AI Industry Global Economy Size Assessment

Teaser

AI Industry Analytics

Deep Knowledge Group

www.aiia.tech/economy

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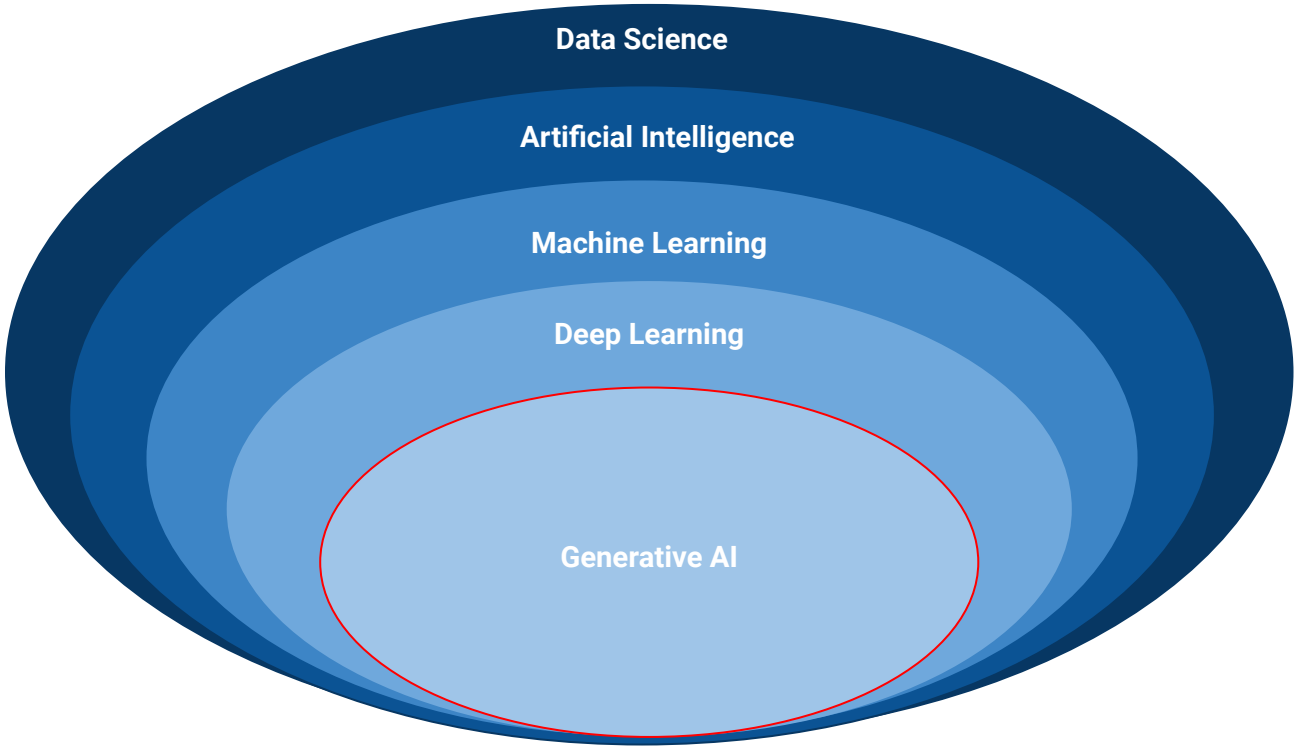
Source: *www.frameworks.technology/ai-industry*

Generative AI as a Part of a Broader AI Industry



Source: *www.aiia.tech/economy*

AI has become a diverse and intricate field that encompasses various disciplines, techniques, and applications. It blends computer science, mathematics, statistics, and engineering to develop intelligent systems capable of carrying out tasks that traditionally rely on human intelligence.

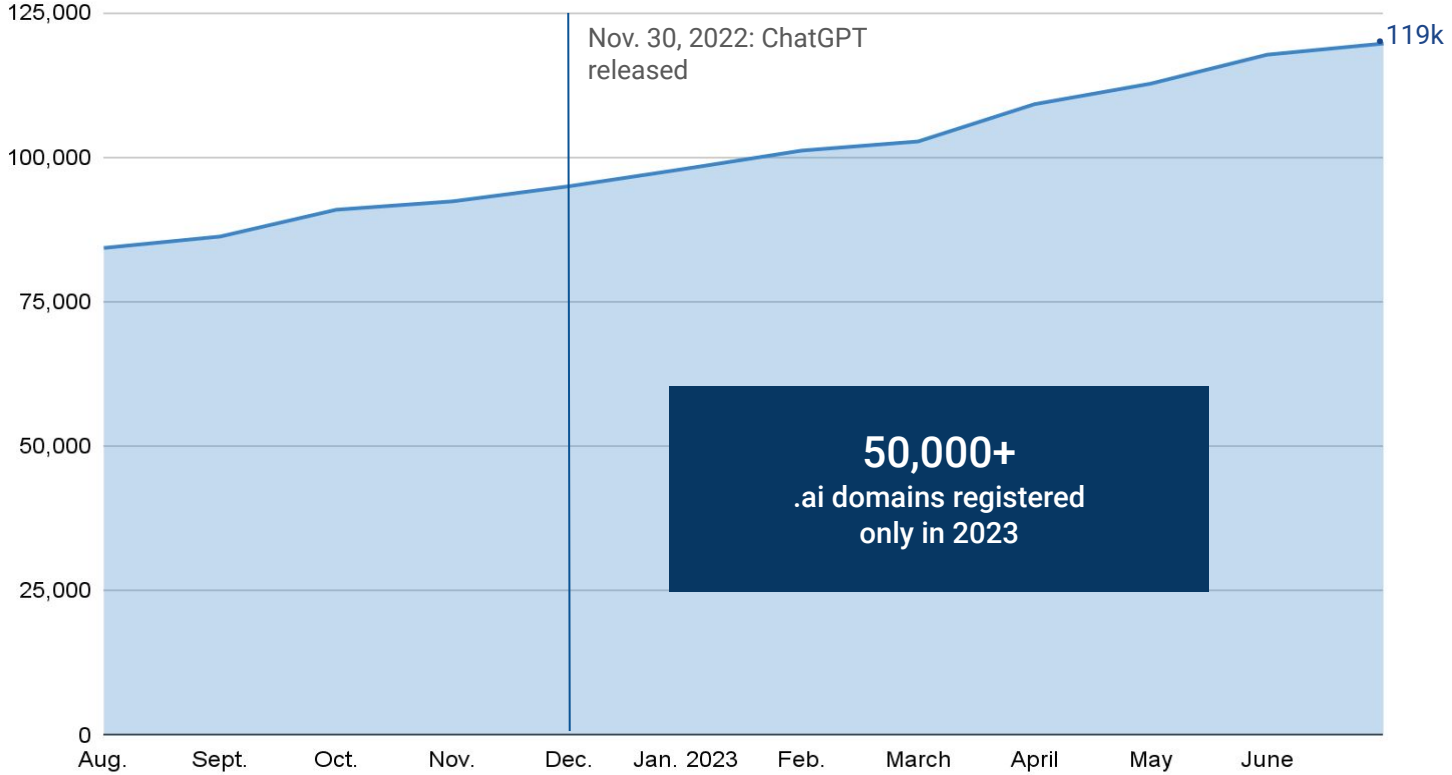
Generative AI refers to the subset of artificial intelligence focused on creating and generating new content, often indistinguishable from human-created content.

Advancements in text generation models (ChatGPT) and image generation models (Midjourney) have caused a rise in Generative AI.

However, it's essential to remember that Generative AI is just a part of a much broader AI field. In the future, other areas may rise in importance.

