



### Artificial Intelligence: Unlocking opportunities, navigating risk

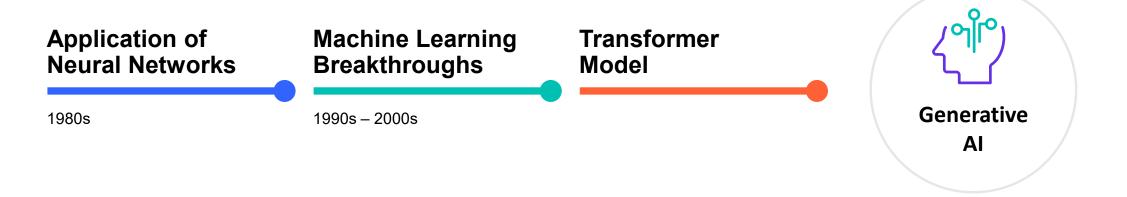


We believe Generative Al represents the next major computing platform shift and a multi-trillion-dollar investment opportunity.



#### Artificial Intelligence is not new, Generative Al is







## Computing platform shifts create trillions of dollars of value<sup>1</sup>















Mainframe

1950s - 1970s

PC

1980s – 2000s

Internet

1990s - 2000s

**Mobile** 

2000s - present

Cloud

2010s - present

ΑI

2020s and beyond

<sup>1.</sup> Based on data from FactSet

This chart is for illustrative purposes only. References to particular securities are only for the limited purpose of illustrating general market or economic conditions and are not recommendations to buy or sell a security or an indication of any portfolio holdings.

# Investors tend to underestimate the long-term impact of new technology



Megatrend	Personal computers PC Users in 2000	Internet Internet Users in 2000	Mobile  Smart Phone Shipments in 2013	Cloud  Top Three Cloud Provider Revenue in 2020	Al Al Market Size
Initial Forecast	225 million	152 million	657 million	\$90.2 Billion	\$1.8 Trillion
Actual	354 million	361 million	1,019 million	\$115.6 Billion	?
Underestimation	36%	58%	36%	22%	?

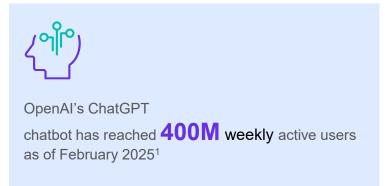
Source: Morgan Stanley Al Guidebook Fourth Edition, 31/01/2024. Next Move Strategy Consulting. Initial forecast dates were February 1996 for PC and internet users, January 2010 for smartphone shipments, March 2017 for cloud revenue and January 2023 for Al market size.

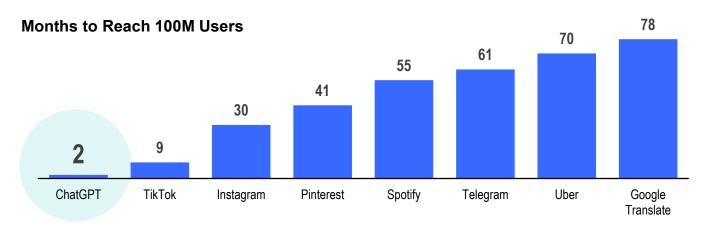


# Generative Artificial Intelligence (AI): a significant growth opportunity...



1 Advances in generative Al are creating an "iPhone" moment for the industry





Poundation models lay the groundwork for giving 1B knowledge workers access to Al/ML tools

40%

productivity increase for highly skilled workers

>34M

Al-generated images per day created from text prompts<sup>3</sup> OpenAl's supercomputer consists of:

1M+
CPU cores²
CPU cores²
CPU cores GPU

1 gb/s
CPU cores GPU

1 gb/s
CPU cores GPU

1 gb/s
Network connectivity (fiber optics)

