

EXECUTIVE BRIEFING · JUNE 2026

# A Brief History of Artificial Intelligence

From the Turing Test to autonomous agents — seven decades that reshaped business.

## WHY IT MATTERS NOW

# AI has crossed from promise to infrastructure

Seven decades of research quietly compounded — then, in just a few years, AI became something every executive must plan around. The numbers tell the story.



of organizations now use AI in at least one business function — up from 20% in 2020.



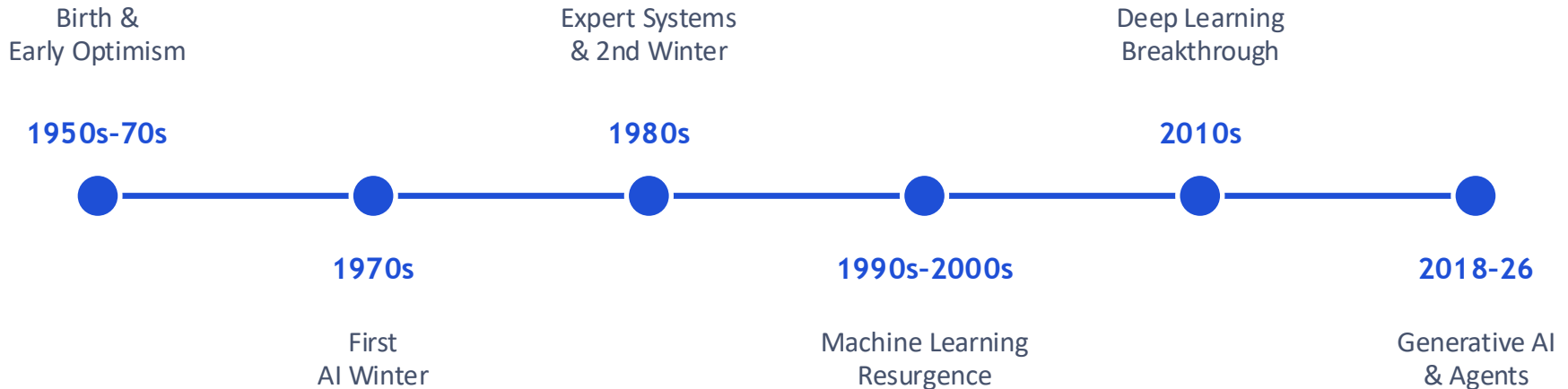
projected global enterprise AI spending in 2026, a ~35% jump over the prior year.



users on ChatGPT within two months of launch — the fastest consumer adoption on record.

## THE JOURNEY AT A GLANCE

# Seven decades, six defining eras



*Two boom-and-winter cycles preceded today's breakthrough — a reminder that progress in AI has never been a straight line.*

ERA 01 · 1950S-1970S

# Birth and Early Optimism

A handful of researchers dared to ask whether machines could think — and gave the field its name and first tools.



1950

## The Turing Test

Alan Turing asks “Can machines think?” and proposes the imitation game.



1956

## Dartmouth

John McCarthy coins “artificial intelligence”; the field is officially born.



1957

## The Perceptron

Rosenblatt builds the first neural network that learns from examples.



1966

## ELIZA

Weizenbaum’s chatbot mimics a therapist; users form real emotional bonds.

*Bold ambition set expectations that 1960s hardware simply couldn’t meet.*

ERA 02 · 1970S

# The First “AI Winter”



## When the hype outran the hardware

Early promises of human-level intelligence “within a generation” collided with the limits of the era’s computers. As results stalled, confidence and funding evaporated — the first deep freeze in AI research.



### Overpromised results

Bold predictions of thinking machines went unmet, eroding credibility.



### Limited computing power

Hardware was far too weak for the problems researchers tackled.



### Funding dried up (1974)

Government and corporate sponsors pulled back sharply.

ERA 03 · 1980S

# Expert Systems Boom – and the Second Winter

AI found commercial value by encoding human expertise into thousands of “if-then” rules.

**69%****MYCIN (Stanford)**

Diagnosed bacterial infections at near-specialist accuracy  
— yet liability fears kept it from the clinic.

**\$25M / yr****XCON (DEC)**

Configured computer orders at 95–98% accuracy, scaling  
to thousands of rules and major savings.

**By 1985:** \$1B+ spent annually on expert systems · Japan's \$850M Fifth-Generation project (1982) raced for the lead.

**1987:** Systems proved brittle and costly to maintain, the specialized-hardware market collapsed, and AI froze a second time.

ERA 04 · 1990S-2000S

# From Hand-Coded Rules to Learning from Data

Cheaper computing and growing datasets revived neural networks and shifted AI toward statistics.



## Backprop Arrives

Backpropagation makes training multi-layer networks practical, reviving neural nets.