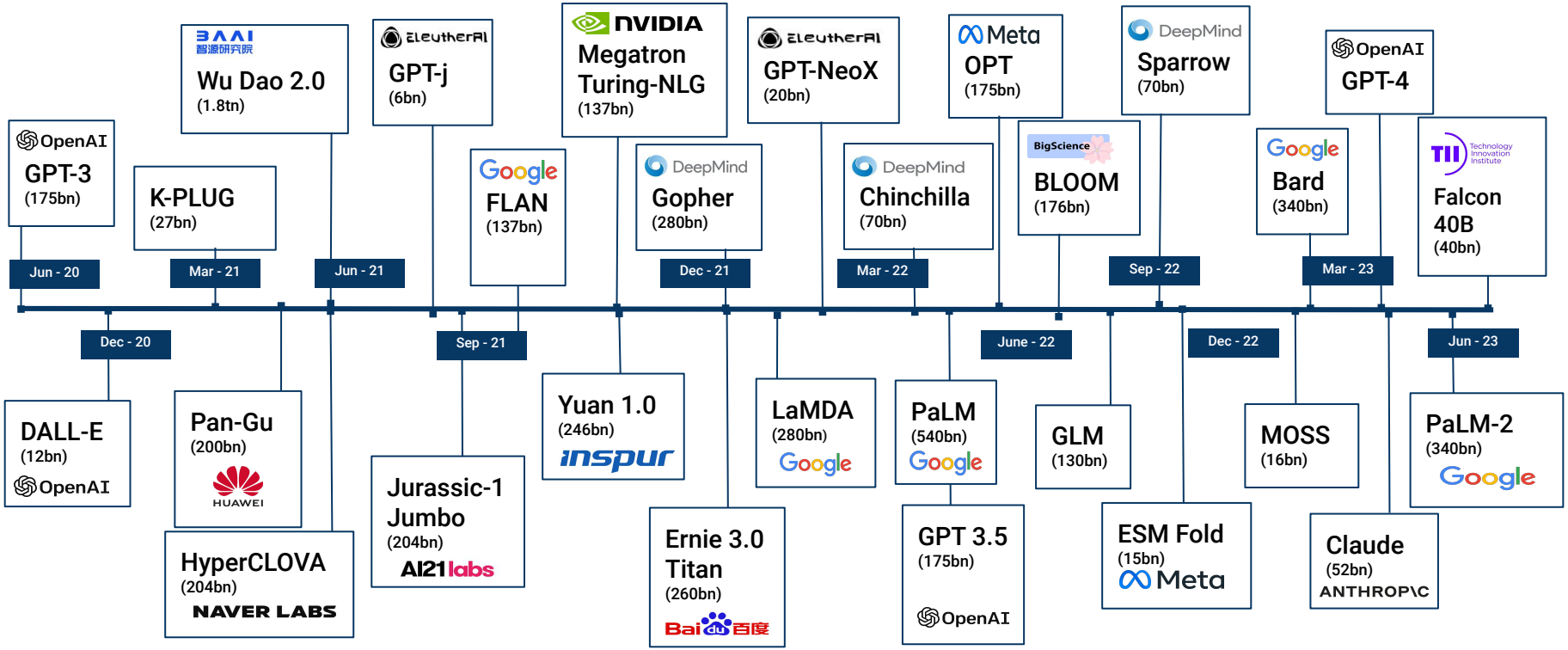
Trends of AI Companies

'.ai' Domain Zone Registrations



Source: *Domain Name Stat*

Global Open-Source AI Collaboration



Source: ***www.aiia.tech/economy***

Major AI Breakthroughs

Between **1997-2014** there were significant developments in the field of artificial intelligence. IBM Deep Blue won the Chess Championship in 1997, demonstrating a breakthrough in computer chess artificial intelligence. DeepMind achieved a significant milestone in 2014 by self-teaching itself to win a computer game. This accomplishment demonstrated the power of their AI algorithms and techniques in conquering complex gaming challenges.

1997
IBM Deep Blue
Won the Chess Championship

2014
DeepMind
Self-taught itself to Win the Computer Game

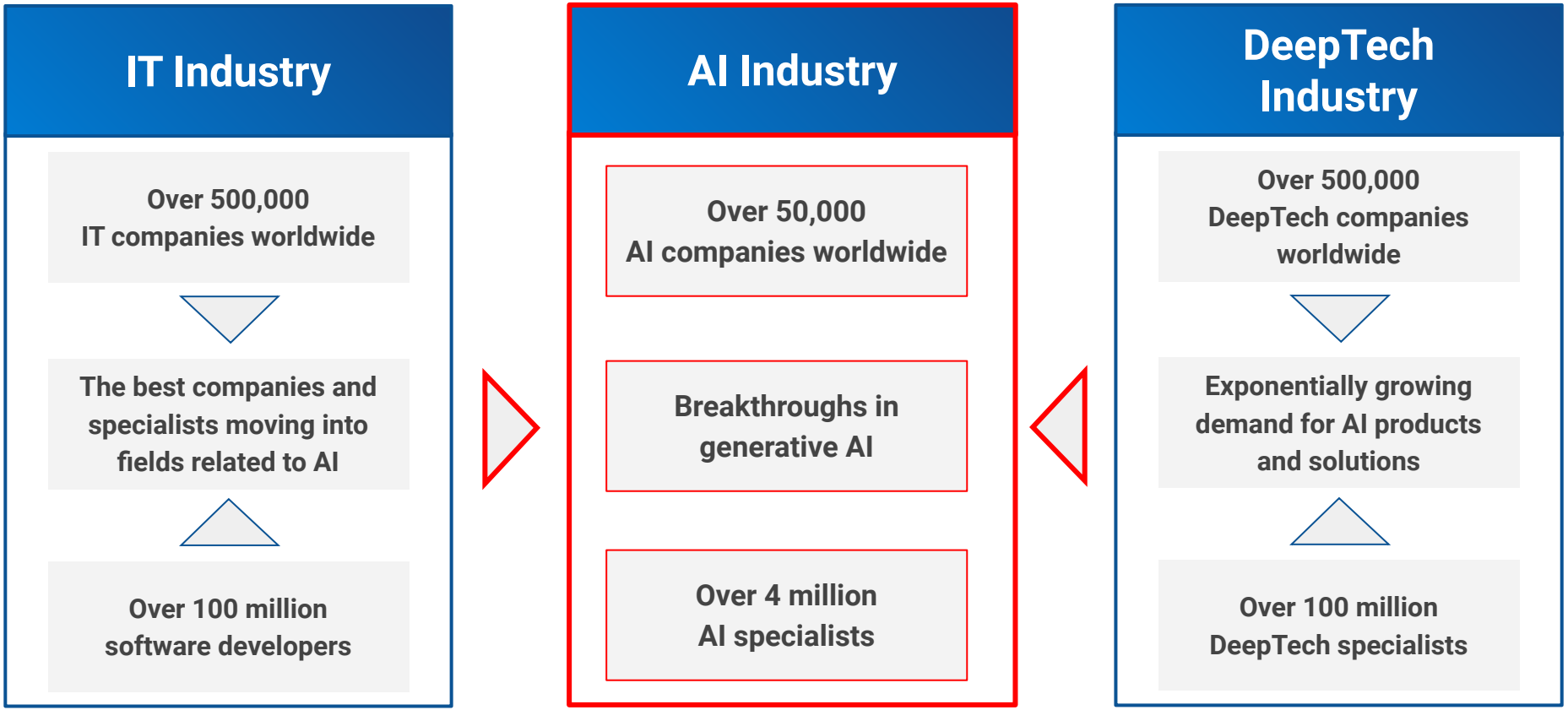
2016
AlfaGo Moment
DeepMind
Won the Go Game Championship

2023
Chat GPT
Open AI
Democratization and Consumerization of AI

Between **2016-2023**, there have been significant shifts in the field of AI. AlphaGo's victory in the game of Go in 2016 was a big moment, demonstrating the power of AI in strategic thinking. This period saw the culmination in 2023 by democratization and consumerization of access to AI provided by OpenAI Chat GPT and its marketplace.

