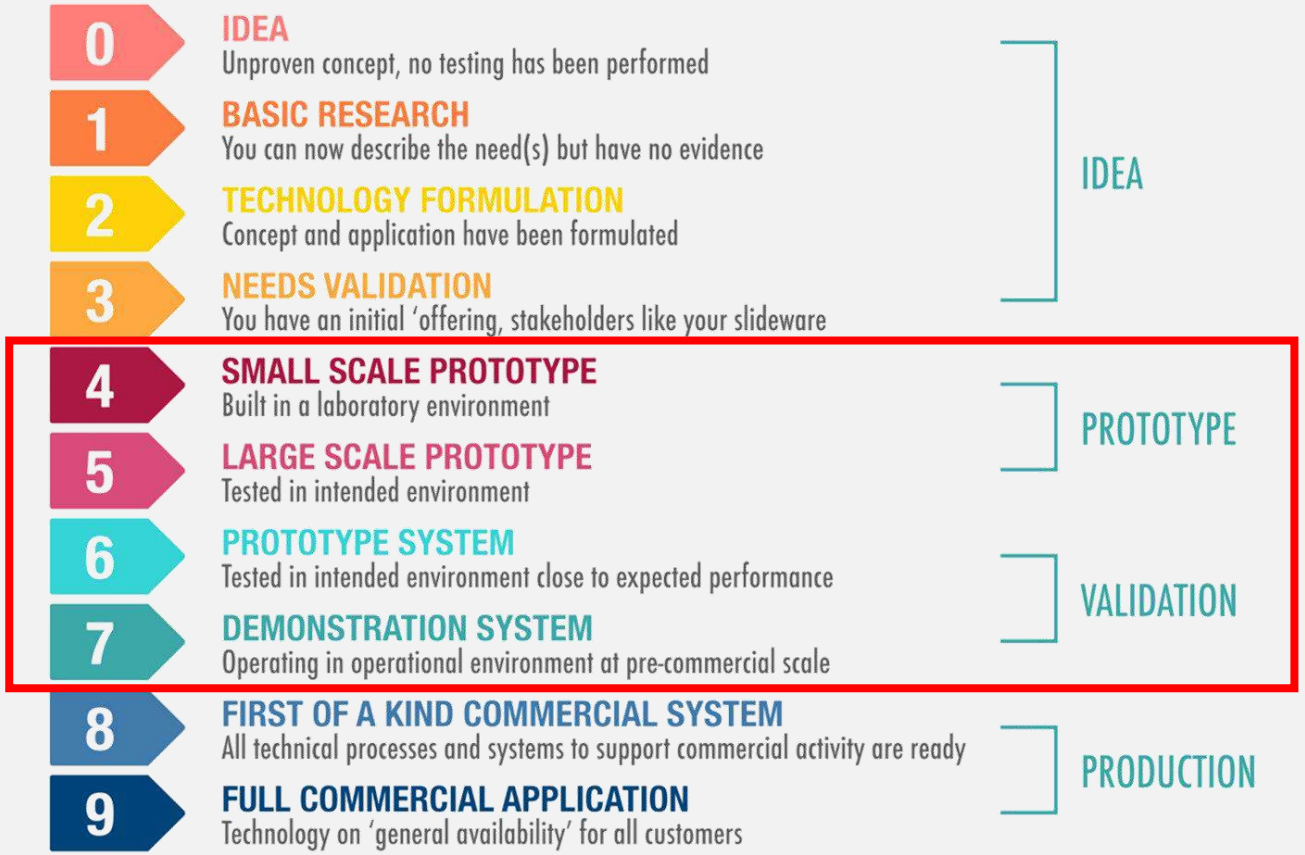
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BSC AI Factory

Accelerating innovation with AI & HPC boosters



a) AI expert support
b) Supercomputing

BSC AI Factory

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BSC AI Factory

BSC AI Factory: what makes it unique?

One of Europe's first AI Factories

A unique combination of science, talent and technology

Decades of leadership
In advanced computing

+1000 researchers
con experiencia multidisciplinar

State-of-the-art infrastructure
MareNostrum 5 and cutting-edge AI capabilities with multidisciplinary experience



BSC AI Factory

AI needs infrastructure. Infrastructure needs knowledge.
BSC combines both.

BSC AI Factory: Consortium & Investment

A European initiative developed in collaboration with reference centres

Project start: 01/04/2025

Partners

Spain

Barcelona Supercomputing Center (BSC-CNS)

Portugal

Fundação para a Ciência e a Tecnologia (FCT)

Türkiye

The Scientific and Technological Research Council of Türkiye (TÜBITAK)

Romania

National Institute for Research & Development in Informatics (ICI Bucharest)

Affiliated Entities

UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

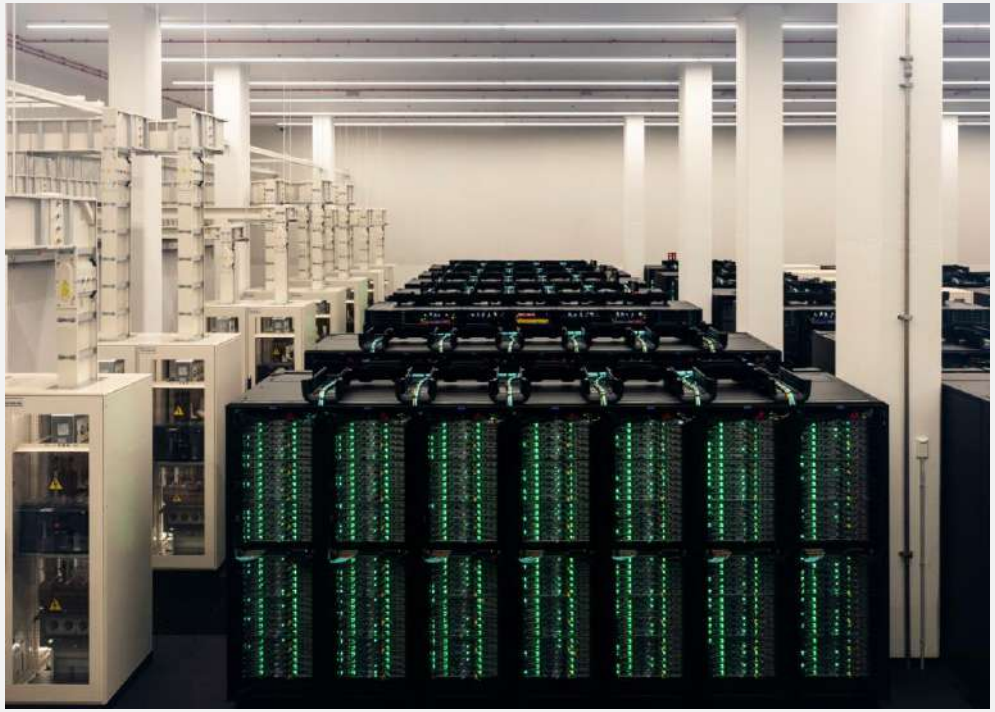
Centro Nacional de Computação Avançada

Investment: €197.28 M

- €42 M: AI services
- €154 M: MareNostrum 5 AI upgrade
- €1.28 M: Advanced Experimental Platform

AI Factory

BSC AI Factory: Accelerating AI innovation



A complete ecosystem for building and scaling AI solutions

Scientific and technical expertise

From the BSC research teams

AI specialized support

Up to 30 hours of expert consulting

24+ services

Designed to ttransfer knowledge and accelerate AI adoption

HPC Resources

Up to 50,000 hours of supercomputing

Access to AI services and HPC to create real impact

BSC AI Factory

BSC AI Factory: Your AI Gym







BSC AI Factory

BSC AIF – What it is and what it is not



- Strategic guidance on specific challenges
- Free of charge
- All IPR is yours

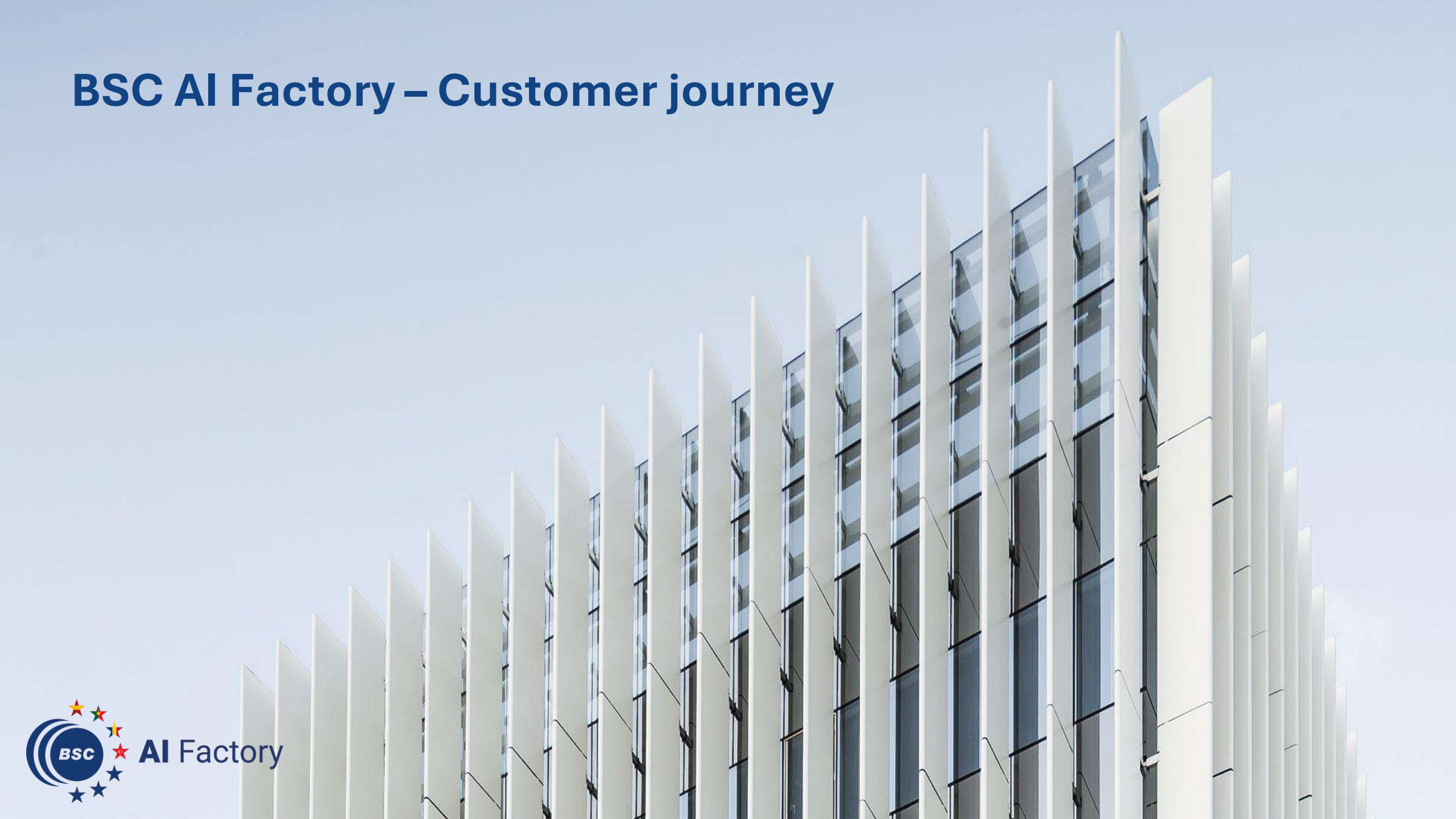


- External development provider
- A strategic long-term relationship with BSC
- A free cloud service to deploy your projects

BSC AI Factory

We don't replace your abilities.
We speed them up.

BSC AI Factory – Customer journey



BSC AI Factory

BSC AIF - Start here

1

SCAN ME

Apply

Fill in a short form telling us about your organisation and goals.

2

Talk to us

A free exploratory call to understand your challenges and ideas.

3

Get a plan

We propose a tailored, low-effort pilot — no obligation.

4

Run the pilot

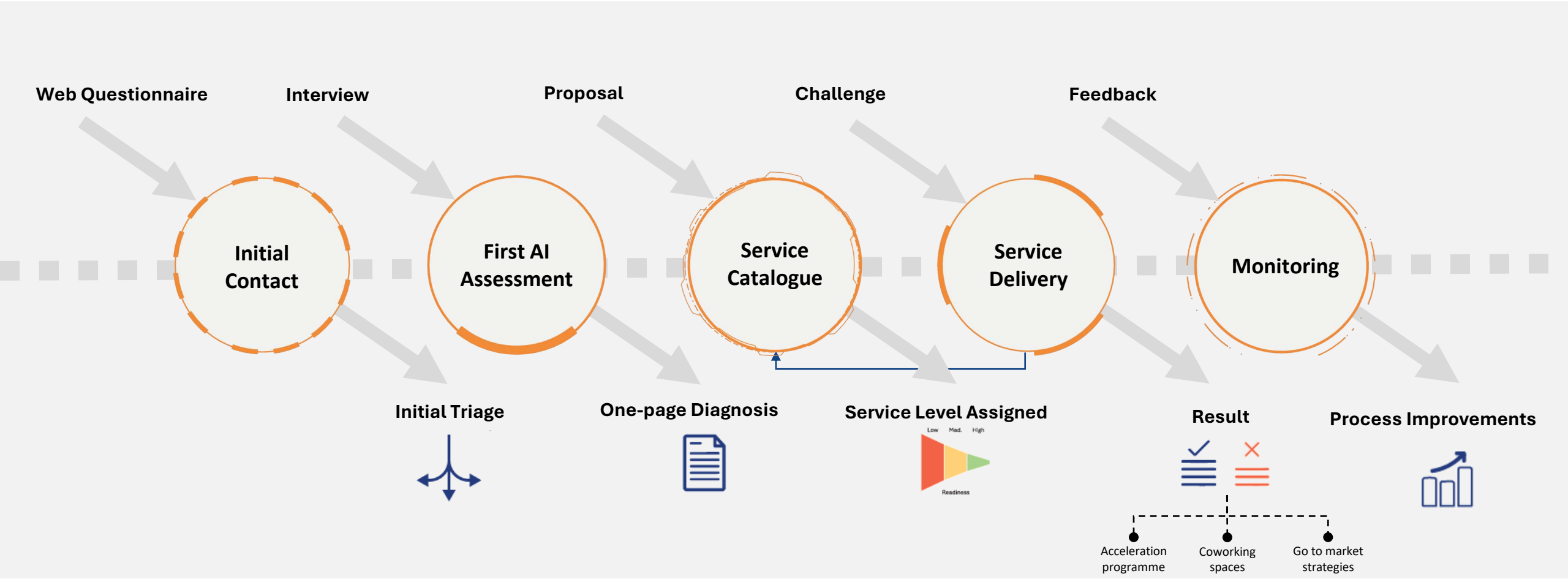
Build and test your AI use case with our experts and infrastructure.

Start with one targeted department or use case, then expand only if it works.

