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7 AI Trends Investors Need to Watch

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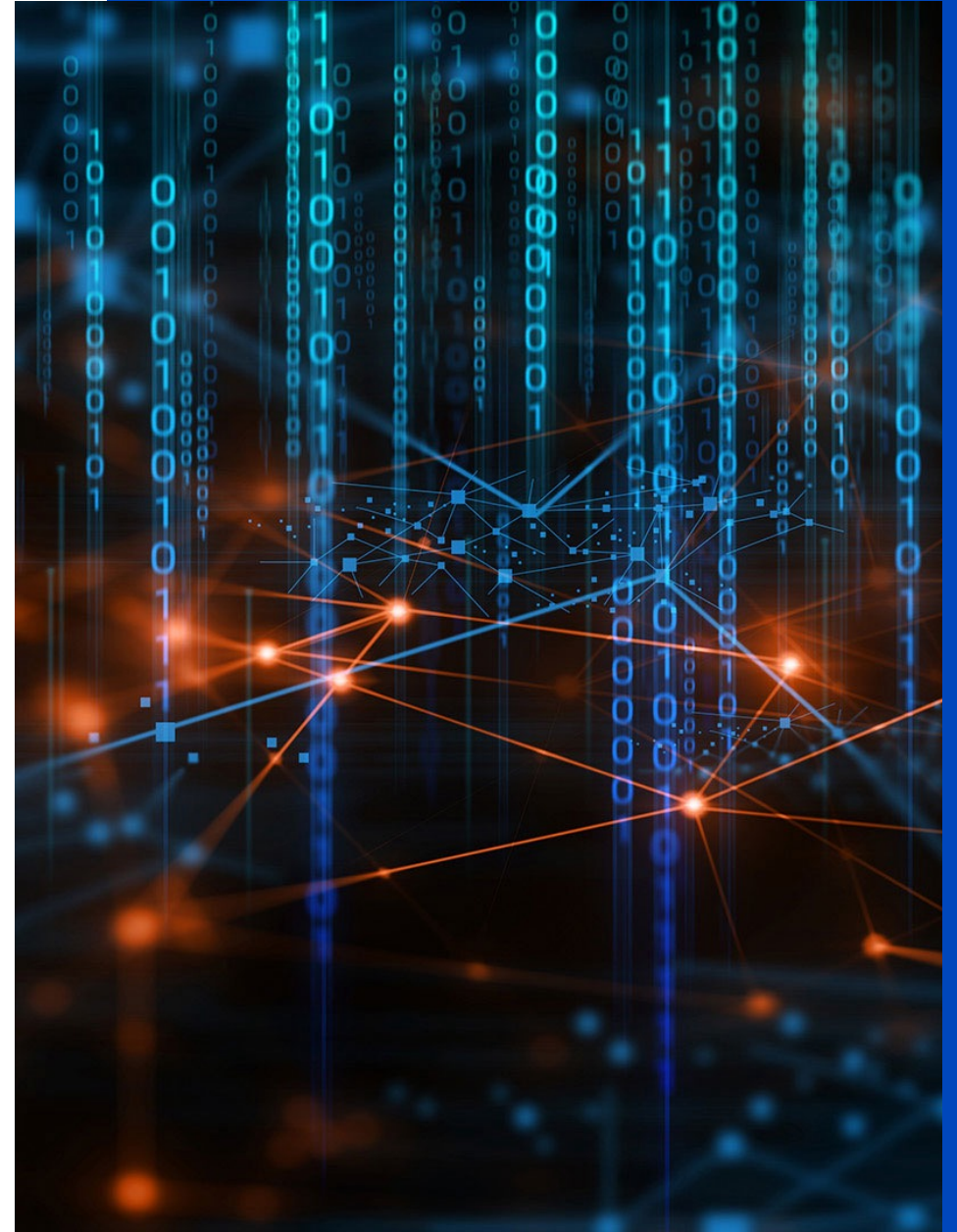
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September 2024

7 AI Trends Investors Need to Watch

Interactive Brokers Webinar



What has changed since 1997 when Garry Kasparov met his match?



Source: World chess champion Garry Kasparov playing IBM's Deep Blue computer in 1997 © AFP.

Or even as recently as 2016 when Lee Sedol played Alpha Go?



Source: Alpha Go marked the birth of modern AI. Google, 2016.

This shift creates opportunities for investors.
Here are 7 trends to watch...



1.

