

Is Agentic AI Right for Your Use Case?

A Gartner framework for getting it right

Organizations are navigating a complex landscape of AI solutions. This guide helps you quickly determine which approach best fits your task or project and how to invest in AI with confidence.

Did you know?

Agentic AI and generative AI are frequently treated as interchangeable. However, agentic AI extends GenAI with autonomy, making it better suited to certain use cases and implementation patterns.

Understanding the difference

Two types of AI. Several different purposes.

Before choosing the right approach, you need to understand what sets these two categories of AI apart and why confusing them leads to poor investment decisions.

The familiar one

GenAI



Learns from vast amounts of data to create new content — text, images, code and more — in response to prompts. It excels at synthesis, creation and summarization:

- Responds to a single prompt at a time
- Requires human direction to take action
- Works from static training data, not live systems
- Predictable, bounded outputs with lower operational risk

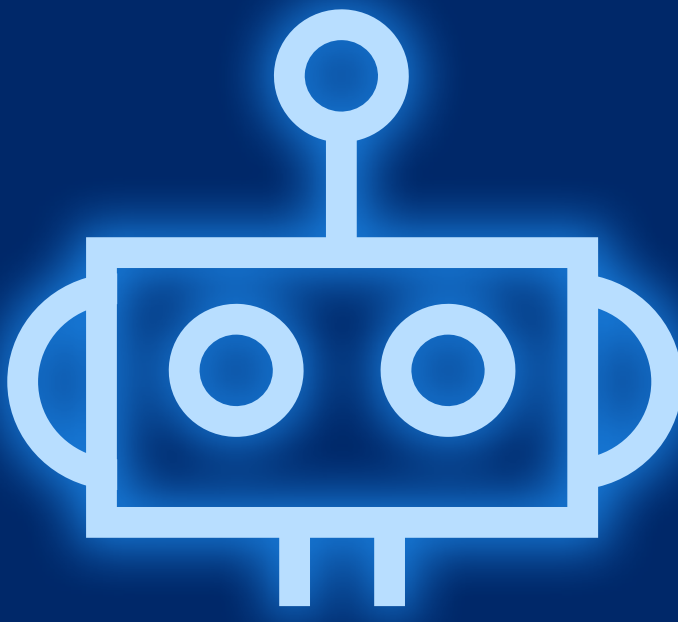
The emerging one

Agentic AI



Autonomously reasons, plans and acts across multistep workflows, using tools, memory and external systems to complete complex goals end-to-end with minimal human input:

- Reasons across multiple steps
- Acts autonomously using tools
- Interacts with live systems
- Introduces new risks in cost, latency and trust