BSC AI Factory

https://bsc-aifactory.eu/one-stop-shop/

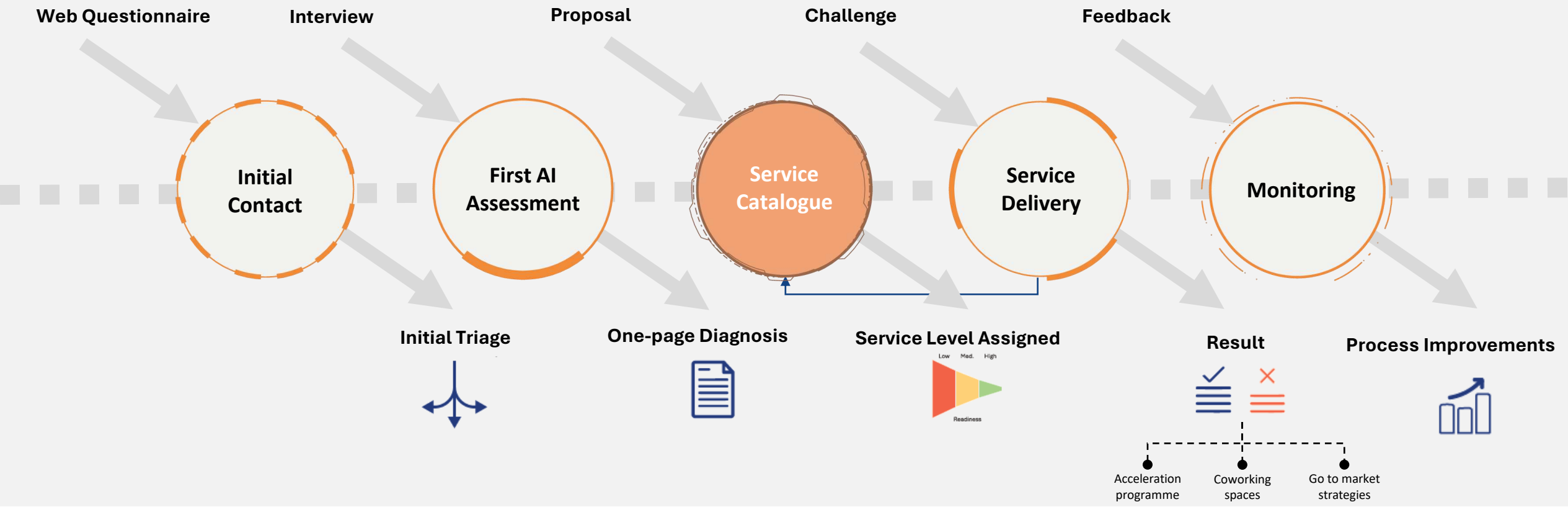
One-stop-shop: the path towards resources



BSC AI Factory

https://bsc-aifactory.eu/one-stop-shop/

One-stop-shop: the path towards resources



BSC AI Factory

https://bsc-aifactory.eu/one-stop-shop/

One-stop-shop: “Service Proposal” sample

AI Factory

BSC AI Factory — Service Proposal

Client organisation: [redacted]
Sector: Digital Health / Psychotherapy / Communication Analysis
OPD reference: [redacted] One-Page Diagnosis
Date: March 2026
Prepared by: BSC AI Factory

1. Client Context

[redacted] is an early-stage startup developing a Laboratory for Therapeutic Communication Analysis assisted by Artificial Intelligence.

The platform aims to support psychotherapists, supervisors, and researchers by analysing therapeutic communication and generating insights that improve professional practice.

The system integrates several AI-based capabilities, including:

- high-quality automatic transcription of therapy sessions
- speaker diarization and conversational segmentation
- phonetic and prosodic analysis (intonation, pauses, speech patterns)
- textual and conversational analysis using language models
- generation of automated insights to support supervision and research.

The platform processes multimodal interaction data (audio and text, with possible future integration of video) and aims to transform therapeutic communication into structured knowledge and reusable research data.

The system is designed as a professional support tool, not a clinical decision-making system, and is aligned with the principles of the European AI Act.

3. Proposed Services

Based on the information collected during the One-Page Diagnosis and the project proposal, the following AI Factory services may be relevant to support the client.

These services combine technical advisory and HPC orientation.

Service	Purpose
Bespoke AI Services	Expert advisory on architecture for multimodal analysis systems combining speech, text and conversational features. Access to experts in speech processing, language technologies and conversational AI.
Infrastructure & Computational Resources Access	Guidance on how to efficiently use HPC resources for batch processing, model experimentation and training workflows.
Advisory on Model Benchmarking	Support in evaluating candidate models for speech recognition, diarization and language analysis.
Data Discovery & Data Stewardship	Guidance on data structuring, anonymization strategies and dataset management for sensitive clinical data.

The exact combination of services may evolve depending on the results of the advisory engagement and the priorities identified together with the client.

4. Expected Outputs

The advisory engagement may result in:

- recommendations for improving speech transcription and diarization pipelines
- guidance on multimodal architecture combining speech and language models
- recommendations for efficient HPC usage and batch processing workflows



BSC AI Factory

One-stop-shop: the path towards resources



Foundations & AI Expertise

Infrastructure & Computational Resources Access	AI Development Data-Related Services	AI Development Advisory Services	Trustworthy AI	Ad hoc AI Services & Expert Consulting
• Infrastructure & Computational Resources Access • Onboarding Support • High-level Technical Access Support	• Data Discovery • Data Stewardship • Data as a Service • Model & Dataset Publication	• Advisory on Model Fine-tuning • Advisory on Model Benchmarking • Advisory on Prompt Engineering • Advisory on RAG Systems	• Consultancy on Ethical & Legal AI Self-Assessment • AI Trustworthiness Consultancy	• Ad hoc AI Services • Healthcare & Clinical Environments • Climate & Earth System Analysis • LangTech Expert Briefings

Adoption, Skills & Ecosystem

Training & Skills Development	AI Ecosystem & Engagement	Enablement & Introductory Services
• Courses Catalogue • Learning Platform / Online Modules	• Events & Co-Marketing • Incubation Spaces	• Briefing about BSC AI Factory and initial customer assessment • Sectoral AI Maturity Assessment - Questionnaire • Issuance of BSC AIF Certificates

BSC AI Factory

https://bsc-aifactory.eu/service-catalogue/

BSC AIF - Service Catalogue – Foundations & AI services

Infrastructure & Computational Resources Access

- Infrastructure & Computational Resources Access
- Onboarding Support
- High-level Technical Access Support

AI Development Data-Related Services

- Data Discovery
- Data Stewardship
- Data as a Service
- Model & Dataset Publication

AI Development Advisory Services

- Advisory on Model Fine-tuning
- Advisory on Model Benchmarking
- Advisory on Prompt Engineering
- Advisory on RAG Systems

Trustworthy AI

- Consultancy on Ethical & Legal AI Self-Assessment
- AI Trustworthiness Consultancy

Ad hoc AI Services & Expert Consulting

- Ad hoc AI Services
- Healthcare & Clinical Environments
- Climate & Earth System Analysis
- LangTech Expert Briefings

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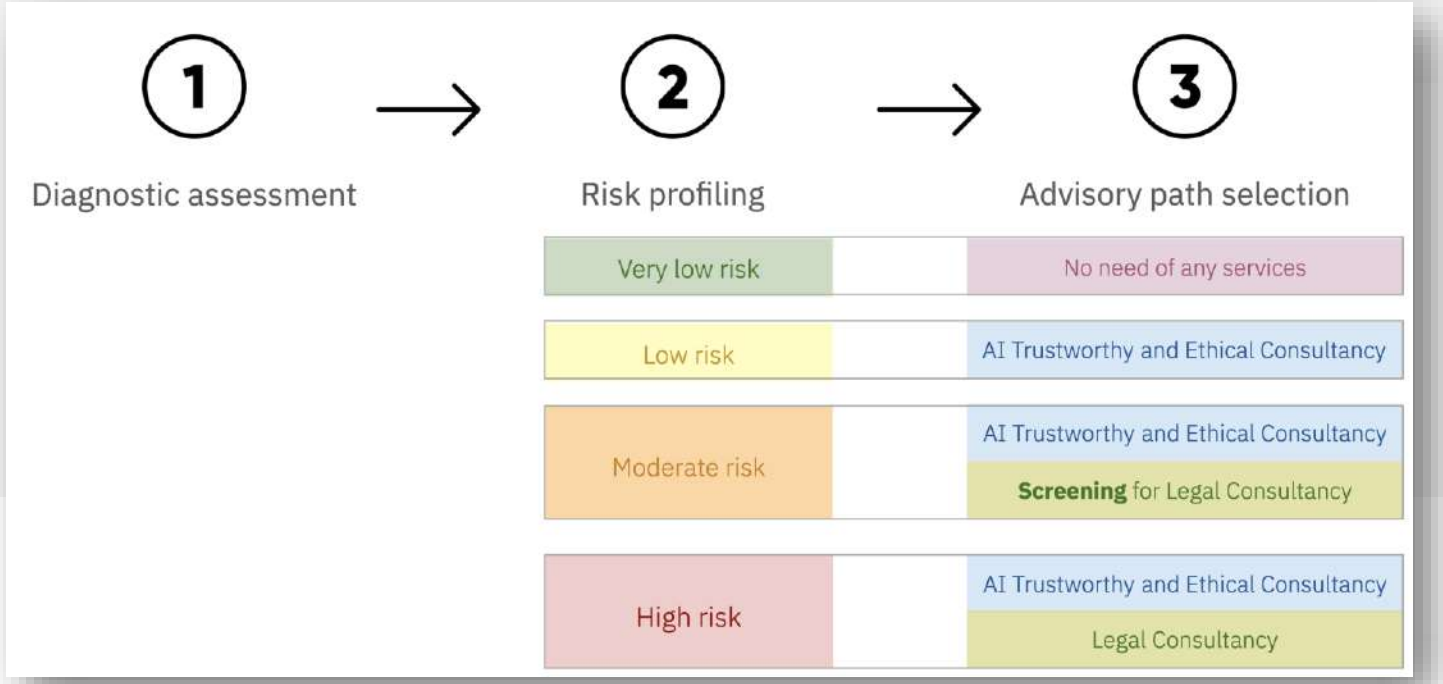
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BSC AI Factory

https://www.bsc.es/marenostrum/marenostrum-5

EuroHPC AI Factories Access Modes

AI for Industrial Innovation

The AI Factories Industrial Innovation track includes three access mode, targeting different use cases and compute needs.

1. **Playground access**, providing limited resources for entry-level users
2. **Fast Lane access**, for users already familiar with HPC requiring up to 50,000 GPU hours
3. **Large Scale access**, catering to AI models and applications requiring more than 50,000 GPU hours

The Industrial Innovation Access modes are open and free-of-charge to AI SMEs (including startups) for innovation purposes. Other industrial applications can benefit from pay-per-use commercial access.

Apply for Access →



EuroHPC Joint Undertaking

BSC AI Factory

https://www.eurohpc-ju.europa.eu/ai-factories/ai-factories-access-modes_en

RES Access Modes

— SUPERCOMPUTING

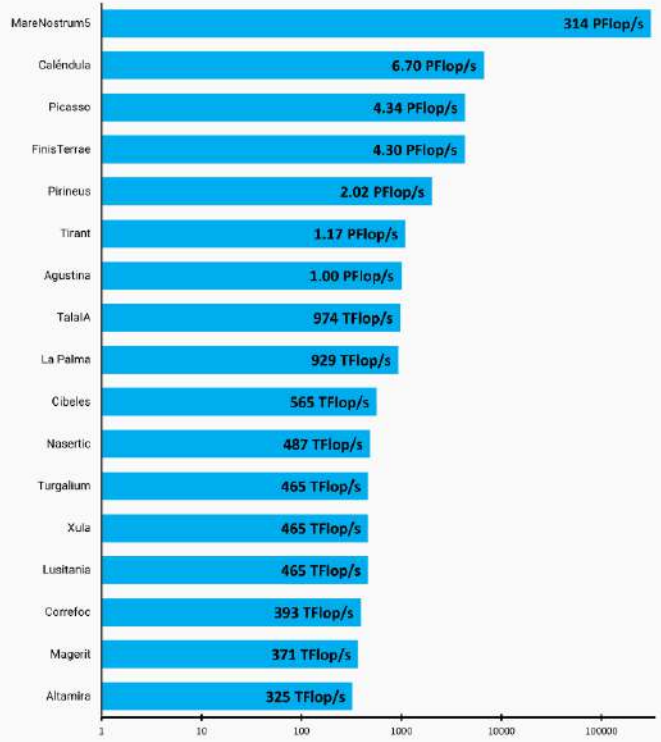
HPC RESources

The supercomputing (HPC) resources of the RES consist of access to the supercomputers that make up the RES to carry out cutting-edge research projects in various branches of science.

The total capacity of the RES supercomputers exceeds 337 PFlop/s, available for RES users via RES' competitive calls.

These supercomputers may consist solely of processors (CPUs) or be hybrids with processors and graphic accelerators (CPUs + GPUs). This allows addressing various challenges, ranging from traditional supercomputing for complex calculations to the creation of digital twins to simulate and predict complete systems.

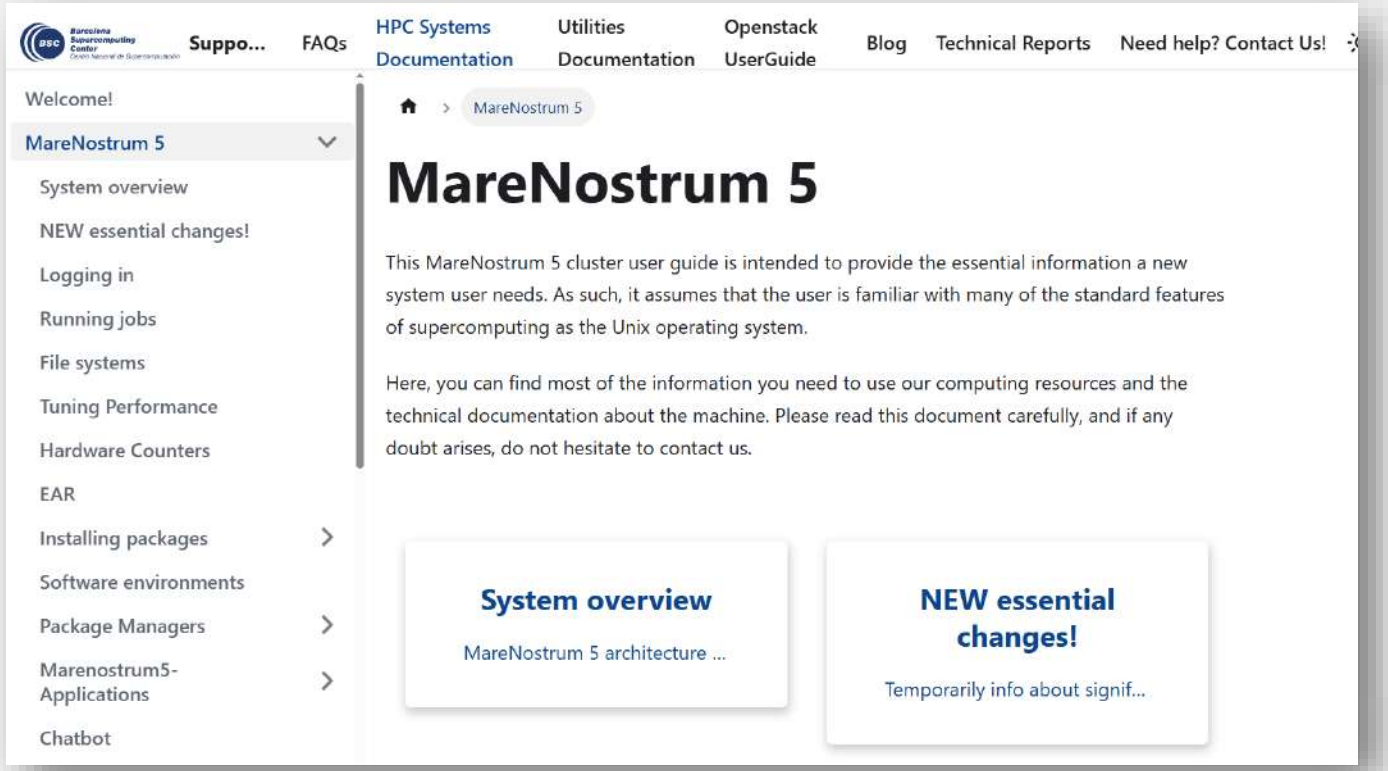
Check how to access RES' HPC resources

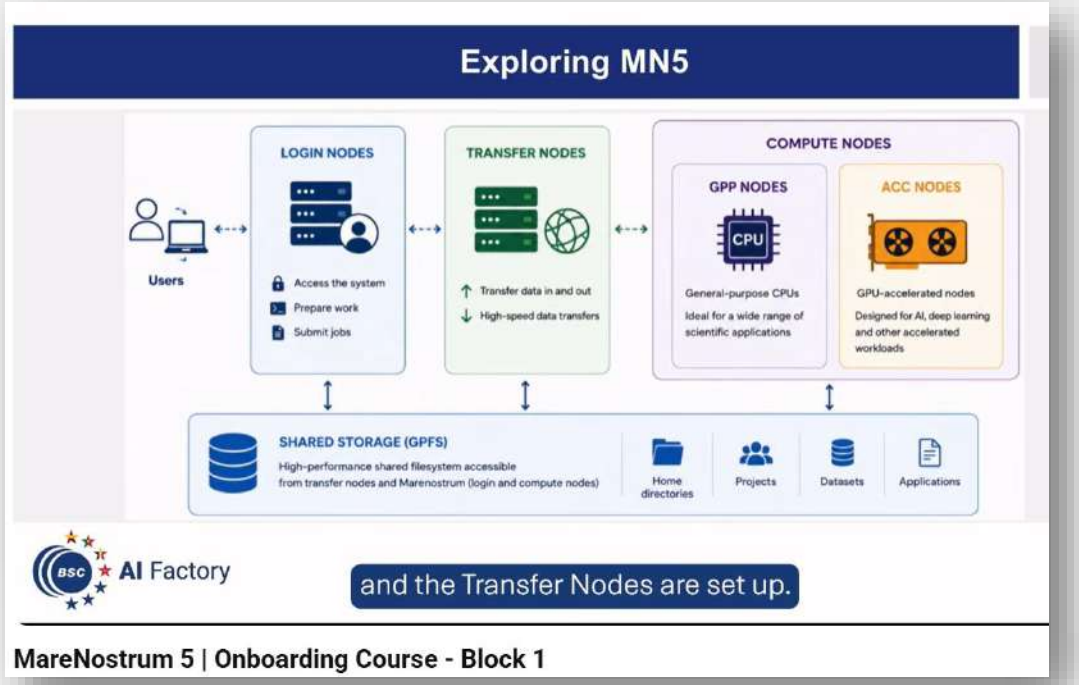


AI Factory

https://www.res.es/en/services/access-and-calls/

MN5 Knowledge base, tutorials & support





AI Factory

https://www.bsc.es/supportkc/docs/MareNostrum5/intro/

BSC AIF - Service Catalogue – Foundations & AI services

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NewMind AI
where data finds its mind