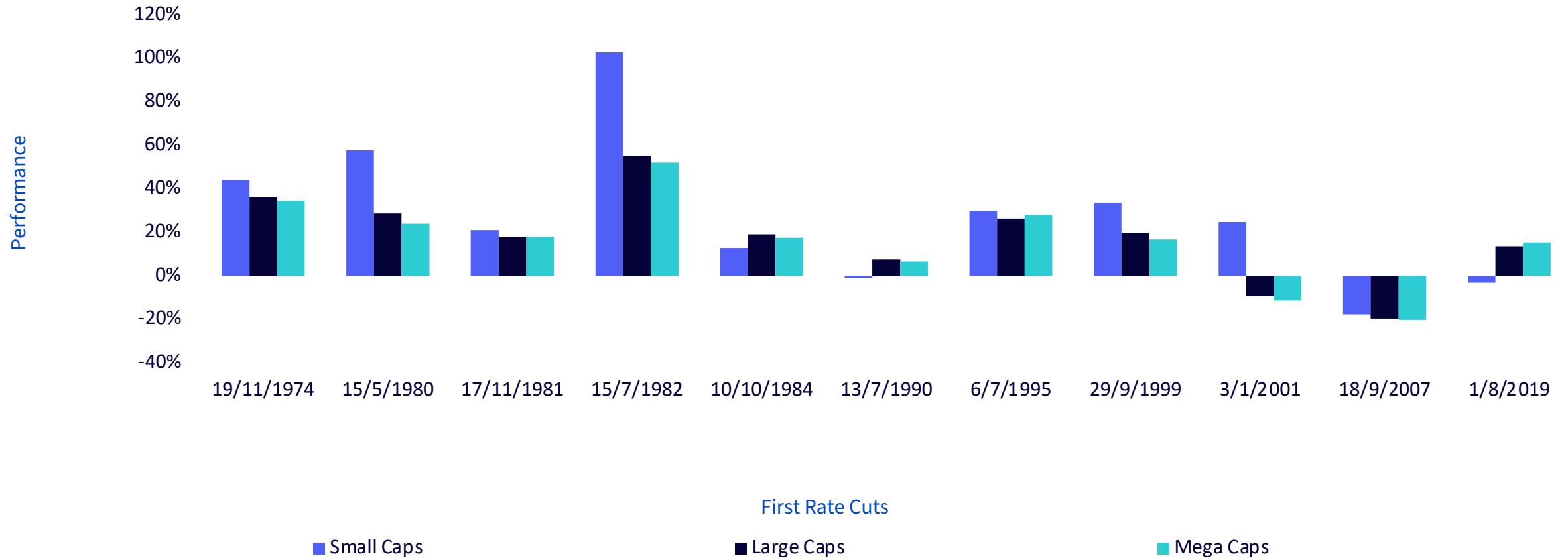
There will be a more favourable macroeconomic backdrop



Rate cuts benefit smaller companies even more



Performance in the 12 months following the first Fed rate cut



Sources: WisdomTree and Ken French, data as of May 2024, which represents the latest date of available data. Small Caps: Low 30% portfolio. Large Caps: High 30% Portfolio. MegaCaps: high 10% portfolio. Market: all CRSP firms incorporated in the U.S. and listed on the NYSE, AMEX or NASDAQ. Historical performance is not an indication of future performance, and any investments may go down in value.



2.

