BSC Al Factory: Enhancing companies' readiness for an Al-driven future





BSC AI Factory partners







Fundação para a Ciência e a Tecnologia









(ICI Bucharest)



BSC AI Factory

AI Factory SERVICES

42M€



Experimental Platform 1.28M€

Targeted Industries

Health

Agriculture and climate

Finance and legal

Policy-making / public administration

Communication and Media

Energy

Industries summary, including datasets and services

Health

Subsectors: biotech, pharma, medical devices,

Datasets: EGA, UniProt, PMUT, EUCAIM, MDDB, PDBe

Services: Genomics Platform, Structural bioinformatics platform; Synthetic data platform; openbech for Al models; Sandbox for future research environments in health

Agriculture and climate

Subsectors: Agriculture; Forest; Food; climate related industries

Datasets: GHOST, Dust reanalysis, Barcelona Dust Regional Center, CALIOPE Air Quality, ICAP-MONARCH, EC-Earth Global Climate Projections, EC-Earth Global Climate Predictions: Agrilub

Services support on selection of geophysical datasets, how to best use those datasets, usage of HPC for specific applications, selection and use of climate data and projections

Energy sector

Subsectors:energy production renewable and non renewable, distribution,energy systems, commercialization of

Datasets: Energy Data space; Offshore Renewable Energy Systems

Services:Support on designing and implementing numerical models for combustion, fusion, solid and fluid dynamics

Finance and Legal

Subsectors: Law Firms, LegalTech companies; Banks Financial Entitites; Investors

Datasets: Banco España; World Bank; Eurostat; boe/dogc/eurlex

Services: Assistance on model selection, data curation and processing, and training for banking problems. assistance on data visualisation and dashboarding

Policy Making

Subsectors: education, economy,Smart cities, infrastructure, social services ...

Datasets: DS4Skills, Eureka3D, Al4Europeana, Europeana, EOSC, FAIR-IMPACT, Urban Planning and Public Services from Portugal:

Services: Assistance on model selection, data curation and processing, and training for banking problems, assistance on data visualisation and dashboarding

Communication and Media

Subsectors: communication agencies; media (press; TV; audiovisual, radio), new agencies etc...

Datasets: BSC Internet observatory, GDELT, MediaCloud, Factiva, TEMS, European Data Portal, EBU Databases

Services: Assistance on model selection, data curation and processing, and training for media and communication problems. assistance on data visualization and dashboarding

Cross Field Suppport throough BSC Language Foundational Models

Datasets ugging face co/datasets/projecte-aina/CATalog hugging face.co/datasets/oscar-corpus/community-oscar hugging face.co/datasets/rlugging faceFW/fineweb-edu

Open Models: https://huggingface.co/collections/BSC-LT/salamandra-68fc171485944df79469043a Aina Translation and speech models

Services:

Continous pretraing Fine tuning for specific tasks (RAG..) Prompt Engineering Benchmarking and evaluation



BSC AI Factory services

The BSC AI Factory is designed around 4 core services and 8 support mechanisms aimed at:

- Breaking AI innovation entry barriers (HPC capacity & technical expertise)
- Generating an Al-related innovation ecosystem (networking, funding, talent...)
- Training the workforce for Aldriven economies

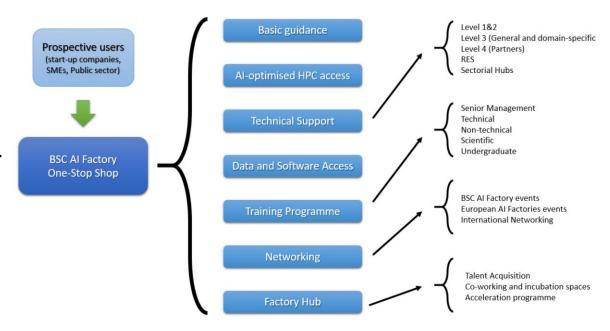




BSC AI Factory one-stop shop (delivery)

Service delivery will be handled through a one-stop shop to achieve:

- Professional grade service delivery¹
- Better allocation of services by user (personalized to their specific needs)
- Faster improvement of support services





Expected AI Factory users by readiness

(and services to be provided)

Al Factory users by readiness

High readiness

- Access to AI optimised supercomputer
- Software
- Datasets
- Support (levels 1-2)
- Networking, coworking, etc.

Medium readiness

- Access to AI optimised supercomputer
- Software
- Datasets
- Support (levels 1-3)
- Training (senior management & technical training)
- · Networking, coworking, etc.

Low readiness

- Support (level 4)
- Traning (senior management, technical training, nontechnical training)
- · Networking, coworking, etc.