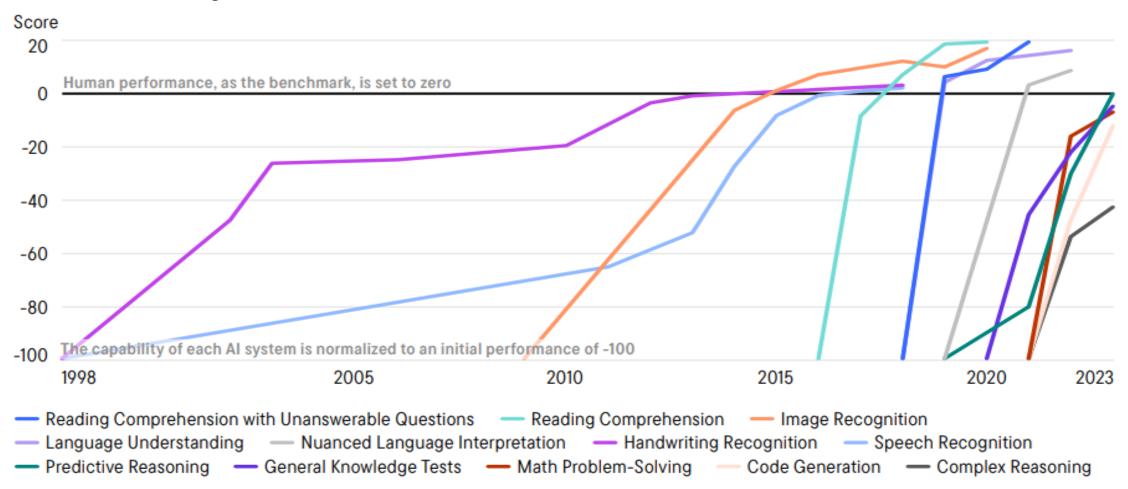
For illustrative and discussion purposes only. The information provided is not a recommendation to purchase, sell, or hold any particular security and should not be construed as an endorsement of or affiliation with Franklin Templeton. Sources:1. Exploding Topics. Number of ChatGPT Users. February 28, 2025. OpenAI. 2. Estimates provided by OpenAI ChatGPT. Exact figures not disclosed. 3. Brookings. April 17, 2024.

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#### Al is becoming much more capable



#### Al Model Benchmarking Relative to Human Performance

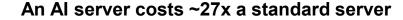


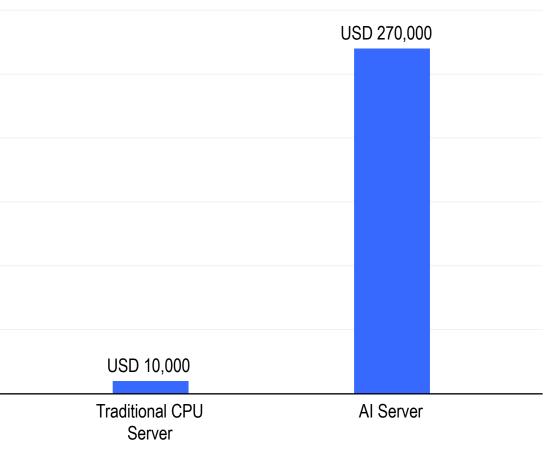
Source: Kiela et al., with minor processing by Our World in Data. "Test scores of Al systems on various capabilities relative to human performance" (dataset) 2023. Kiela et al., "Dynabench: Rethinking Benchmarking in NLP" (original data). Retrieved July 23, 2024. Within each domain, the initial performance of the Al is set to -100. Human performance is the baseline, set to zero. When the Al's performance crosses the zero line, it scores more points than humans.



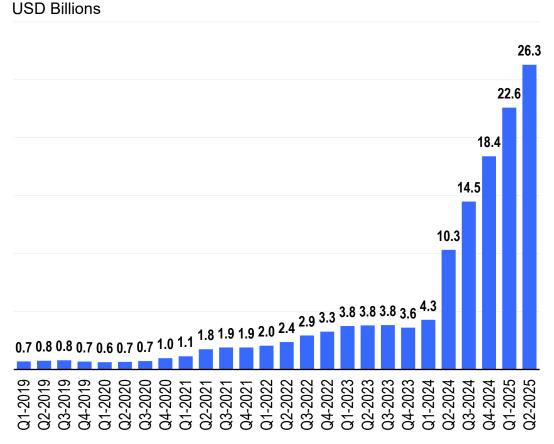
#### The "buildout" stage of generative Al continues







#### One datacenter's revenue more than tripled in under one year



Source: Company reports, Franklin Templeton. Figures are an estimate, as of July 2023.

Source: Company reports, as of December 2023.

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# The great accelerator across many sectors

#### The Al investment universe



Al could contribute US \$15.7 trillion to the global economy by 2030<sup>1</sup>

"We believe that we are at the beginning of the Al computing era. We think this is the single most powerful force of our time."

