

FUSION AI LABS

DALLA RICERCA ALL'IMPATTO: LA NASCITA DI FUSION AI LABS

Andrea Pescino



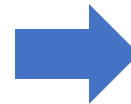


BLUEPRINT

ARTIFICIAL INTELLIGENCE FOR AFRICA

FIRST EDITION © 2021

www.smartafrica.org



Paula Ingabire
(Jan 83)



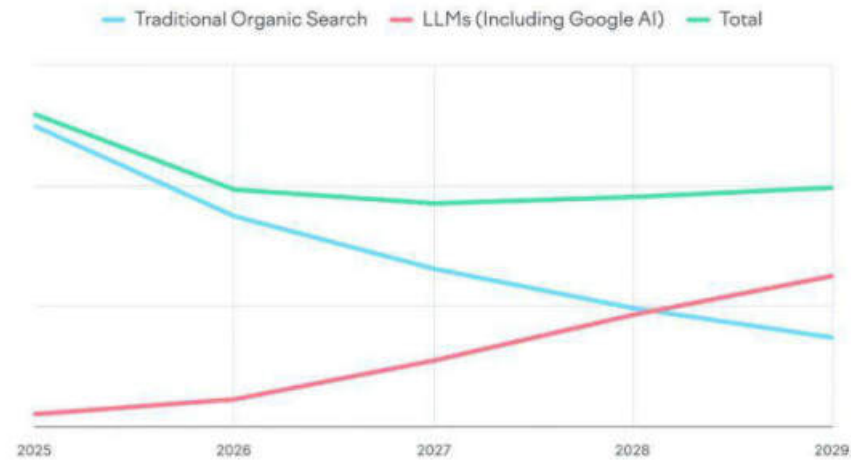
Zipline

Babyl

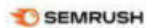


IL MOMENTO

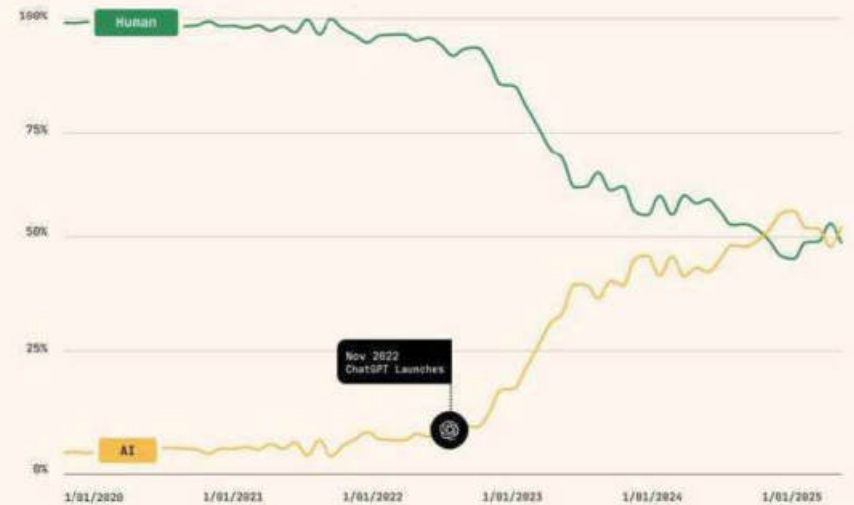
Projected Annual Visitors by Source



semrush.com



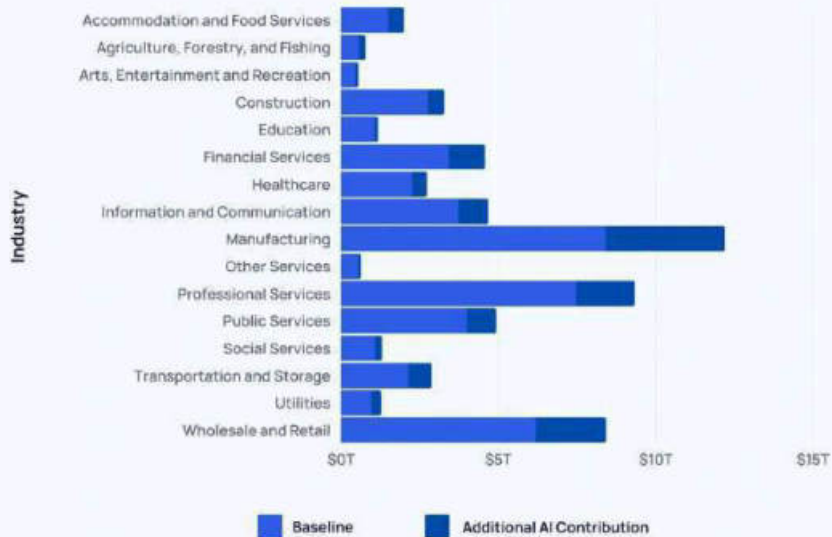
AI-Generated Content Has Surpassed Human Content