Accelerating Large Language Model Fine-Tuning on BSC with FP8 Mixed Precision and FSDP2: Performance, Convergence, and Multi-Node Scaling on NVIDIA H100



BSC AI Factory

https://www.newmind.ai/en/blog/accelerating-large-language-model-fine-tuning-on-bsc-with-fp8-mixed-precision-and-fsdp2-performance-convergence-and-multi-node-scaling-on-nvidia-h100?id=110

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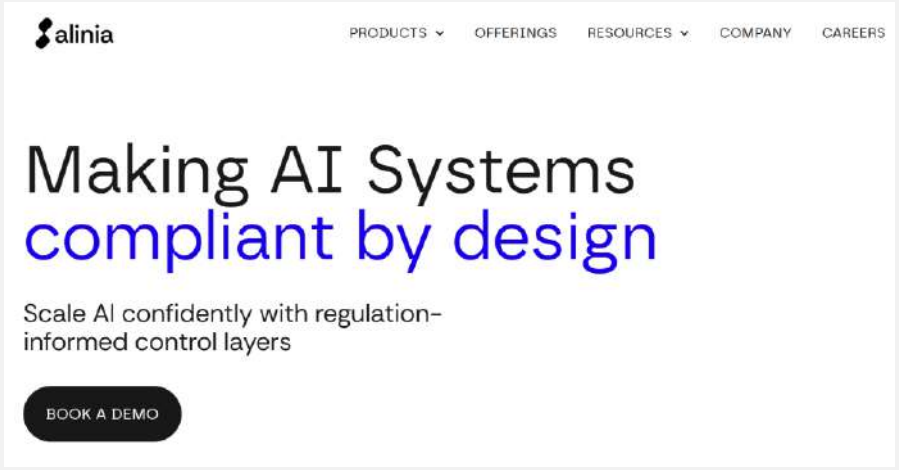
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Ad hoc AI Services & Expert Consulting

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https://alinia.ai/

BSC AIF - MN5 AI update (129M€)

Home / News / BSC News / **EuroHPC and the consortium led by Fsas Technologies and Telefónica sign the contract to expand the AI capabilities of MareNostrum 5**

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News

BSC News

Events

BSC in the Media

Newsletter

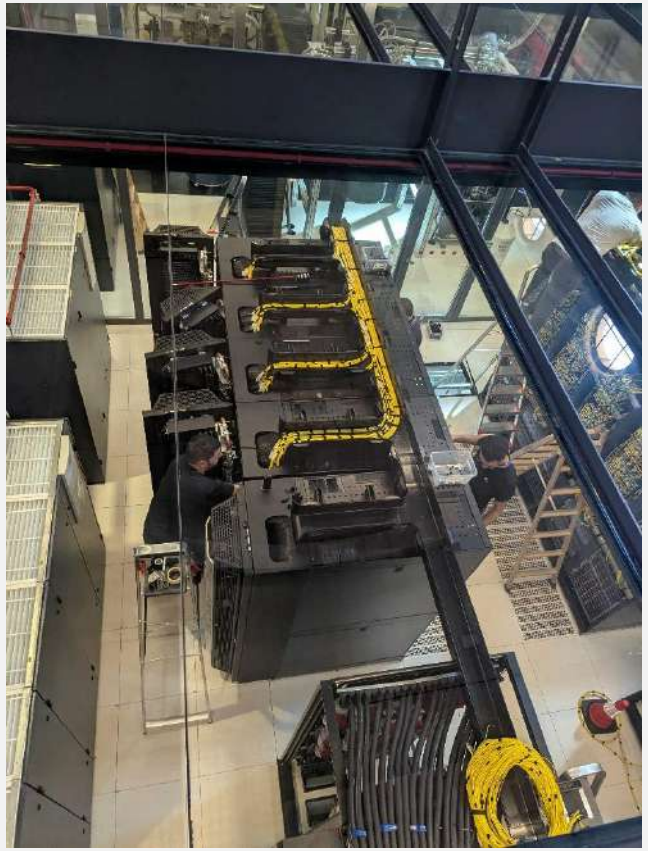
DOWNLOAD PDF | PRINT | SHARE

EuroHPC and the consortium led by Fsas Technologies and Telefónica sign the contract to expand the AI capabilities of MareNostrum 5

26 January 2026

The facility will provide a leading artificial intelligence service to SMEs, start-ups and public administrations, as well as to the scientific community, through the AI Factories promoted by EuroHPC





BSC AI Factory

BSC AIF - MN5 AI update (129M€)

MARENOSTRUM 5

AI Factory Partition

A dedicated partition designed to accelerate and optimise artificial intelligence workflows, combining two specialised NVIDIA GPU architectures for large-scale AI training and inference.

AI INFRASTRUCTURE

AI partition - NVL4 Partition

The AI NVL4 partition is designed for demanding large-scale AI training and inference workloads. It combines NVIDIA Grace CPUs with NVIDIA Blackwell GB200 GPUs and high-bandwidth GPU interconnects.

Number of nodes	**336**
CPU	**2 × NVIDIA Grace CPUs, 72 cores each**
GPU	**4 × NVIDIA Blackwell GB200 per node**
GPU memory	**186 GB HBM per GPU**
GPU interconnect	**NVLink up to 4 GPUs**

AI INFRASTRUCTURE

AI partition - NVL72 Partition

The AI NVL72 partition provides next-generation accelerated computing for demanding AI inference and training workloads. It is based on NVIDIA Blackwell Ultra GB300 GPUs interconnected through NVLink.

Number of nodes	**144**
CPU	**2 × NVIDIA Grace CPUs, 72 cores each**
GPU	**4 × NVIDIA Blackwell Ultra GB300 per node**
GPU memory	**288 GB HBM per GPU**
GPU interconnect	**NVLink up to 72 GPUs**

Red Hat OpenShift

NVIDIA | run:ai

BSC AI Factory

https://www.bsc.es/marenostrum/marenostrum-5

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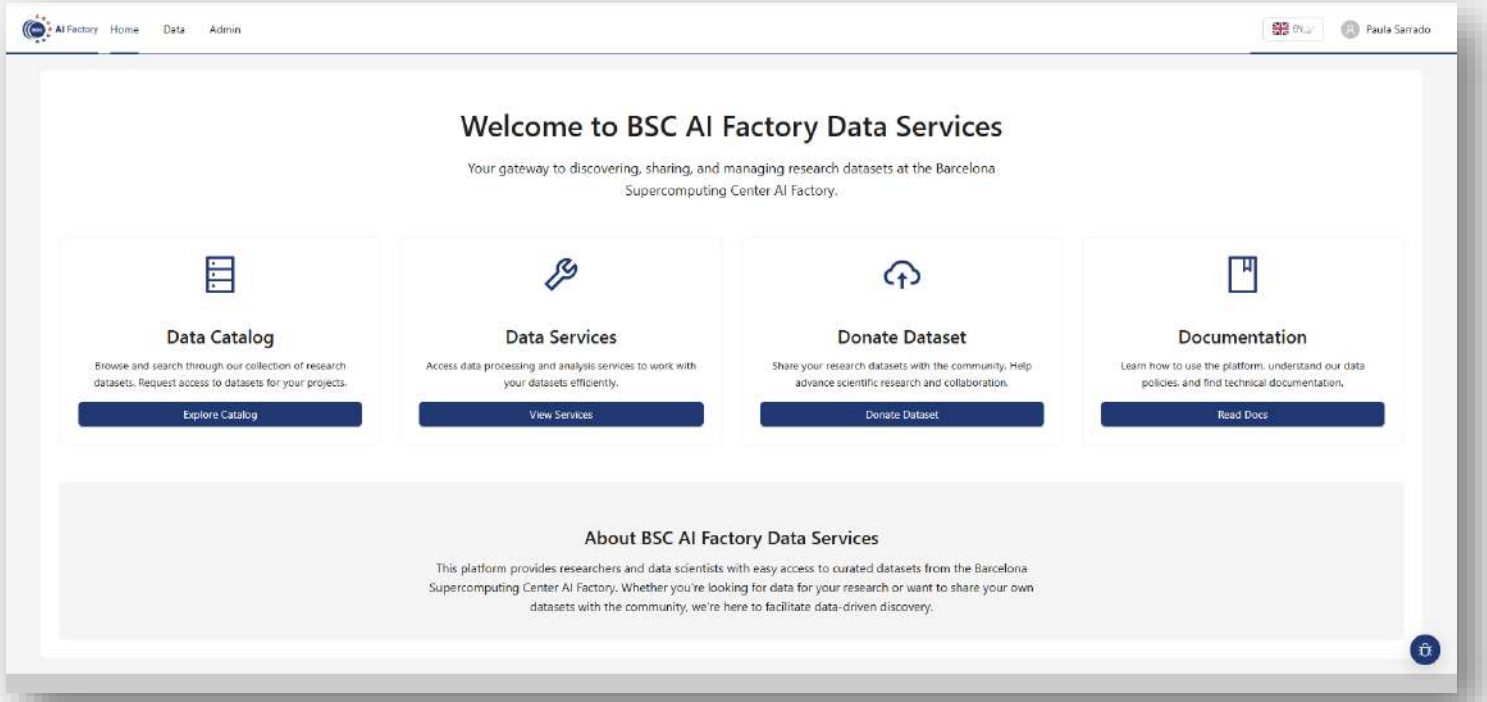
Ad hoc AI Services & Expert Consulting

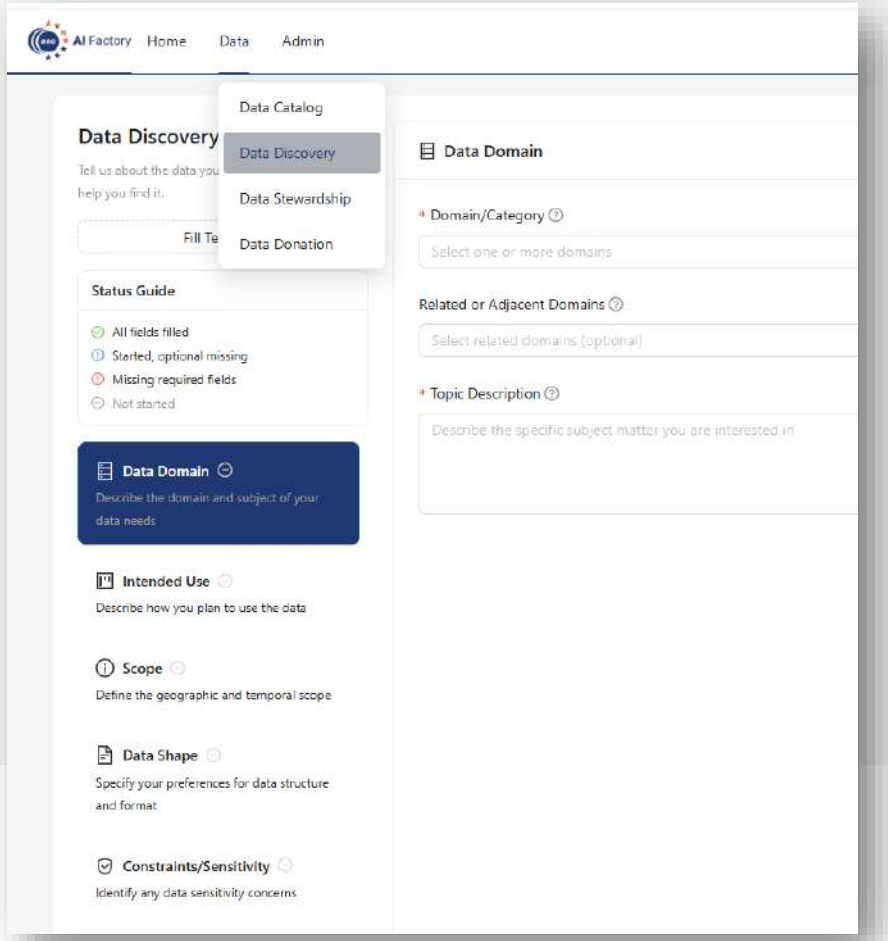
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BSC AI Factory

The BSC AI Factory Data Portal

The [BSC AI Factory Data Services Portal] acts as the entry point to a growing ecosystem of data-related services supporting AI development, collaboration, and future resource integration.





BSC AI Factory

The BSC AI Factory Data Services

The Data Services support organisations throughout the data lifecycle, helping them discover, access, govern, improve, and share data assets that can accelerate AI adoption and innovation.

BSC AI Factory Data Services Portal

Data as a Service (Daas)

Access to curated datasets through a structured request process.
Current catalogue: 34 datasets, spanning language technologies, healthcare, environmental, geospatial, and scientific domains.

Data Stewardship

Guidance on data management, governance practices, access management, and lifecycle considerations.

Data Discovery

Support to identify datasets relevant for training, benchmarking, RAG, and sectoral AI use cases.

Dataset Publication

Support for reviewing and integrating datasets into the ecosystem.

Phase 2

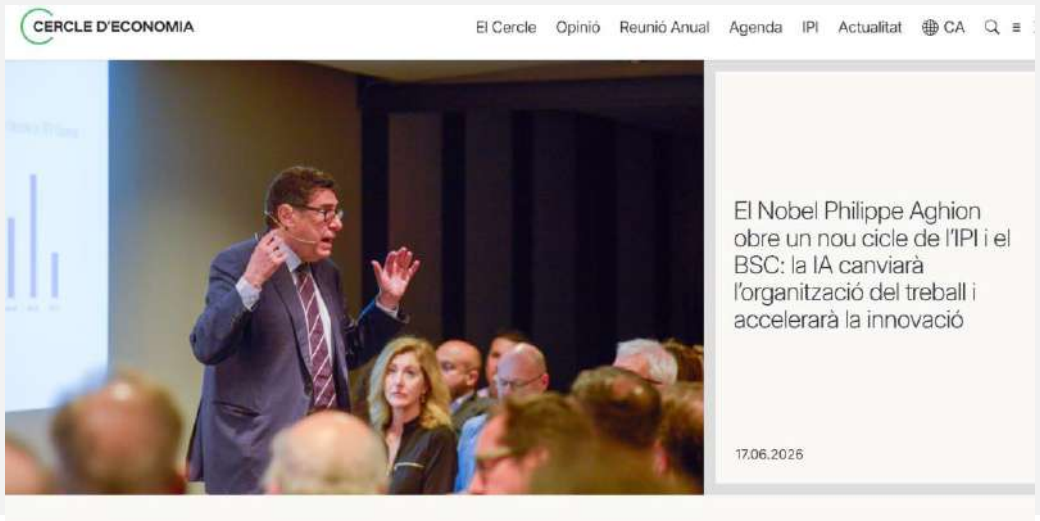
Data preparation, Wrangling and Annotation Tools

Synthetic Data Generation

BSC AI Factory

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https://cercledeconomia.com/

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The solution

Chemical pesticides are a dead end — for our soils, our health, and the planet.