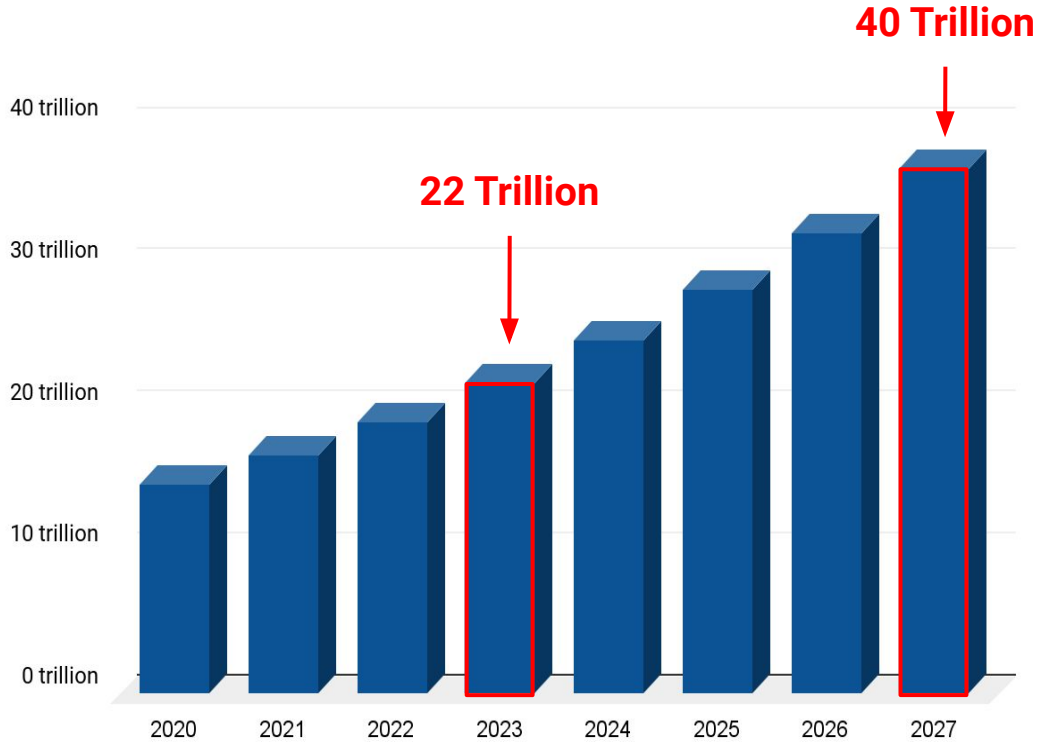
Source: *www.aiia.tech/economy*

Fusion of IT and DeepTech Industries with AI Industry



Source: ***www.aiia.tech/economy***

Global AI Economy Size Projections (USD)



Note: Global AI Economy Size - estimated total value of global AI assets.

Source: *www.aiia.tech/economy*

$22 Trillion AI Economy Size

50,000 AI Companies

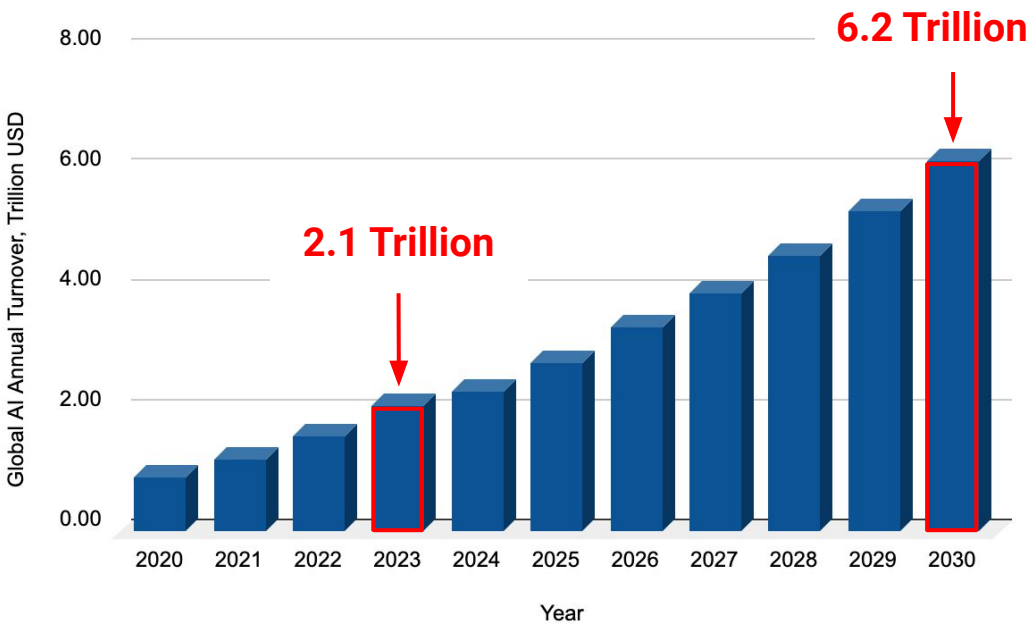
5 Million Specialists

AI Industry Analytics defines the AI Economy as an ecosystem of entities whose activities are related to utilizing, developing or supplying AI technologies.

- **Publicly Traded AI corporations:**
  USD 5T / 750 Corporations / 1.4M Specialists
- **Private AI companies:**
  USD 1.5T / 50,000 Companies / 2.5M Specialists
- **Scientific Ecosystem:**
  USD 2.2T / 1M Specialists
- **Investors valuation:**
  USD 3T / 20,000 Investors
- **Government-sponsored projects:**
  USD 200B / 0.1M Specialists
- **Derivatives market:**
  USD 10T

By 2027, the global AI Economy size is projected to reach **USD 40 trillion.**

Global AI Economy Turnover Projections (USD)



Note: Global AI Turnover Size - estimated total value of AI goods and services sold annually.

Source: *www.aiia.tech/economy*

$2.1 Trillion AI Economy Annual Turnover

AI technologies are beginning to add trillions of dollars in value to the global economy across various sectors, including banking, high-tech, and life sciences.

The generative AI technology is currently the main contributor to the market growth. The technology is poised to transform roles and boost performance across functions such as sales and marketing, customer operations, and software development.

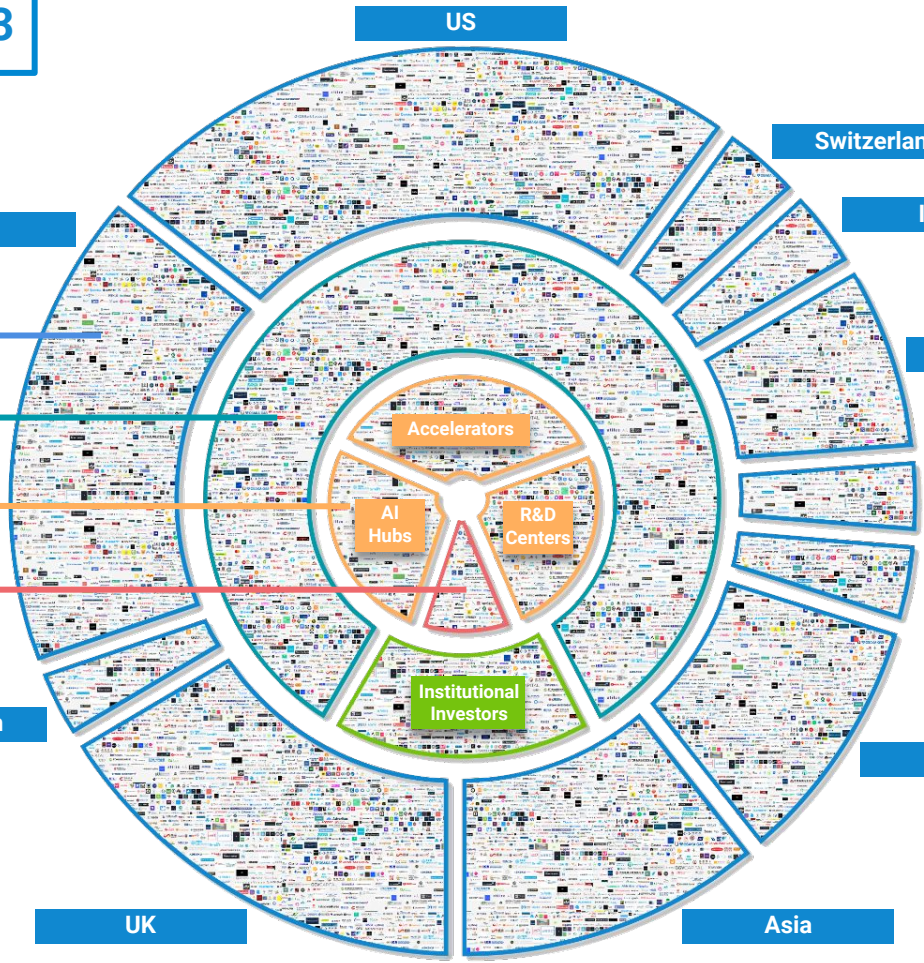
The speed at which generative AI technology is developing is also noteworthy, with new advancements coming in quick succession.

