

Gartner®

Strategy Leadership Council

AI Strategy: Where Your Competitors Are Investing



Introduction

How do your artificial intelligence (AI) initiatives stack up against industry peers? These benchmarks can help you make the case for further investments.

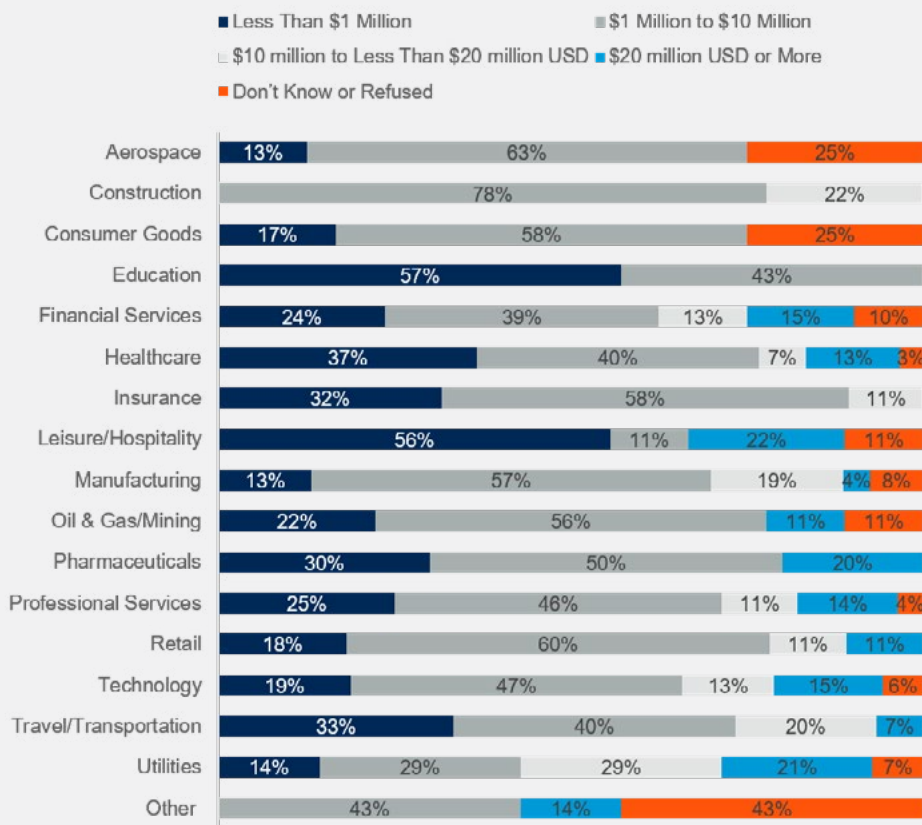
AI Adoption Accelerates

In the last year, companies with at least \$1 billion in revenue are finding new ways to use the technology. That's according to our survey of nearly 500 Chief Information Officers (CIOs). Compared to last year, more companies are planning to build out and deploy AI across five areas. They are: process augmentation, computer vision, natural-language processing, decision augmentation and physical robots. Process augmentation and computer vision account for the largest investments in AI, each taking in about 20% of the total spend in 2018.

1. Where Are You Investing in AI?

A wide range of industries are now investing, including leisure, pharmaceuticals and utilities. At least one in five firms in those categories have invested \$20 million or more in AI projects (Figure 1).

