### **Gartner Research**

# The Future of Al: Reshaping Society

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### The Future of AI: Reshaping Society

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With the latest advances in generative AI and ChatGPT, AI is recasting the world landscape and changing how we live and work. Executive leaders must treat AI innovation as a societal trend and not one that impacts solely technology and business. — By Gartner Futures Lab

#### **Overview**

### **Key Findings**

- Al cannot be viewed simply as a technology or as a business tool. Al will reshape our society at large and influence what it means to be human.
- Al's advances and impact on society cannot be stopped. While Al should not be hyped, it should never be underestimated. We are at the beginning of more breakthroughs. And while we acknowledge the fear that surrounds Al, we emphasize the hope. Nothing should be seen as impossible not even artificial general intelligence.

#### Recommendations

- View Al as an actor that is impacting society at large. Assess new advances in Al as actions that influence people's environments and actions, not just processes and systems.
- Embrace advances in AI, such as ChatGPT, and take a proactionary approach.
   Continue to advance responsibly, experimenting with and developing further innovation.
- Prepare for future growth and the evolution of AI by using our futures wheel, depicting the four seasons of change, to develop your organization's business strategies through 2033.

### **Strategic Planning Assumptions**

Through 2026, despite all the advances in AI, the global job impact will be neutral — there will not be a net decrease or increase. (This is primarily due to enterprise adoption lags, implementation times and learning curves, and time horizons for realized impacts that traverse multiple fiscal years.)

By 2026, over 100 million people will engage robocolleagues (synthetic virtual colleagues) to contribute to enterprise work.

By 2033, Al solutions, introduced to augment or autonomously deliver tasks, activities or jobs, will result in over half a billion net new human jobs.

### **Why This Matters**

#### Download presentation slides of this material

The latest advances in generative AI, including ChatGPT, have propelled AI forward. AI no longer functions as just a technology or business tool. AI is making an impact on society comparable to the advent of the internet, printing press or even electricity. It is just on the verge of reshaping society as a whole. The future of AI is here. Advances in AI cannot be slowed or even halted.

There are two unhelpful ways to consider the current AI leap forward. The first is to consider new AI developments humanlike (one Google engineer got fired for ascribing consciousness to AI) or even magical. Doing so only adds to the hype.

But the other way is even more unhelpful — to look at AI through the lens of our current definitions of the world. It leads to not seeing what is really happening.

Al is already displaying signs of agency or the capacity to act in a certain context. We are beginning to trust Al to make decisions for us, in an autonomous way. Can this be compared to human agency? The answer is no, because there is no free will. However, early Al advances force us to reconsider the possibility of nonhuman agency and our definitions. Will we see Al evolve as a new actor in society? We explore the possibilities.

So, how do you and your organization chart your course in the wake of Al? Our research explores different paths that Al may take during the next 10 years — these paths are depicted as the four seasons (see Figure 1).

Figure 1: The Four Seasons of Al During the Next 10 Years



How to Use

Executive leaders and their teams can use our presentation slides to develop future strategies through 2033 and beyond:

- Part 1: What's Up, AI?
  - Read this for an introduction to some fundamental issues (including the future of jobs).
- Part 2: What's Next, Al?
  - Study this for future AI scenarios through 2033.
- Part 3: What Else, Al?
  - Browse this for more insights on the impacts of Al.

At the end of each section below, download the PowerPoint slides for further guidance.

### **Analysis**

#### Part 1: What's Up, AI?

The path to Al adoption has been gradual, but now is occurring at a breakneck pace. In fact, ChatGPT set the record in early 2023 for the fastest growing application ever. <sup>1</sup> Al is beginning to display signs of emergent behaviors, or behaviors that are unexpected or unusual. OpenAl's hide-and-seek game demonstrated that Al agencies are developing new strategies. <sup>2</sup>

These advances raise some fundamental questions:

- How would we recognize Al as an actor in society?
- In what areas will Al outperform people, and where will it not?
- How will Al augment most jobs and not replace them?
- What fundamental risks come with the growth of Al?

#### Download Part 1 of the presentation slides

#### Part 2: What's Next, AI?

Here, we explore future AI scenarios through 2033 using a familiar metaphor — the four seasons of summer, fall, winter and spring.

The **summer** brings energy and life, but it can also be overheated. Al will continue to innovate, sometimes at a breakneck pace, making it challenging to control. Fundamental progress in Al is combined with responsible and ethical use of Al, benefiting large parts of the world. But will this last forever?

The **fall** is a time of harvesting fruits, but under the threat of brewing storms and growing darkness. In the race for Al dominance, clear winners emerge. They exploit the growing power of Al for their own interests. Negative sentiments grow, and innovation slows. How will this end?

In the winter, everything slows down. We protect ourselves from the cold. Yet hibernation helps us regenerate. In AI, innovation stagnates, inhibited by disappointment and a lack of trust. But stagnation also gives people time to regroup and start building new forms of trust, while exploring new sparks of innovation. Will AI flourish again in the next season?