AI market growth in the upcoming years will be accelerated by the development of multimodal AI systems, autonomous multistage reasoning AI agent, and API integrations into different businesses outside the AI industry.

By 2030, the global AI Economy turnover is projected to reach **USD 6.2 trillion.**

Global AI Industry 2023

Companies – 50,000
Investors – 20,000
R&D Hubs – 2,500
Governmental Organizations – 300



AI Industry Analytical Agency

Global AI Ecosystem

www.ai-ecosystem.org/mindmaps

View More at
www.ai-ecosystem.org

AI Industry Analytical Agency

AI Industry Ecosystem by Sectors – 50,000 Companies

Global AI Ecosystem

AI Infrastructure

Cloud Computing

Computing Hardware

AI Optimization & Development Software

Semiconductors

NanoTech Electronic Components

AI in Finance

FinTech / Digital Banking

WealthTech & Asset Management

InsurTech

Quant Finance

Institutional Brokerage

AI in BioMed

MedTech

HealthTech

PharmaTech

Healthcare Administration

Longevity & Wellness

Industrial Applications

Manufacturing

Retail & E-commerce

Media & Entertainment

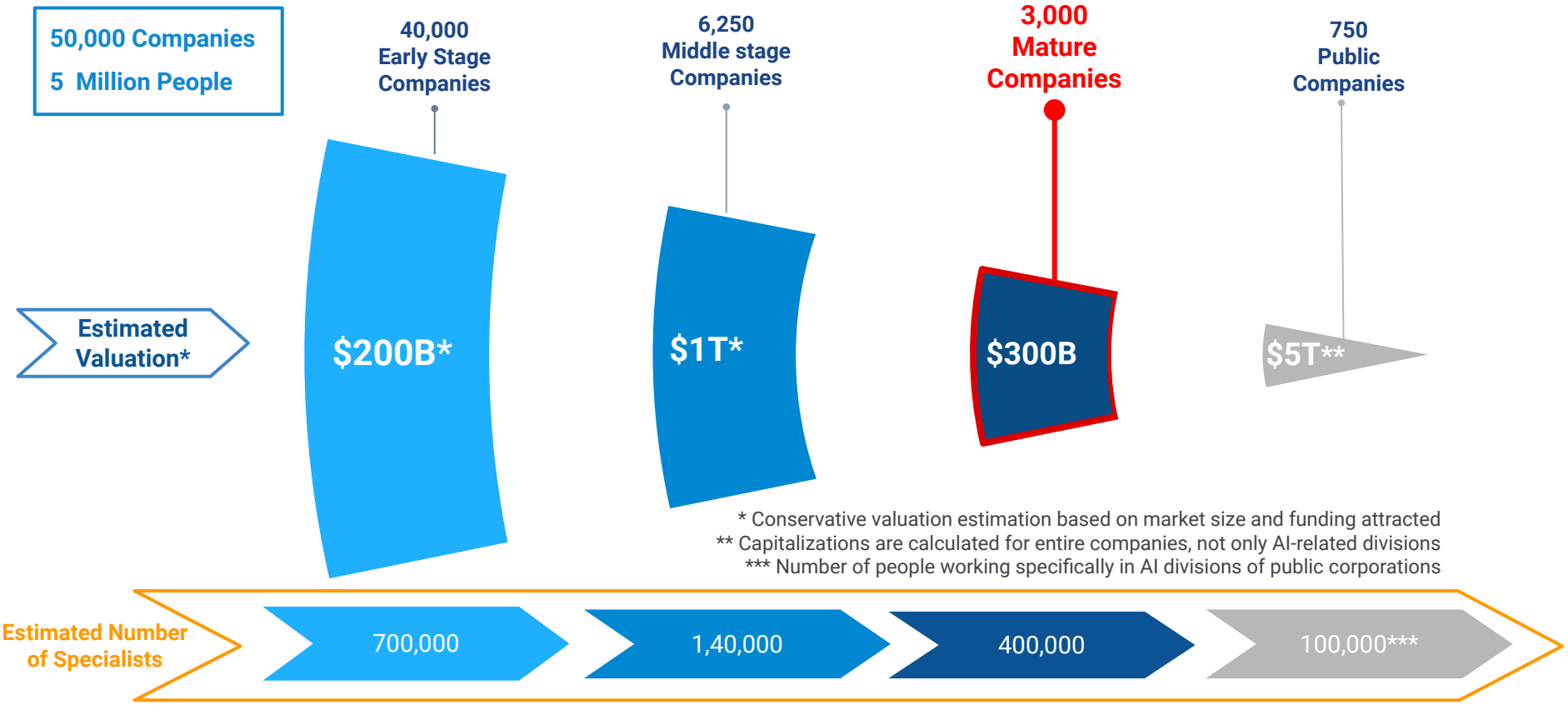
Transportation & Logistics

Construction Tech

Others

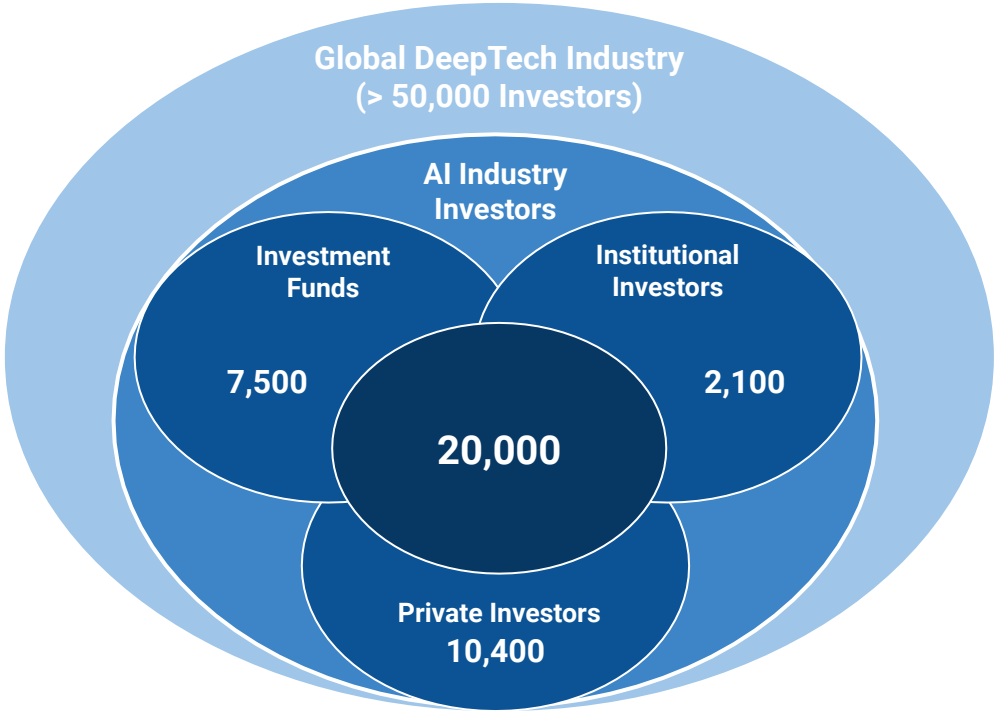
Source: ai-ecosystem.org

AI Industry – Significant Business Opportunity and Market Capacity



Source: ***www.aiia.tech/economy***

The Convergence of DeepTech and AI Investors Could Open New Opportunities



Source: *www.aiia.tech/economy*

AI Industry is one of the dynamic subclasses within the vast domain of **DeepTech**. **DeepTech** encompasses a wide range of cutting-edge technologies that push the boundaries of innovation, and **AI** is undoubtedly a prominent player in this field. With its ability to enable machines to mimic human intelligence, **AI** has revolutionized numerous industries and paved the way for unprecedented advancements.