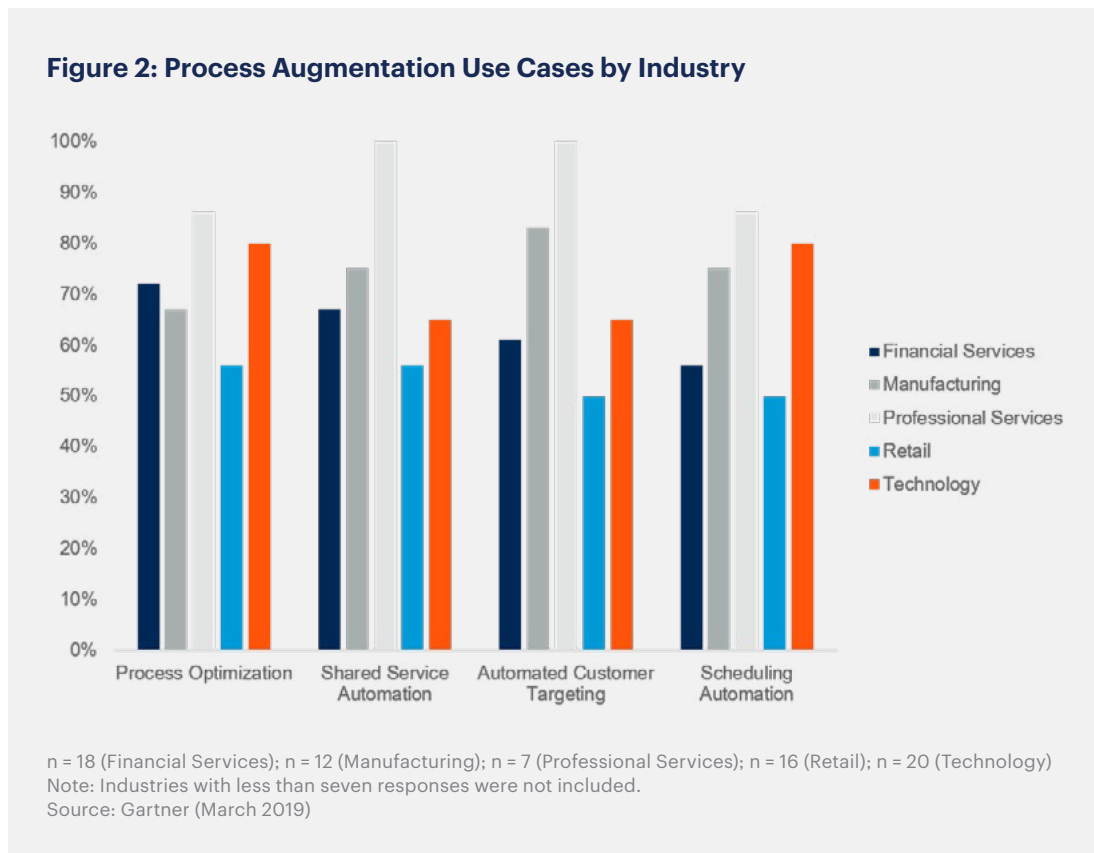
Figure 1: Average Company Investment in AI Technologies by Industry



n = 490
Source: Gartner (March 2019)

