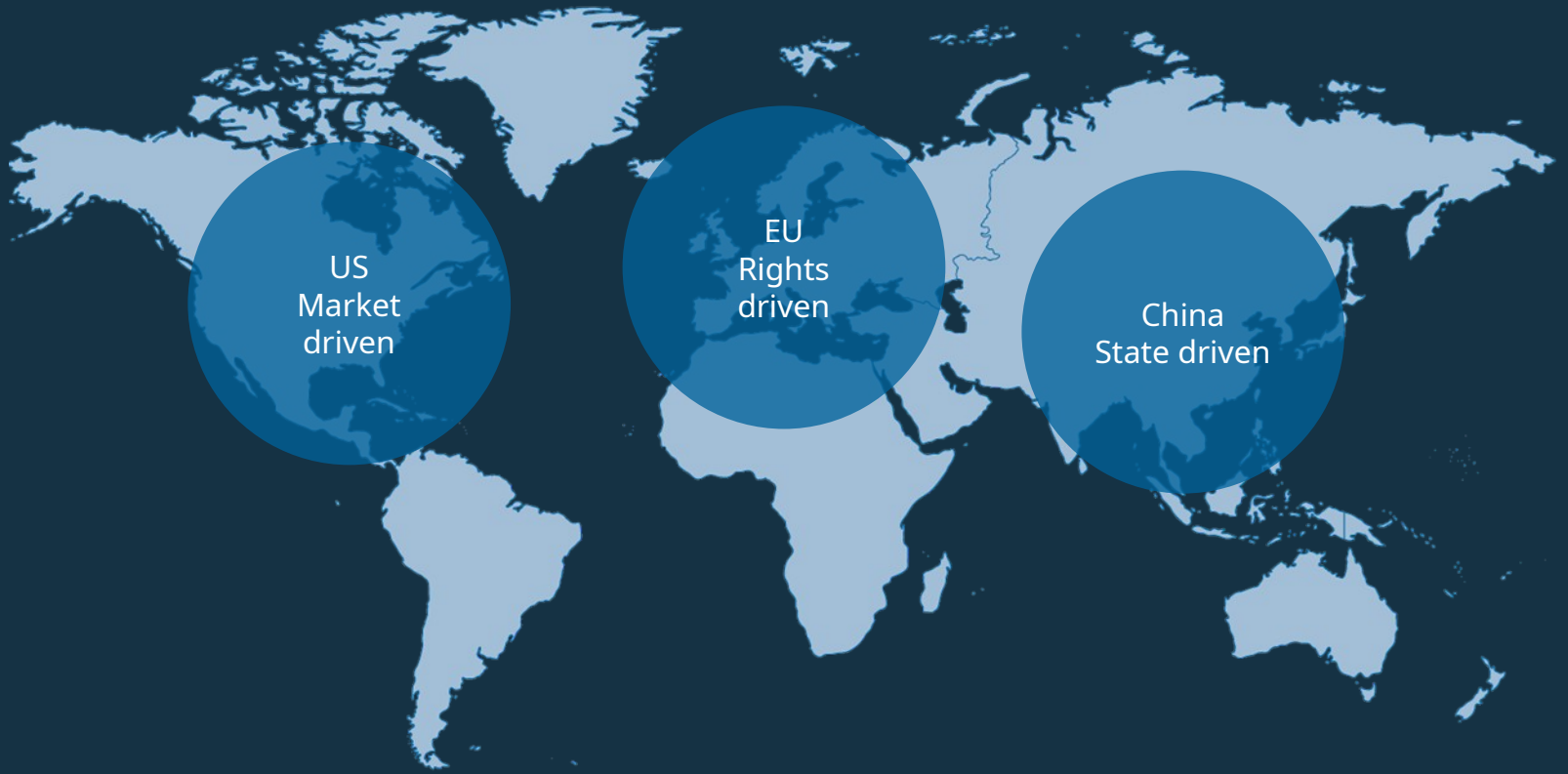
CertifAIEd AI Systems

Αλέξανδρος Νούσιας, Νομικός,
Συνεργάτης Έρευνας,
ΕΚΕΦΕ-Δημόκριτος

Three core competing regulatory models