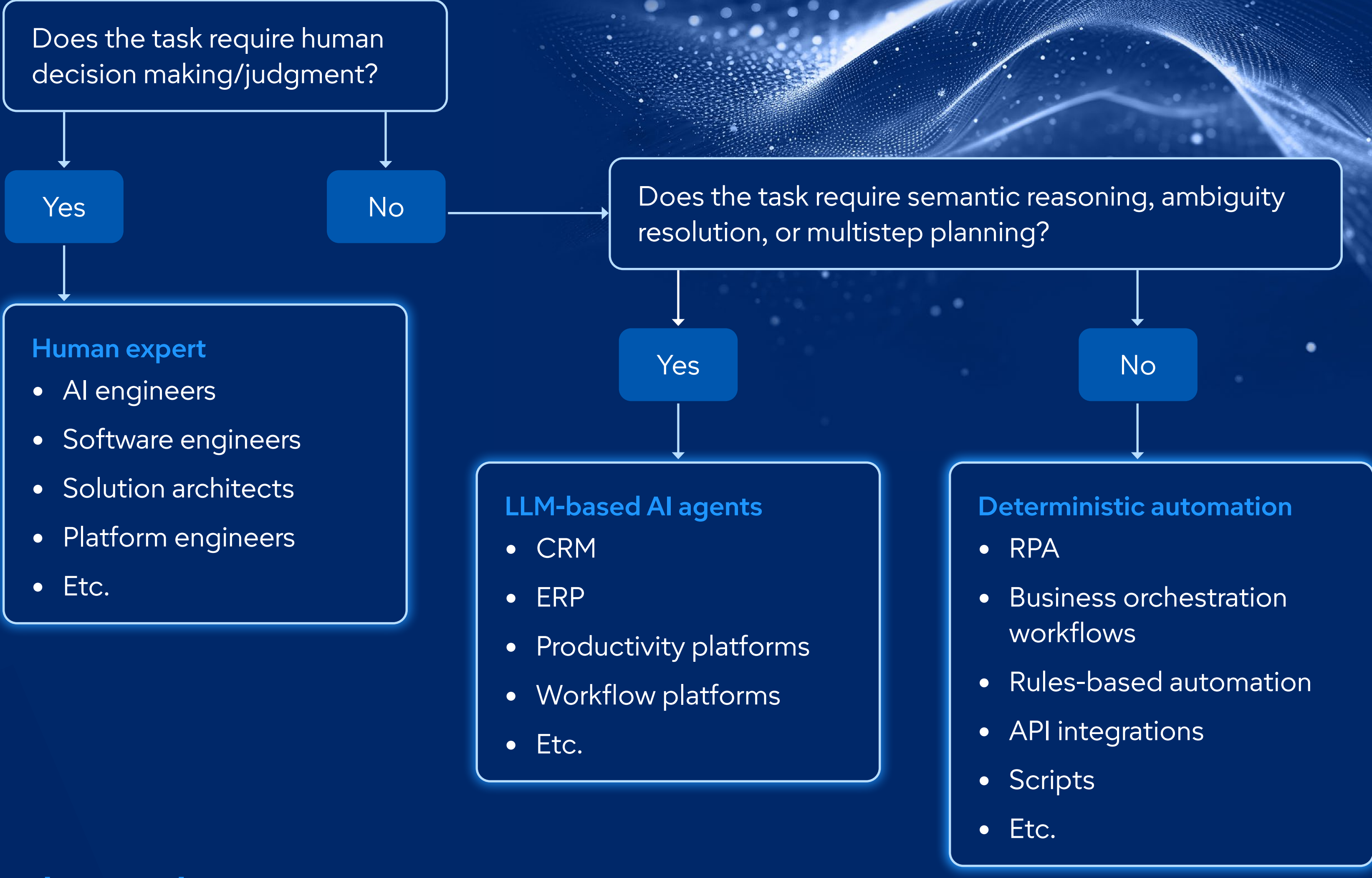


Agentic AI task routing tool

Does your task call for an AI agent?

If you think agentic AI is the right fit for your project, use this Gartner decision framework to route any task to the right execution approach; whether that's a human expert, deterministic automation or an LLM-based AI agent.