At **Agrikola**, we're building a better path forward: autonomous crop protection that's clean, precise, and scalable.

Using electric powered actuators, cloud computing and AI-powered robotics, we treat crops without chemicals — reducing disease, protecting yields, and helping farmers transition to a more sustainable and profitable future.

FAILED

BSC AI Factory

https://agrikola.carrd.co/

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AI Development Advisory Services

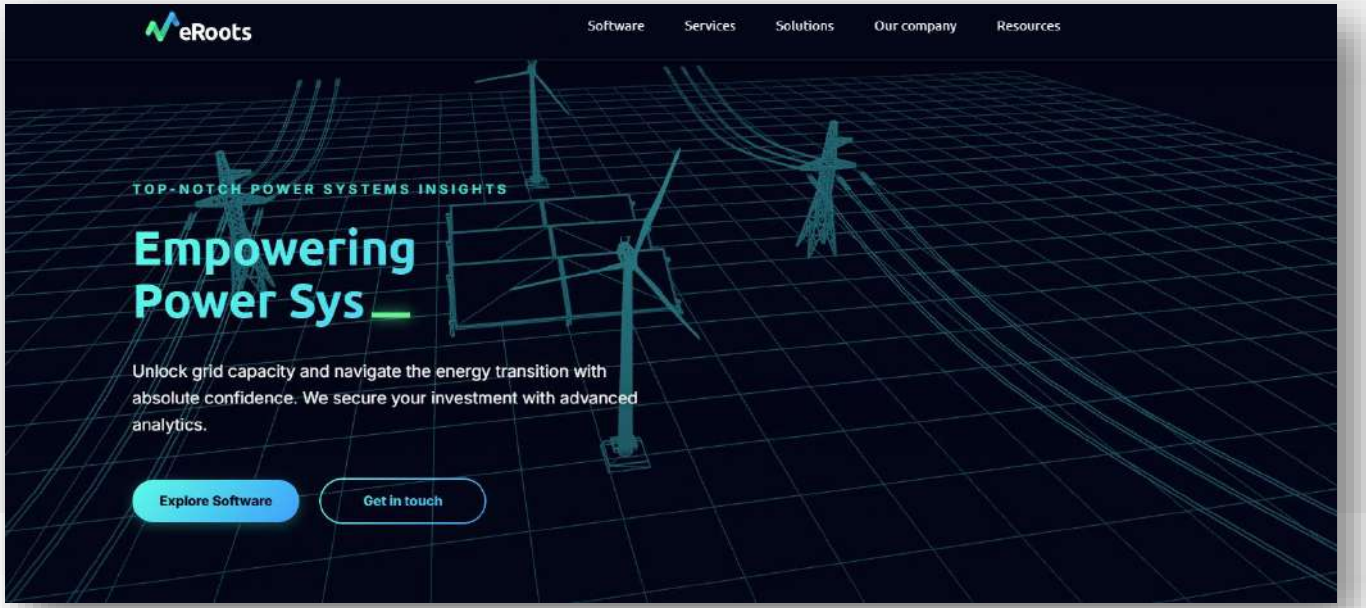
- Advisory on Model Fine-tuning
- Advisory on Model Benchmarking
- Advisory on Prompt Engineering
- Advisory on RAG Systems

Trustworthy AI

- Consultancy on Ethical & Legal AI Self-Assessment
- AI Trustworthiness Consultancy

Ad hoc AI Services & Expert Consulting

- Ad hoc AI Services
- Healthcare & Clinical Environments
- Climate & Earth System Analysis
- LangTech Expert Briefings



https://eroots.tech/

BSC AI Factory

BSC AIF - Service Catalogue – Foundations & AI services

Infrastructure & Computational Resources Access

- Infrastructure & Computational Resources Access
- Onboarding Support
- High-level Technical Access Support

AI Development Data-Related Services

- Data Discovery
- Data Stewardship
- Data as a Service
- Model & Dataset Publication

AI Development Advisory Services

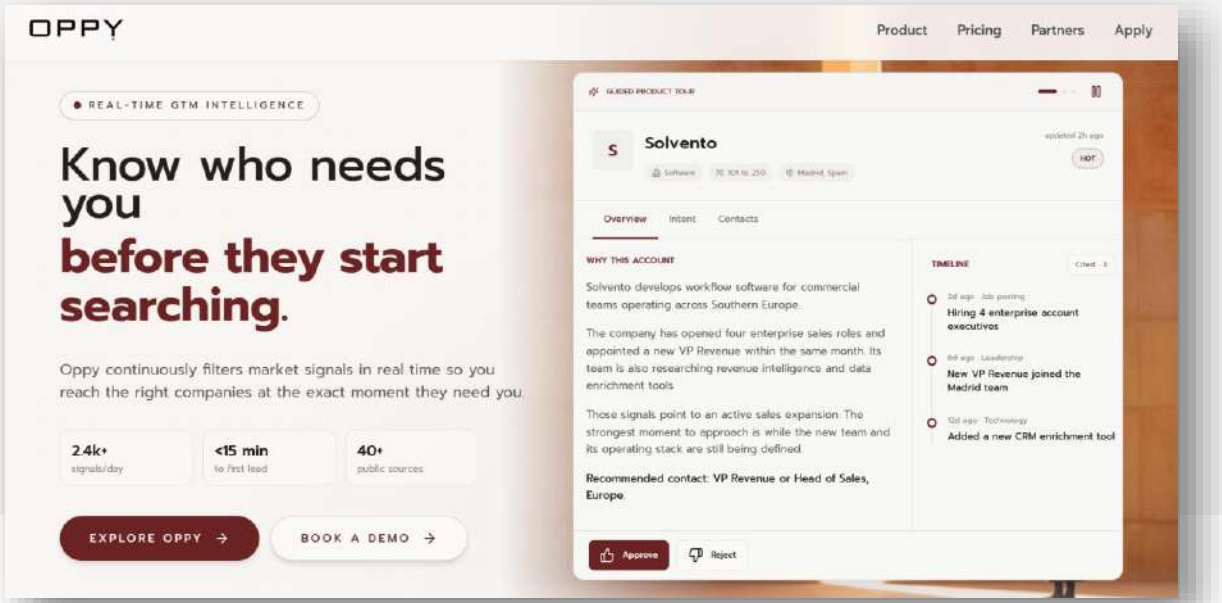
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https://oppyone.com/

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https://fluendo.com/blog/ia-veu-building-legal-ethical-and-trustworthy-ai-voice-technology-in-catalan/

BSC AI Factory

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ALIA

LA INFRAESTRUCTURA PÚBLICA DE IA EN CASTELLANO Y LENGUAS COOFICIALES



https://www.libelium.com/

https://www.linkedin.com/feed/update/urn:li:activity:7437124322562912256/

BSC AI Factory

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- Climate & Earth System Analysis
- LangTech Expert Briefings

Aina

Impulsant l'ús del català en l'era digital

BSC AI Factory

https://projecteaina.cat/

BSC AIF - Service Catalogue – Onorato customer story



https://www.youtube.com/watch?v=gyCMVsz8DrA

BSC AIF SUCCES STORY

mafer
AI for specialty chemicals.

MAFER:
Industrial Knowledge Assistant

THE CHALLENGE

Operational teams rely on dispersed technical documentation, procedures, and expert knowledge that can be difficult to access during maintenance and production activities.

THE AI SOLUTION

- **Industrial Assistant**: AI-powered access to procedures, manuals, and operational know-how.
- **Immediate Value:** Reduce time spent searching documentation and faster issue resolution.
- **Knowledge Retention:** Capture expert knowledge and make it accessible across the organization.

Data Discovery | Data Stewardship | Data As a Service | Advisory on RAG | Incubation spaces

BSC AI Factory



BSC AI Factory provided advisory support on Retrieval-Augmented Generation (RAG) approaches to enable secure access to technical documentation, operational procedures, and internal knowledge repositories.

The engagement helped identify suitable architectures, information retrieval strategies, and governance considerations for an AI-powered knowledge assistant.

BSC AIF SUCCES STORY

mafer
AI for specialty chemicals.

MAFER:
Industrial Knowledge Assistant

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Data Discovery | Data Stewardship | Data As a Service | Advisory on RAG | Incubation spaces

BSC AI Factory

EMPRENDEDORES

Mafer AI capta dos millones para llevar la IA a la industria química

ERIC GALIÁN Actualizado 28 MAY. 2026 - 11:52



Equipo de Mafer AI.

En la operación han participado los fondos de capital riesgo Kfund, 4Founders Capital, Masia y Lavanda Ventures, este último brazo inversor en 'start up' de la familia Puig.

From 2 founders to 15+ employees and 2M€ investment in the 1st year. Hosted at BSC AIF Incubation spaces

BSC AIF - Service Catalogue – Adoption, Skills & ecosystem

Training & Skills Development	AI Ecosystem & Engagement	Enablement & Introductory Services
• Courses Catalogue • Learning Platform / Online Modules	• Events & Co-Marketing • Incubation Spaces	• Briefing about BSC AI Factory and initial customer assessment • Sectoral AI Maturity Assessment - Questionnaire • Issuance of BSC AIF Certificates

BSC AI Factory

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BSC AI Factory

https://bsc-aifactory.eu/training/

BSC AIF - Service Catalogue – Adoption, Skills & ecosystem









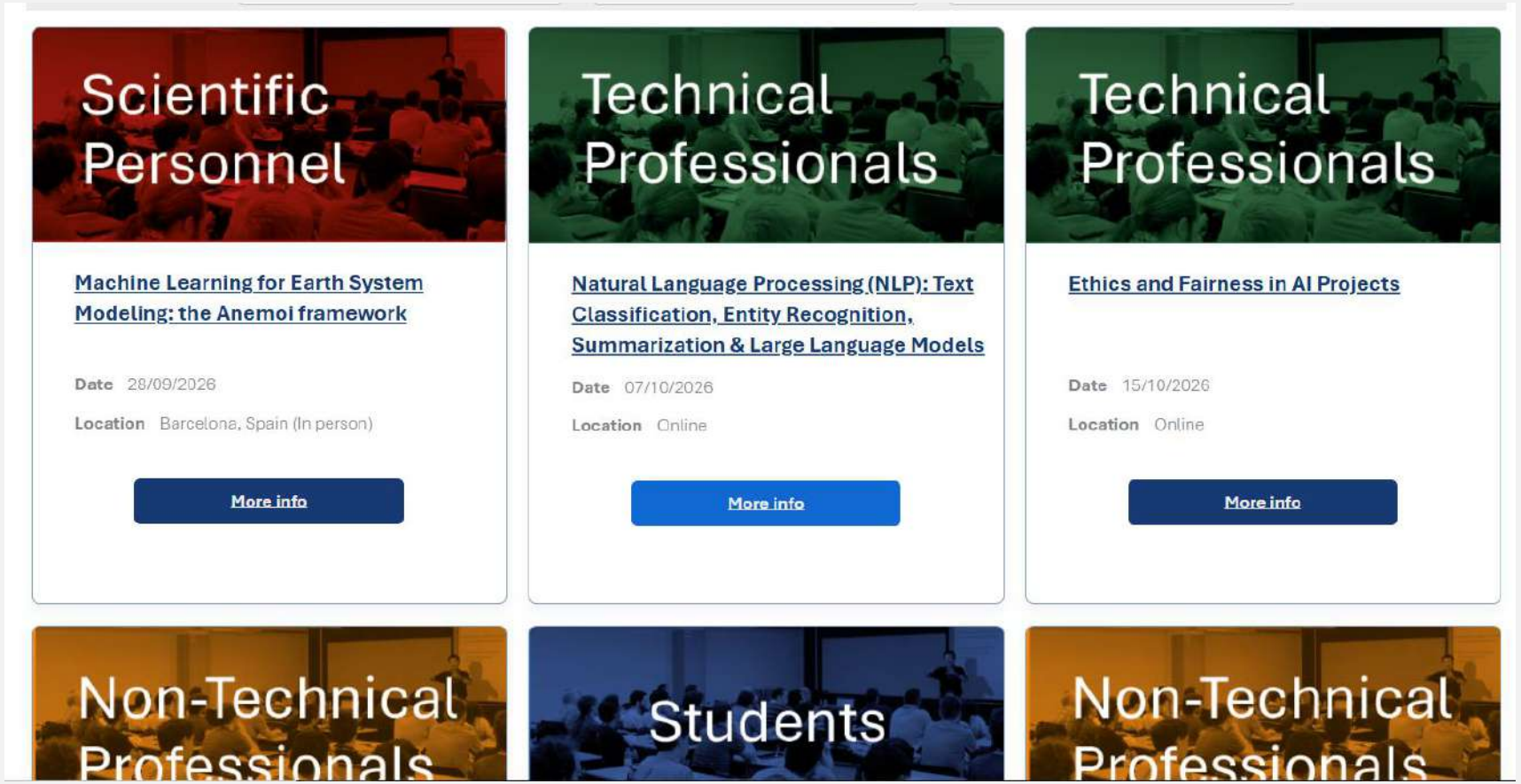




BSC AIF training catalogue covers six different **target audiences.** Different partners and providers **contribute** to different parts of this catalogue

BSC AI Factory

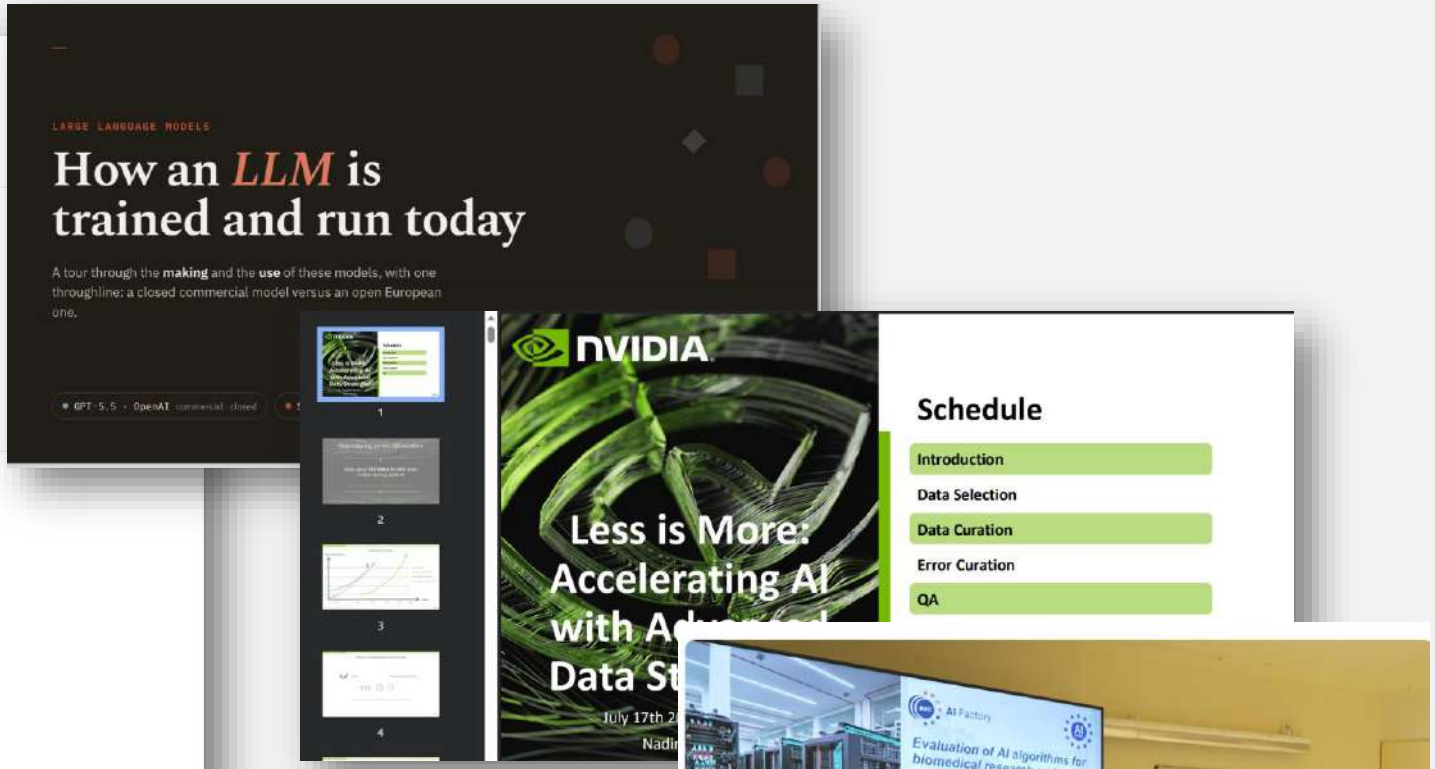
BSC AIF - Service Catalogue – Adoption, Skills & ecosystem



https://bsc-aifactory.eu/training-courses/

BSC AIF - Service Catalogue – Adoption, Skills & ecosystem

Training	Links
Building and Deploying LLMs (Large Language Models)	• Slides & Materials
Evaluation of AI algorithms for biomedical research and sex and gender biases in AI	• Day 1 • Day 2 • Day 3 • Day 4 • Slides & Materials