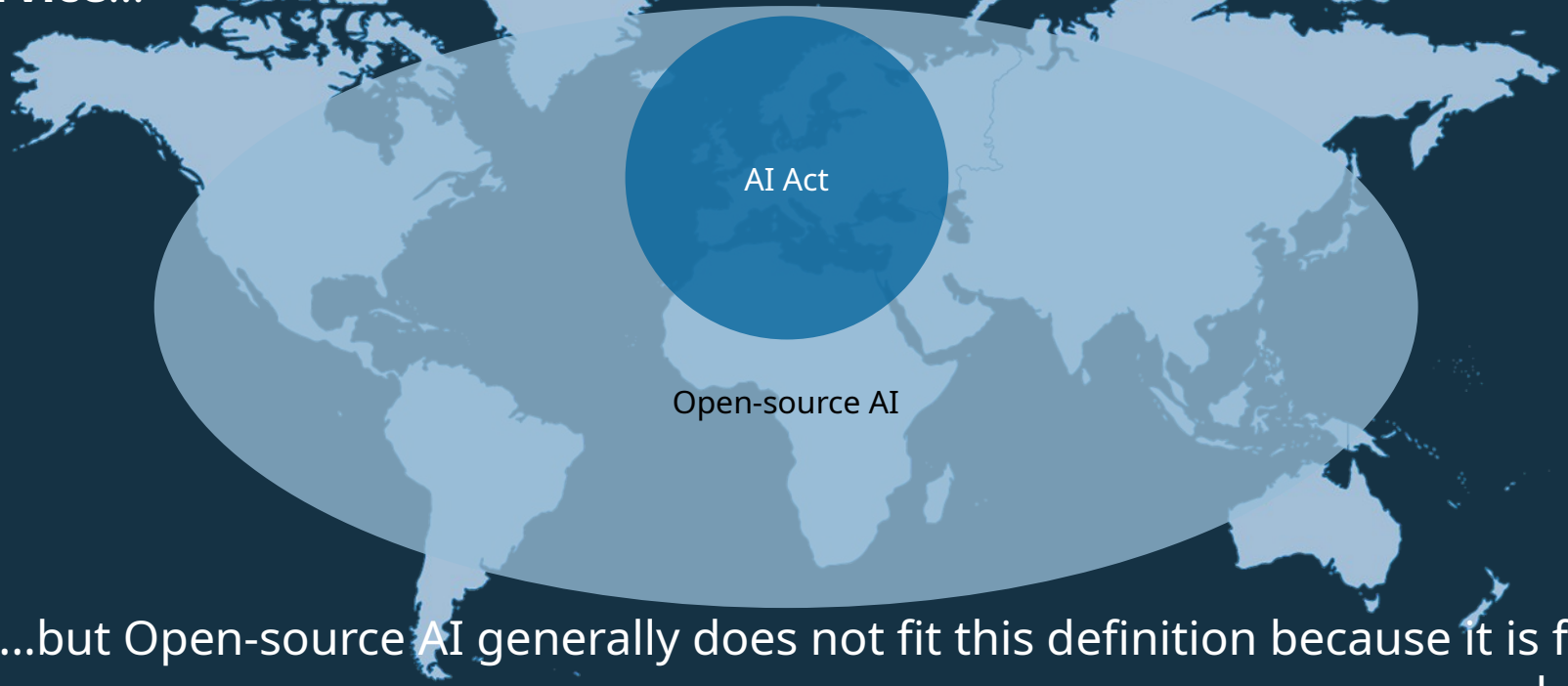
The EU Rights/Values Model

The AI Act primarily focuses on regulating digital markets, while advancing European integration…