GRAPHITE

IL MOMENTO

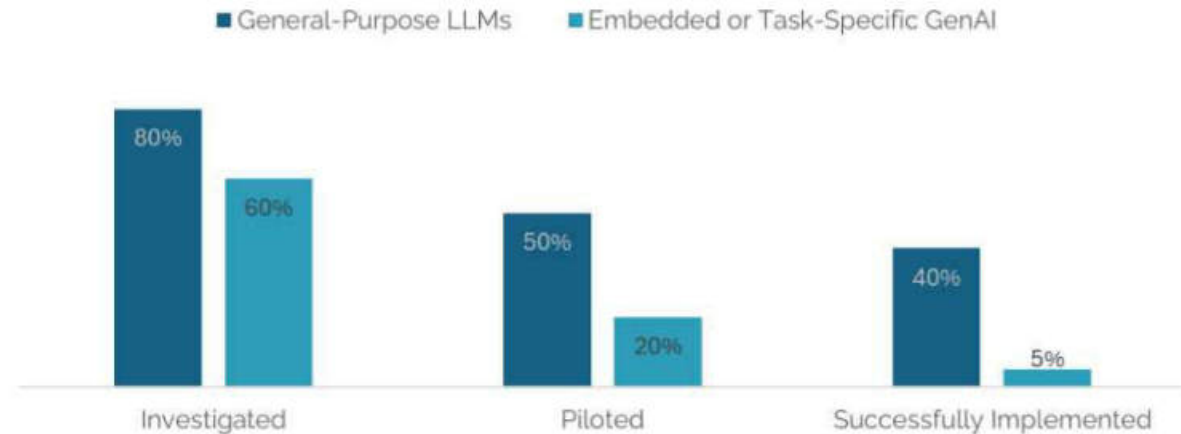
AI gross value added (GVA) in 2035



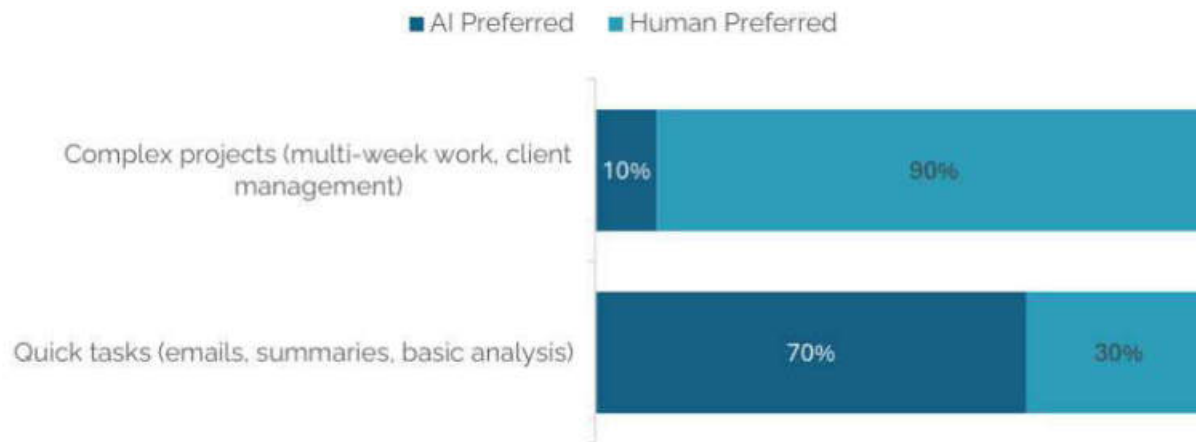
Use case frequency of machine learning and artificial intelligence



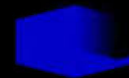
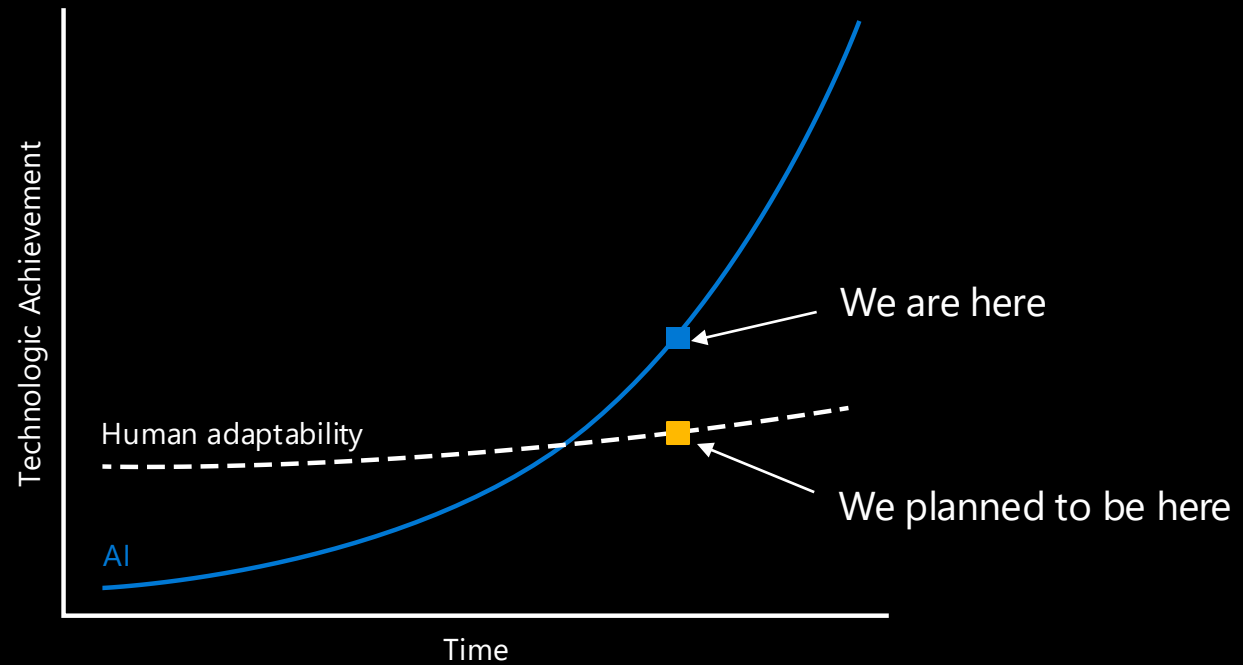
IL GAP DELL'AI MODERNA



"Would you assign this task to AI or a junior colleague?"



