



2026

# State of Agentic Orchestration & Automation


Closing the agentic AI  
vision–reality gap



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# Introduction

Investment in business automation is still rising, and it is paying off. Organizations are not just automating more; they are automating what matters most, from onboarding and claims to order fulfillment and fraud detection. An overwhelming majority (95%) have seen increased business growth due to process automation over the past 12 months (up from 87% the previous year). On average, organizations have automated 48% of their processes and believe this could reach 64%. Nearly four in five (79%) plan to increase automation spend, with budgets expected to rise by an average of 20% over the next two years, and 85% say they will increase automation spending by at least 10%.

At the same time, technology stacks are becoming more distributed, the number of endpoints involved in each process is increasing, and AI is moving from experimentation into everyday work. AI agents, in particular, promise to extend automation into complex knowledge work that previously required human judgment alone. Many organizations want to turn that promise into a dependable capability that can scale across the business, but **nearly three-quarters (73%) say there is a gap between their vision for agentic AI use and the reality today**. While 71% are already using AI agents, only 11% of agentic use cases have reached production in the last year. This report outlines how organizations can move from isolated agent pilots to enterprise agentic automation, where agents, people, and systems are orchestrated as part of governed, end-to-end business processes.

For this report, we spoke to 1,150 senior IT decision makers, business decision makers, and enterprise software architects responsible for process automation in large organizations (over 1,000 employees). We asked about the current state of process orchestration and automation in their business, how AI and agents are being used today, and what stands in the way of scaling and governing AI agents in production.

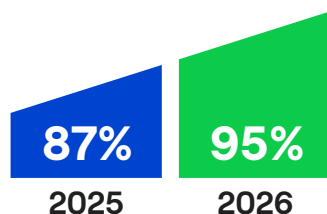
## What is an AI agent?

An AI agent is a piece of software that uses Large Language Models (LLM) to interpret goals, make decisions, reason about next steps, and interact with people, systems, and devices.

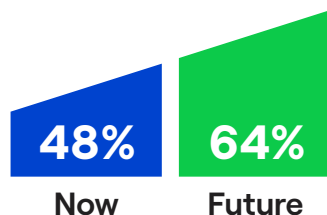
# Automation is delivering business value and there's runway to do more

Automation is already delivering tangible results for many organizations and is now a key driver of value across core business processes: the ones that build and sell an organization's products and services. Organizational leaders report increased business growth, higher efficiency, and better customer experiences as a result of process automation, as well as intentions to invest further. These results highlight a significant runway for further process automation, and the investment outlook reflects this ambition.

The next step is extending this success into enterprise agentic automation, where AI agents participate in the same core processes with the same level of control and reliability as other tools and technologies.



Increased business growth due to process automation over the past year



48% of processes are currently automated  
This figure could climb to 64%



**79%**  
plan to increase automation spend



**+20%**  
automation budgets expected to rise by an average of 20% over the next two years



**85%**  
will increase automation spending by at least +10%

# Process complexity is outpacing innovation

While many organizations aim to increase their investment in process automation, some are encountering complexity that outpaces their ability to innovate.

## Process complexity is rising due to:

- 81% — Regulatory complexity
- 57% — Branching and conditional logic
- 54% — Legacy systems that are difficult to connect to
- 47% — Multiple systems that must interoperate
- 41% — Human work
- 33% — Homegrown software that is hard to integrate

## Rising volume and diversity of process endpoints

Process endpoints are a major source of complexity in designing, running, and managing end-to-end business processes. Endpoints can be:

- **People** such as insurance claims adjusters, loan officers, and contact center personnel
- **Systems** such as customer relationship management (CRM) systems, enterprise resource planning (ERP) tools, and large language models (LLMs)
- **Devices** such as physical robots, kiosks, and Internet of Things (IoT) sensors

As technology stacks evolve, the volume and diversity of process endpoints are increasing. The result is an environment where business processes are tightly intertwined with many systems, teams, external partners and, increasingly, AI agents. Creating or changing an end-to-end process often implies touching multiple systems and interfaces, which slows down change and increases risk.

## What's needed to tame process complexity?



85% say they need better tools to manage the intersection of processes



66% say they need a better way to monitor and control process automation

# Process complexity is outpacing innovation



Survey respondents shared that they manage an average of **50 endpoints** in their business processes, and that footprint is **growing at 14% year over year**.