…,based on health, safety, fundamental rights (democracy, rule of law, environment)

Open-source AI

The AI Act primarily focuses on AI systems **placed on the EU market** or **put into service**…



…but Open-source AI generally does not fit this definition because it is freely shared

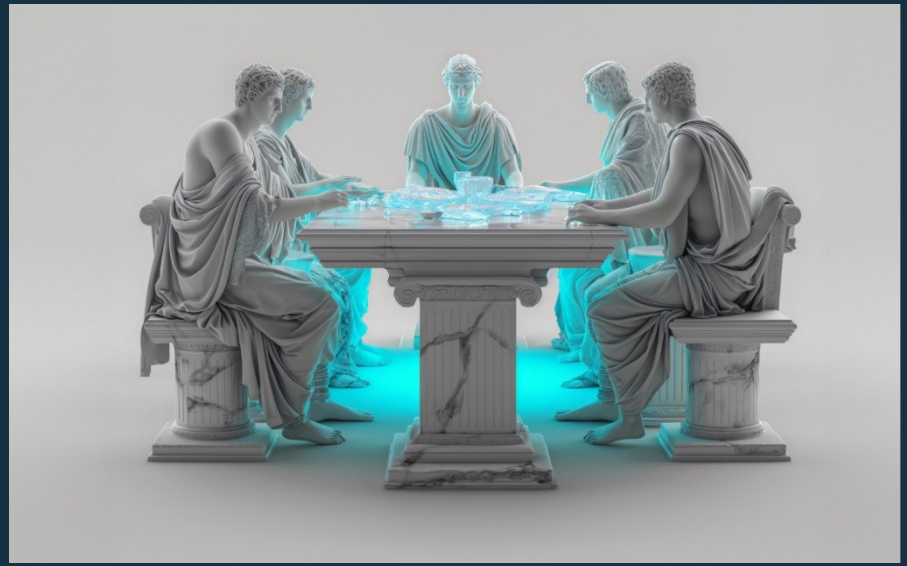
EU AI Board Agenda

Supporting compliance and simplification

Alexandros Nousias, NCSR-D

Things to reflect

- **Values based Ethical Design:** How do we ensure values based ethical design?
- **Regulatory Compliance:** How do we ensure regulatory compliance?
- **Business practices:** How do we
- migrate nicely from legacy systems to new ones?
- **Universal Design:** How can we achieve global relevance?



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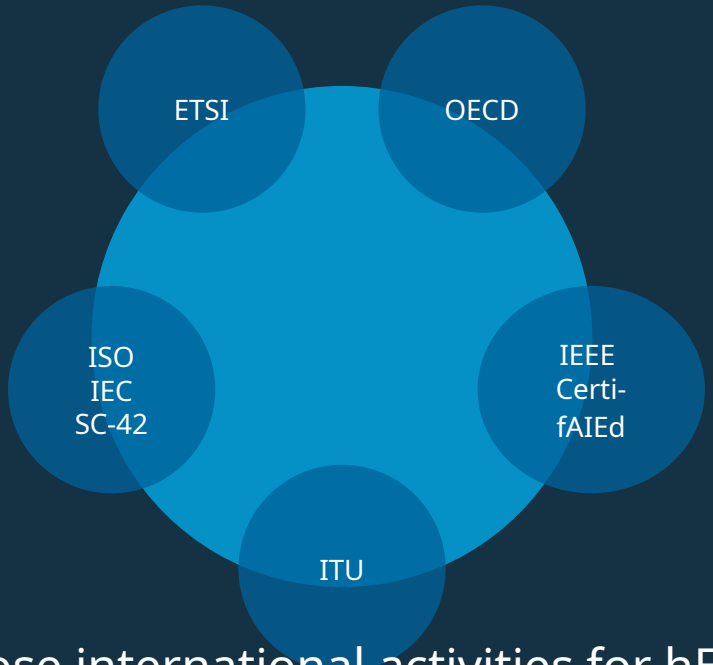
EU AI Board Standards Subgroup

Report on the ongoing standardization activities in other international fora...