3. Evaluation of AI algorithms for biomedical research and sex and gender biases in AI | Day 4

BSC AI Factory

https://bsc-aifactory.eu/training-material/

BSC AIF - Service Catalogue – Adoption, Skills & ecosystem



UPF-BSM → Senior Management



UOC → Non -Technical Professionals



BSC AI Factory

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Lane Patrol · MAFER AI · Crata AI · libelium · syntonym · KLOOSIV · MICA ECO · KILIMANJARO QUANTUM·TECH

https://x4hpc.cat/mwc26/ai-startup-exhibitors/



BSC AI Factory

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BSC AI Factory

Tech Barcelona

MAFER underty Crata AI elna BYBUSINESS AI K Numerand

deckard axessible EasyMedAi AiMA vecify one care ai

connecthink qyoloo alphaSIP SKILLIA

BSC AIF – Incubation & coworking space

3rd Open Call for Access

BSC AI Factory
14h •

🚨 **LAST CALL: applications close TODAY!**

The third call of BSC AI Factory #IncubationProgramme closes today, September 15. This is your last chance to submit your application!

The programme is designed to support #AI startups and companies with access to physical incubation spaces and a hands-on, on-site programme.

This call remains open across all four #AIFactory hubs:
📍 Barcelona (Pier 07)
📍 Lisbon
📍 Porto
📍 Bucharest

Participants joining the programme will get:
- A dedicated physical incubation space.
- Access to programme activities, visits and community events.
- A direct link to the broader #BSCAIFactory ecosystem.

BSC AI Factory

BSC AIF – Incubation & coworking space

1. Incubation Space

A Dedicated Incubation Space for Early-Stage Startups, providing a structured and tailored growth environment and a specific activity plan for them. This access is provided through competitive calls and lasts for 6 months.

2. Coworking Space

Open Coworking Spaces for AI Stakeholders, experts , aimed at fostering collaboration, knowledge exchange, and ecosystem connectivity. This access is via an open form where you can select your planned dates of attendance.



Barcelona



Lisboa & Porto



Bucharest

BSC AI Factory

BSC AIF - Service Catalogue – Adoption, Skills & ecosystem

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BSC AI Factory

BSC AIF - Start here

1

SCAN ME

Apply

Fill in a short form telling us about your organisation and goals.

2

Talk to us

A free exploratory call to understand your challenges and ideas.

3

Get a plan

We propose a tailored, low-effort pilot — no obligation.

4

Run the pilot

Build and test your AI use case with our experts and infrastructure.

Start with one targeted department or use case, then expand only if it works.

BSC AI Factory

https://bsc-aifactory.eu/one-stop-shop/

BSC AIF - 3 x Key Account Managers (KAMs) @ BSC



Santi Trujillo Roldán ·

Startups & AI



Ayshah Butt She/Her · 1st

Strategic Partnerships | Innovation Investment & AI Initiatives



Carolina Buelta · 1st

Key Account Manager - Public Sector

BSC AI Factory

BSC AIF - 2 x Key Account Managers (KAMs) @ CSUC



Esther Puerto

Senior Communications & Innovation Officer at Consorci de Serveis Universitaris de Catalunya (CSUC)

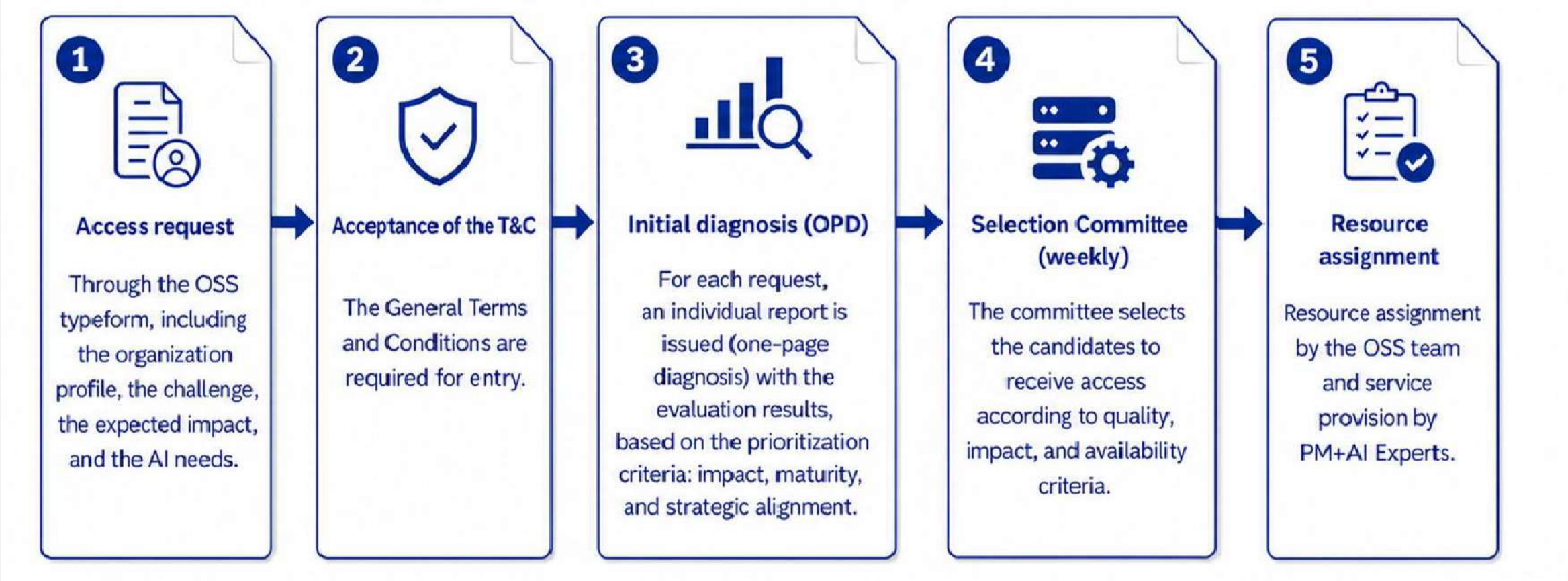


Pratima Tamang

Consorci de Serveis Universitaris de Catalunya (CSUC)

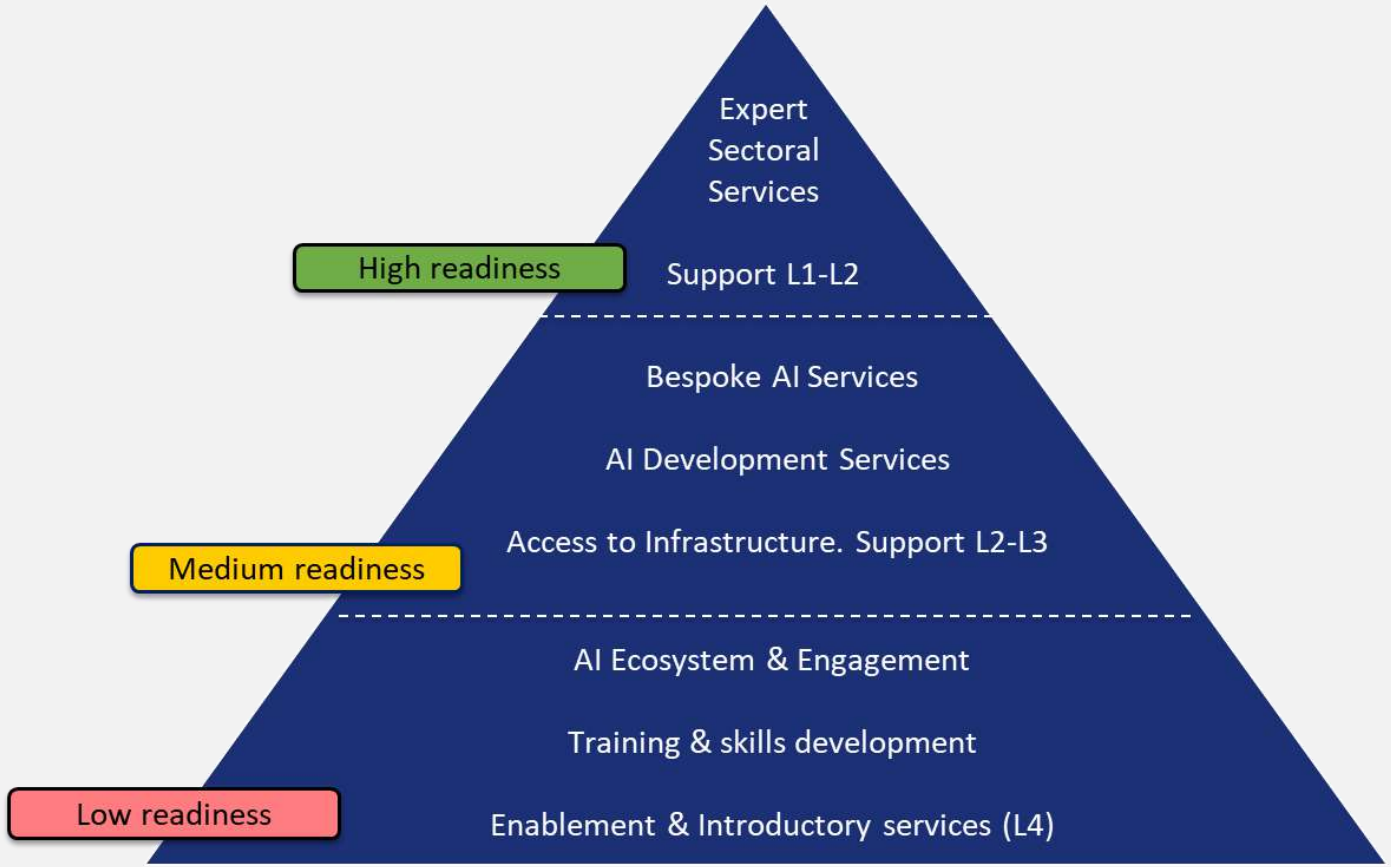
BSC AI Factory

BSC AIF Access Protocol



BSC AI Factory

Maturity level and matching services



AI Factory

BSC AIF General & Service specific Terms & Conditions

BSC AI Factory

BSC-CNS AI FACTORY

GENERAL TERMS AND CONDITIONS

+



AI FACTORY BSC-CNS

BSC-CNS AI Factory Data Platform - Terms and Conditions of Use for Data Users (Access)

Welcome to the BSC-CNS Data Platform.

These Terms and Conditions ("Terms") govern the use of the BSC-CNS Data Platform (the "Platform") and apply to any individual, institution, or organization requesting access, contributing datasets or interacting with the Platform.

By accessing, using, or submitting data to this Platform, you expressly agree to these Terms.

By your own admission, you act as a:

Data User: An individual
Platform repositories for re

Platform User: A visitor
information available on th

Use of this Platform and that data
authorisations defined in these
license.

For clarity, the following definition

1. Additional Terms: means
to Program Services.

AI FACTORY BSC-CNS

BSC-CNS AI Factory Trainings - Terms and Conditions of Use

Welcome to the BSC-CNS AI Factory Training Form

These Terms and Conditions ("Terms") govern the delivery of training activities ("Training Services") rendered under the BSC-CNS AI F
individual, institution, or organization accessin

By registering for, accessing, or participating in
these Terms.

1.Definitions

For clarity, the following definitions are used th

- **"Project"** refers to the BSC AI Factor
provided.
- **"Training Services"** refers to any wo
materials, or related activities delivered

BSC AI Factory

RULES FOR PARTICIPATION

BSC AI FACTORY INCUBATION SPACE

CALL 2

BSC AI Factory

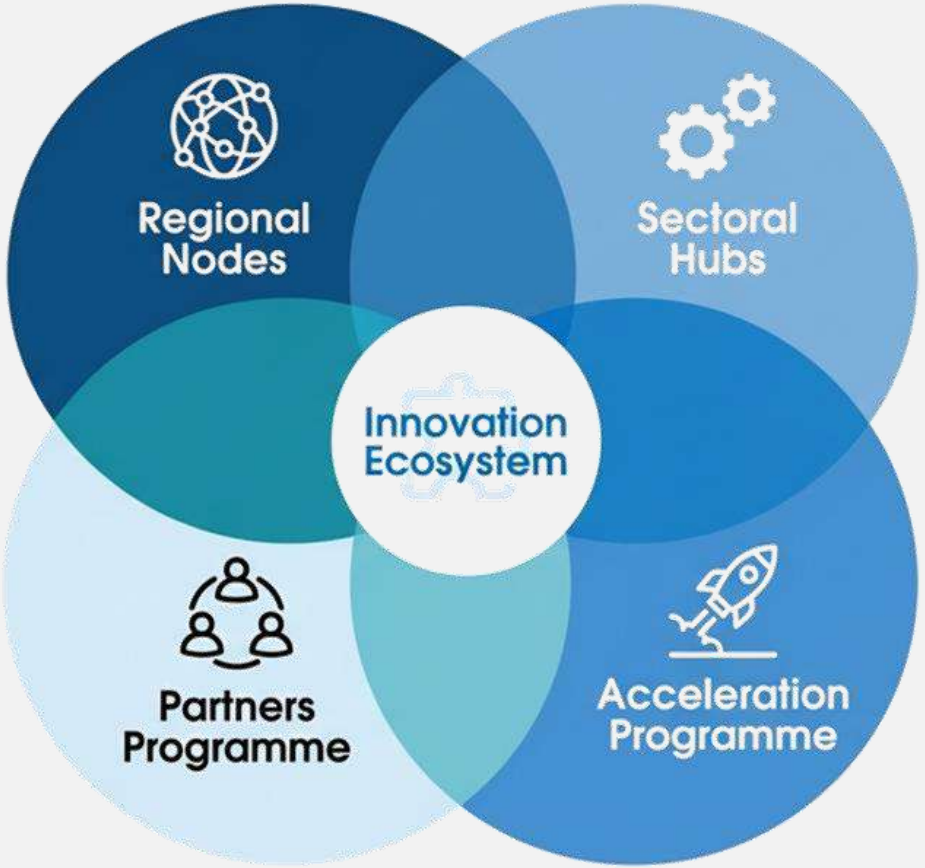
BSC AI Factory Ecosystem Activities



BSC AI Factory

BSC AIF Ecosystem Activities

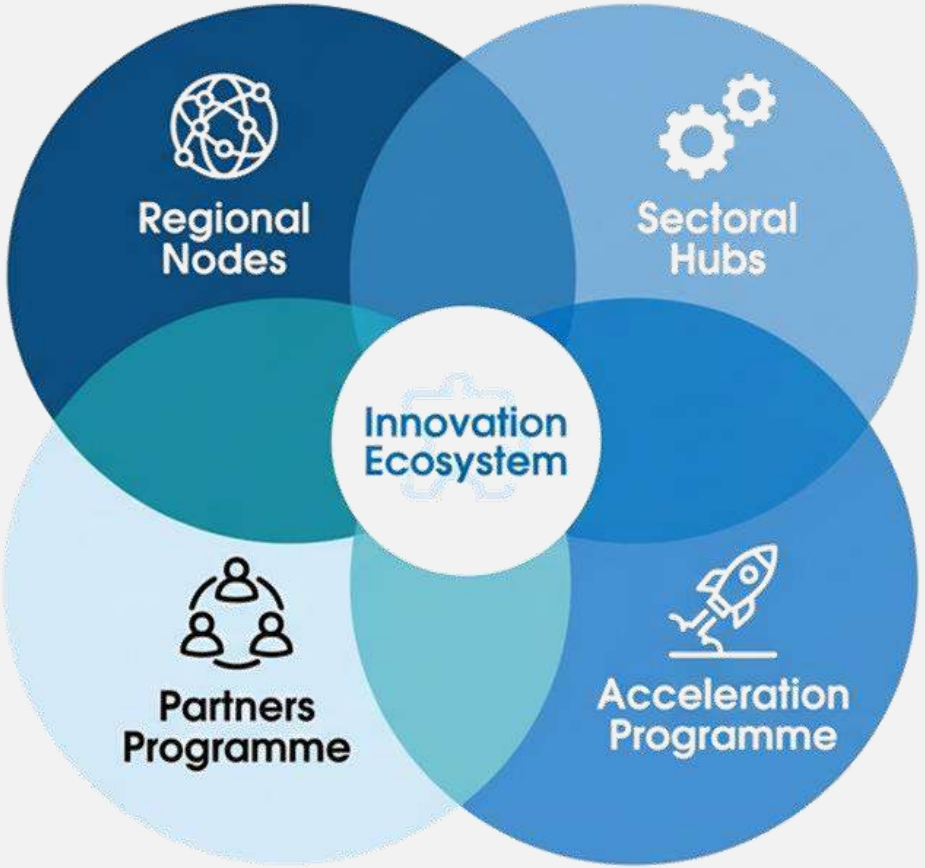
1. Regional Nodes
2. Sectoral Hubs
3. Acceleration Program
4. Partners Program