- Jensen Huang, CEO Nvidia<sup>2</sup>



#### Al Infrastructure

#### **US\$394.46** billion

Projected market size in 2030<sup>3</sup>

- Semiconductors
- Data Centers
- Cloud Services
- Security
- Power and Electricity



#### **Al Applications**

#### **US\$1.24 trillion**

Projected market size in 2030<sup>4</sup>

- Software and Services
- Agentic Al
- Industry-specific applications and tools



#### **Physical Al**

#### **US\$12.6 trillion**

Projected market size in 2030<sup>5</sup>

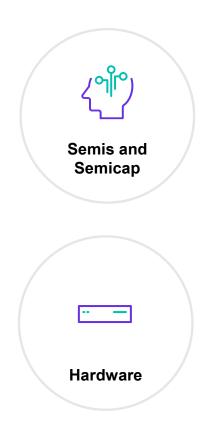
- Humanoid Robots
- Autonomous Vehicles
- Smart Materials

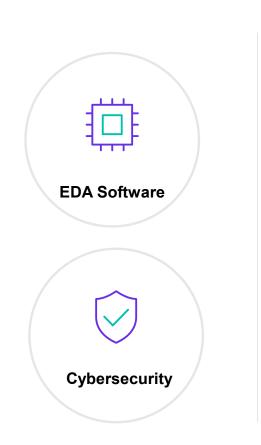
<sup>1.</sup> PWC, "Sizing the prize: what's the real value of AI for your business and how can you capitalize?" 2. Fox Business, "Nvidia CEO Jensen Huang says everyone is racing to adopt AI technology," February 27, 2025. 3. Markets and Markets, "AI Infrastructure Market Size, Share & Trends," November 2024. 4. Next Move Strategic Consulting, Artificial Intelligence (AI) Market Report. February 14, 2025. 5. McKinsey, Trillion Sensor Economy, "How physical AI unlocks real world data," August 26, 2024.



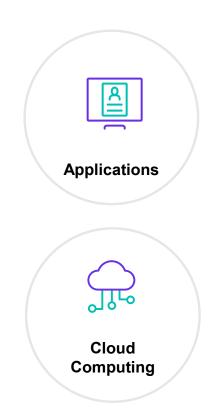
#### Al will impact companies across the technology sector...













#### ...as well as sectors beyond tech



#### **Health Care**



Al and machine learning (ML) can improve and streamline health care delivery - Al/ML tools can anticipate disease and diagnose it earlier, potentially improving patient outcomes while lowering health care costs over time.



Al applications with data analysis enable companies to analyze large amounts of data to identify trends and patterns that could inform healthcare decision-making.



Al can help accelerate drug discovery and development.



#### **Financials**



Generative AI can assist with analyzing financial data, improving trading, and enhancing risk management systems.



Al-powered algorithms can analyze substantial amounts of financial data, predict market trends, and automate trading decisions, aiding both financial services clients and end market users.



Asset managers can use these tools to gain more productivity in active management.



#### ...as well as sectors beyond tech





#### **Utilities**



As utilities seek to meet the growing power demand, they can deploy AI in their business models to enhance customer service and engagement.



Generative AI can assist with optimizing energy production and distribution.



Al can help lower labor costs, gather insights from massive data repositories, and better manage the grid through improved service offerings.



#### **Industrials**



Al can enhance logistics, automation and electrification, which may lead to lower costs, higher quality, better customer service, and improved sustainability and efficiency metrics.



Building owners and operators can reduce energy consumption and minimize carbon emissions.



Car manufacturers are using it to test autonomous driving.

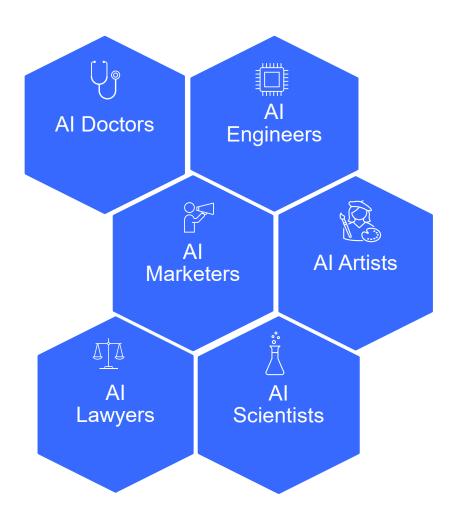
# "Digital Labor" should significantly boost knowledge worker productivity





2025 and beyond

Al "Agents"



### What is the value of digital labor?

GenAl could add

US \$6.1trillion - US \$7.9 trillion

in economic benefits *annually* across select use cases<sup>1</sup>

<sup>1.</sup> Source: McKinsey & Company. "The economic potential for generative AI: The next productivity frontier," June 14, 2023.

#### Sample Agentic Al use cases



By 2028, at least 15% of day-to-day work decisions will be made autonomously through agentic AI, up from 0% in 2024.<sup>1</sup>



Independently resolve customer queries



- Control flow of production lines
- Predict outages
- Maximize productivity



- Find sales leads
- Recommend follow-up actions
- Book meeting time



 Process vast data sets to extract actionable insights



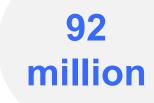
- Autonomously monitor market trends
- Manage risk in real time

<sup>1.</sup> Source: Gartner. "Intelligent Agents in Al Really (an Work Alone. Here's How," October 1, 2024. 2. Source for sample use cases: Harvard Business Review, Generative Al, "What is Agentic Al, and how will it change work?" Mark Purc 1, December 12, 2024.