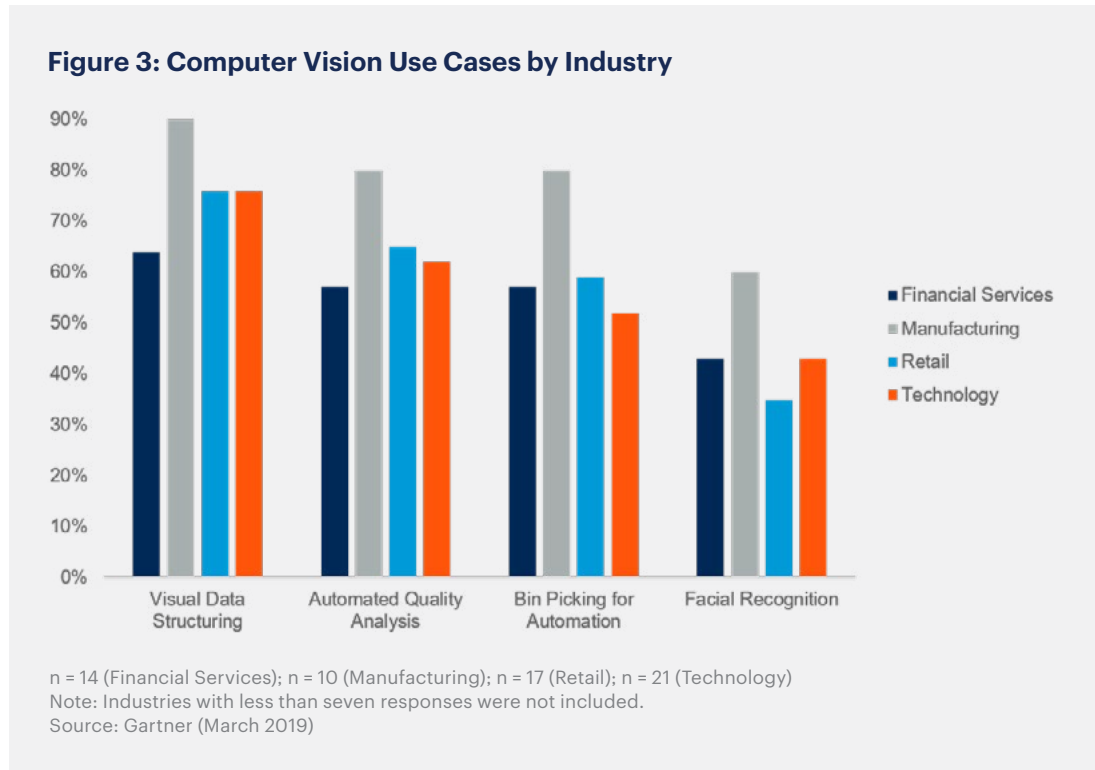
2. Process Augmentation

Process augmentation projects can reduce costs and improve operational efficiency. As the most commonly deployed technology, nearly half of CIOs saying their company is either already using it or currently piloting it. Here are the four most common uses among those companies. (Figure 2).



3. Computer Vision

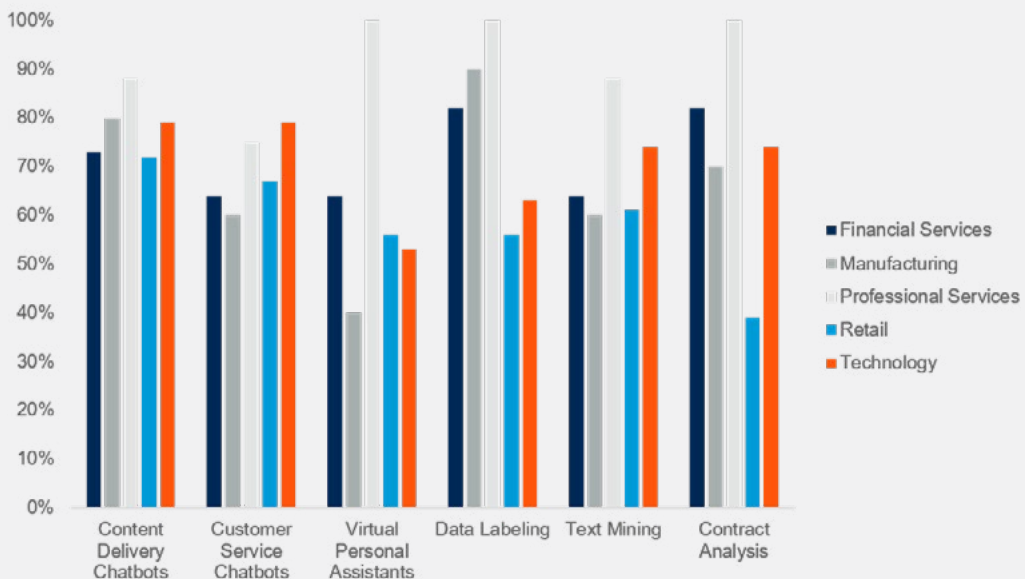
Computer vision bridges the gap between the digital and physical worlds. It enables robots and machines involved to carry out tasks in quality control, security and marketing. For instance, a robot must be able to “see” objects to identify and categorize them.