...and the relevance of those international activities for hENs and the implementation of the AI Act

The AI Act & Ethics Interplay

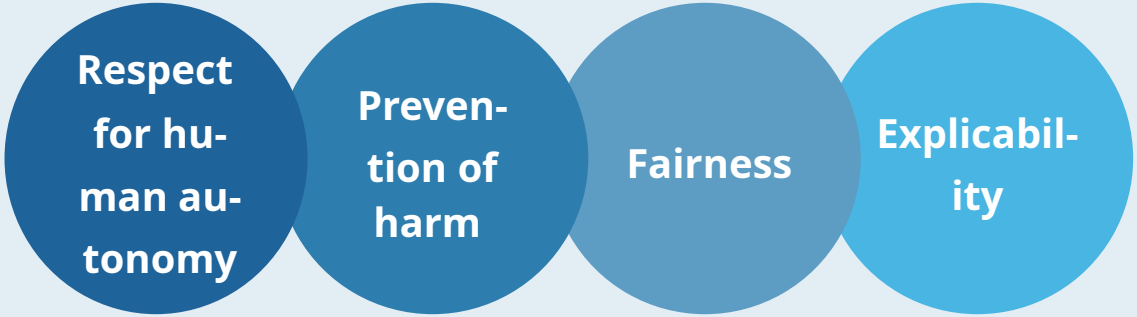
IEEE CertifAIEd: Integral to Building Trust and Societal Well-being

Is Aligned to Human Values

Aligns with Global Regulation:
AI Regulations being implemented in US, China, EU, Canada, UK and other countries

Human values & IEEE CertifAIEd

4 grounding principles of Human Values

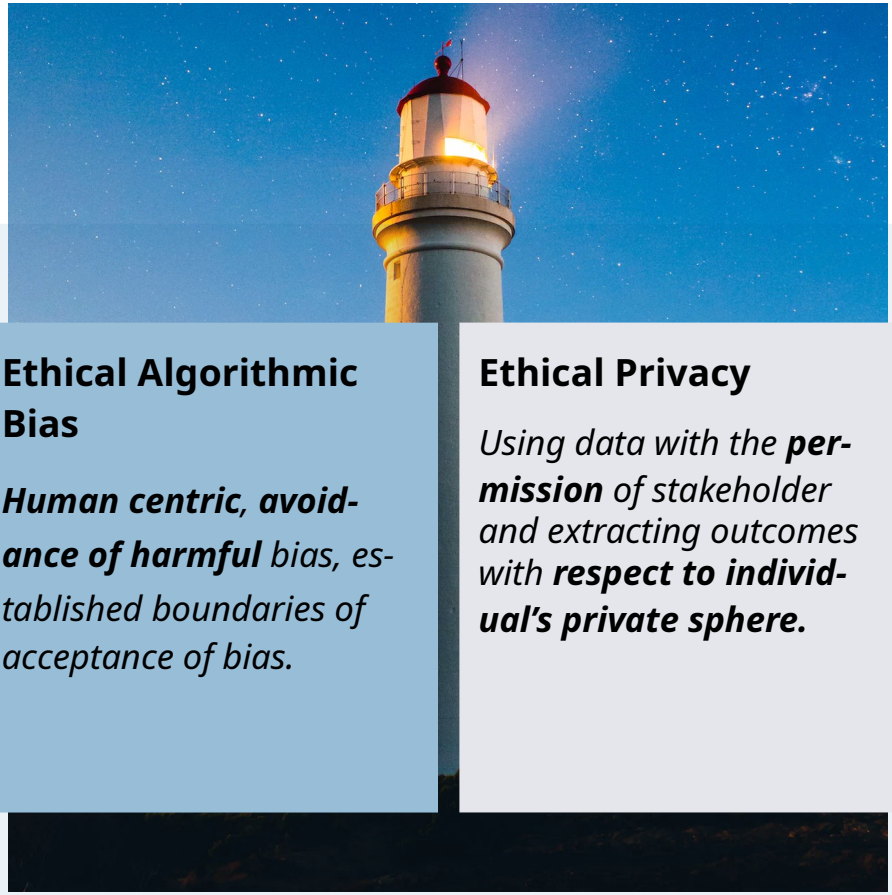


IEEE CertifAIEd supports these principles through the Ethical Foundational Requirements (E-FRs) promoting