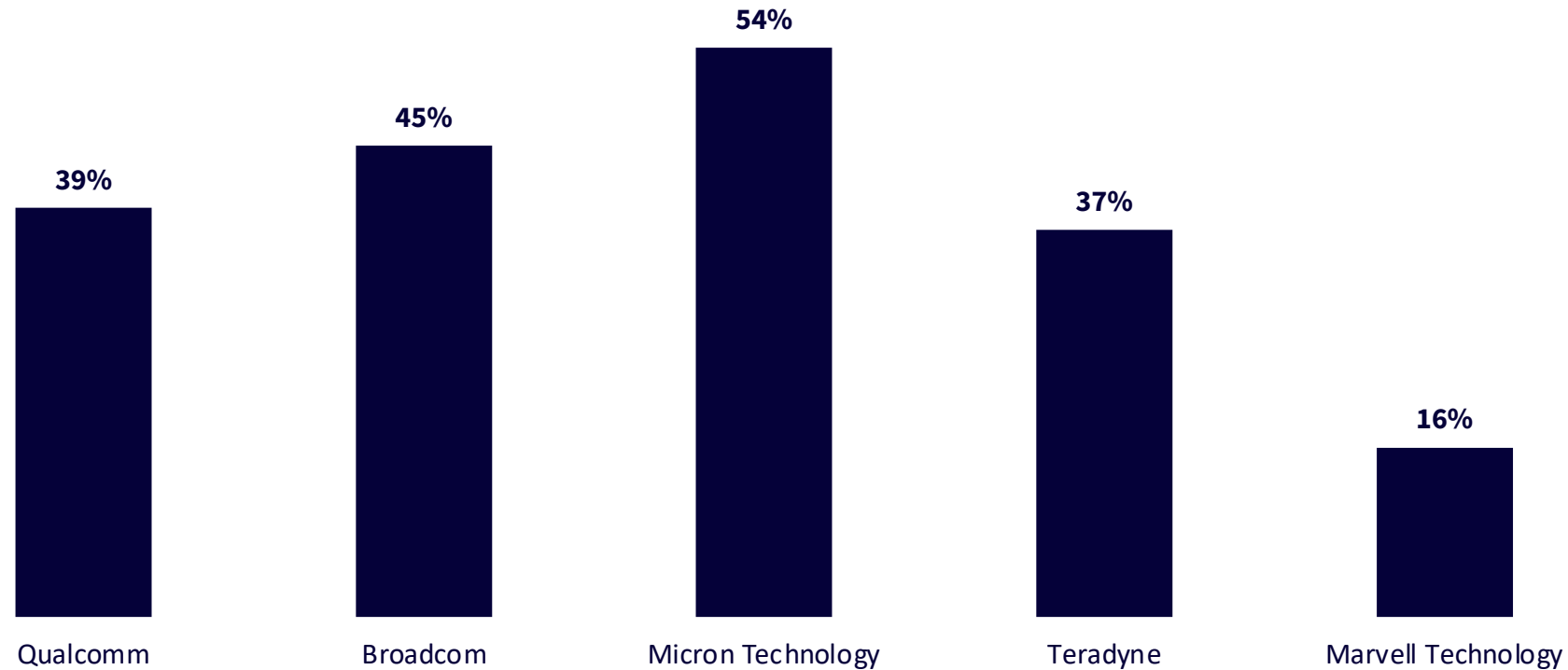
The hype will extend
beyond just Nvidia



The AI revolution requires a lot of computing power



H1 2024 returns for select US semiconductor companies



Source: Bloomberg, returns based on stock prices. Historical performance is not an indication of future performance, and any investments may go down in value.

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3.