**Spring** is about new growth. Let a thousand flowers bloom. Yet spring is also about unpredictable weather, destroying some of that growth. All is full of experimental innovation, but its application is often unclear. Will the promise of All materialize?

#### And what are the most likely seasonal directions during the next 10 years?

- Al spring: With Al investment levels high, the near future compares to the season of blossoms. Although recent advances are promising, it remains to be seen whether the promise will materialize.
- AI fall: As things stand today, Al innovation is more expensive and complex, and primarily controlled by just a few large technology firms. If further breakthrough innovations occur, we will find ourselves in the season of harvest.
- Al summer: If society manages to foster and fund more open innovation, such as the current wave of open-source LLMs, combined with the ethical and regulated use of Al, only then would it be feasible for society to reach the season of eternal sunshine.

#### Download Part 2 of the presentation slides

#### Part 3: What Else, AI?

In this section, we provide some additional insights into the impact of Al. These run the gamut from creative Al and Al regulations to the emergence of artificial general intelligence:

- What Is AI? Some Definitions
- Will We See the Emergence of Artificial General Intelligence?
- Al Schools of Thought Different People Have Different Opinions
- Digital Technologies Traverse Phases of Responsible Use
- Balancing Al Energy and Environmental Impacts
- Confirming Reality and the Source
- Can Generative Al Be Creative?
- Responsible Use of Generative Al Applications
- The Al Wave Will Not Recede for You

Al innovation continues. However, pausing development will not provide a solution. Al's societal impact cannot be solved upfront or immediately. Gartner believes that it can be done only through moving forward, learning through experience and making mistakes.

#### Download Part 3 of the presentation slides

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This research is part of Gartner Futures Lab — Gartner Futures Lab research challenges conventional wisdom and explores plausible "what if" futures to reconsider implications for the present.

### **Next Steps**

Executive leaders, responsible for innovation and managing disruption, should:

- Understand that AI is advancing rapidly and creating its own forms of intelligence, with an enormous impact on human life. This requires society to create new definitions and a new worldview. AI and humanity should evolve together.
- Address fears of potential job losses incurred from AI technology advances by emphasizing the goal of AI is to augment human capability, not replace it.

- Collaborate across teams by mixing engineering skills with social sciences. Al should be treated not just as a technology, but more significantly as a force that shapes society and affects our humanity.
- Avoid development in an attempt to untangle Al's impacts. We cannot foresee all consequences. We can learn only through development, experience and acceptance of making mistakes. Propose agreed-on schedules that lead to open sourcing, regulated constraints, quasi-public systems or global treaties.
- Work on cutting-edge use cases and governance simultaneously. Be aware of the risks that come with deploying advanced AI.

### **Acronym Key and Glossary Terms**

AGI	Artificial general intelligence is an anticipated future of AI where it has the capacity to understand or learn any intellectual task that a person can do.
Al	Artificial intelligence applies advanced analysis and logic-based techniques, including machine learning, to interpret events and suggest, support and automate decisions or take actions.
ChatGPT	This OpenAl service incorporates a conversational chatbot with LLM to create content. It was trained on a foundational model of billions of words from multiple sources, and then fine-tuned by reinforcement learning from human feedback.
Foundation models	Large machine learning models are trained on a broad set of unlabeled data and then adapted to a wide range of applications with fine-tuning.
Generative Al	These AI techniques learn from a representation of artifacts from data and models, which they use to generate new artifacts that preserve a likeness to the original artifacts.
LLM	A large language model is AI that is focused on vast amounts of text to interpret and generate humanlike textual output.

### **Evidence**

This research is based on Gartner interactions with clients and Gartner research reports.

 $<sup>^{1}</sup>$  ChatGPT Sets Record for Fastest-Growing User Base — Analyst Note, Reuters.

<sup>&</sup>lt;sup>2</sup> Emergent Tool Use From Multi-Agent Interaction, OpenAl.

### **Recommended by the Authors**

Some documents may not be available as part of your current Gartner subscription.

Applying AI — Techniques and Infrastructure

Applying AI — Key Trends and Futures

Applying AI — A Framework for the Enterprise

Applying AI — Governance and Risk Management

How to Responsibly Use ChatGPT (and Other LLM Applications) in Your Business

Interactions

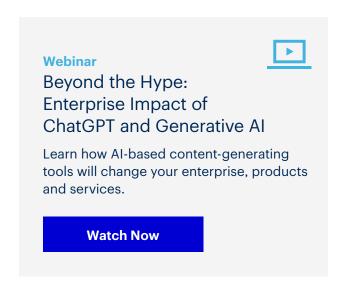
Gartner Futures Lab Podcast: Thriving in the Age of Disruption

Video: How Executive Leaders Can Prepare for the Future

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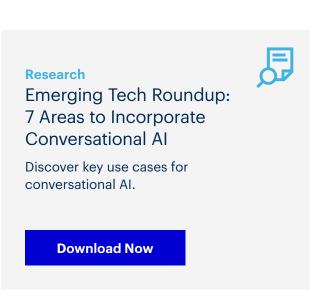
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