4. Natural-Language Processing (NLP)

NLP lets machines interpret unstructured data like written and verbal communications. It helps translate, sometimes literally, between machines and humans.

Figure 4: NLP Use Cases by Industry

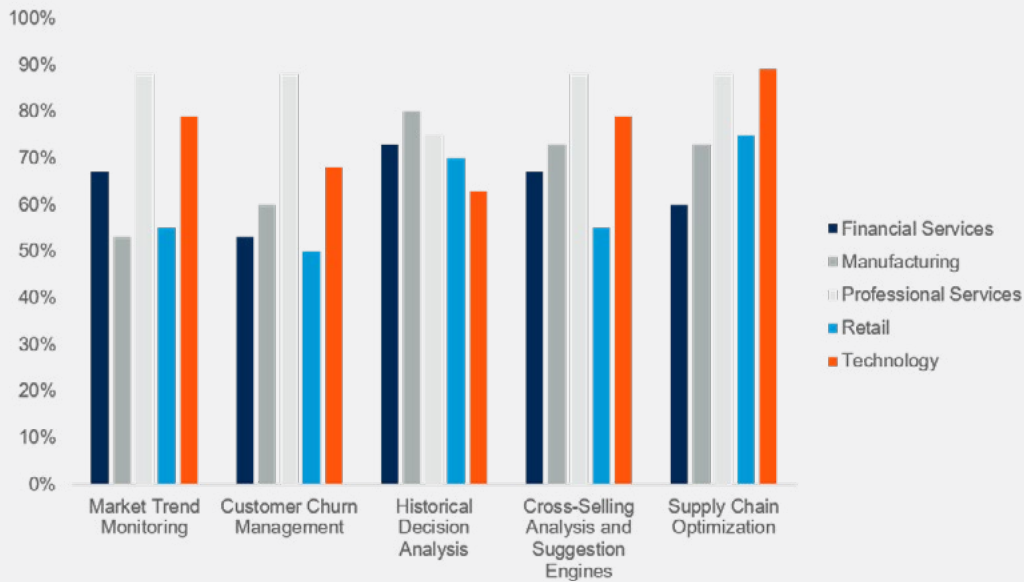


n = 11 (Financial Services); n = 10 (Manufacturing); n = 8 (Professional Services); n = 18 (Retail); n = 19 (Technology)
Note: Industries with less than seven responses were not included.
Source: Gartner (March 2019)

5. Decision Augmentation

This broad category has the greatest possibility to transform the strategy function itself. AI can tap internal and external data to automate routine decisions or provide leaders with additional context. AI advanced decision making tools are still a few years away. For now, AI is being used in trend analysis and predictive analytics.