- Human agency and oversight
- Technical robustness and safety
- Privacy and data governance
- Transparency
- Diversity, non-discrimination and fairness
- Societal and environmental well-being
- Accountability

IEEE CertifAIEd™ CRITERIA SUITES

Principal Suites of Criteria



Ethical Transparency

*Preservation of **openness**, **self-determination**, **communication, disclosure of information** regarding an AI, the organization and its processes.*

Ethical Accountability

***Answerability, liability,** the expectation of **account-giving** and **assumption of responsibility** for actions, products, decisions, and policies.*

Ethical Algorithmic Bias

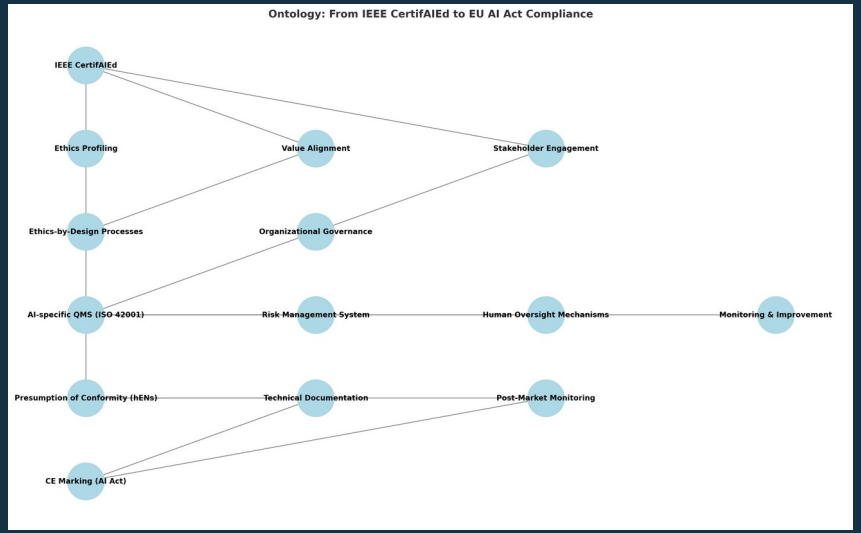
***Human centric**, **avoidance of harmful** bias, established boundaries of acceptance of bias.*

Ethical Privacy

*Using data with the **permission** of stakeholder and extracting outcomes with **respect to individual's private sphere.***

The Standardisation ontology towards compliance

- **IEEE CertifAIEd: Values based ethical design**
- **AI Act requirements: High Risk AI systems (Art. 8-15)**
- **Legacy Frameworks: ISO 42000 series, 9000 series, IEEE P7000 series, ETSI**
- **hENs: Presumption of conformity**



