Why EOSC is pivotal to European competitiveness

European digital and data sovereignty

EOSC stands at the intersection of Europe's strategic priorities

✅ **Offers solutions to critical challenges** in research, innovation and societal development

✅ **Fosters digital sovereignty,** inclusivity, trust, and transparency in research and innovation

✅ **Supports the Open Science movement**

✅ **Underpins Europe's broader competitiveness agenda,** reinforced by policy recommendations coming from the Letta report, the Draghi report, and the Heitor report on the next Framework Programme (FP10)

Europe's challenge
Underutilisation of vast pool of research data

Risk
Global entities better positioned to capitalise on data, potentially hampering European strategic autonomy and economic security
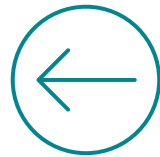
Solution
Create a European Knowledge Commons

EOSC embodies this ambition by establishing a system for researchers to store, share, process, analyse, and reuse FAIR research outputs

Security in research and data management

Data sharing in research faces **two challenges**

1 Ensuring **data owner control**

2 Providing a **secure environment** for collaboration

EOSC addresses these issues through its **federation model**

- **Complies with European regulations** such as GDPR, cybersecurity, directives and Data and AI Acts

- Provides a virtual environment where only **authenticated users** can upload high-quality, rigorously vetted data

- Offers **cross-discipline** and **cross-border** services

- Follows **robust security protocols,** ensuring that sensitive data remains protected while being available to drive scientific breakthroughs

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Enhances Europe's **capacity for innovation and productivity** by addressing inefficiencies that cost Europe billions each year

Reduces duplication of efforts and streamlines access to diverse, high-quality data

Offers a **cross-border, interdisciplinary approach** to research for overcoming fragmentation in Europe's research landscape

Facilitates **rapid discovery** and reuse of data

Serves as a **catalyst for economic growth** by supporting start-ups, scale-ups, and mature industries alike

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Democratises access to research resources across Europe

Empowers **researchers, educators, and innovators** from all regions—irrespective of economic or geographic constraints—to engage in cutting-edge scientific work by providing open access to FAIR datasets

Supports **capacity-building initiatives** and creates pathways for early-career researchers

Helps ensure that Europe's research ecosystem benefits from diverse perspectives and **broad participation**

Sustains a vibrant, competitive, and **socially cohesive research community**

Fostering European leadership in artificial intelligence

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EOSC contributes to Europe's leadership in AI by offering a **vast pool of quality data** that can be leveraged by scientific communities and businesses to drive innovation

By integrating EOSC into its broader digital strategy, Europe can nurture a thriving AI ecosystem that adheres to its **ethical and security standards**

Europe's challenge

Participating in the AI-race with much less capital.

Risk

Global entities better positioned to capitalise on data for AI and having their 'solutions and technology' dominate the world stage.

Opportunity

High-quality research data is essential for training trustworthy and efficient AI models. See to it that data meets the European standards for both human and machine use.

Solution

Create a European Knowledge Commons as part of the AI solution, meeting the FAIR principles, the sovereignty and trustworthiness data.

EOSC embodies this ambition by establishing a system to store, share, process, analyse, and reuse FAIR and trustworthy data.

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Provides a **cohesive framework** that links diverse data repositories and Research Infrastructures

Standardises data sharing protocols and ensures interoperability across disciplines and borders

Enhances the **efficiency and effectiveness** of both the Common European Data Spaces and Europe's research ecosystem as a whole

Improves **resource allocation and utilisation**

Photo by Pietro Battistoni on Pexels

Conclusion

EOSC is central to Europe's research and innovation strategy, addressing key priorities in digital and data sovereignty, security, productivity, and technological leadership

By fostering a collaborative, secure, efficient, and trusted research environment, **EOSC drives economic growth and innovation** while advancing the Open Science movement

EOSC's design and operational principles are directly in line with the strategic imperatives outlined in the **Competitiveness Compass communication,** as well as the recommendations of the **Letta, Draghi, and Heitor reports.**

Continued investment in and development of EOSC is not merely beneficial, it is essential for securing Europe's future prosperity and global leadership.