When it comes to investments in the **AI** Industry, the landscape often overlaps with other **DeepTech** sectors. **Many investors** recognize the immense potential of **AI** and understand that it is an integral component of numerous emerging technologies. As a result, the same investors who support **DeepTech** ventures often invest in **AI-focused companies**. They recognize the synergy between different technological advancements and aim to diversify their portfolios by participating in various **DeepTech** projects.

AI Economy Size Preliminary Assessment by Country

The AI economy has experienced remarkable growth in recent years, revolutionizing various sectors and transforming the way we live and work. Assessing the size of the AI economy on a country-by-country basis provides valuable insights into the global AI landscape. While this report does not focus on ranking, it serves as an illustrative snapshot of the AI market, showcasing the AI economy size preliminary assessment by country.

By AI Economy Size, 2023

US	USD 9.7 T
UK	USD 1.8 T
GERMANY	USD 800 B
CANADA	USD 650 B
FRANCE	USD 600 B
CHINA	USD 450 B
SWITZERLAND	USD 400 B
ISRAEL	USD 115 B

By Government Spending on AI

US	USD 100 B
UK	USD 20 B
CANADA	USD 10 B
CHINA	USD 10 B
GERMANY	USD 10 B
FRANCE	USD 10 B
SWITZERLAND	USD 5 B
ISRAEL	USD 5 B

By Number of AI Specialists

US	2,600,000
UK	450,000
CHINA	350,000
CANADA	200,000
SWITZERLAND	170,000
GERMANY	120,000
FRANCE	100,000
ISRAEL	25,000

Source: ***www.aiia.tech/economy***

AI Economy Growth Forecasting for 2027

Country-Specific Forecast

 US	USD 17T
 UK	USD 3T
 GERMANY	USD 1.2T
 CANADA	USD 700B
 FRANCE	USD 1.5T
 CHINA	USD 1T
 SWITZERLAND	USD 900B
 ISRAEL	USD 180B

Industry-Specific Forecast

AI Industry
Technology Infrastructure
USD 18T

Finance Industry
USD 7.5T

BioTech & HealthTech
USD 7T

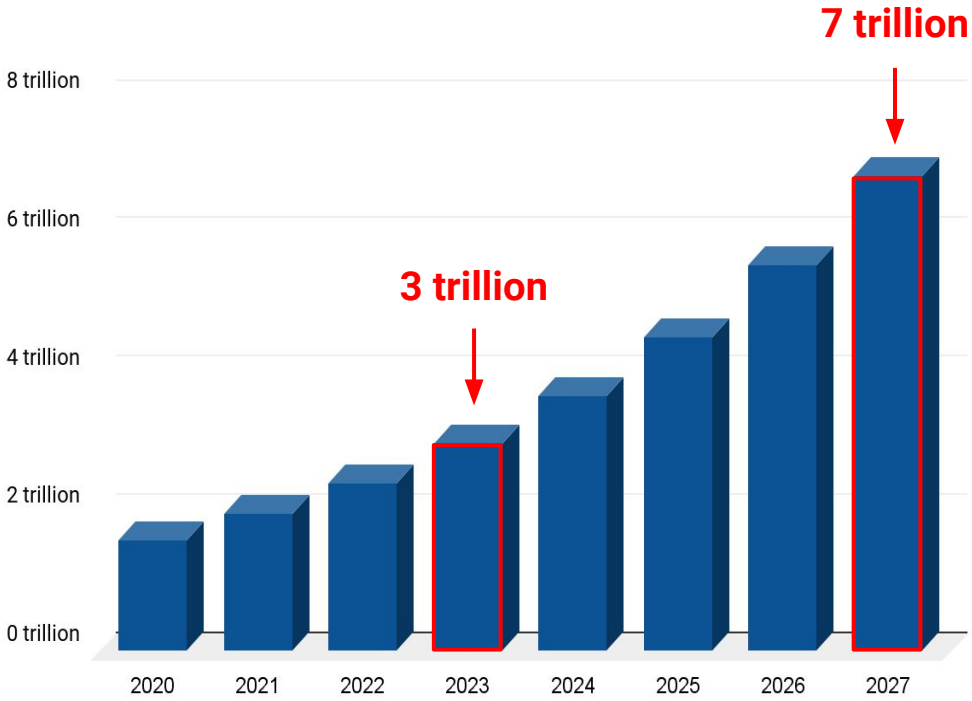
Source: ***www.aiia.tech/economy***

AI Economy Size Preliminary Assessment by Industry

Industry / Parameters	AI Technology Infrastructure	BioTech & HealthTech	Finance Industry
Total Industry Size (USD)	10 Trillion	3 Trillion	4 Trillion
AI Companies	8,000	6,000	6,000
AI Specialists	800,000	400,000	300,000
AI Patents	36,000	5,585	27,545
AI Sectors	5	9	8

Source: ***www.aiia.tech/economy***

Global AI in BioTech & HealthTech Industry Size Projections (USD)



Source: *www.aiia.tech/economy*

$3 Trillion AI in BioTech Industry Size

6,000 AI in BioTech Companies

400,000 Specialists

The global AI in BioTech & Healthcare Industry size is estimated at **USD 3T** in 2023 and is projected to reach around **USD 7T** by the year 2027.

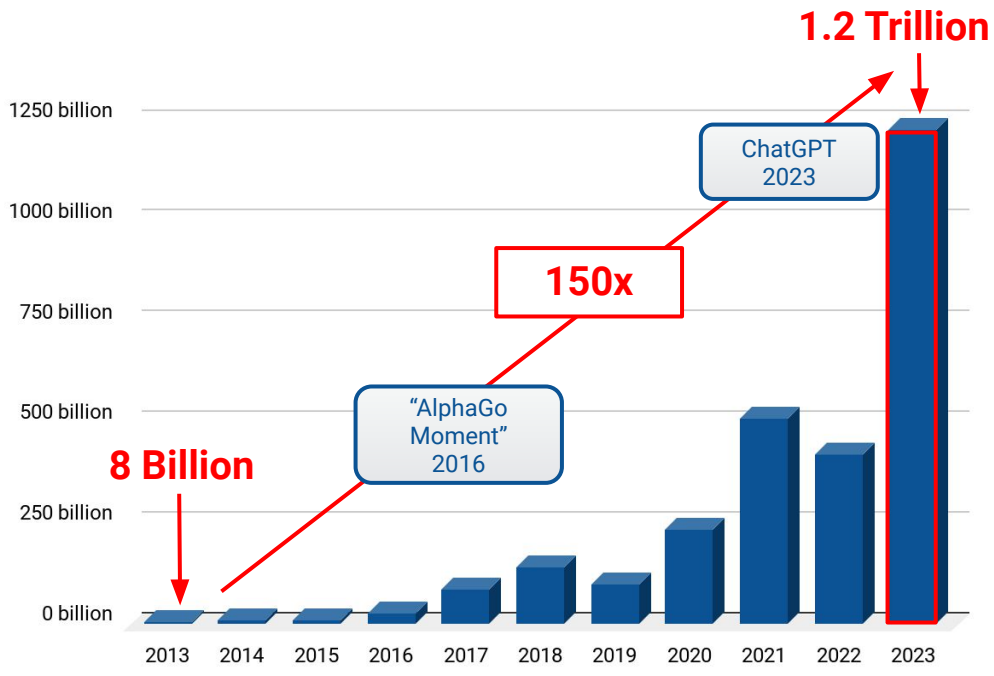
The AI in BioTech & Healthcare Industry consists of **9 Industry Sectors** including Longevity & Wellness, MedTech, Medical Internet of Things, PharmaTech, HealthTech, Healthcare InsurTech, BioTech & Healthcare Administration, Medical BioTech and Industrial BioTech.