The unreasonable ability of machines to “reason”



~~3~~ key advancements 5

Attention

Transformers that can
distill information and
effectively **use context**

Self-supervision

Training from **all data**,
learning the innate
semantic structure

Scaling laws

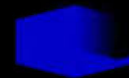
More is better

Test-time compute

Spending more time
(compute) on answers
is (by now) a new
scaling law

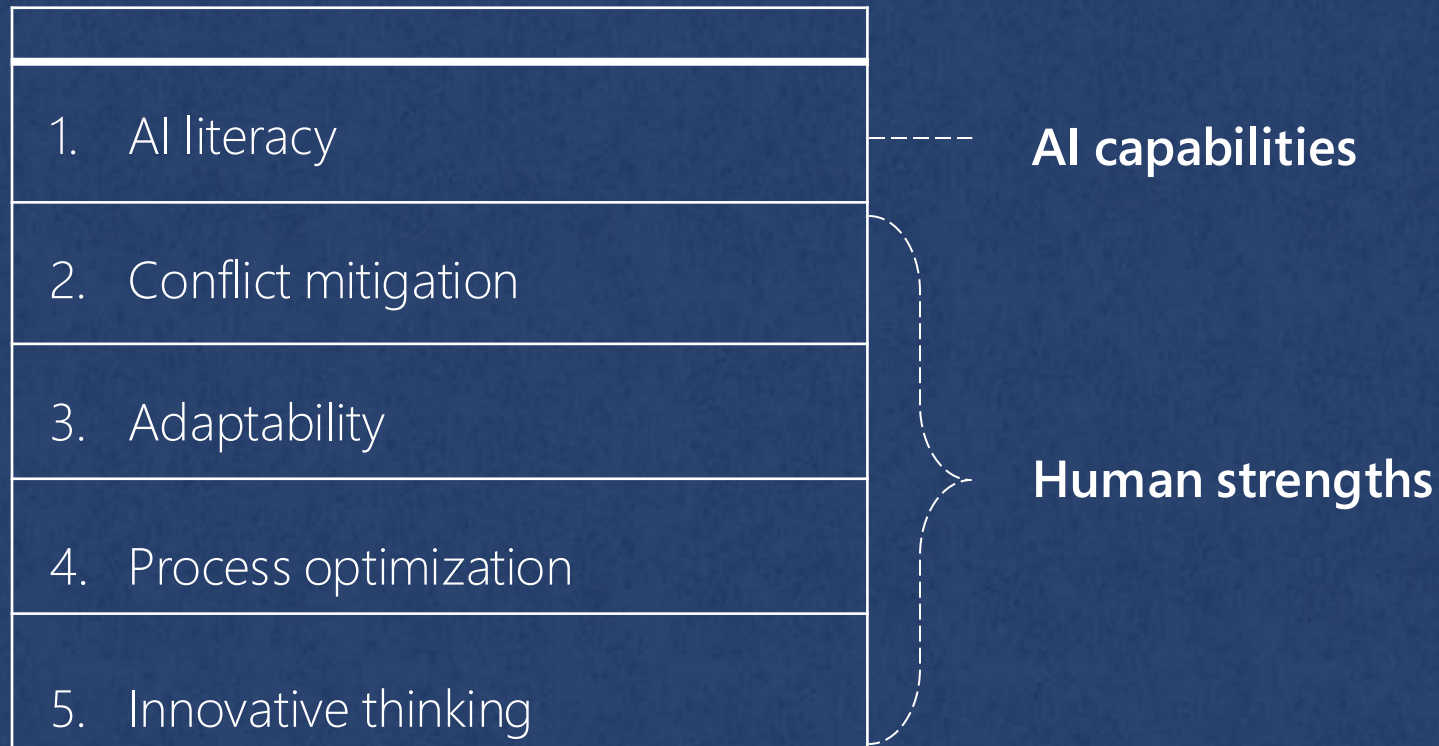
Agents

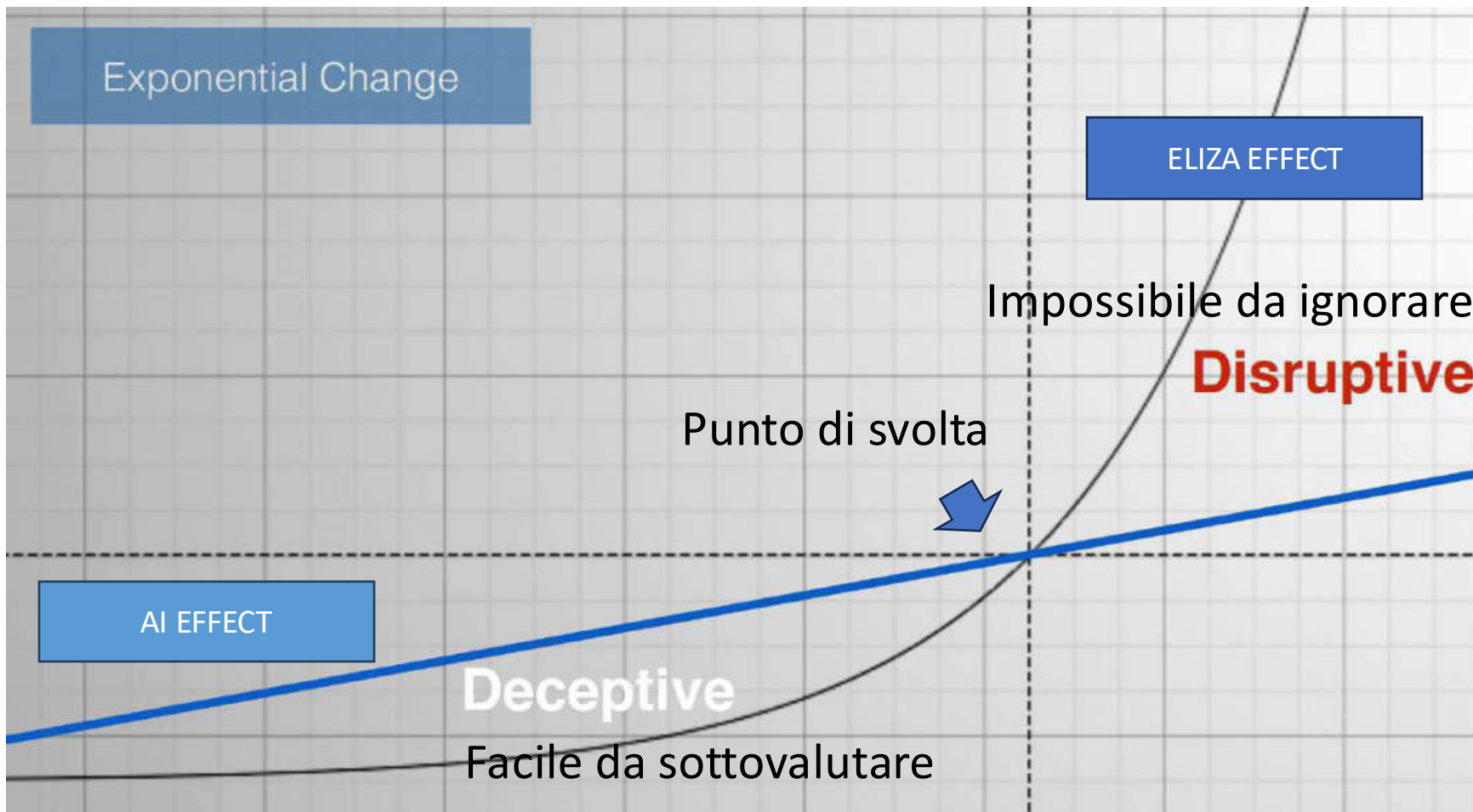
The ability to
decompose tasks and
act in the world