The internet of (AI-enabled) things is about to begin



Chinese mobile phone maker introduces an EV



Source: mi.com, EV is electric vehicle

Apple Intelligence symbolises the power of on-device AI



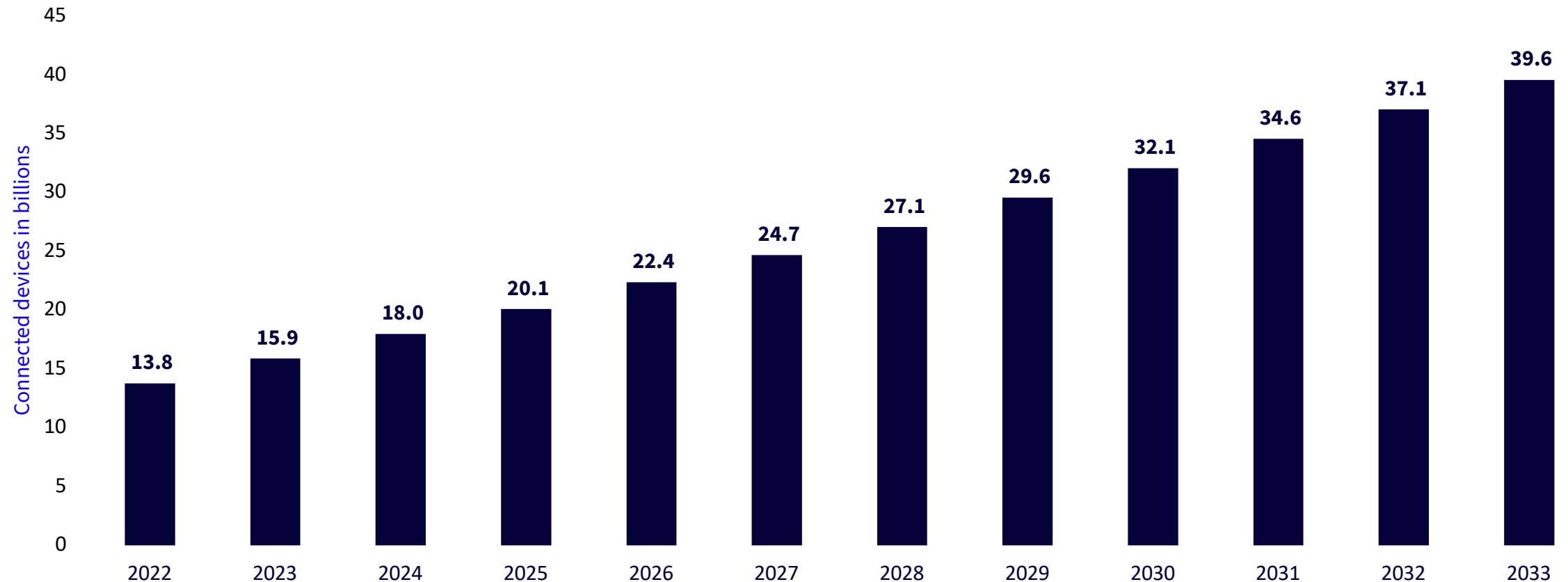
Source: mi.com, EV is electric vehicle

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Connected devices open new frontiers of possibilities



Number of Internet of Things (IoT) connections worldwide



Source: Statista, in cooperation with Transforma Insights, June 2024. Forecasts from 2024 onwards. Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.



4.

In some cases, David will
beat Goliath



Creative start-ups can catch big tech off-guard

AI chip start-up Groq's value rises to \$2.8bn as it takes on Nvidia

Company raises \$640mn from investors including BlackRock and brings in Meta AI scientist Yann LeCun as adviser



Jonathan Ross, chief executive of Groq: 'We aim for a full dollar returned for every dollar we spend on hardware. We don't intend to lose money.' © David Paul Morris/Bloomberg

George Hammond and Michael Acton in San Francisco AUGUST 5 2024



Apple partners with OpenAI to roll out new artificial intelligence system

iPhone maker touts suite of 'Apple Intelligence' features as it aims to catch up with Big Tech rivals



Tim Cook, speaking at the Apple Worldwide Developers Conference, said the new approach was 'AI as only Apple can deliver it' © Bloomberg

Michael Acton in Cupertino, California JUNE 10 2024



Source: Financial Times, August 2024, and June 2024.



5.

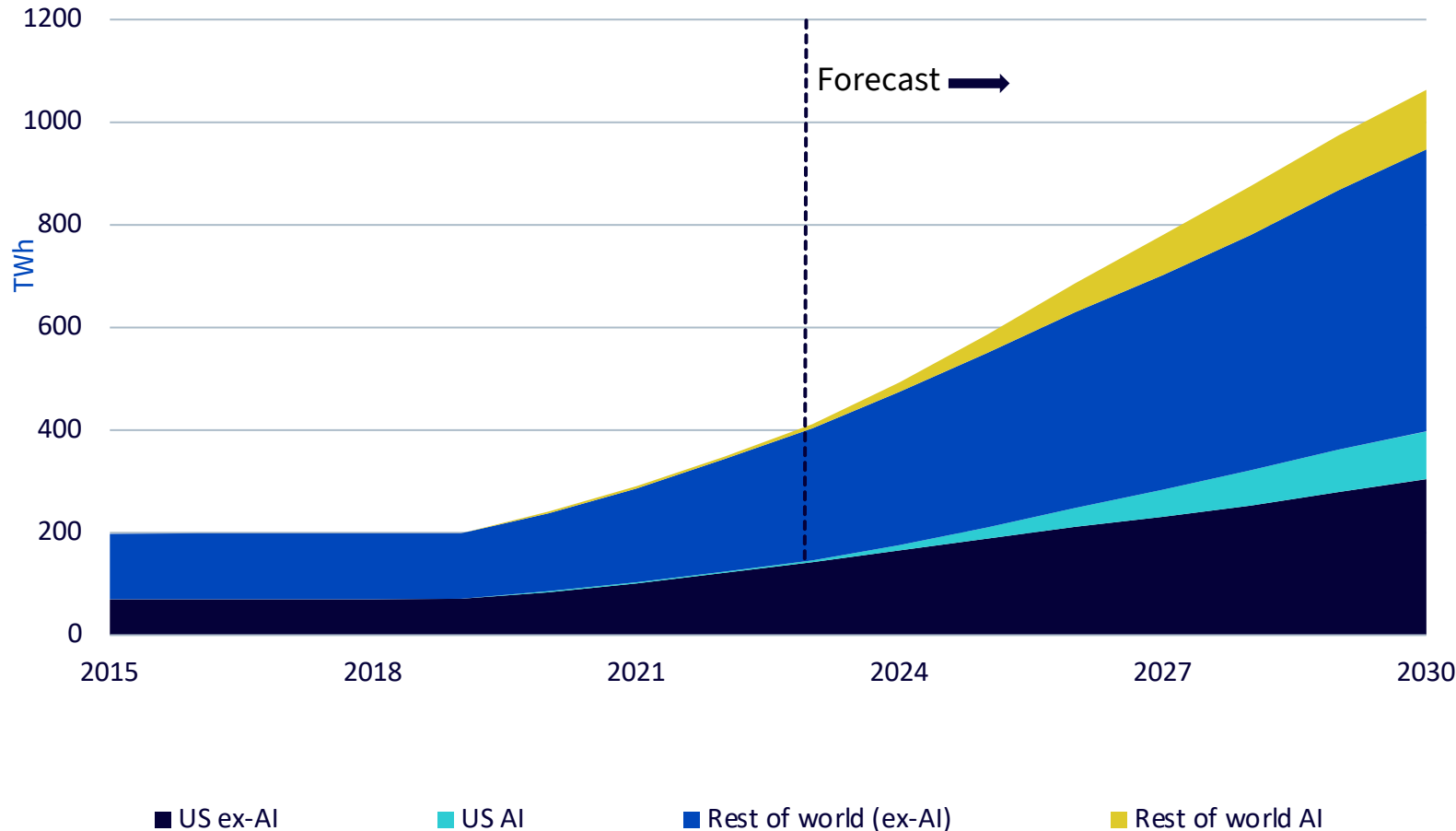
Demand for clean, well-distributed energy will rise