Decision framework



What each outcome means

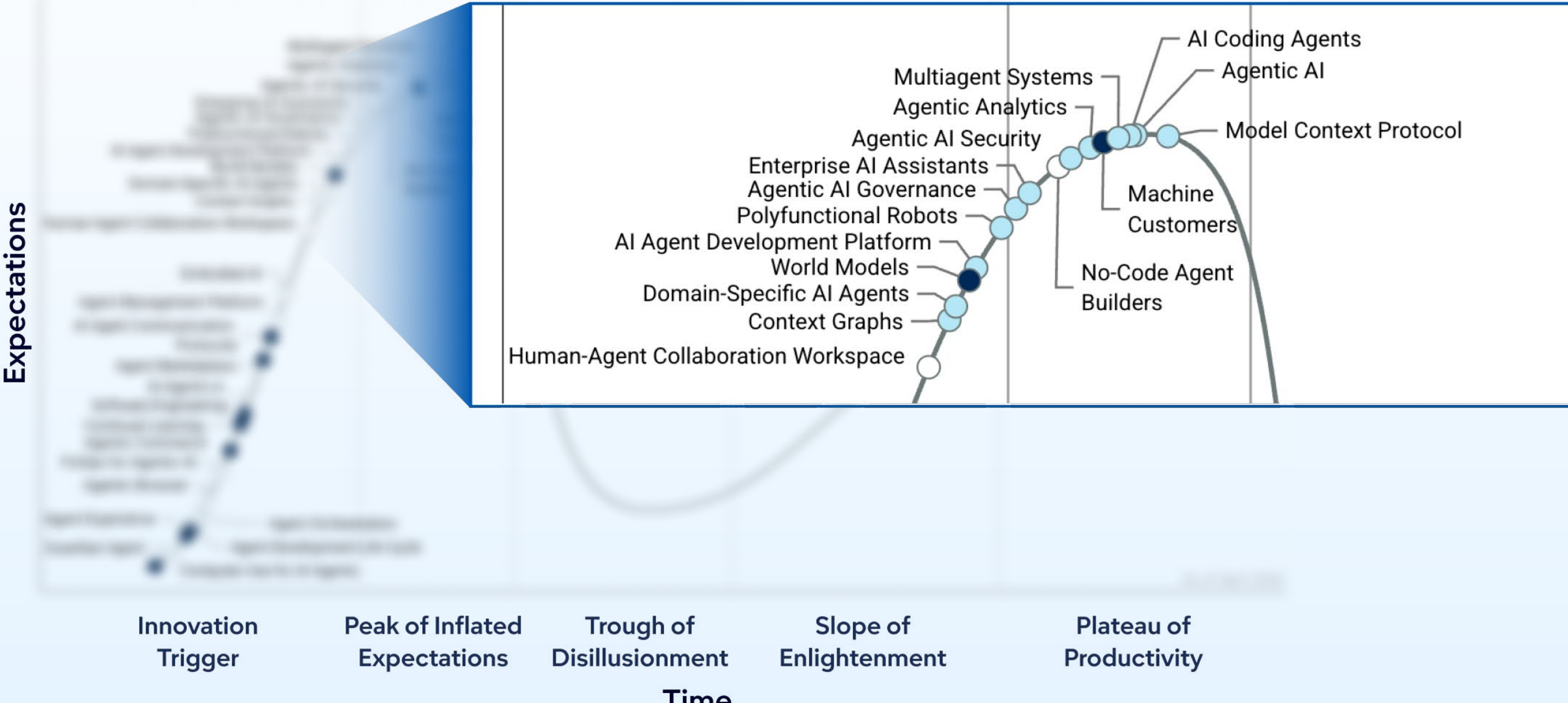
Agentic AI market maturity

Where does agentic AI stand today?

The Gartner Hype Cycle™ for Agentic AI report maps the maturity of key technologies, helping you understand which are enterprise-ready now and which require a watch-and-wait strategy.

Hype Cycle for Agentic AI

Plateau will be reached ○ < 2 years ● 2 – 5 years ● 5 – 10 years ▲ > 10 years ✕ Obsolete before plateau



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Ready now <2 yrs

AI Coding Agents, Agentic AI, Model Context Protocol

Approaching or at the Slope of Enlightenment — prioritize investment now.

Maturing 2 – 5 yrs

Multiagent Systems, Agentic Analytics, AI Governance

Climbing toward maturity — begin foundational planning today.

Emerging 5 – 10 yrs

World Models, Human-Agent Collaboration Workspaces

Early-stage innovation — monitor closely, avoid heavy commitment.

Virtual Briefing

How to Assess Best-Fit Agentic AI Solution

Join Gartner analysts for a discussion around identifying when agents are truly needed, choosing the right use cases and designing for traceability, safety and secure integration.

Access the Virtual Briefing ↗

You'll walk away ready to:

- Identify the right use cases for LLM-based agents
- Ensure safe, cost-effective autonomous reasoning with strong guardrails and traceability
- Integrate agents with external tools and systems to minimize risks

Questions we'll answer:

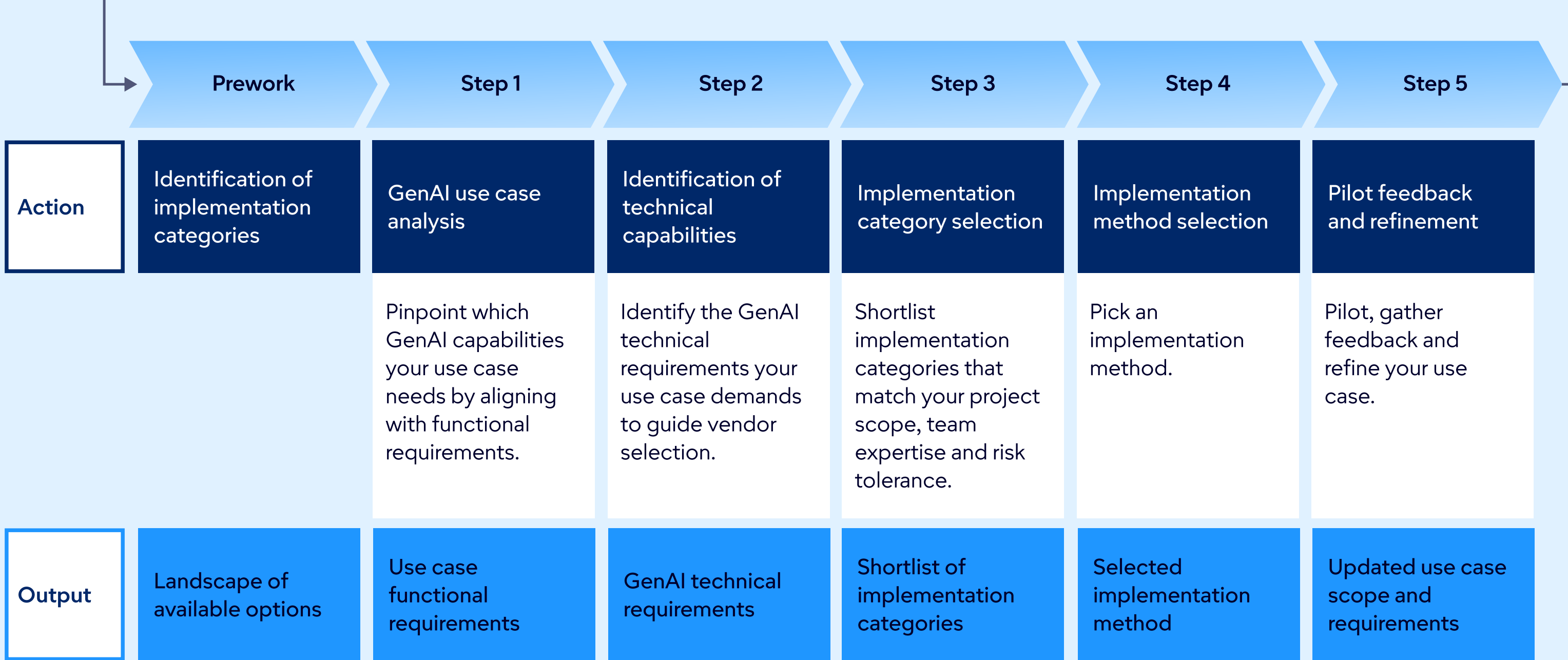
- How do you ensure agent quality?
- How does Model Context Protocol guide solution selection?
- Is there a universal approach for all agentic AI use cases?
- What are real-world examples of successful agentic AI solutions, and why did they fit?
- What data requirements are needed before starting an agentic AI pilot?

AI use case implementation roadmap

How to select the right implementation approach

Agentic or not, if you've determined the right fit, this Gartner Assessment Framework provides a structured path from use case analysis through pilot to refinement.

Gartner Framework for Selecting AI Implementation Methods



Source: Gartner

Actionable, objective insights

Position your organization for success. Explore these additional complimentary resources to guide your AI strategy:

FAQ

Understanding the Gartner Top 10 Strategic Technology Trends

Get answers to the most frequently asked questions about AI technology, tools and terminology to inform smarter investment decisions.

Read Now ↗

How We Help

How Gartner Works With Technical Teams

Explore our product capabilities, and discover how they help IT and data leaders evaluate, select and implement the right AI solutions.

Get Started ↗

Tool

Pinpoint High-Impact AI Opportunities

Browse real-world AI use cases mapped to business outcomes — helping you identify which applications are the best fit for your organization's goals.

Learn More ↗

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