In-demand skills for the new era of work

Top skills for 2025 according to LinkedIn





Ugc_Veo3.1

Share

Smartphone Close-Up



iPhone Unbox... Veo 3.1

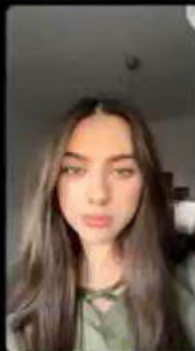


4

Cheerful Portrait



Young Woman Portrait



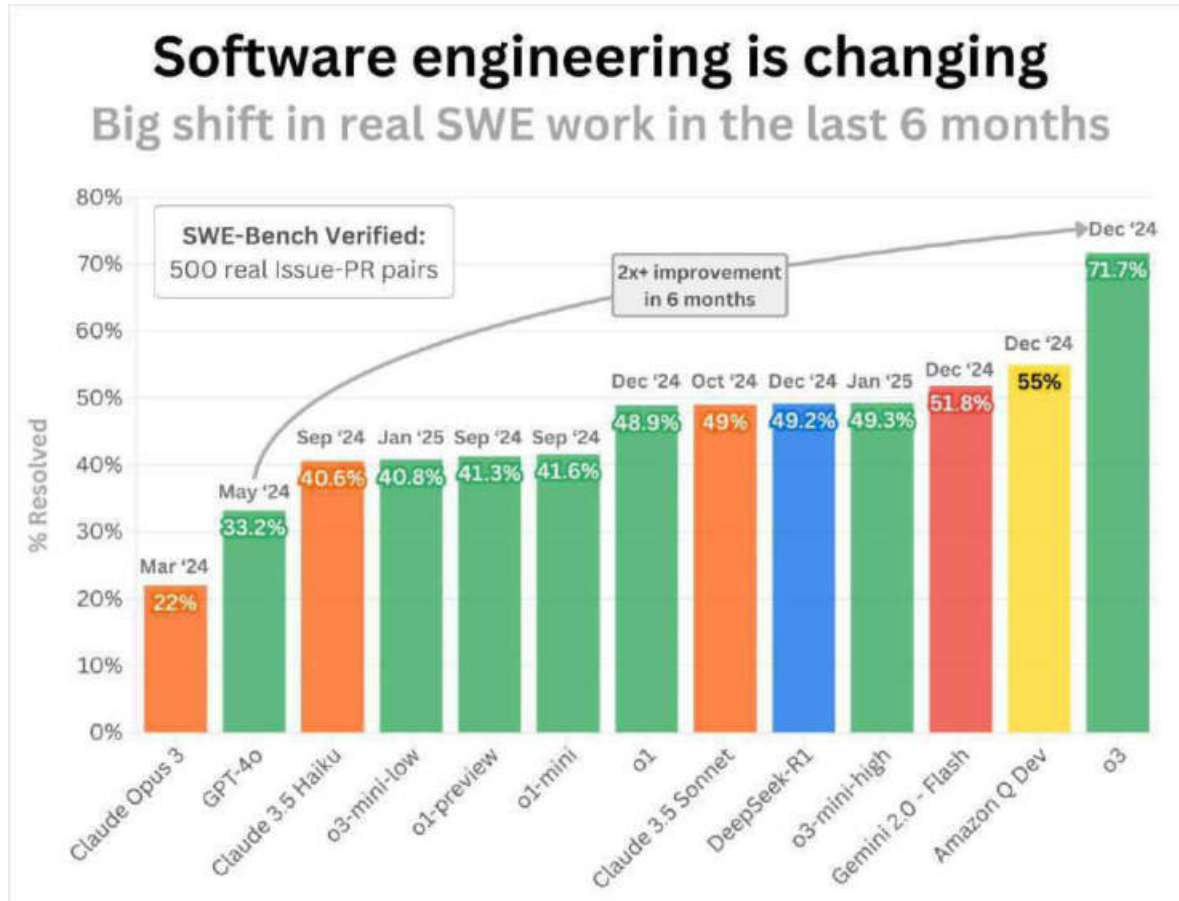
Coca-Cola Bottle



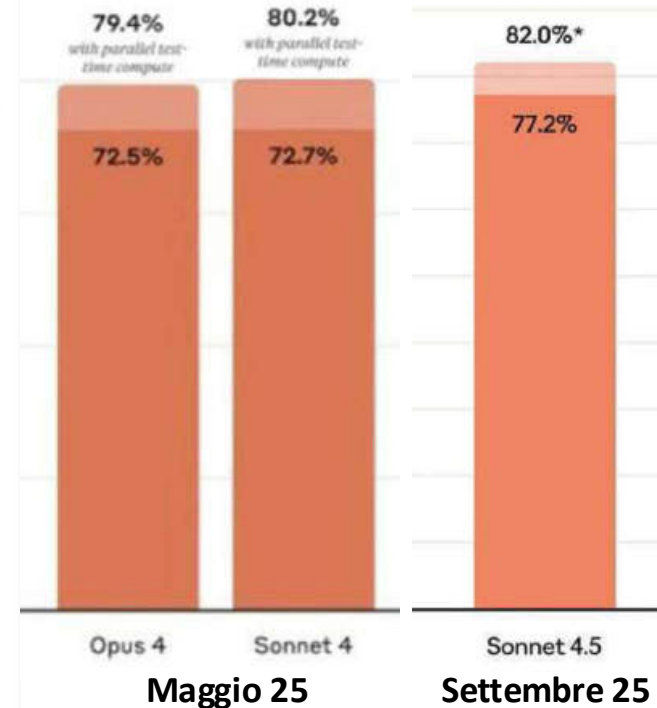
Queue 0 active

190.3K

CODING E ACCELERAZIONE



Accelerazione di 4X in 18 mesi



MATURITÀ E ADOZIONE



Gen AI integration Maturity Progress

BASIC

READY

DYNAMIC

ADVANCED

Progresso

Phase 1 – Vast Majority

Awareness

- Discovery of the Technology
- Spotted usage by bottom-up adoption

Adoption

- Understanding the value of the tools
- Distribution of specific tools to users
- Basic training

Evolution

- First integration with docs and data (RAG)
- Dedicated teams to test basic solutions
- First basic applications (API)