The growth of the **BioTech & Healthcare Industry** has been driven by recovery from the downward trend in the market, which is also reinforced by the greater integration of artificial intelligence technologies in the biotech industry.

Cementing its position at the forefront of innovation, the BioTech & Healthcare Industry has generated a substantial **5,585 patents,** notably in key AI applications such as diagnostic tools, genomic analysis, personalized medicine, drug discovery and advanced medical technology.

Notable Example: Nvidia – Leading Corporation in AI Infrastructure

Capitalization of Nvidia (USD)



Source: *www.aiia.tech/economy*

- In 2023, **Nvidia experienced** impressive financial success, fueled by **substantial earnings from video cards and AI investments.** This resulted in doubling of the company's market capitalization compared to previous years, solidifying its position as the *leading corporation in the Technology Infrastructure industry*.
- **Nvidia chips are actively used** by ChatGPT and other customers developing AI products. Nevertheless, it is worth noting that gaming hardware is still one of the company's main sources of revenue. This is one of the reasons the company implements AI in its products.
- Nvidia has enjoyed significant success with its graphics cards, which have become a hit with gamers and visualization and graphics professionals. The company has been working hard to develop powerful graphics processing units **(GPUs) that have become indispensable for the development of AI technologies**.
- At next month's GTC, Nvidia's annual AI conference, over 3.5 million developers working on its platform will be reached.
- Nvidia has built a strong ecosystem that includes the chips, associated hardware, and a full suite of software and development systems that are optimized for their systems. This **combined hardware and software platform** marks Nvidia as one of the most efficient companies in generative AI.

US AI Economy Size in 2023: $9.7 Trillion

AI Industry Analytics defines the AI Economy as an ecosystem of entities whose activities are related to utilizing, developing or supplying Artificial Intelligence technologies.

- **Publicly Traded AI corporations:**
  USD 3T / 220 Corporations
- **Private AI companies:**
  USD 600B / 15,000 Companies
- **Government-sponsored projects:**
  USD 100B / 200 Projects
- **Scientific ecosystem:**
  USD 1T
- **Investors:**
  USD 1T / 6,500 Investors
- **Derivatives market size:**
  USD 5T
- **AI R&D Centers and Hubs:**
  700

By 2027, the US AI Economy size is projected to reach **USD 17 trillion.**

Projected to Reach 17 Trillion USD in 2027

Source: *www.aiia.tech/economy*

UK AI Economy Size in 2023: £1.44 Trillion ($1.8 Trillion)

AI Industry Analytics defines the AI Economy as an ecosystem of entities whose activities are related to utilizing, developing or supplying Artificial Intelligence technologies.

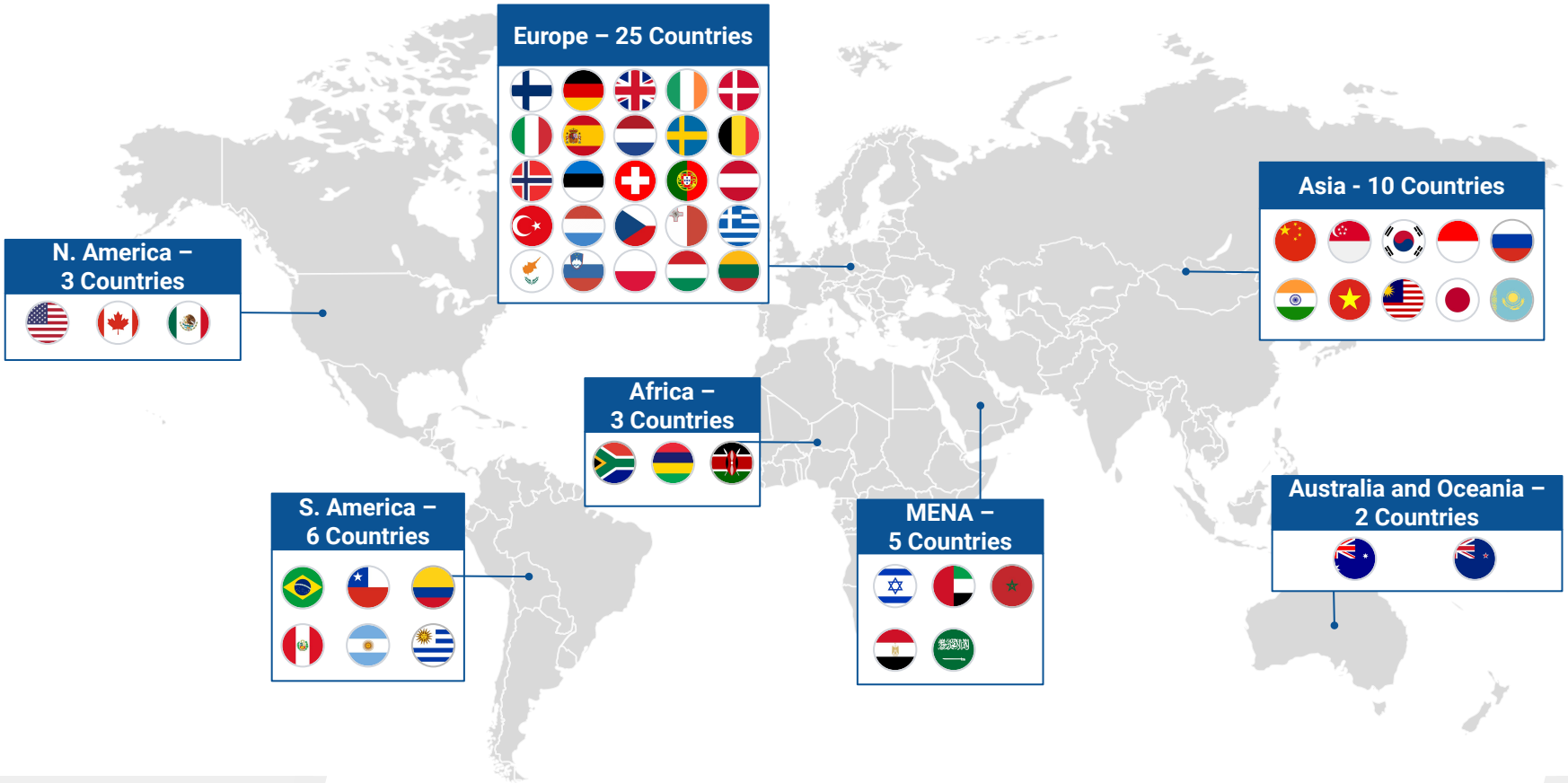
- **Publicly Traded AI corporations:** USD 250B / 90 Corporations
- **Private AI companies:** USD 100B / 6,850 Companies
- **Government-sponsored projects:** USD 20B / 100 Projects
- **Scientific ecosystem:** USD 200B
- **Investors:** USD 250B / 4,100 Investors
- **Derivatives market size:** USD 1T
- **AI R&D Centers and Hubs:** 350