Renewable energy might help meet AI's energy needs



Data Centre Power Demand



A single ChatGPT query requires 2.9 watt-hours of electricity, compared with 0.3 watt-hours for a Google search.

“ International Energy Agency

Source: Masanet et al. (2020), Cisco, IEA, Goldman Sachs Research, June 2024. Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.

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6.

AI's impact across industries will be better appreciated

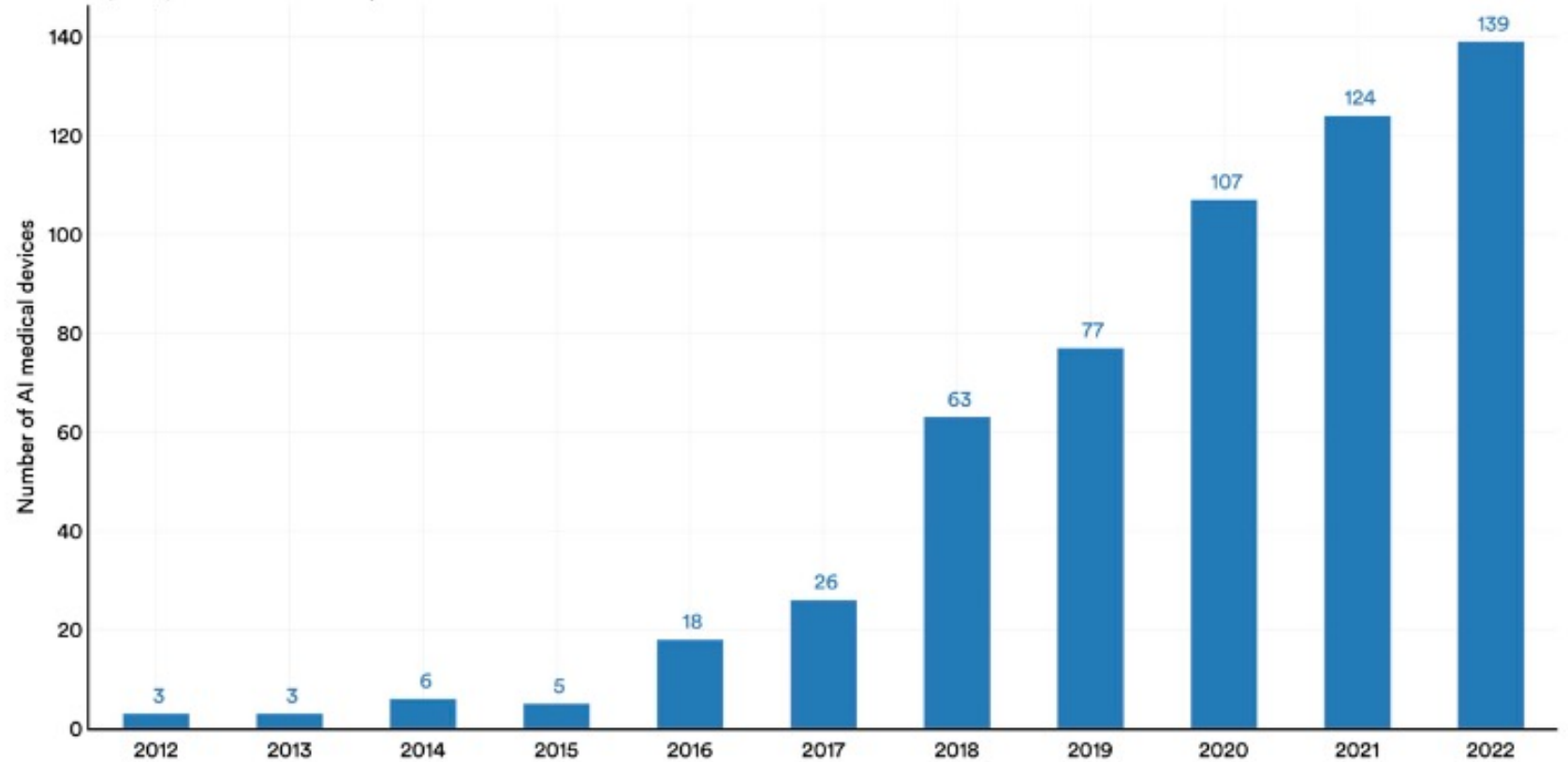


In 2022, the FDA approved 139 AI-related medical devices, a 12.1% increase from 2021

Since 2012, the number of FDA-approved AI-related medical devices has increased by more than 45-fold

Number of AI medical devices approved by the FDA, 2012–22

Source: FDA, 2023 | Chart: 2024 AI Index report



Source: Stanford AI Index Report 2024.

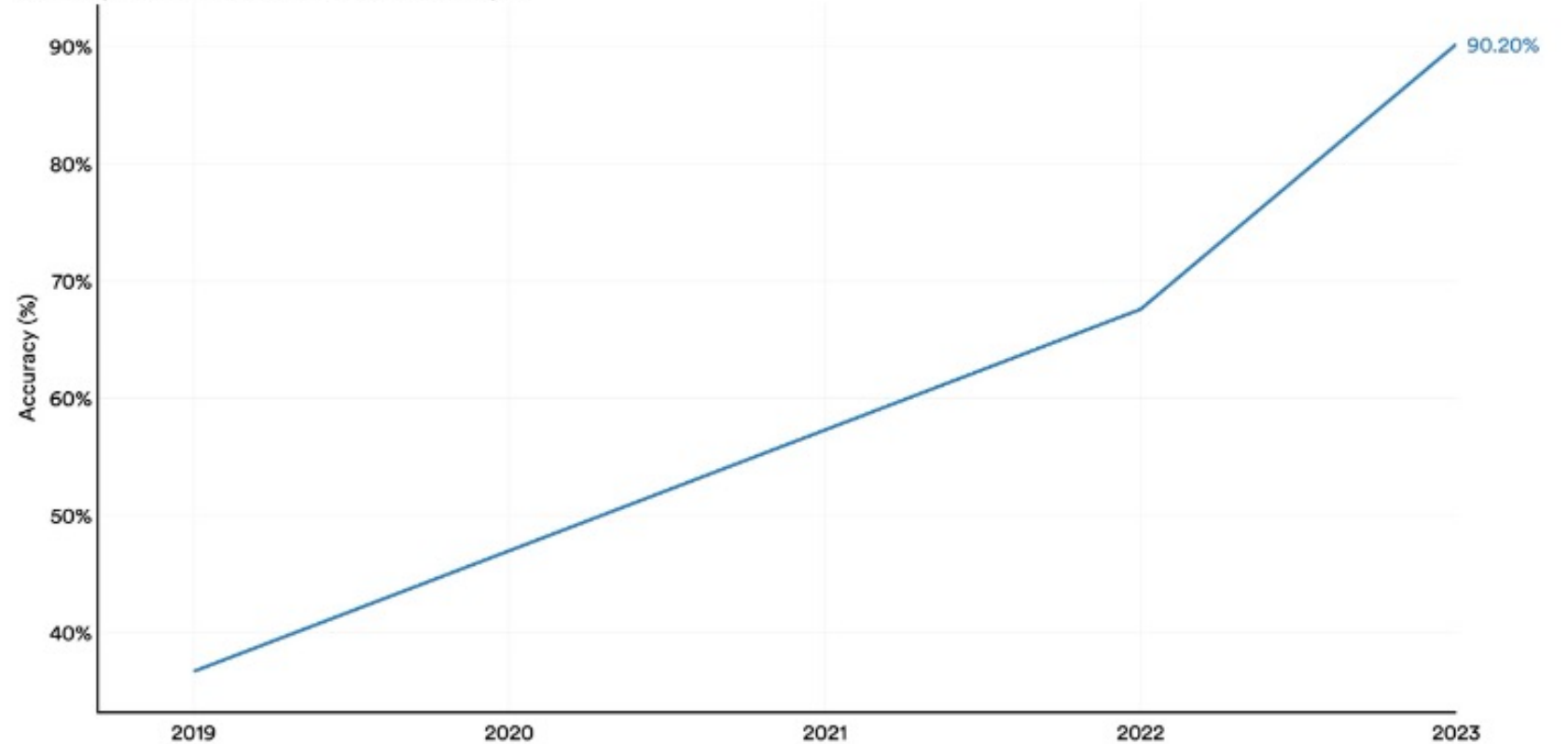
Highly knowledgeable medical AI has arrived