Adaptation

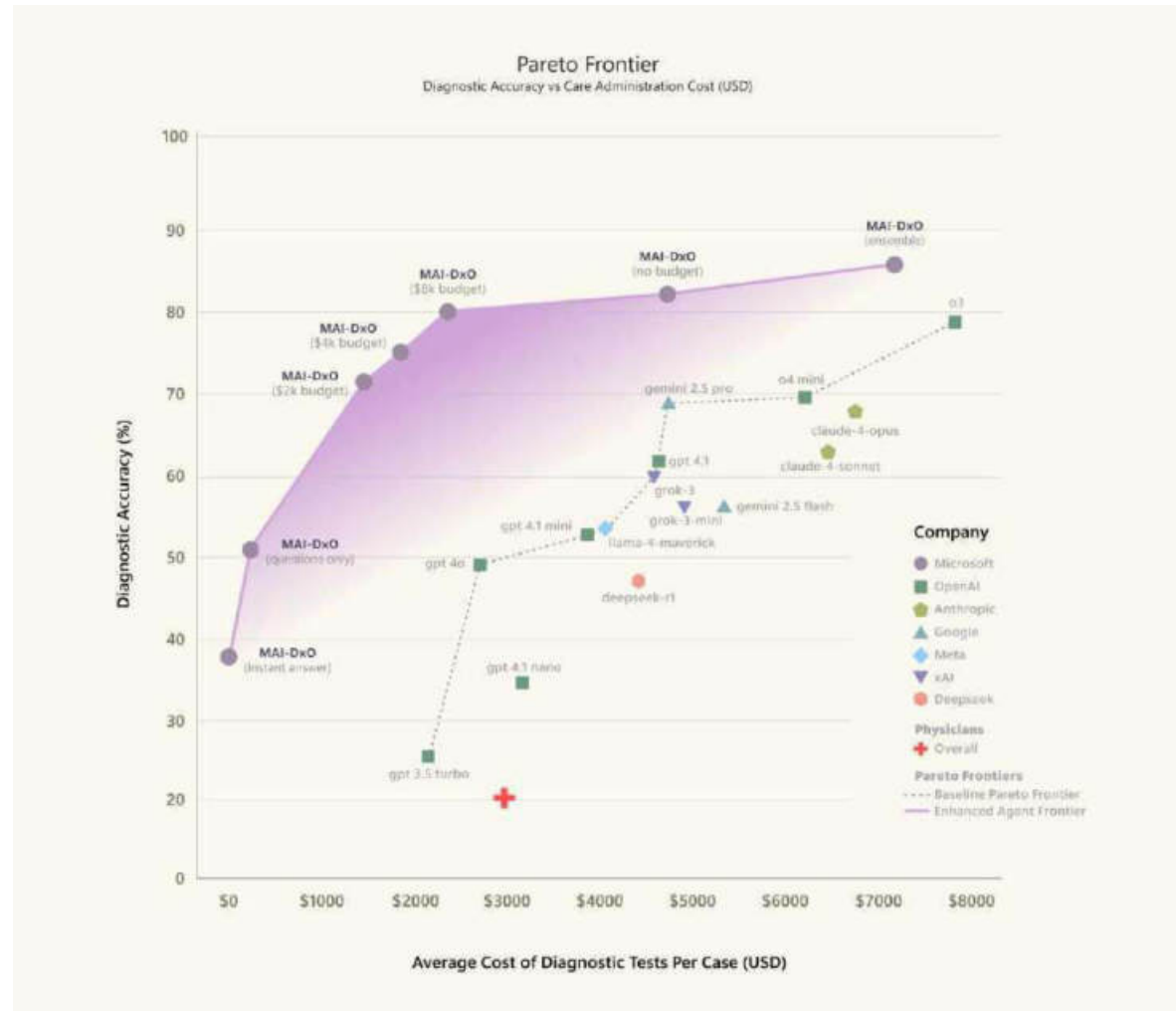
- Foundation Model Approach
- Fine-tuning on internal, curated data
- Reinforcement Learning emerging

Optimization

- Multiple Model Picking based on requirements
- Optimization strategies and ops
- CoE activation
- Dedicated R&D

Architectural Impact

- Multi-Agent applications
- Embodiment and infusion on products and core applications
- Neurosymbolic and multi paradigm



The Path to Medical Superintelligence

30 giugno

MAI-DxO (Microsoft AI Diagnostic Orchestrator)

Sequential Diagnosis Benchmark (SD Bench):
304 casi clinici pubblicati sul *NEJM*, trasformati in sfide passo-passo con costi virtuali associati alle indagini diagnostiche

Precisione diagnosi: fino all'85 % nei casi SD Bench, usando MAI-DxO con il modello OpenAI o3

Confronto con umani: medici esperti (5–20 anni di carriera) raggiungono solo il 20 % di accuratezza