By 2027, the UK AI Economy size is projected to reach **USD 3 trillion.**

Projected to Reach 3 Trillion USD in 2027

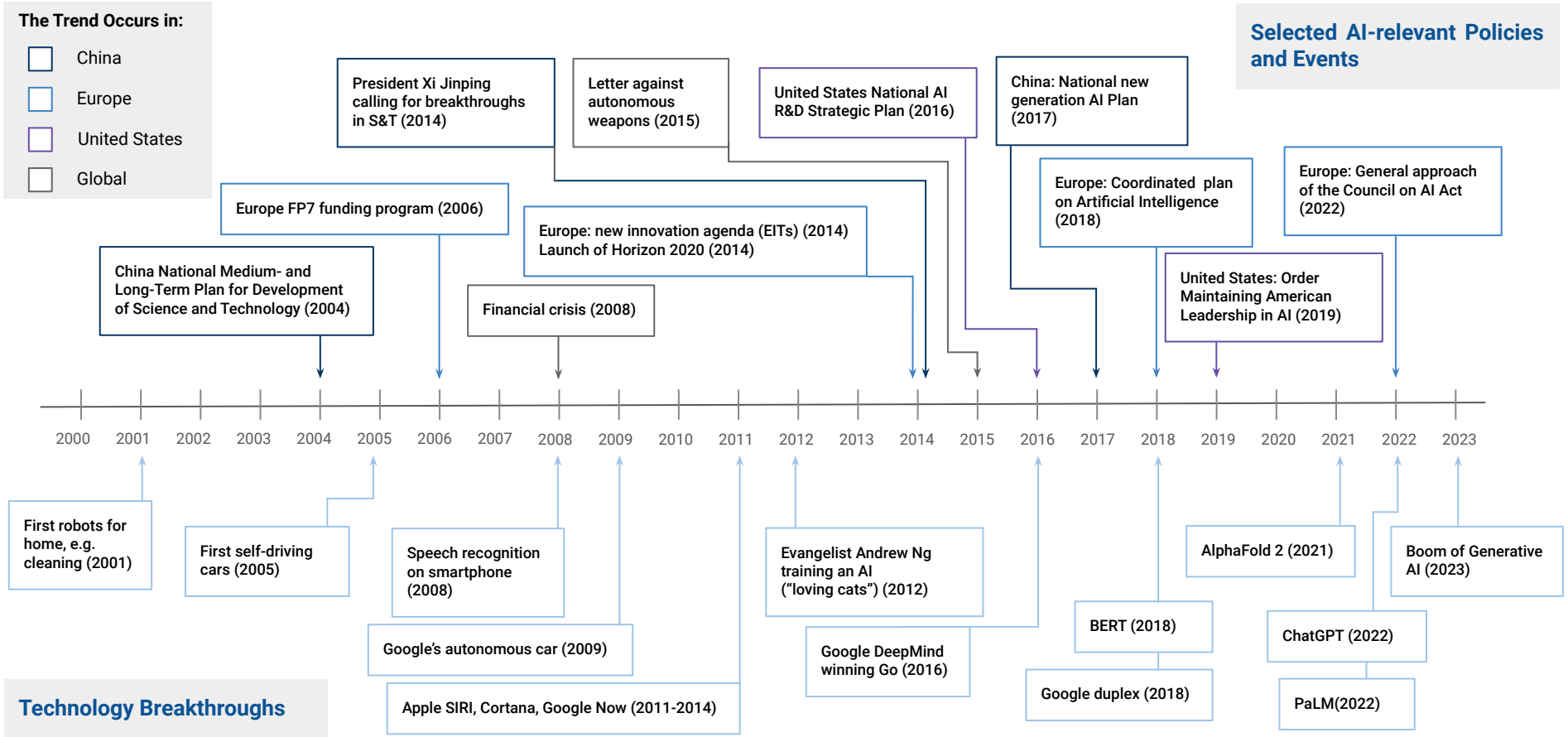
Source: *www.aiia.tech/economy*

AI National Strategies by Region



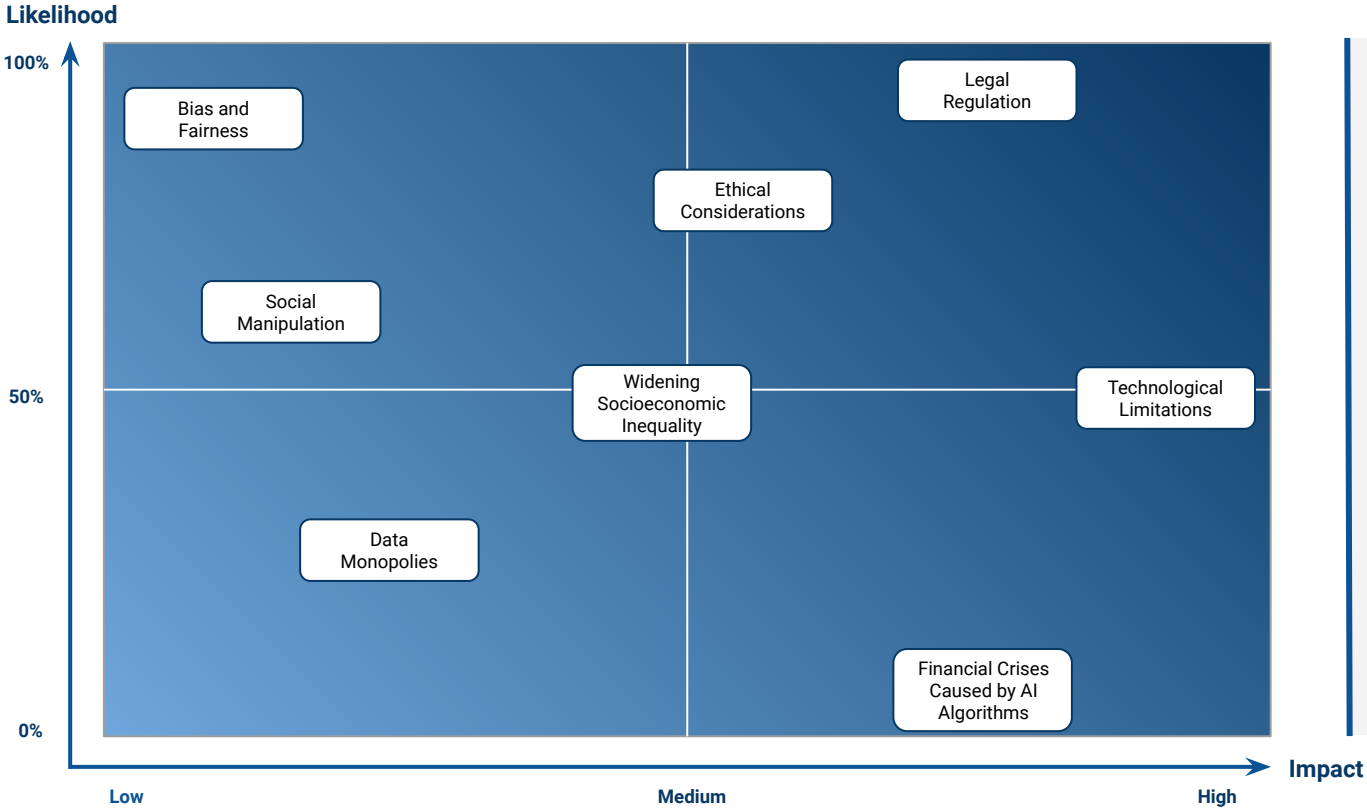
Source: ***www.aiia.tech/economy***

Selected AI-relevant Policies



Source: *elsevier*

Potential Threats, Limitations and Risk Factors to AI Economy Growth



The rapid growth of the Artificial Intelligence economy presents vast opportunities for innovation, productivity enhancement, and economic progress.

AI technologies have the potential to revolutionize various industries, drive automation, and improve decision-making processes.

However, alongside the immense possibilities, there are also potential threats, limitations, and risk factors that can impede the growth and realization of the full potential of the AI economy.

Source: ***www.aiia.tech/economy***

AI + API => AI Revolution

ChatGPT reached
100m users
In two months and became the fasted - growing consumer app in history

Nvidia surpassed
$1tn
in market capitalisation

AlphaFold saved
400m years
Of research progress by predicting the 3D shape of 200m proteins

The growth in the number of AI startups using the API of various AI companies in 2023 increased by
3x
times

Growth in AI publishing has been greatest in the past 5-6 years, with the relative share of AI publishing rising from **2.9%** of all publications

SaaS AI API usage increased
1,300%
from Nov-22 until May-23

AI Revolution

.ai domain registrations grew
6x
faster than .com over the last year

Knowledge workers see a
30-40%
Increases in productivity by using ChatGPT

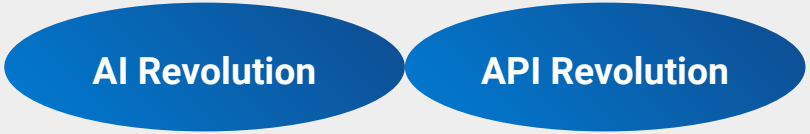
Increasing the learning rate and quality of Neural Networks. Studies have shown that this approach can lead to performance gains of up to
30%
in terms of accuracy and precision

Over the past 5 years, the number of patent applications related to AI technologies has increased by an average of
28%