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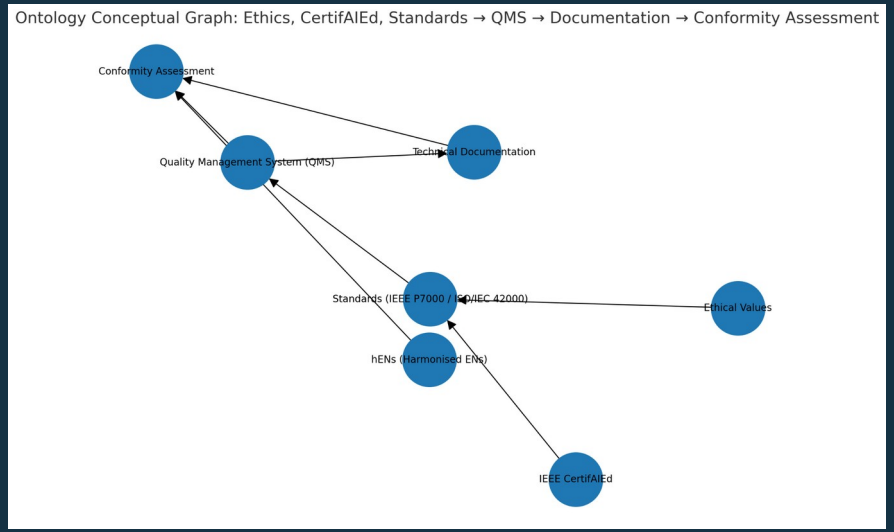