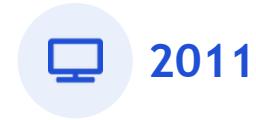
## Deep Blue

IBM's machine defeats world chess champion Garry Kasparov.



## LSTM Networks

A memory architecture that still underpins modern sequence models.



## IBM Watson

Wins Jeopardy!, showcasing data-driven question answering.

*The center of gravity shifts from logic rules to data and statistics — the groundwork for what comes next.*

ERA 05 · 2010S

# Deep Learning Changes Everything

Abundant data, powerful GPUs, and new architectures unlocked capabilities that finally scaled.

**2012**

## ImageNet Moment

Deep neural networks shatter image-recognition benchmarks, igniting the modern AI boom.

**2016**

## AlphaGo

DeepMind's system masters the game of Go — a milestone thought to be decades away.

**2017**

## Transformers

The “attention” architecture becomes the foundation for nearly all modern AI models.

*Data + GPUs + new architectures = capabilities that improve as they scale.*

ERA 06 · 2018-2026

# The Generative AI Era

- **2022** ChatGPT reaches 100M users in two months, putting generative AI in everyone's hands.
- **2023** GPT-4 and rival models from across the industry bring AI into everyday knowledge work.
- **2024** Multimodal models see, hear, and speak — not just type.
- **2025-26** Reasoning models and autonomous agents shift AI from assistant to coworker.



# Three Levels of Machine Intelligence



EXISTS TODAY

## Narrow AI (ANI)

Excels at one specific task. Powers voice assistants, recommendations, fraud detection — and today's chatbots.



THEORETICAL

## General AI (AGI)

Matches human ability to learn and reason across any task. Not yet achieved.



HYPOTHETICAL

## Superintelligence (ASI)

Would surpass the best human minds across every domain. Purely speculative today.

*Every AI system in production today is Narrow AI — remarkably capable, but specialized.*

## CATEGORIES OF AI · BY DISCIPLINE

# The AI Toolkit



## Machine Learning

Systems that learn patterns from data instead of explicit rules.



## Deep Learning

Multi-layer neural networks for images, speech, and text.



## Natural Language

Understanding and generating human language (NLP).



## Computer Vision

Interpreting images and video to recognize the world.



## Generative AI

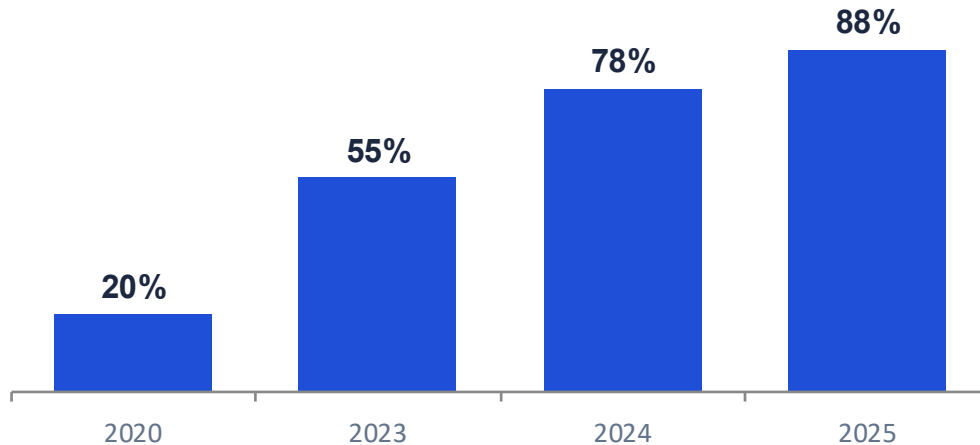
Creating new text, images, and code from learned patterns.

*Deep learning is a subset of machine learning, which is a subset of AI — language, vision, and generation are where they create value.*

## AI IN THE ENTERPRISE

# Adoption Is Near-Universal – Returns Are Still Catching Up

Share of organizations using AI in at least one function



**\$407B**

projected enterprise AI spending in 2026 (IDC)

**82%**

of business leaders use generative AI at least weekly

**~1 in 3**

organizations yet report significant ROI from AI

*Adoption has outpaced operating discipline: the value now lies in turning pilots into governed, repeatable workflows.*

## IMPLICATIONS

# What Seven Decades Teach Business Leaders



## Hype runs in cycles

Two winters followed two booms. Separate durable capability from the noise before you bet.



## Data is the moat

Value shifted from clever rules to proprietary data and feedback loops you alone control.



## From tools to agents

AI is moving from answering questions to taking actions — redesign workflows, not just tasks.



## Govern early

With adoption near-universal, ROI and trust now hinge on governance, not model choice alone.

THE NEXT CHAPTER

# From a tool to a teammate.

AI traveled from a philosophical question to the Turing Test to systems that now act on our behalf. The organizations that pair bold ambition with disciplined governance will define the decade ahead.