Figure 5: Decision Augmentation Use Cases by Industry

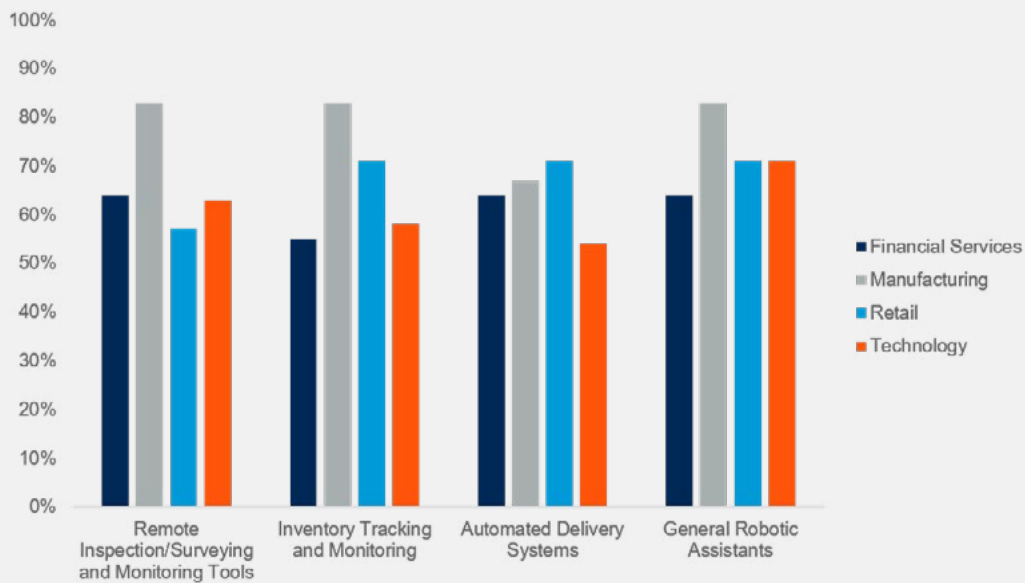


n = 15 (Financial Services); n = 15 (Manufacturing); n = 8 (Professional Services); n = 20 (Retail); n = 19 (Technology)
Note: Industries with less than seven responses were not included.
Source: Gartner (March 2019)

6. Artificially Intelligent Physical Robots

Despite having high public visibility around technologies like drones and driverless cars, robots are the least developed area of AI. They automate work to improve safety and decrease labor costs. Yet robotics is an expensive field compared to other AI solutions.

Figure 6: Artificially Intelligent Physical Robots Use Cases by Industry



n = 11 (Financial Services); n = 12 (Manufacturing); n = 14 (Retail); n = 24 (Technology)
Note: Industries with less than seven responses were not included.
Source: Gartner (March 2019)

How Much Are AI Considerations Part of Strategy?

Use the maturity scale below to rank how much AI features in your overall strategy, from basic awareness to enterprise transformation.

Table 1: AI Maturity Scale for Vision and Strategy

Level of Maturity	Description
Awareness	The organization's AI vision is emerging from attendance at conferences, participation in blogs, public threads, engaging with internal users and external vendors, and capturing a variety of examples. The management team is intrigued by industry or functional examples and has reached the level of "pressured" exploration. Management team is feeling hope, fear or pain about AI.
Active	The potential value of AI is recognized. Experimentation and AI-driven innovation is actively promoted and facilitated. The organization has AI pilot projects to learn about technology, skills and business impact, but it is still too early to include them in strategies.
Operational	AI is delivering real business value in some parts of the organization or product/service portfolio. AI is explicitly addressed in the strategies of existing business and technology areas.
Systemic	AI is pervasive, enabling improved or new digital business models. The organization has a dedicated AI strategy and adaptive roadmap. It's fully aligned with its digital business, digital transformation, innovation, R&D, HR and other strategies. From board decisions to every customer interaction, AI is a critical element in each business moment and event, allowing the organization to operate in a highly responsive and adaptive manner.
Transformational	AI is part of business DNA. Strategy and operations are continuously orchestrated and adapted in a complex business ecosystem of interdependent agents. The organization is considered and managed as a dynamic and context-driven system-of-systems with both human and artificial actors. AI plays a role in all business strategies and technology innovations.

Source: Gartner

How We Help

The pathway to digital transformation is unclear, and current digital capabilities are insufficient to achieve transformation. Strategy leaders must approach their roles in a new way to drive the business to make enough of the large and transformative digital investments necessary to grow and evolve. Gartner can help: we provide strategists with the intelligence and tools needed to stay on top of market changes, potential opportunities and threats stemming from emerging digital technology and trends.

About Gartner

Gartner, Inc. (NYSE: IT), is the world's leading research and advisory company and a member of the S&P 500. We equip business leaders with indispensable insights, advice and tools to achieve their mission-critical priorities today and build the successful organizations of tomorrow.

Our unmatched combination of expert-led, practitioner-sourced and data-driven research steers clients toward the right decisions on the issues that matter most. We are a trusted advisor and objective resource for more than 15,000 organizations in more than 100 countries — across all major functions, in every industry and enterprise size.

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