

AI IST KEIN TRAUM, ES IST EINE ENTSCHEIDUNG!









## Performance & Real-World Integration of Al



#### ${\mathscr P}$ Major Benchmark Gains (2023 ightarrow 2024)

MMMU: +18.8 pts, GPQA: +48.9 pts, SWE-bench: +67.3 pts
In some coding tasks, Al agents outperform humans under time pressure

#### Al Goes Mainstream

223 FDA-approved AI medical devices (vs. just 6 in 2015) Waymo provides 150,000 autonomous rides/week in the U.S. Baidu's Apollo Go robotaxis operate in multiple Chinese cities

#### Business Momentum & Productivity Gains

U.S. private Al investment: \$109.1B (12x China, 24x UK) 78% of organizations used Al in 2024 (up from 55% in 2023) Generative Al funding: \$33.9B (+18.7% YoY)

## Global Race & Rising Efficiency



#### U.S. Leads Model Output—China Closes the Gap

2024: U.S. (40 notable models), China (15), Europe (3)
Benchmark gaps (e.g., MMLU, HumanEval) nearly closed in 1 year
China leads in publications and patents

#### Al Becomes Cheaper & Greener

Inference cost (GPT-3.5-level): \$\\$280x (Nov 2022-Oct 2024) Hardware costs: \$\\$30\% annually, Energy efficiency: \$\\$40\%/year Open-weight models close performance gap to 1.7\%

# Regulation, Responsibility & Public Sentiment



#### Responsible AI Still Lags Behind

Al incidents rising, but RAI evaluations still rare
New safety benchmarks: HELM, AIR-Bench, FACTS
Governments more active: OECD, EU, UN, AU frameworks

#### Global AI Optimism is Divided

High optimism: China (83%), Indonesia (80%), Thailand (77%) Lower: Canada (40%), U.S. (39%), Netherlands (36%) Positive shift in Germany, France, Canada, UK, U.S. since 2022

#### Regulation & Public Funding Surge

59 U.S. federal AI regulations in 2024 (2x more than 2023)
Big investments: China (\$47.5B), France (€109B), Saudi Arabia (\$100B)

### Education, Science & the Frontier of Al



#### CS Education Expands—But Gaps Persist

<sup>2</sup>⁄<sub>3</sub> of countries now offer K−12 CS education (2x since 2019) Africa & Latin America show fastest growth U.S.: 22% rise in CS degrees over 10 years, but many teachers feel unprepared for Al

#### Al's Scientific Recognition

Nobel Prizes for deep learning & protein folding work Turing Award: Reinforcement learning breakthroughs

#### **Bottlenecks at the Frontier**

90% of top models come from industry (vs. 60% in 2023)

Training compute doubles every 5 month

Top model skill gap is narrowing: #1 vs. #10 fell from 11.9% → 5.4%















# Performance vs. Competence







«Ever since the 19th century, our country's prosperity has been based on synapses & technologies»



«Robust infrastructure drives strong economic performance»

Global Competitiveness Ranking 2024



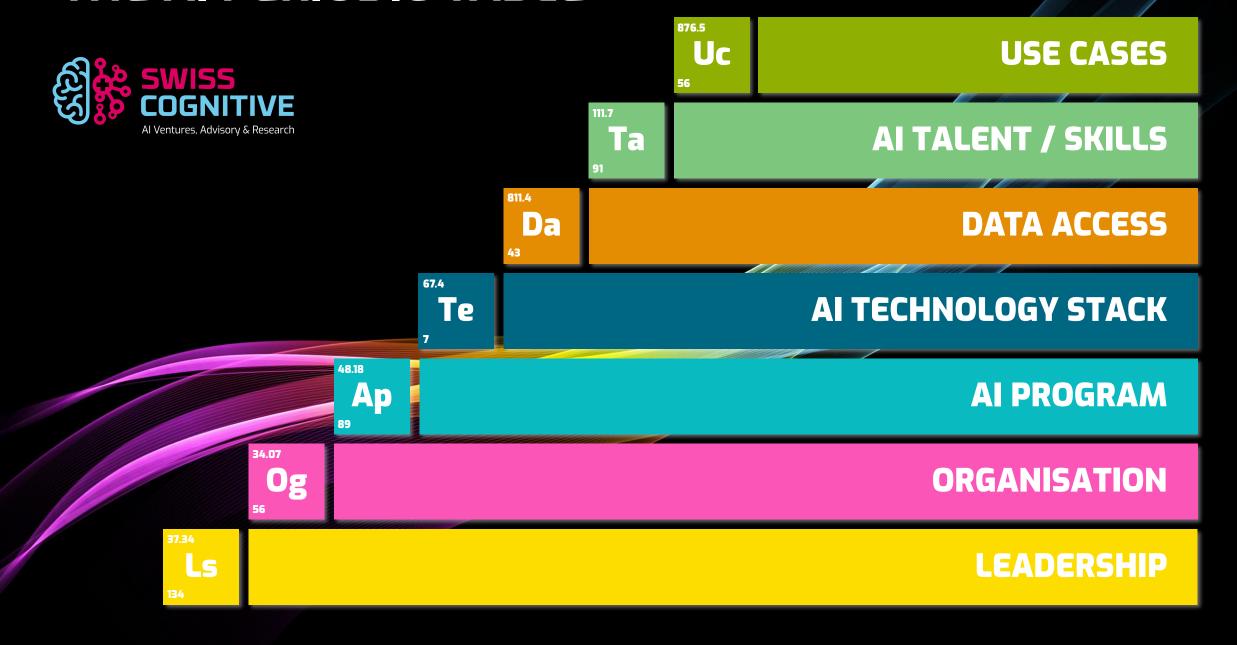
For 14 consecutive years, Switzerland has consistently ranked as the world's most innovative economy. 2024 Global Innovation Index by the World Intellectual Property Organization



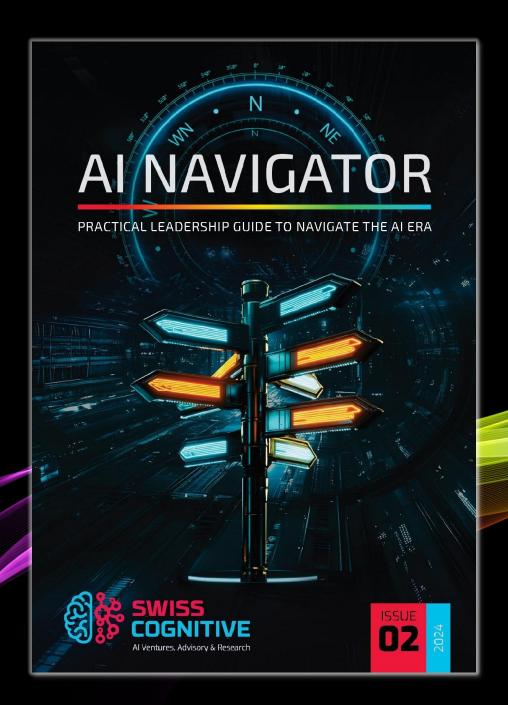




## THE AI PERIODIC TABLE











## The AI Power Couple - With a Passion to Share





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Al Ventures, Advisory & Research