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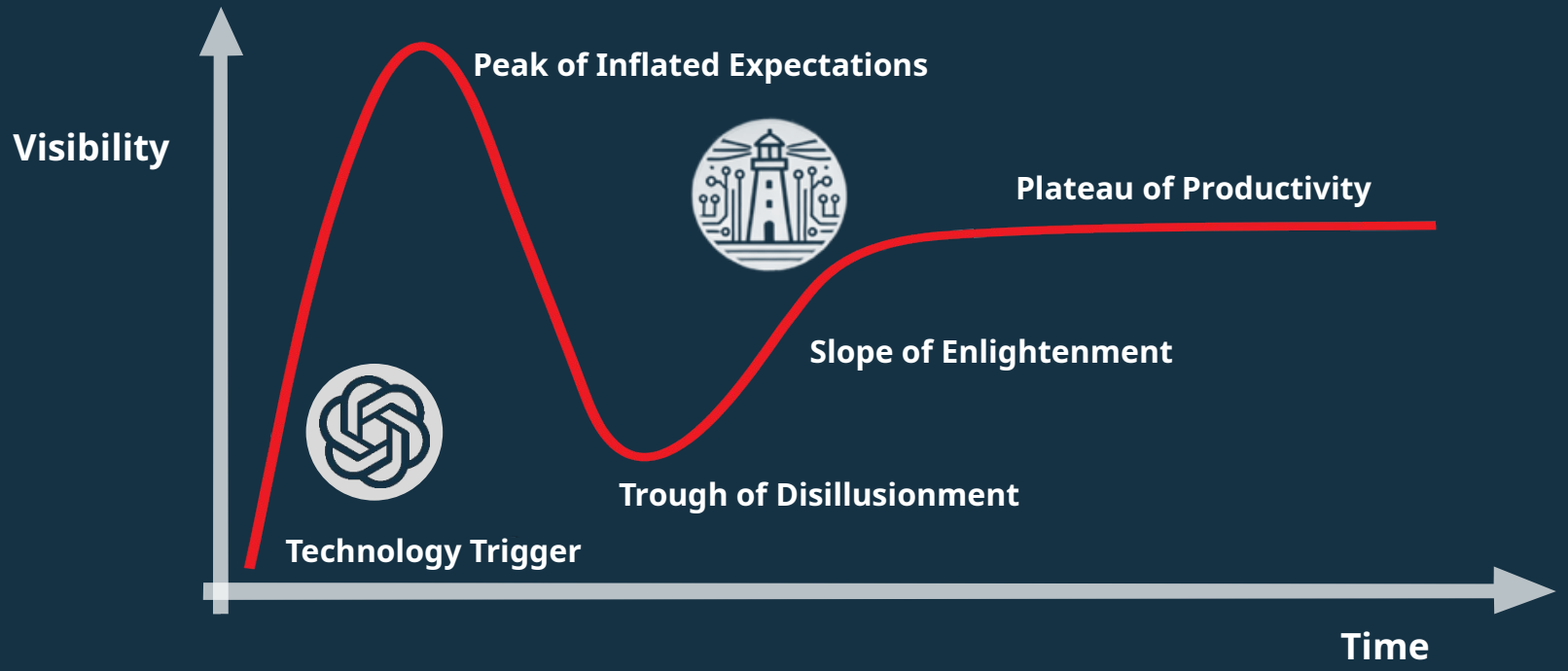
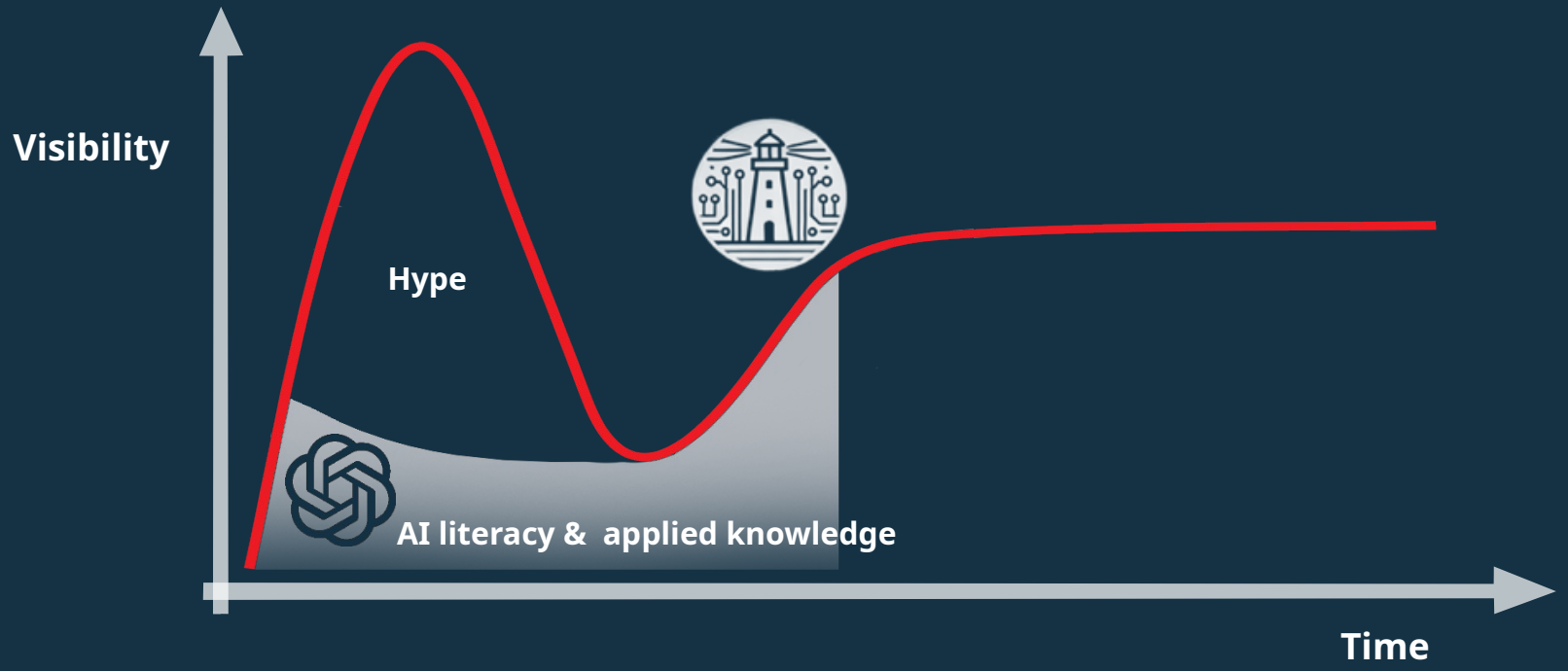
Amara's law

We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run



Amara's law

It takes a lot of time to apply knowledge in a productive way, beyond the initial hype



Thank You

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