MAI-DxO raggiunge diagnosi più accurate
senza eccedere nei test diagnostici



EMBODIMENT

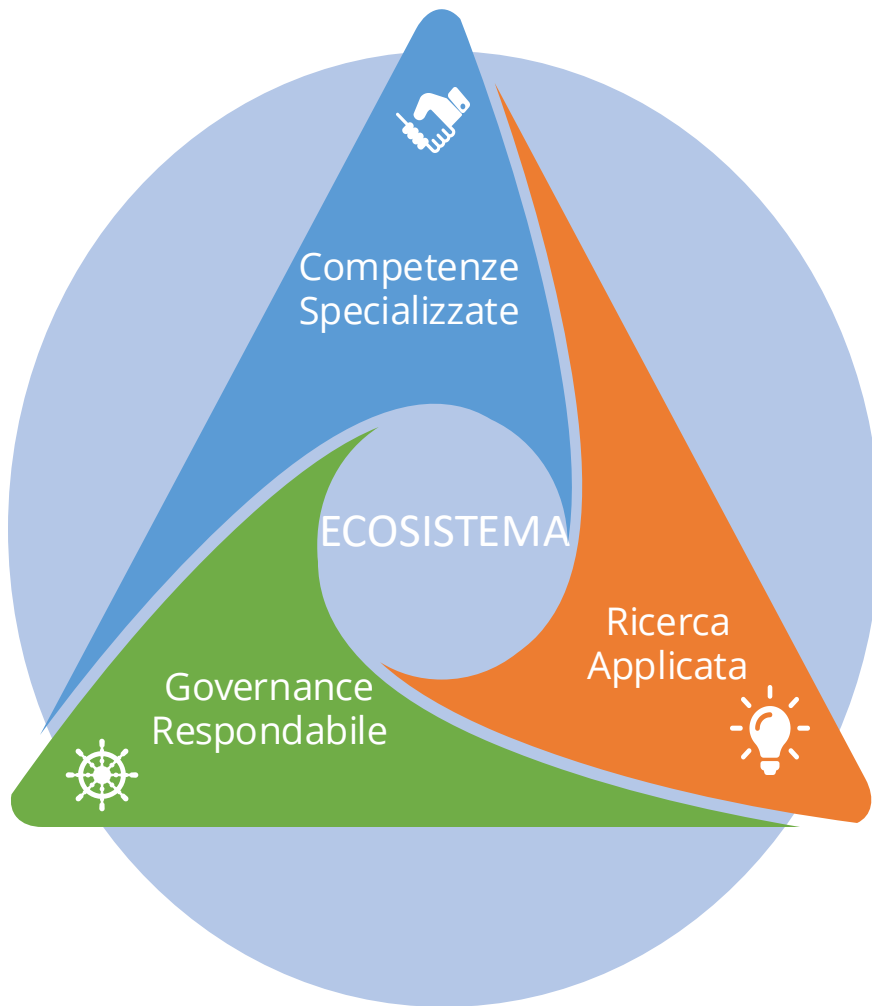
L'AI nel mondo fisico



Kungfu Kid
V6.0

Unitree G1

I PILASTRI DELL'ADOZIONE



Competenze Specializzate

Non più solo data scientists, ricercatori, innovatori e AI strategist

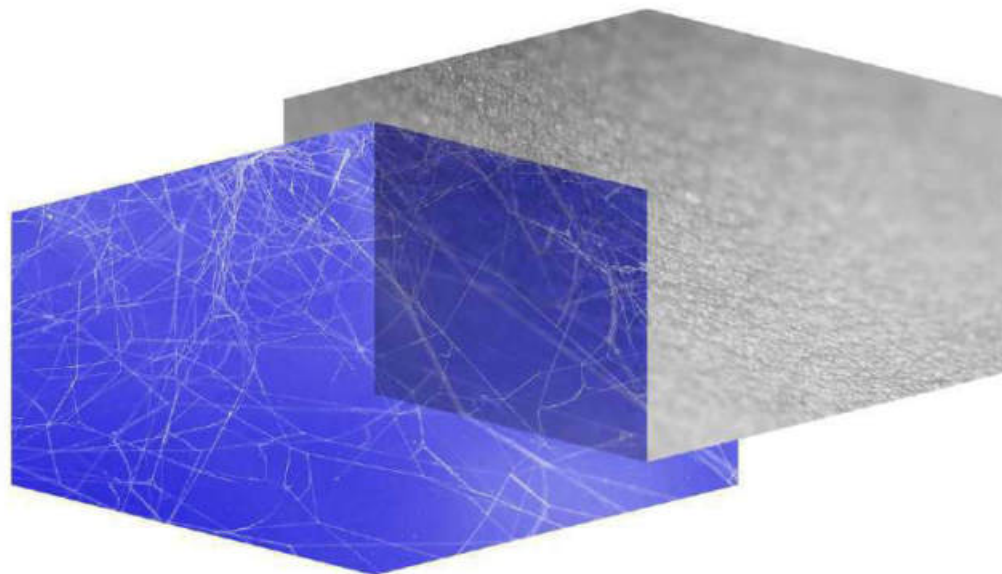
Ricerca Applicata

Tradurre l'innovazione continua in scenari di applicazione industriale

Governance Responsabile

Allineamento, etica, trasparenza e conformità alle normative e ai principi

FUSION AI LABS



Accelerare l'adozione **matura** e **responsabile** dell'Intelligenza Artificiale nelle organizzazioni europee attraverso **ricerca applicata**, sviluppo di **competenze**, e innovazione **collaborativa**.