## Most commonly used process endpoints:

- 60%** — Enterprise applications such as SAP, Oracle, and Salesforce
- 56%** — Task automation technologies such as robotic process automation (RPA)
- 50%** — AI/ML software, including LLMs and intelligent document processing (IDP) tools



**76%**

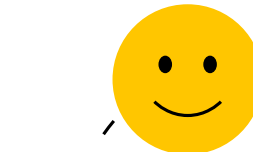
say the volume and diversity of endpoints are increasing exponentially

## Agentic orchestration as the new operating model

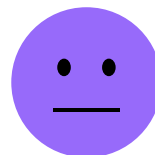
**Agentic orchestration enables teams to blend deterministic and dynamic orchestration of business processes. It leverages agents to add dynamic reasoning to deterministic processes so they can adapt in real time.**

Business process maturity is essential to safely implement agentic orchestration at scale, but many organizations are still early in their journey. They need to increase process maturity and AI maturity in parallel so that, as agents become more capable, teams are ready to embed them into governed, end-to-end processes rather than bolting them onto fragile or ad hoc automations.

## Current state of agentic orchestration



**10%** say they are currently using agentic orchestration



**85%** say they have not reached the right level of process maturity to implement agentic orchestration

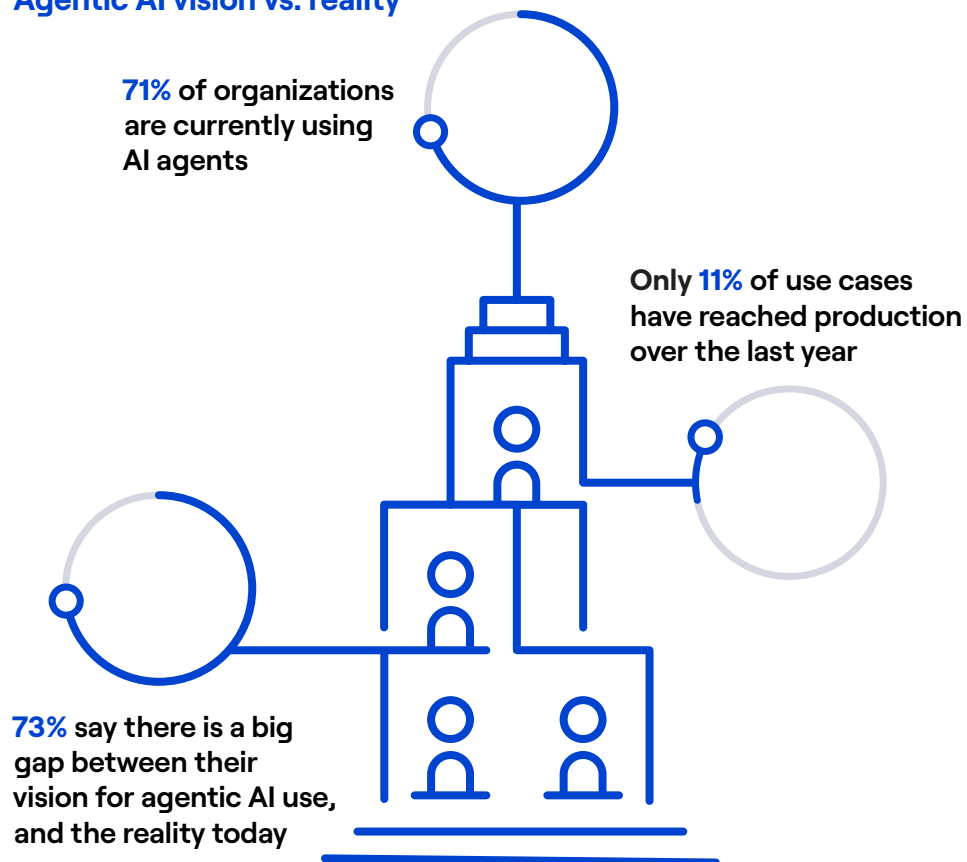


**81%** say that without agentic orchestration, achieving a fully autonomous enterprise is a “pipe dream”

# AI in practice: Risk versus reward

Across the board, organizational leaders understand that AI can bring substantial value by augmenting human work, saving time, and improving decision-making.