Source: *GP Bullhound The State of AI*

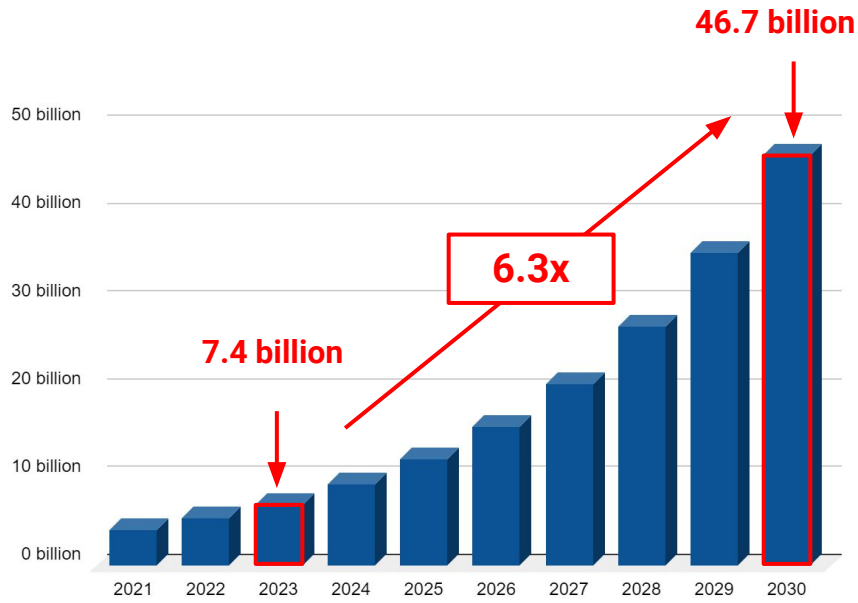
Fusion of AI and API Revolutions

AI + API = Fusion Reaction



- The API market is set to rise in 2023 as companies focus on offering advanced capabilities while attracting and retaining top developer talent.
- In 2023, APIs will drive data management, enabling enterprises to gain insights and control costs without relying heavily on specialized engineers and data scientists.
- In 2023, we will witness a significant shift to cloud-native architectures and a stronger focus on multi-cloud and hybrid cloud structures. This will drive an explosion of APIs, fueling further growth in the API economy.

API Market Size, 2021 - 2030, USD



Source: *rapidapi*

About AI Industry Analytics

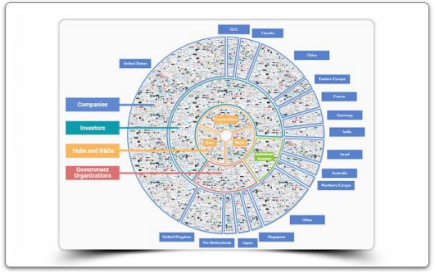
AI Industry Analytics (AIIA) is an analytical agency that has created the world's first, definitive analysis on the global AI ecosystem of companies, investors, and hubs. By combining the power of market analytics and investment data with advanced algorithms and machine learning techniques, AIIA provides unparalleled insights and solutions in real time.

In addition to providing comprehensive solutions for businesses aiming to make better investment decisions and financial institutions seeking to optimize their portfolios, AIIA also monitors the development of AI companies and investors. By doing so, AIIA is able to provide valuable information to its clients on the latest trends and developments in the AI industry.

AI Industry Analytics IT Platform Components

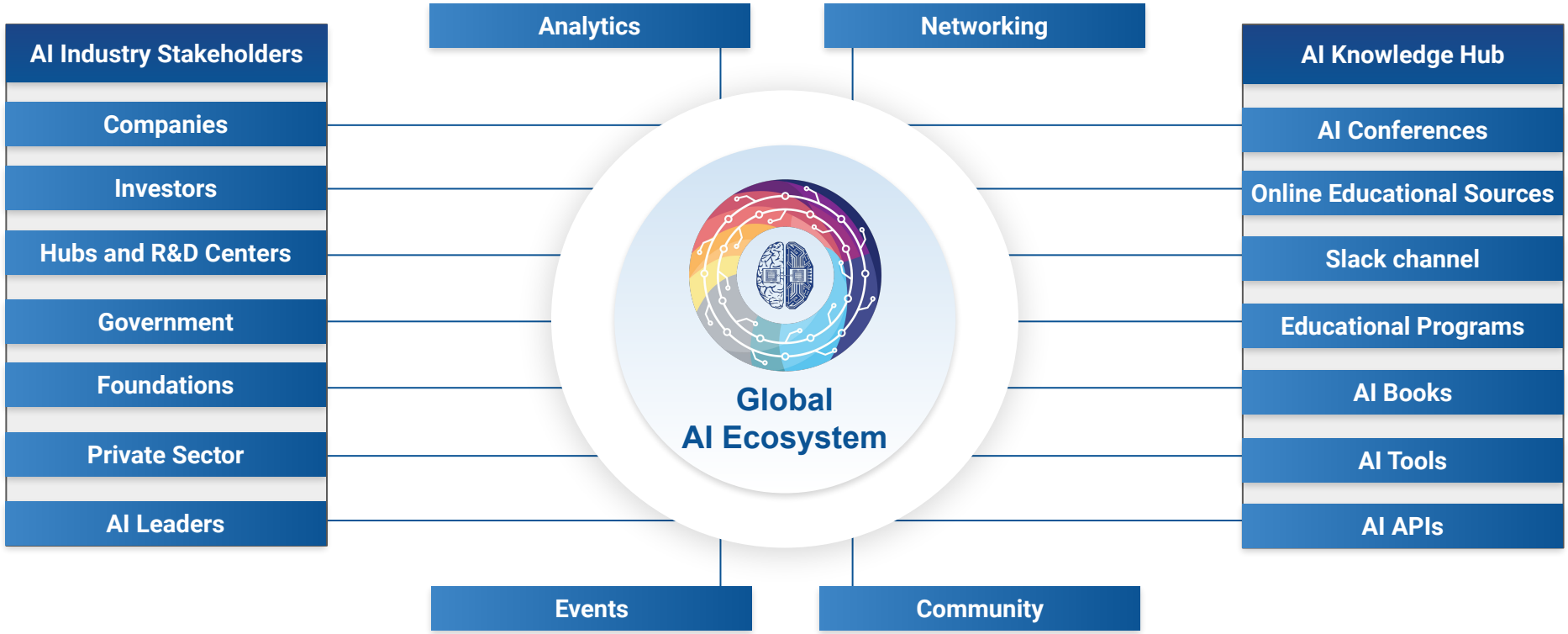
AI Industry Big Data Analytics Dashboard

Solutions



Global AI Ecosystem

About Global AI Open Sources Platform



About Tech Finance Platform Concept

Tech Finance Platform Concept

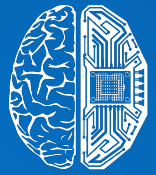
Private Companies Benchmarks | Public Companies Benchmarks | Portfolio Benchmarks | Methodology Summary

The complexity of AI economy requires providing investors and financiers with relevant opportunities and risk management tools. The Tech Finance platform delivers a set of automated data-driven solutions and tools to structure, emulate, compare, analyze, rank, and issue various financial products connected to the performance of the entities in global AI industry. The platform converts different types of conventional and alternative AI assets into liquid, bankable and tradable products while supplying the users with quantifiable AI-driven analytics to de-risk and commoditise their investments.

It consists of a financial product constructor and analytical/forecasting engine to enable investment decision making in fast, knowledgeable, and efficient way. The set of analytical tools is powered by DKG Big Data Analytics System.

View more

Rankings	Indices	Financial products
Companies	Companies	Derivatives
Alternative assets	Alternative assets	Structured products
Regions	Macro indicators	Securities
Sectors	Composite indices grouped by: industry, region, technology, market	Other products



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Ecosystem

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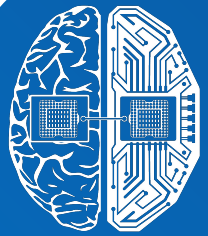

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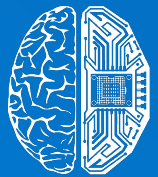

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