GPT-4 Medprompt, reached an accuracy rate of 90.2% in 2023, up 22.6% from 2022

MedQA: accuracy

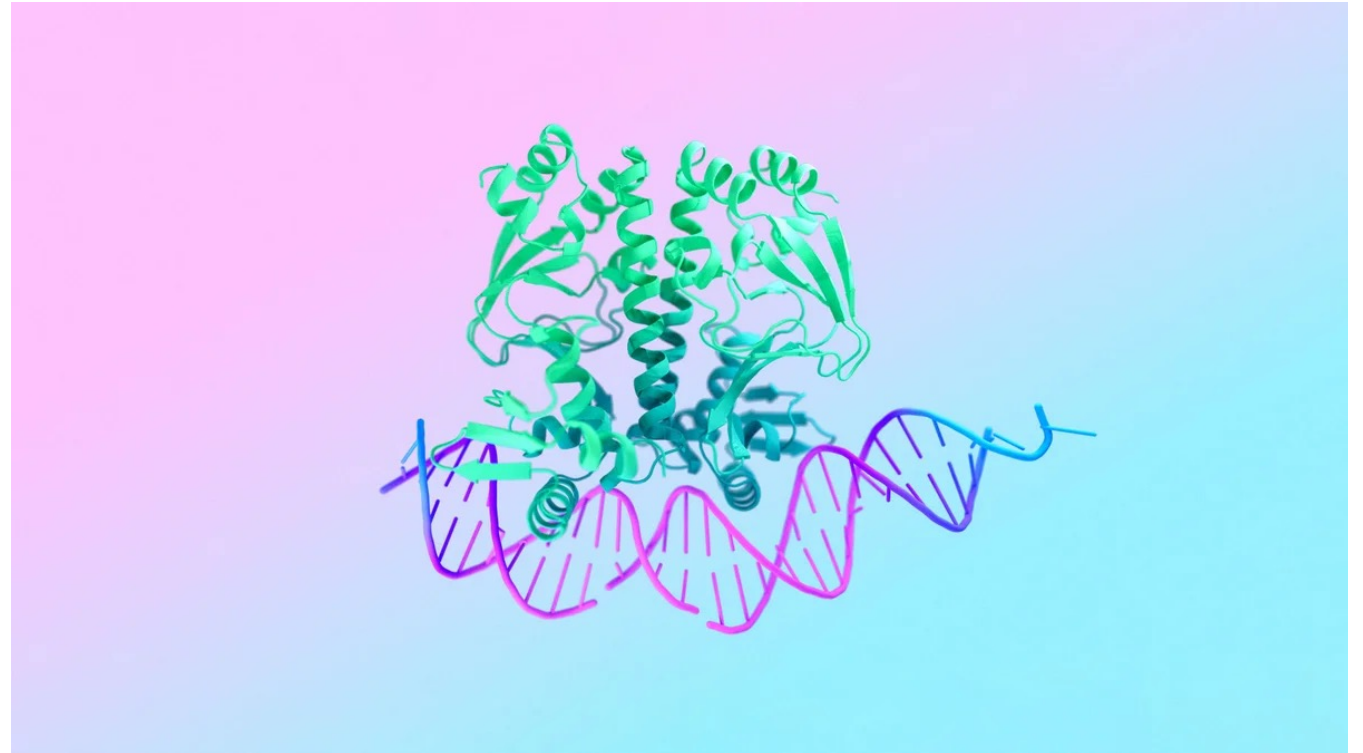
Source: Papers With Code, 2023 | Chart: 2024 AI Index report



Source: Stanford AI Index Report 2024.

