



FORTISSIMO
PLUS

FFPLUS SUCCESS STORY: INNOVATION STUDY

A TRUST FRAMEWORK FOR SOVEREIGN AI: THE HALLUCINATION-AWARE LAYERED OPTIMIZATION

ORGANIZATIONS

Seedbox Ventures GmbH is a German AI studio specialising in advanced Generative AI solutions. The company has strategically evolved from delivering bespoke, projectbased services into a scalable, product-led technology provider, focused on building trustworthy, sovereign AI solutions for regulated European industries requiring compliance, transparency and auditability.



THE CHALLENGE

European adoption of Generative AI remains limited in regulated sectors due to high and unpredictable operational costs, persistent risks of model hallucinations, and significant data sovereignty and GDPR compliance concerns. Seedbox's existing service-based delivery model was difficult to scale under these constraints, prompting the need for a single, production-ready framework capable of delivering trusted, costefficient, and compliant AI.



Technology used: HPC, GenAI, Reinforcement Learning
Industry Sector: Regulated Industries

THE SOLUTION

Seedbox developed the HALO framework, an integrated Generative AI architecture built entirely on open-source models and trained using distributed HPC resources. HALO combines a specialised RAG-LLM, an intelligent classifier router and a factual consistency auditor, delivering transparent, verifiable and cost-efficient AI outputs while ensuring GDPR compliance, EU AI Act alignment and reduced energy consumption in production environments.

THE IMPACT

Seedbox's transformation from a bespoke AI consultancy into a scalable, product-led SaaS company was enabled by the FFplus study, with HALO becoming its core reusable intellectual property asset supporting recurring revenue growth across regulated European markets.

By reducing operational LLM costs by up to 85% through intelligent query routing, HALO makes production-grade Generative AI economically viable for SMEs and mid-sized enterprises previously constrained by unpredictable cloud pricing, lowering adoption barriers in regulated sectors.

For finance, legal and healthcare organisations, HALO provides auditable, sentence-level trust scoring aligned with GDPR and the EU AI Act, removing key procurement barriers linked to unverifiable AI outputs.

HALO strengthens institutional trust in AI by embedding transparency and explainability at architectural level, reducing misinformation, unsafe automation and reputational risk in high-stakes environments.

BENEFITS

- Up to 85% reduction in operational LLM costs, achieved through intelligent query routing that avoids unnecessary use of computationally intensive Generative AI processes.
- Auditable, sentence-level hallucination transparency, enabling compliant use of Generative AI in regulated sectors such as finance, legal and healthcare.
- Removal of procurement barriers by delivering transparent, GDPR-compliant and EU AI Act-aligned AI outputs.
- Enabled transition to a scalable, product-led SaaS business model.



EuroHPC
Joint Undertaking