## Agentic AI vision vs. reality



However, while many organizations are experimenting with AI agents or plan to, trust remains a major barrier to wider adoption.

## AI trust issues

### What's holding organizations back?

- 84%** — Business risk of AI in day-to-day processes when IT does not have appropriate controls in place
- 80%** — A lack of transparency around how AI is used within business processes
- 66%** — Compliance concerns around the use of AI agents
- 56%** — Missing internal skills to manage AI effectively
- 50%** — Concerns that AI will make poorly implemented processes worse
- 42%** — Questions about using agentic AI where it doesn't add value
- 39%** — Don't trust delegating critical tasks to AI



**50% believe untamed agentic AI risks fanning the flames of poorly implemented processes and automations**

# AI in practice: Risk versus reward

These concerns do not negate the value of AI agents. Instead, they help explain why adoption patterns are uneven: organizations tend to be **comfortable using agents for low-risk tasks or internal copilots**, but are much more **cautious when considering agents for end-to-end, revenue-critical, or highly regulated processes**.



**80% say most of their AI agents today are chatbots or assistants that summarize or answer questions, rather than handling mission-critical cases**

This cautious stance is understandable, but it carries its own risk. Organizations that cannot move beyond pilots and isolated use cases will capture only a fraction of the potential value of AI. Meanwhile, those that successfully incorporate agents into core business processes as part of an enterprise agentic automation strategy will be able to redesign customer journeys and optimize internal operations much more effectively.

## The limits of siloed agents

An additional barrier to using AI in production is the proliferation of siloed agents that aren't embedded in orchestrated business processes or aligned with an enterprise agentic automation strategy. Many IT leaders today refer to their agents as:

- Focused on low-level, low-risk activities such as chatbots or assistants that summarize information and answer questions
- Operating at the edge of business processes rather than operating in core, mission-critical process flows
- Heavily dependent on human oversight and approval for important decisions



**48% say their agents today operate in silos and aren't woven into end-to-end processes**



# AI in practice: Risk versus reward

## Building a foundation for trust

To build a foundation for trusting AI agents in production, organizations need agentic orchestration to provide a control layer for agent behavior. This means using deterministic process models to define where agents are allowed to act, which decisions require human approval, what to do when confidence scores are low, and how to capture a complete audit trail of every step an agent takes.

### AI in the future

- 90% — of respondents say AI needs to be orchestrated like any other endpoint within automated business processes to ensure compliance with regulations
- 88% — say AI needs to be orchestrated across business processes if they are to get maximum benefit from their investments
- 73% — are looking to use AI to better analyze and improve processes

Once a foundation of trust is built, agents become powerful endpoints inside a governed process instead of siloed copilots or chatbots. This is enterprise agentic automation: the ability to design, orchestrate, and govern enterprise-grade agents that handle business-critical work. Enterprise agentic automation connects agents to process endpoints and systems of record, with explicit rules, observability, and human-in-the-loop checkpoints to ensure governance.



# Conclusion



Organizations are under pressure to automate more of what matters most while safely incorporating AI agents into the core business processes that build and sell their products and services. Agentic orchestration, not standalone agents, is the key to closing the AI vision-reality gap. By using deterministic process models, clear guardrails, and event-driven orchestration to coordinate agents, people, systems, and devices, enterprises can build a foundation for AI agents they truly trust. This is enterprise agentic automation in practice, and it is how organizations will turn today's AI experiments into durable, business-critical capabilities.

## About the report

Camunda commissioned Coleman Parkes to conduct a survey among 1,150 respondents (503 US, 216 UK, 215 Germany, and 216 France) at organizations with at least 1,000 employees. All respondents are either responsible for, or significantly involved in, process automation in their organization. This survey was conducted online between September 23 and October 23, 2025.



**For more information about anything in this report, please [get in touch](#).**

## About Camunda

Camunda is the leader in enterprise agentic automation, orchestrating complex business processes, including high-value knowledge work, across agents, people and systems. By creating production-ready, enterprise-grade agents with built-in governance, Camunda uniquely delivers trusted AI agents for business-critical processes. Over 700 leading innovators like Atlassian, ING and Vodafone rely on Camunda to slash time-to-value from months to days, boost operational efficiency and elevate customer experiences. Ready to become an AI-first enterprise? Visit [camunda.com](https://camunda.com).