I TRE PILASTRI STRATEGICI



Ricerca
Applicata e
Innovazione



Formazione e
attrazione
Talenti



AI
Responsabile
ed Europea



RICERCA APPLICATA E INNOVAZIONE



Parte da tecnologie **mature e consolidate** magari non **esplorate**
Identifica problemi specifici del **dominio** dell'organizzazione
Ricerca e testa soluzioni che adattano e integrano queste tecnologie al contesto
Valida l'impatto attraverso **pilot controllati** e **metriche** oggettive

FORMAZIONE CONTINUA E TALENTI

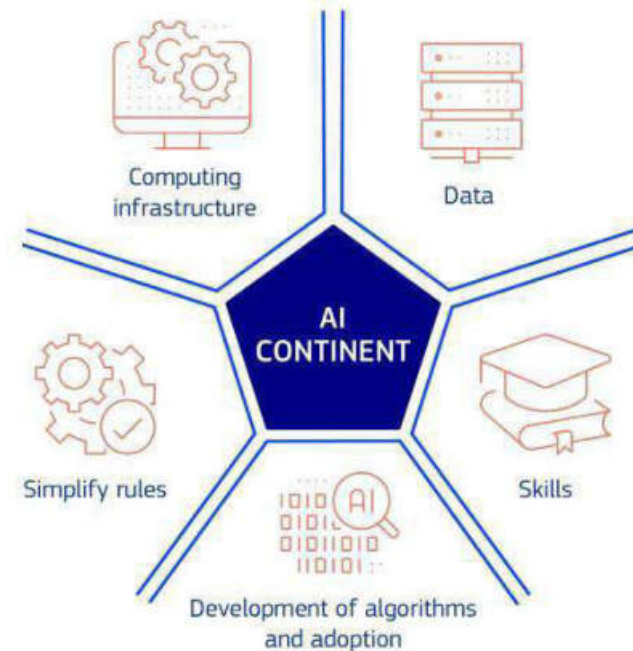
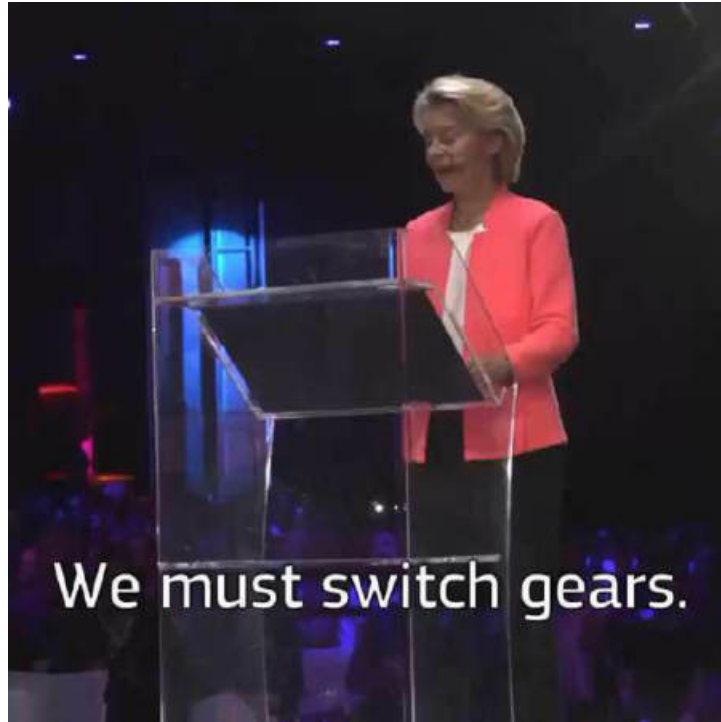