#### Al will reshape the workforce over the next 25 years





170 million

40%

14%

20%

Potential jobs displaced by AI by 2030<sup>1</sup> Potential new jobs created by AI requiring new skills<sup>1</sup>

Potential increase in performance of highly skilled workers using Al<sup>1</sup>

Percent of employees who switch careers because of AI by 2030<sup>2</sup>

Percent of jobs replaced by AI by 2050<sup>2</sup>

"Al and robotics are going to be a big deal, just as the internet was. But the internet created more jobs than it destroyed. I think Al will do the same."

Erik Brynjolfsson,

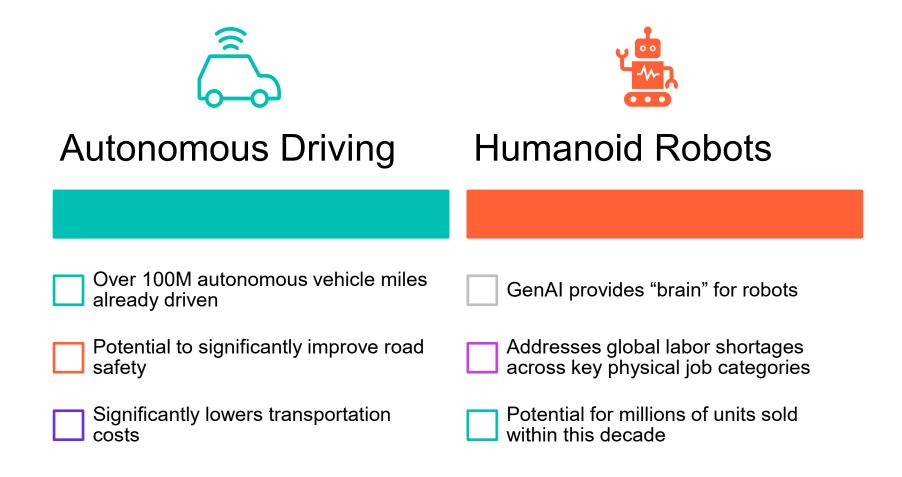
Director of the MIT Initiative on the Digital Economy<sup>3</sup>

<sup>1.</sup> Source: McKinsey & Company. "Superagency in the Workplace – Empowering people to unlock Al's full potential," January 2025. 2. Genius, "How many jobs will Al replace by 2050?" IG Rosales, January 2025. 3. TechCrunch, "Workhelix taps years of research to help enterprises figure out where to apply Al," February 27, 2025.



#### FRANKLIN TEMPLETON

# "Physical" AI – autonomous driving and robots add new growth markets over the coming years



Source: Franklin Templeton; Waymo; Autonomous Vehicle Industry Association (AVIA); Forbes, "60 Million Miles and Counting: Robotaxis Shift into High Gear" by Richard Bishop, July 24, 2024.

#### Potential challenges for Al





#### **Energy Intensity**

Training/running AI models requires significant energy, potentially exceeding current supply



#### **Regulation & Oversight**

Governance frameworks could help ensure models are safe and operating in society's best interests



#### **Ethical & Bias Concerns**

GenAl models can inadvertently perpetuate or amplify biases present in their training data



#### **Data Privacy**

The use of large datasets, often containing personal information, raises concerns about data privacy and security



#### **Misinformation**

GenAl can create highly realistic fake content, which can be used to spread misinformation, destabilize societies and harm people



#### **Intellectual Property**

Complexity in ownership and intellectual property rights in Algenerated content



# Navigating the Al risk landscape will require a multifaceted approach





**Collaboration** across sectors

Technologists,
policymakers and civil
society must work together
to create comprehensive
strategies that balance
innovation with ethical
considerations.



Frameworks to guide development

Frameworks to guide Al development flexible enough to adapt to new advancements while ensuring that safety and ethical standards are maintained.



**Create a future-ready workforce** 

Employers and educators should develop reskilling and upskilling programs to help workers adapt to new roles that require advanced digital skills and tech literacy.



Augment human capabilities

Al can augment human capabilities, enhancing productivity and creativity by automating routine tasks, allowing humans to focus on more complex and strategic activities.



#### **Key takeaways**





Emergence of new market platforms have historically created massive value.



We are in the very early stages of AI centric investments.



Today, the impact is felt most in the technology sector, as we build the foundational structure.



Future growth stems from breadth of opportunity across all sectors of the economy.

We believe active management is critical for successfully navigating these dynamic markets

### **Appendix**

#### **Important Disclosures**



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