BSC AI Factory

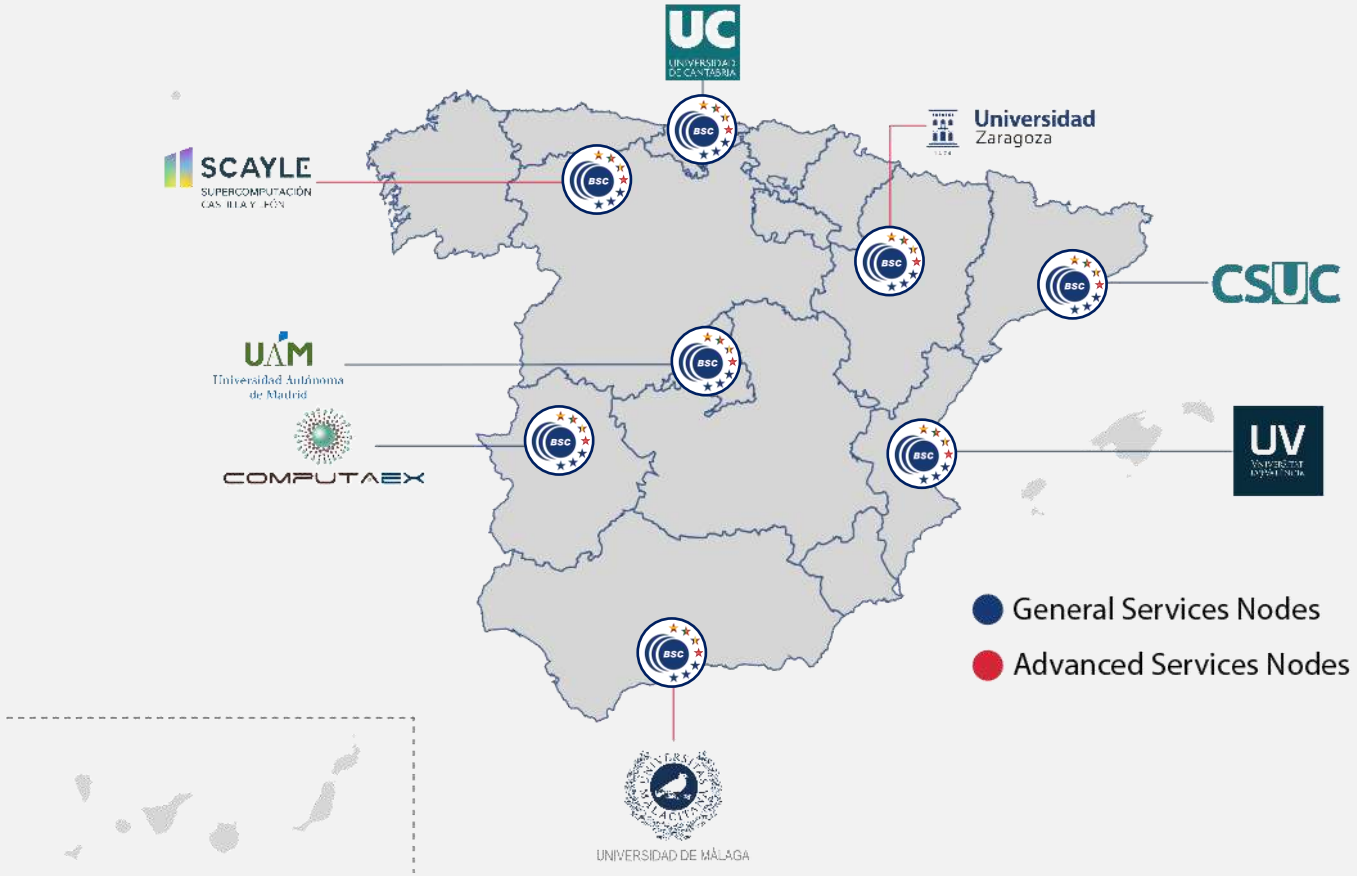
BSC AIF Ecosystem Activities

1. Regional Nodes
2. Sectoral Hubs
3. Acceleration Program
4. Partners Program



BSC AI Factory

8 x KAMs @ Regional Nodes for local support



Local resources

1 x KAM
Access to RES HPC

1x AI Expert

Activities

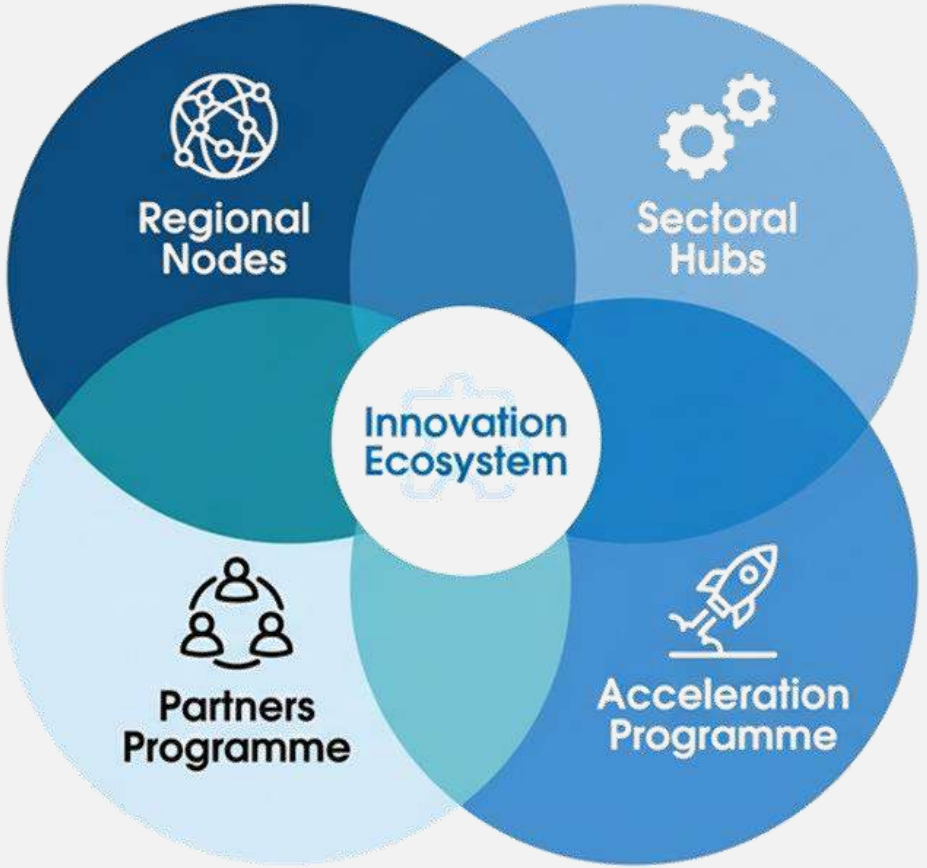
- Local direct support
- Events to connect innovation actors

BSC AI Factory

https://bsc-aifactory.eu/regional-hpc-nodes/

BSC AIF Ecosystem Activities

1. Regional Nodes
2. Sectoral Hubs
3. Acceleration Program
4. Partners Program



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Sectoral Hubs – Fostering sectoral collaboration



SECTORAL HUBS

Open solution for sectoral use

6 large scale AI solutions x 5 sectors

Developed by Innovation Centers

Leveraging BSC AIF resources & services

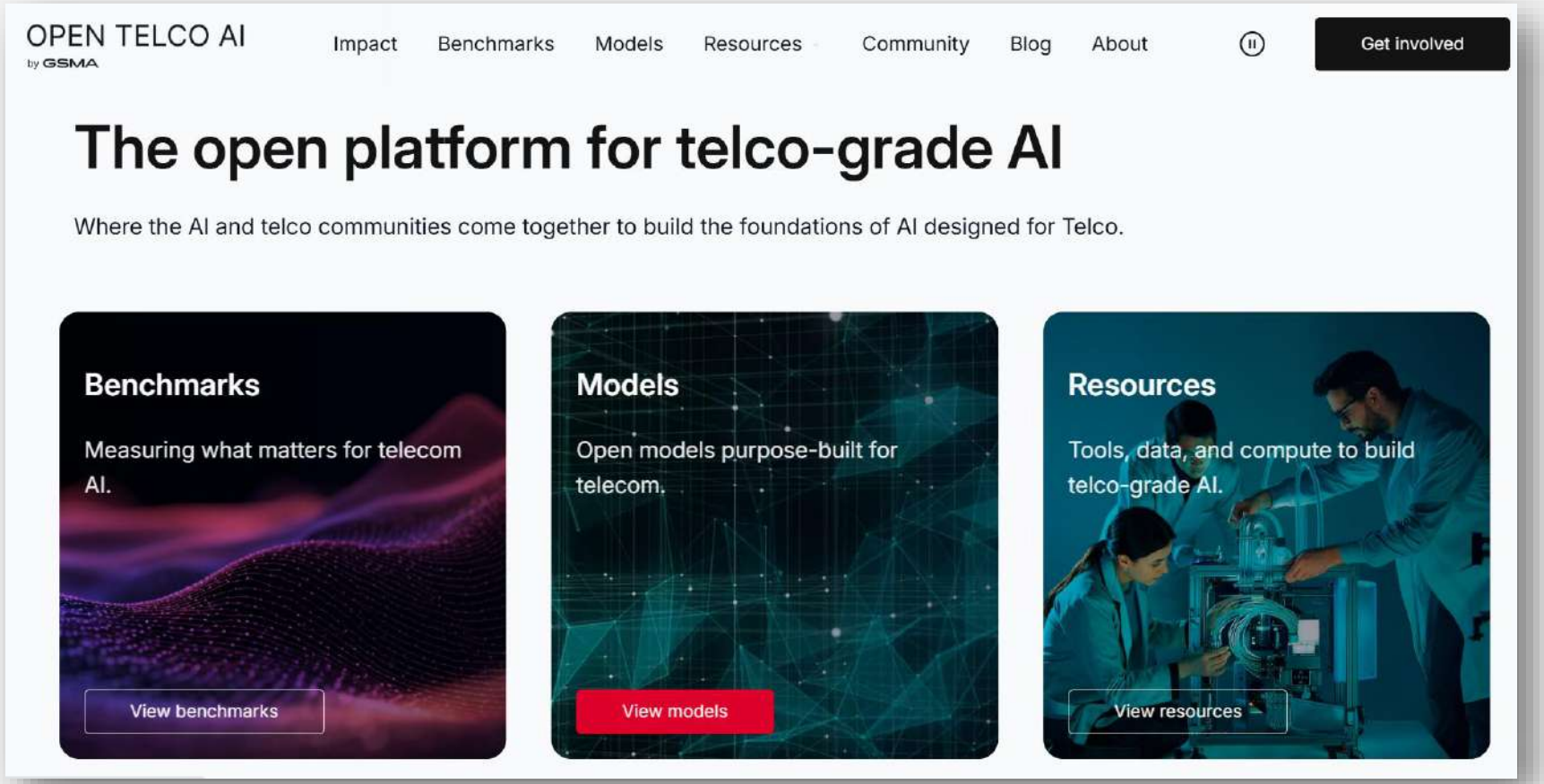
Sectoral AI Training

Sectoral AI events

Fostering sectoral collaboration for ambitious AI solutions

BSC AI Factory

Sectoral Hubs – Fostering sectoral collaboration



EXAMPLE

BSC AI Factory

https://www.open-telco.ai/

Sectoral Hubs – Fostering sectoral collaboration

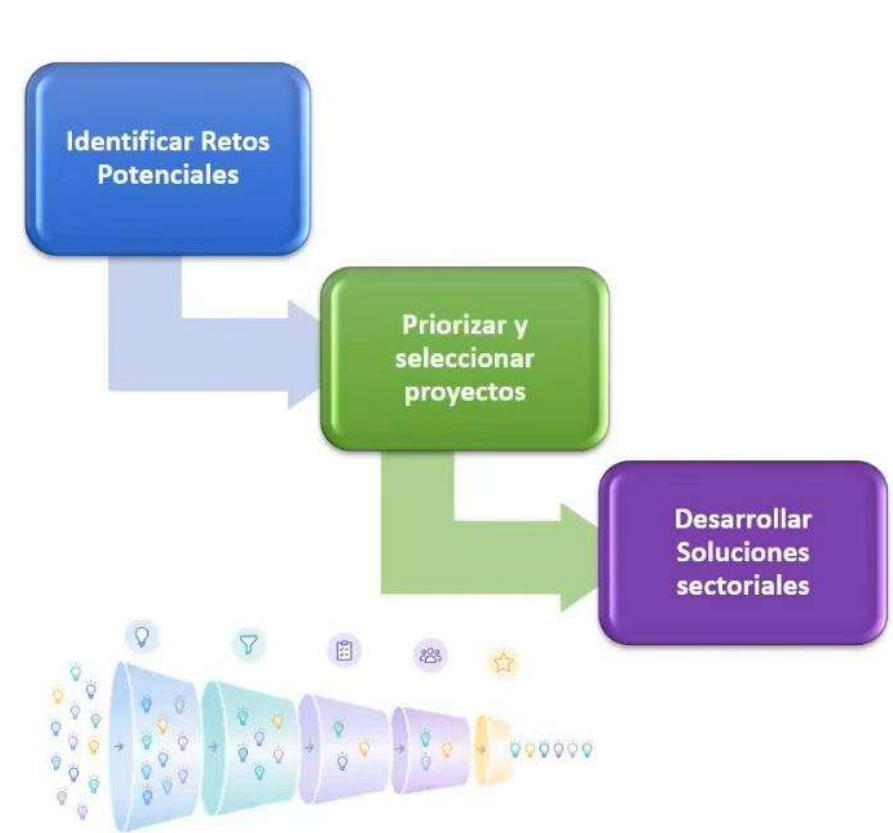
Salud, Pharma y Biotech	Sergio Muñoz sergio.munoz@tecnalia.com	tecnalia MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE
Agricultura, Clima y Economía Azul	Chus García chus.garcia@ctic.es	CTIC centro tecnológico
Energía	Gonzalo Blázquez gblazquez@itg.es	itg
Finanzas y Legal	Francisco Ricau, Ángel González hubsectorialfinleg@iti.es	iti CENTRO TECNOLÓGICO ESPECIALIZADO EN TIC
Comunicación y Medios	Daniel González hubsectorialmedia@eurecat.org	eurecat Centro Tecnológico
Sector Público	Ana Santos ana.santos@bsc.es	BSC Barcelona Supercomputing Center Centro Nacional de Supercomputación