Costruire un **ambiente accogliente** e di **crescita** costante per i **giovani** talenti

Formazione **continua** per una tecnologia che evolve con enorme rapidità

Scambi e integrazione con il mondo delle organizzazioni per colmare il gap dell'**innovazione**

AI RESPONSABILE E EUROPEA

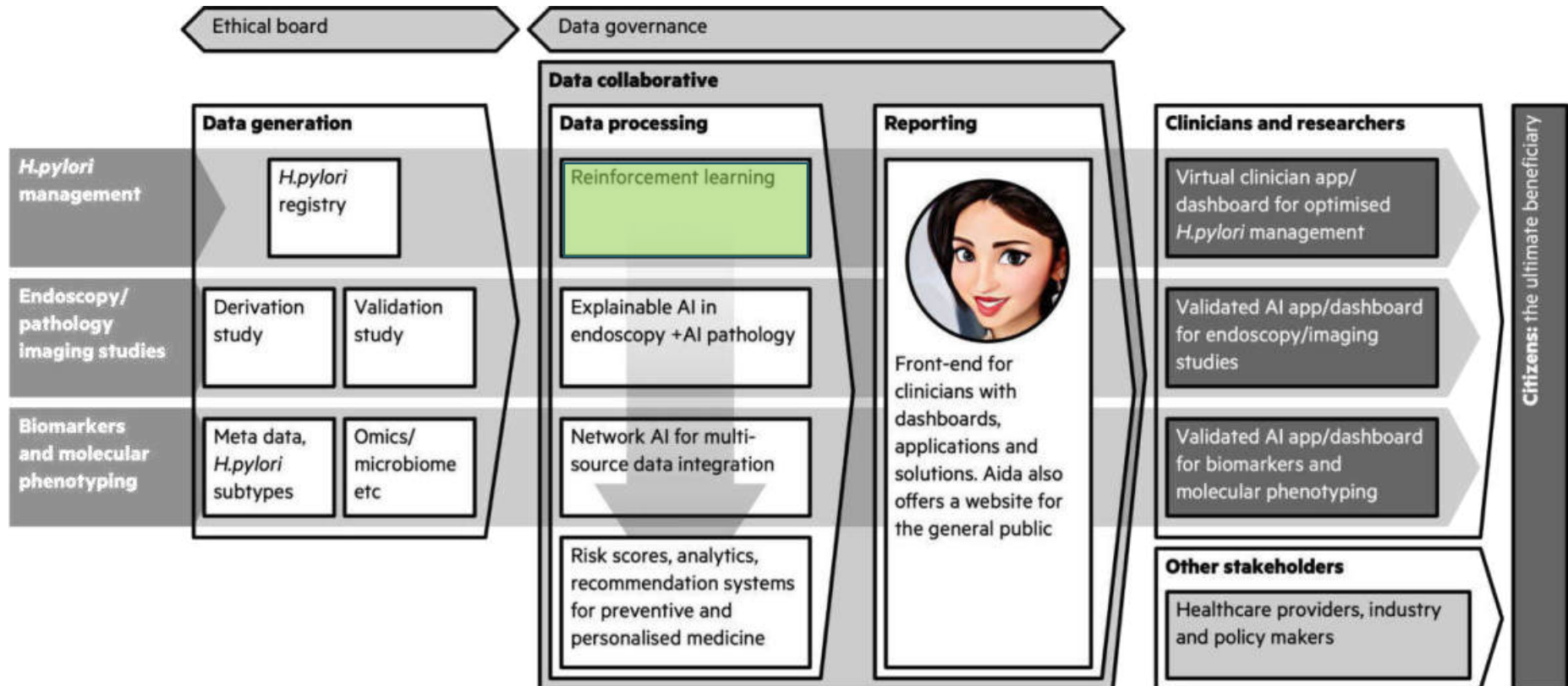


Supportare il percorso **Nazionale** ed **Europeo** verso un **AI Continent**
Che possa portare **valore** continuo e **consapevole**
E favorire uno sviluppo della società nelle **sfide** che affronterà



An Artificially Intelligent
Diagnostic Assistant
for gastric inflammation

<https://www.aidaeuproject.org/>



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UK Research
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