The biotech industry will now make more AI-related headlines

AlphaFold 3 predicts the structure and interactions of all of life's molecules



Source: Google DeepMind, 2024.



7.

Cybersecurity will assume
a wider role in society



Inaccuracy, cybersecurity, and intellectual-property infringement are the most-cited risks of generative AI adoption



+ Source: McKinsey Global Survey on AI, 1,684 participants at all levels of the organization, April 11–21, 2023

Realistic deepfakes are here. What can we trust?

Arup lost \$25mn in Hong Kong deepfake video conference scam

UK-based engineering group identified as target of fraud that used digitally cloned CFO to trick staff



Companies are at growing risk from scams using hyper-realistic video, audio or other images generated using artificial intelligence
© Getty Images

Cheng Leng and Chan Ho-him in Hong Kong MAY 17 2024



Deepfakes ahead of US elections



Source: Financial Times, May 2024, and July 2024, AlJazeera, September 2024.

Cybersecurity expertise are highly valued

Google parent in talks to buy cyber security start-up Wiz for \$23bn

Acquisition of cloud specialist would be largest in Alphabet's history



Wiz helps companies secure programs in the cloud © Timon Schneider/Dreamstime

Ivan Levingston in London, James Fontanella-Khan and Maria Heeter in New York JULY 14 2024



Source: Financial Times, July 2024.

The future of AI and Cloud cannot be secured without continuous development of Cybersecurity solutions



+ Cybersecurity solutions are becoming ever important with the evolving cyber-threat landscape

110%

+ Increase in cloud-conscious threat actors in 2023

75%

+ of attacks were malware-free in 2023

\$4.88 million

+ Average cost of a data breach due to phishing in 2022

> 93%

+ of organisations expect a negative impact on cybersecurity due to AI

Source: Figure 1 and 2 - CrowdStrike, '2024 Global Threat Report'; Figure 3 - IBM, Cost of a Data Breach Report 2024; Figure 4 - CyberArk, '2024 Identity Security Threat Landscape Report'.

How can investors capture the opportunity?

	Our prediction	Consideration for investors
1	There will be a more favourable macroeconomic backdrop	Diversify by market cap through a pure exposure to the AI theme
2	The AI hype will extend beyond Nvidia	Seek broader exposure across the AI value chain
3	The internet of (AI-enabled) things is about to begin	Continuously reevaluate the identification and classification of AI stocks
4	In some cases, David will beat Goliath	Include innovative companies early in the hype cycle in an AI-focused portfolio
5	Demand for clean well-distributed energy will rise	Invest in clean energy production and storage stocks benefiting from AI demand
6	AI's impact across industries will be better appreciated	Monitor sectors like biotech where AI's potential impact is underappreciated
7	Cybersecurity will assume a wider role in society	Consider cybersecurity as a high-growth theme and a way to invest in the AI megatrend

Source: WisdomTree. WTAI: WisdomTree Artificial Intelligence UCITS ETF, WRNW: WisdomTree Renewable Energy UCITS ETF, WCBR: WisdomTree Cybersecurity UCITS ETF.



\$15.7 trillion
Potential contribution to the global economy
by 2030 from AI

“ PwC (2023)

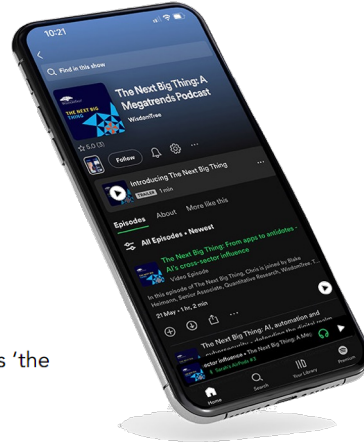


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Megatrends are changing our world. We've seen the internet and smartphones transform our lives and, more recently, have seen artificial intelligence touted as 'the next big thing', with the emergence of software like ChatGPT. So, what's next?

- + Hosted by
- + Christopher Gannatti, Global Head of Research
- + Mobeen Tahir, Director of Macroeconomics and Thematic Research



Questions

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