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https://bsc-aifactory.eu/sectoral-hubs/

https://www.youtube.com/watch?v=BHFtPumHC1E

Sectoral Hubs – Fostering sectoral collaboration



Health, Biotech and Pharma

1) Simulation platform focused on the microbiota–gut–immune system
2) Explainable multimodal AI model for predicting lung function

Agriculture, Climate and Blue Economy

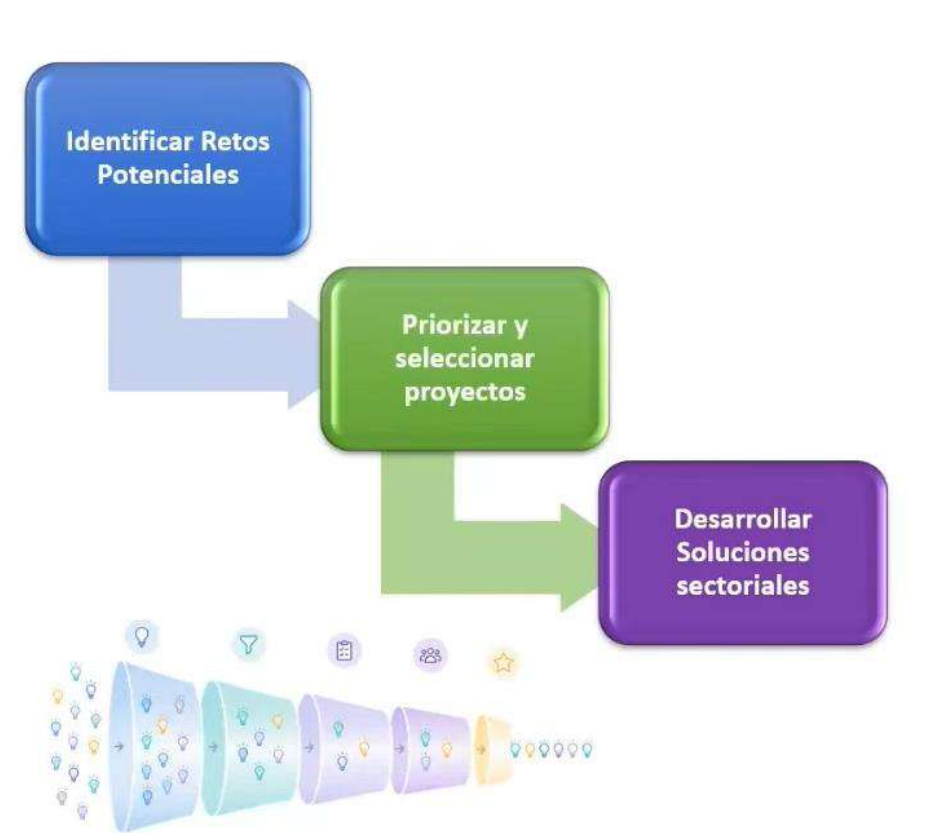
1) Specialised conversational assistant for agronomy
2) Conversational assistant for climate risk information

Energy

1) An assistant for querying and analysing public energy data
2) Solution for optimising energy generation and storage decisions

BSC AI Factory

Sectoral Hubs – Fostering sectoral collaboration



Communications & Media

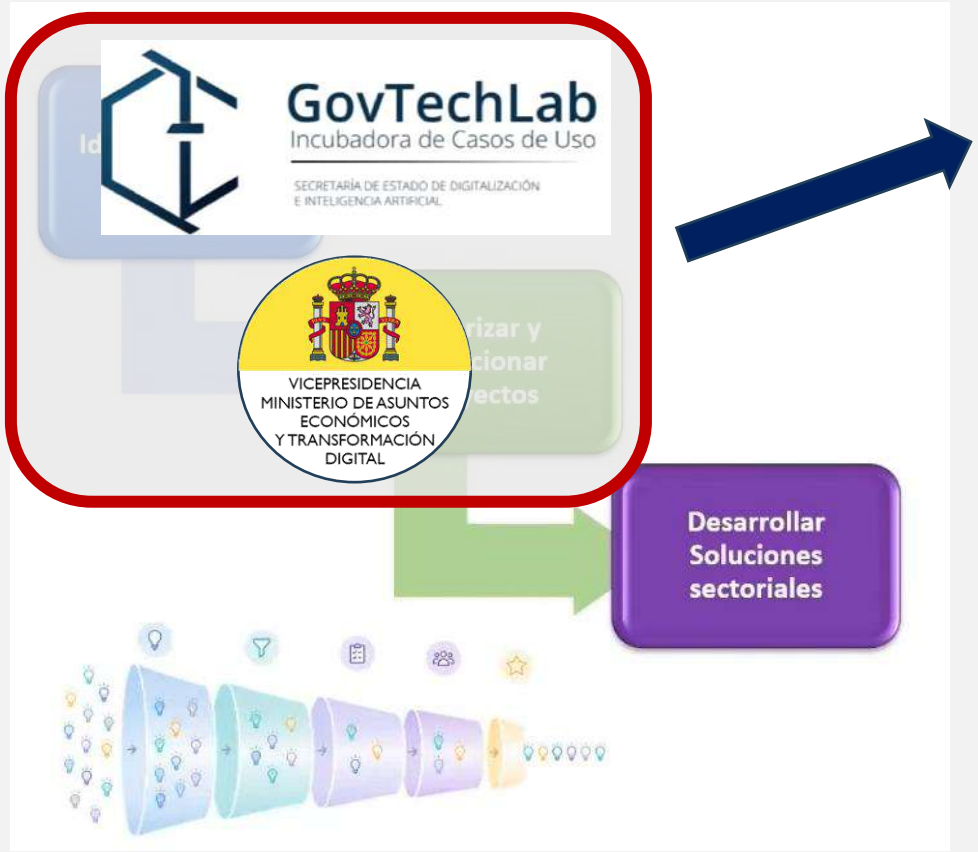
1) Automatic audiovisual description system, designed to generate synchronised audio descriptions of audiovisual content
2) Platform for automated transcription, subtitling and translation into co-official languages

Finance & Legal

1) Automated quality validation of digital financial reporting
2) Intelligence solution for monitoring regulatory changes

BSC AI Factory

Sectoral Hubs – Fostering sectoral collaboration



Public Sector Hub (BSC)

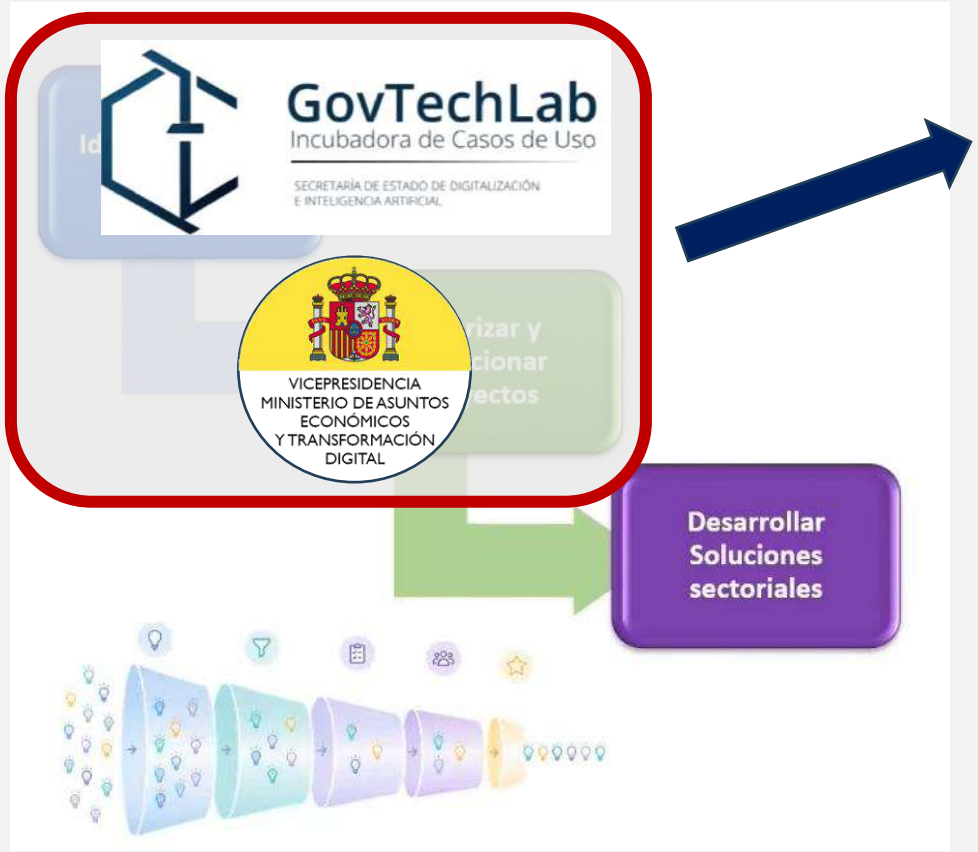
- Depart from the 19 solutions from GovTechLab
- Work on their re-usability by other public sector agents



https://www.youtube.com/live/vgF2FYLIfqM?si=RwbM1nmqFj87KIRE&t=10566

BSC AI Factory

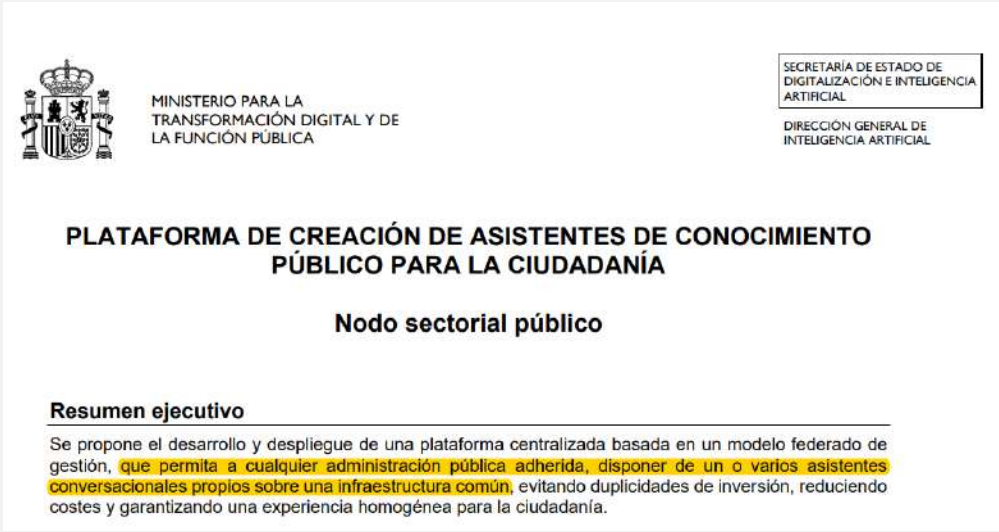
Sectoral Hubs – Fostering sectoral collaboration



Public Sector Hub (BSC)

- Depart from the 19 solutions from GovTechLab
- Work on their re-usability by other public sector agents

1) Chatbot for public administrations



MINISTERIO PARA LA TRANSFORMACIÓN DIGITAL Y DE LA FUNCIÓN PÚBLICA

SECRETARÍA DE ESTADO DE DIGITALIZACIÓN E INTELIGENCIA ARTIFICIAL

DIRECCIÓN GENERAL DE INTELIGENCIA ARTIFICIAL

PLATAFORMA DE CREACIÓN DE ASISTENTES DE CONOCIMIENTO PÚBLICO PARA LA CIUDADANÍA

Nodo sectorial público

Resumen ejecutivo

Se propone el desarrollo y despliegue de una plataforma centralizada basada en un modelo federado de gestión, que permita a cualquier administración pública adherida, disponer de un o varios asistentes conversacionales propios sobre una infraestructura común, evitando duplicidades de inversión, reduciendo costes y garantizando una experiencia homogénea para la ciudadanía.

BSC AI Factory

Sectoral Hubs – Fostering sectoral collaboration



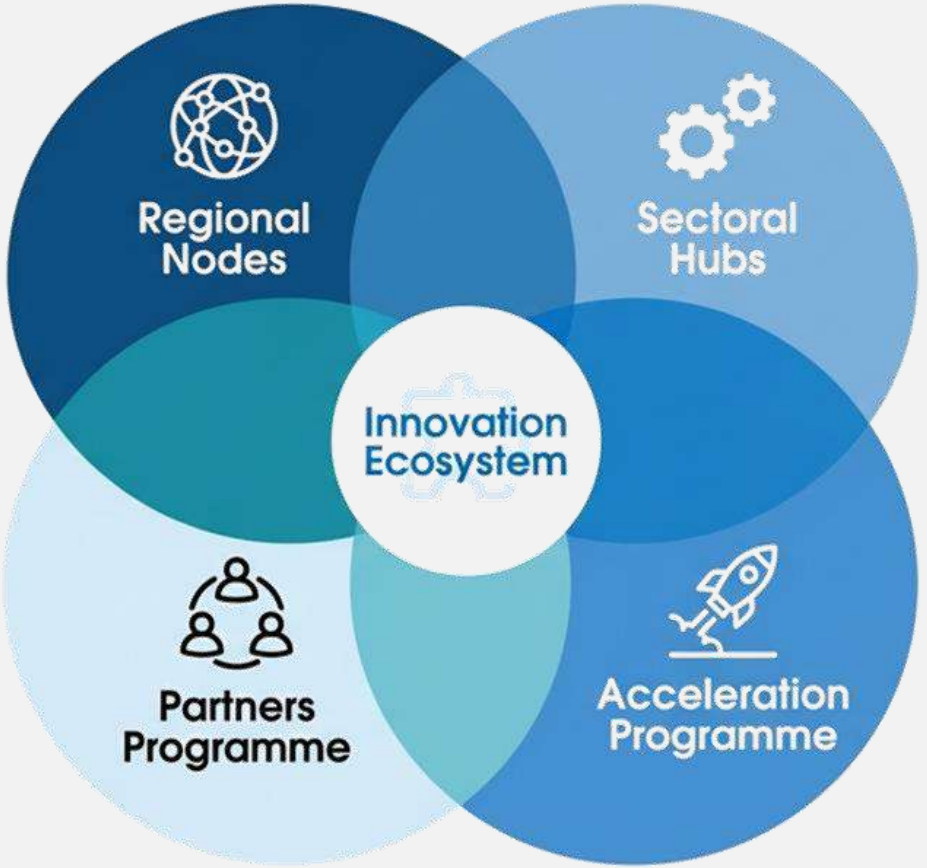


https://eurecat.org/calendari/workshop-bsc-iafactory-822/

BSC AI Factory

BSC AIF Ecosystem Activities

1. Regional Nodes
2. Sectoral Hubs
3. Acceleration Program
4. Partners Program



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Pilot Edition BSC AIF Accelerator Program



AI Factory

https://www.youtube.com/watch?v=dQZanZZnfgs

BSC AIF Accelerator programme

The most technical accelerator in Spain

The BSC AI Factory Accelerator Programme is designed to accelerate 100 startups across Spain in each 3-month batch, with a target of 25 startups per location.

The programme runs over 12 weeks and is carried out across 4 physical hubs covering the entire Spanish territory with a selective funnel that culminates in exclusive access to MareNostrum 5.

peninsula



BSC AI Factory

https://bsc-aifactory.eu/acceleration-programme/

BSC AIF Accelerator program

Programme's partners

Tech partners:

NVIDIA

aws

To enable access to **specialized technical mentoring, compute capacity/resources**, and additional opportunities for the startups.

Ecosystem collaborators:

seedrocket

Tech Barcelona

CUATRECASAS

CaixaBank DayOne

To scout and spread the call to relevant innovation hubs and to enable access to **investment and partnership opportunities**, as well as any other **service** relevant for the startups.



BSC AI Factory

https://bsc-aifactory.eu/acceleration-programme/

BSC AIF Accelerator program

A selective programme

25 startups

Phase 1: Business Track

1st Cut off

12 startups

Phase 2: Tech Track

2nd Cut off

3 startups

Demo day



BSC AI Factory

https://bsc-aifactory.eu/acceleration-programme/

BSC AIF Accelerator program

OPENING SOON

8th of October 2026

STAY TUNED

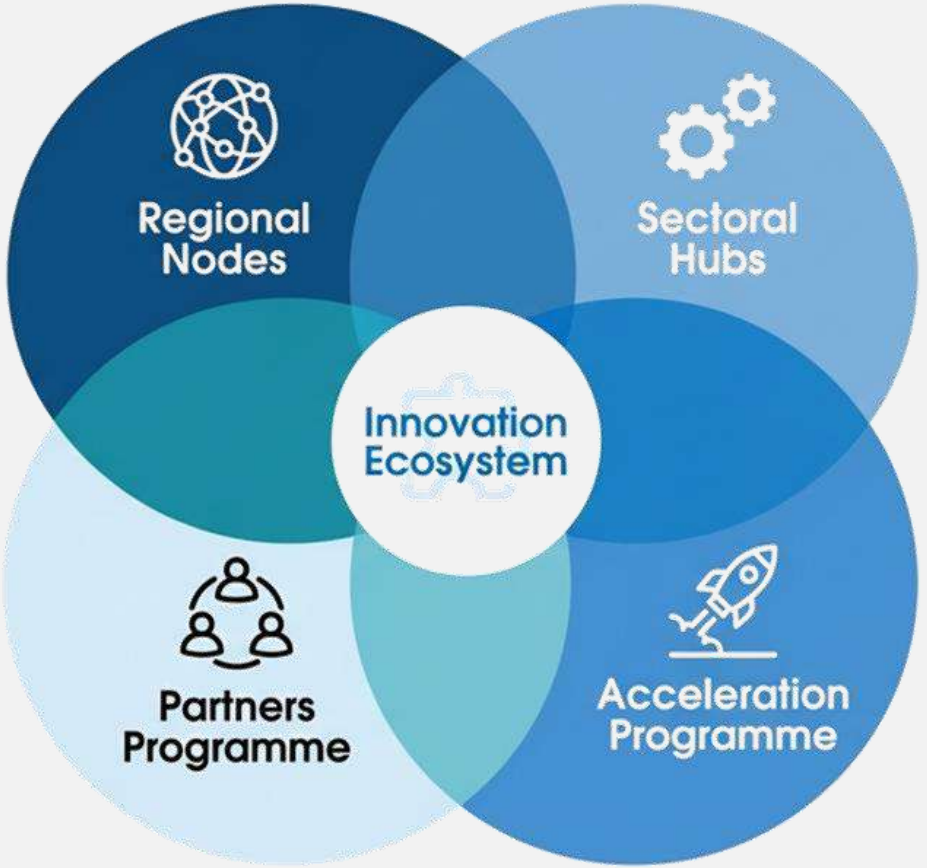


BSC AI Factory

https://bsc-aifactory.eu/acceleration-programme/

BSC AIF Ecosystem Activities

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BSC AIF - Partners Program (Coming soon!)





BSC AIF - Partners Program (Coming soon!)

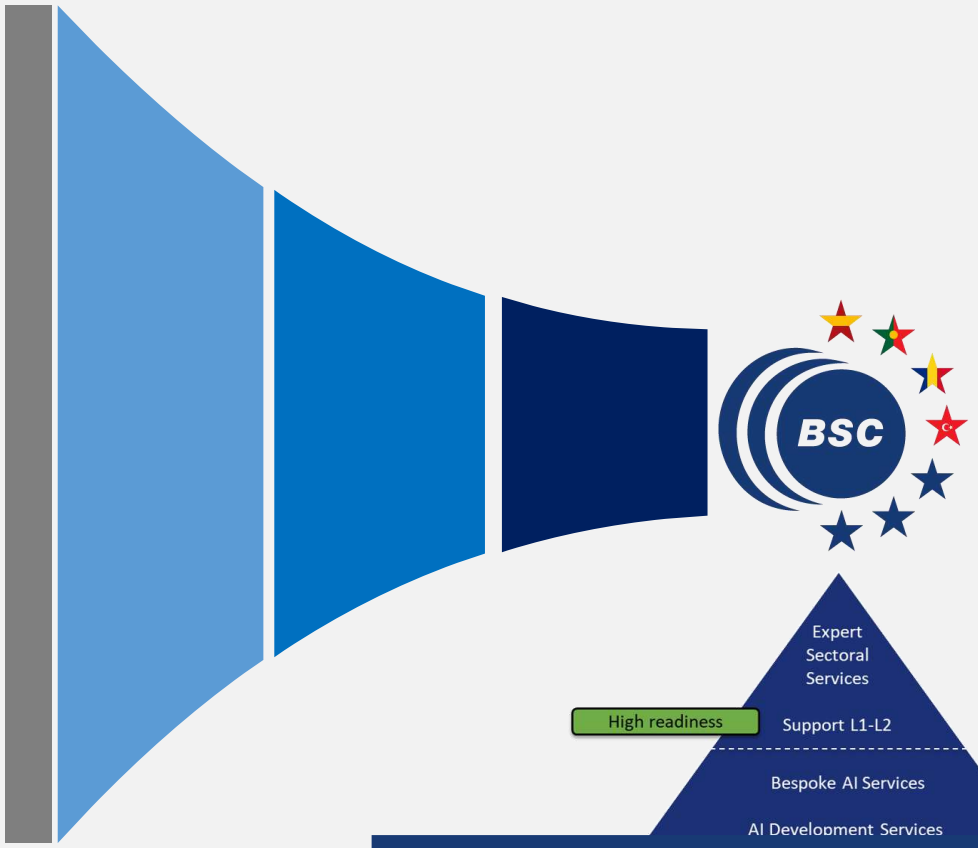
Partners to support on leads generation



BSC AI Factory

BSC AIF - Partners Program (Coming soon!)

Partners to support on leads generation





Partners to support low readiness customers

AI Factory

BSC AIF - Partners Program (Coming soon!)

Partners to support on leads generation



Partners to support industrialization needs

Partners to support low readiness customers

BSC AI Factory

BSC AIF - Partners Program (Coming soon!)

Partners to support on leads generation



Partners to support industrialization needs

BSC AI Factory

BSC AI Factory Recap



BSC AI Factory

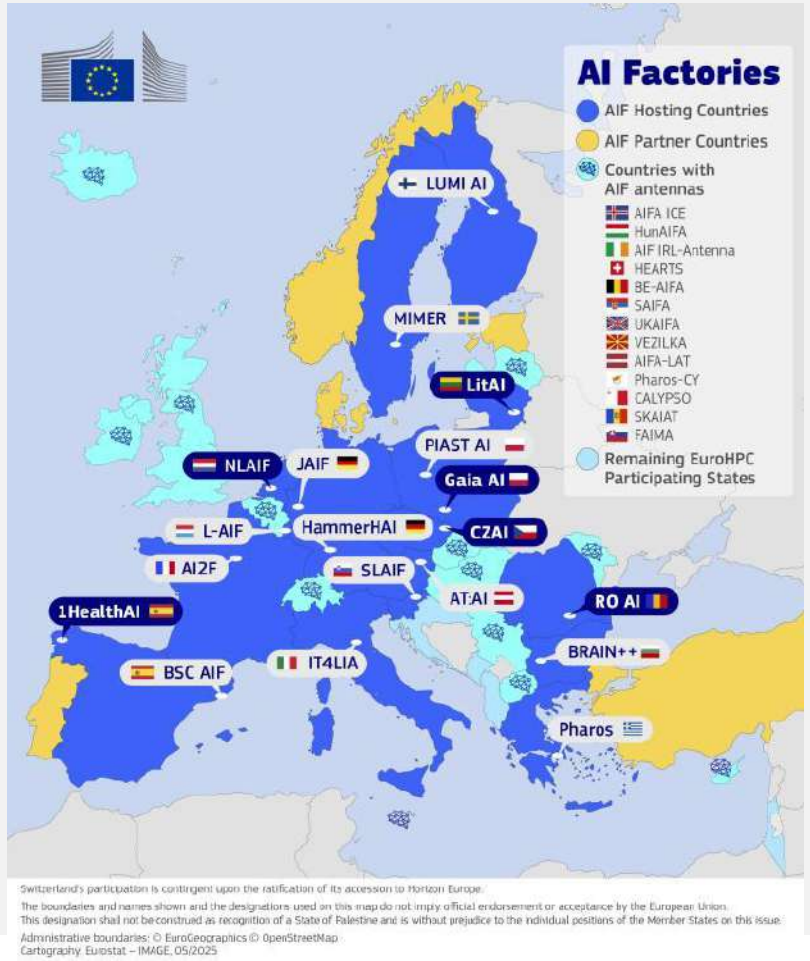
AI Factories

19 AI Factories in Europe

Serving: Startups, SMEs and Public Sector entities

Key capabilities

- Supercomputing for AI
- Scientific-technical collaboration
- Ethical and regulatory safeguards



AI Factories do not replace the market; they create the technological foundation to scale the European ecosystem.

BSC AI Factory

BSC AI Factory: what makes it unique?

One of Europe's first AI Factories

A unique combination of science, talent and technology

Decades of leadership
In advanced computing

+1000 researchers
con experiencia multidisciplinar

State-of-the-art infrastructure
MareNostrum 5 and cutting-edge AI capabilities with multidisciplinary experience



BSC AI Factory

AI needs infrastructure. Infrastructure needs knowledge.
BSC combines both.

BSC AIF - MN5 AI update (129M€)

MARENOSTRUM 5

AI Factory Partition

A dedicated partition designed to accelerate and optimise artificial intelligence workflows, combining two specialised NVIDIA GPU architectures for large-scale AI training and inference.

AI INFRASTRUCTURE

AI partition - NVL4 Partition

The AI NVL4 partition is designed for demanding large-scale AI training and inference workloads. It combines NVIDIA Grace CPUs with NVIDIA Blackwell GB200 GPUs and high-bandwidth GPU interconnects.

Number of nodes	**336**
CPU	**2 × NVIDIA Grace CPUs, 72 cores each**
GPU	**4 × NVIDIA Blackwell GB200 per node**
GPU memory	**186 GB HBM per GPU**
GPU interconnect	**NVLink up to 4 GPUs**

AI INFRASTRUCTURE

AI partition - NVL72 Partition

The AI NVL72 partition provides next-generation accelerated computing for demanding AI inference and training workloads. It is based on NVIDIA Blackwell Ultra GB300 GPUs interconnected through NVLink.

Number of nodes	**144**
CPU	**2 × NVIDIA Grace CPUs, 72 cores each**
GPU	**4 × NVIDIA Blackwell Ultra GB300 per node**
GPU memory	**288 GB HBM per GPU**
GPU interconnect	**NVLink up to 72 GPUs**

Red Hat OpenShift

NVIDIA | run:ai

BSC AI Factory

BSC AI Factory: Your AI Gym







BSC AI Factory

Service Catalogue



Foundations & AI Expertise

Infrastructure & Computational Resources Access	AI Development Data-Related Services	AI Development Advisory Services	Trustworthy AI	Ad hoc AI Services & Expert Consulting
• Infrastructure & Computational Resources Access • Onboarding Support • High-level Technical Access Support	• Data Discovery • Data Stewardship • Data as a Service • Model & Dataset Publication	• Advisory on Model Fine-tuning • Advisory on Model Benchmarking • Advisory on Prompt Engineering • Advisory on RAG Systems	• Consultancy on Ethical & Legal AI Self-Assessment • AI Trustworthiness Consultancy	• Ad hoc AI Services • Healthcare & Clinical Environments • Climate & Earth System Analysis • LangTech Expert Briefings

Adoption, Skills & Ecosystem

Training & Skills Development	AI Ecosystem & Engagement	Enablement & Introductory Services
• Courses Catalogue • Learning Platform / Online Modules	• Events & Co-Marketing • Incubation Spaces	• Briefing about BSC AI Factory and initial customer assessment • Sectoral AI Maturity Assessment - Questionnaire • Issuance of BSC AIF Certificates

BSC AI Factory

https://bsc-aifactory.eu/service-catalogue/

BSC AIF - Start here

1

SCAN ME

Apply

Fill in a short form telling us about your organisation and goals.

2

Talk to us

A free exploratory call to understand your challenges and ideas.

3

Get a plan

We propose a tailored, low-effort pilot — no obligation.

4

Run the pilot

Build and test your AI use case with our experts and infrastructure.

Start with one targeted department or use case, then expand only if it works.

BSC AI Factory

https://bsc-aifactory.eu/one-stop-shop/

BSC AIF - 3 x Key Account Managers (KAMs) @ Barcelona



Santi Trujillo Roldán

Startups & AI



Ayshah Butt She/Her · 1st

Strategic Partnerships | Innovation Investment & AI Initiatives

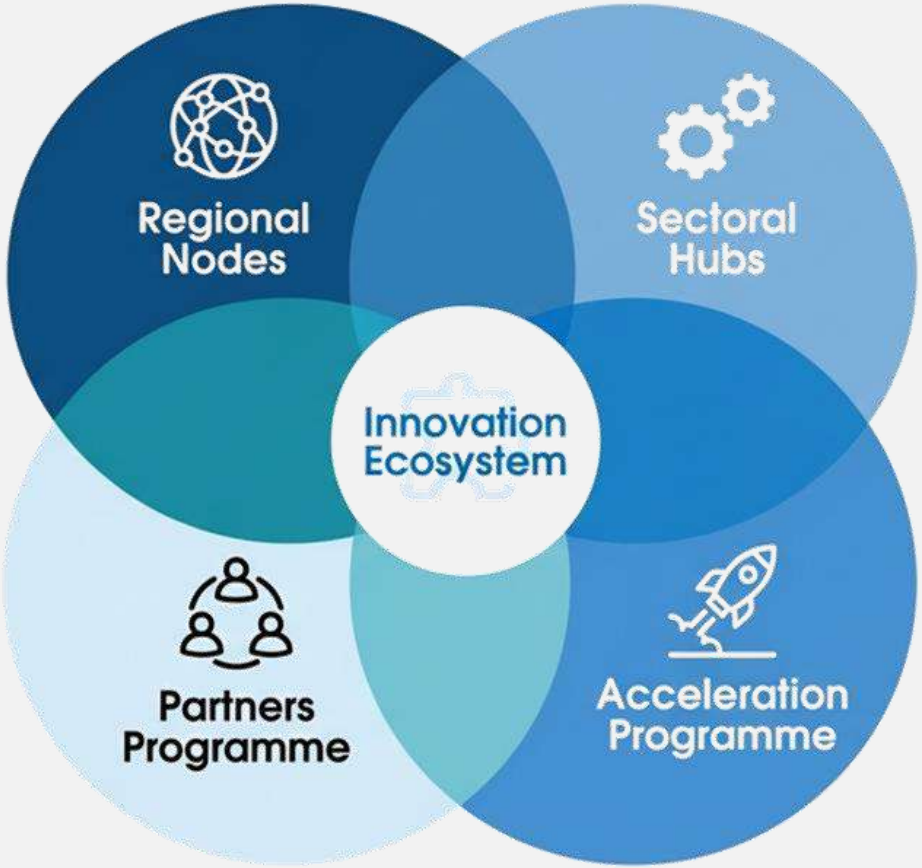


Carolina Buelta · 1st

Key Account Manager - Public Sector

BSC AI Factory

BSC AIF Ecosystem Activities



BSC AI Factory

Contact us

https://bsc-aifactory.eu

https://www.linkedin.com/company/bsc-ai-factory

https://www.youtube.com/@BSCAIFactory

SCAN ME

https://form.typeform.com/to/Pog9iEFH

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Q&A



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AI Factories

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Plan de Recuperación, Transformación y Resiliencia

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BSC AI Factory Partners

20 YEARS BSC

fct Fundação para a Ciência e a Tecnologia

TÜBİTAK

ICI

Affiliated entities

UPC UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

CNCA Centro Nacional de Computação Avançada