

Agentic Al powered by integration

Integration turns agentic AI into connected, actionable intelligence



AGENDA

As businesses experience the transformative power of agentic AI, it's rapidly climbing the strategic agenda. Here we'll explore how agentic AI can reshape your enterprise, delivering tangible value through intelligent integration. We'll unpack the benefits, share our recommendations, and outline actionable steps to help you navigate this emerging opportunity.

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Unlock the value of agentic through enterprise integration and orchestration

Learn how Capgemini helps organizations embed agentic AI at scale through deep expertise, proven methodologies, and industry-aligned integration solutions.



How your team of agentic AI collaborators can unlock business value

Al is evolving fast and agentic Al is accelerating the transformation. Agentic Al represents a major leap in artificial intelligence, signaling a shift from systems that merely analyze, predict or generate content to those capable of taking purposeful, context-aware action within complex environments.

Gartner predicts that by 2028, 33% of enterprise software applications will include agentic AI, up from less than 1% in 2024. AI agent machine customers will replace 20% of the interactions at human-readable digital storefronts. And at least 15% of day-to-day work decisions will be made autonomously through agentic AI, up from zero percent in 2024¹.

Agentic AI can orchestrate and integrate multiple AI models, leveraging reasoning, learning, and iterative planning to address dynamic, multi-step challenges within organizations. This emerging paradigm redefines AI from a passive tool to anactive collaborator capable of initiating, adapting, and completing tasks with reduced human input.

Key characteristics that define agentic AI systems include goal-directed reasoning, real-time adaptability, and the ability to adjust behavior based on evolving conditions, rather than relying on static instructions. These systems excel at executing multi-step tasks, navigating complex workflows from problem identification to gathering inputs, evaluating options, and driving solutions to completion. A defining capability is collaborative orchestration, where multiple agents coordinate seamlessly toward shared objectives with reduced human intervention. This marks a transformative shift, positioning AI agents as capable assistants that can pursue goals, make informed decisions, and continuously learn.



But here's the catch. Without integration, even the smartest AI agent is just a siloed brain with no body.

Integration isn't just a technical layer. It's the strategic enabler that transforms agentic AI into a business-ready powerhouse. By seamlessly connecting data, systems, and intelligent agents, it empowers agentic AI to operate as a cohesive network of near-autonomous collaborators.



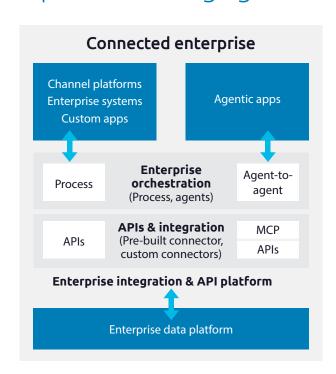
Integration: the missing link in agentic AI adoption

Despite its transformative potential, agentic AI faces a critical barrier—integration. A staggering 95% of IT leaders report challenges connecting AI to existing systems. With organizations averaging 897 applications, only 2% have integrated more than half of them².

Integration is what makes agentic AI real. It's how AI agents access data, trigger workflows, and communicate with each other. Without it, they're isolated. Intelligent, but inert. Business leaders who prioritize integration will unlock the full power of agentic AI, driving growth, innovation, and sustained competitive advantage.



Operationalizing agentic AI: integration is the catalyst



In a connected enterprise, agentic AI platform is set to become a proactive force in the ecosystems—but integration is what makes it operational. It enables agents to deliver dynamic, contextual responses, automate workflows, and scale securely through modular, composable architecture.

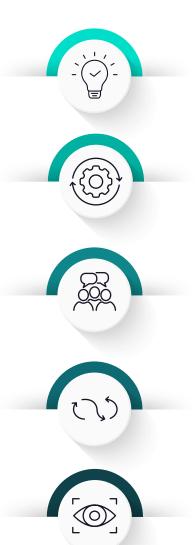
As agentic AI evolves to act independently, integration ensures it operates with the same context, access, and agility as a near human team member. This demands seamless access to enterprise data and the ability to act within existing systems.

In such an ecosystem, enterprises are increasingly relying on enterprise orchestration and interconnected systems, making the ability to coordinate multiple AI agents to contribute to their capabilities. In such a multi-agent ecosystem, integration allows agents to delegate subtasks to one another, exchange information, and collect results.

"According to Gartner, agentic AI will be incorporated into AI assistants and built into software, SaaS platforms, internet-of-things devices and robotics. When AI assistants start planning, making decisions and taking action for you, agentic AI will be there. It'll be everywhere, with the potential to extend collaborative work management platforms beyond task tracking into planning and executing tasks"³.

Agentic AI is ready – but integration makes it real

For agentic AI to move from potential to real-world impact, it requires a solid foundation of integration. Integration is the force transforming intelligence into action and autonomy into outcomes. To deliver on this promise, agentic AI depends on a set of critical enablers.



Agentic AI needs data to think

Al systems rely on access to real time, high quality data from across your enterprise. Integration connects siloed systems, enabling AI to generate insights with full business context.

Agentic AI needs systems to act

Unlike traditional analytics, agentic AI doesn't just recommend. It acts. Integration provides the pathways for AI to trigger workflows, update records, and drive outcomes across platforms with minimal human input.

Agentic AI needs agents to communicate

Multi-agent systems use specialized AI agents working together, structured or decentralized, to solve complex tasks. Integration is key. It enables seamless communication and orchestration among agents, unlocking their collective potential in real-world applications.

Agentic AI needs scalability and agility

Integration enables AI to scale across enterprise and adapt to changing business needs. Integration provides modular, secured, composable architectures to drive business agility and scale.

Agentic AI needs reliability and observability

Integration provides the backbone for reliable agent coordination and real-time observability, enabling seamless execution and transparent monitoring across distributed environments.



As agentic AI continues to evolve, multi-agent systems from different platforms such as SAP, ServiceNow, Salesforce etc. are emerging as a transformative force. These multi-agent systems consist of multiple specialized AI agents working collaboratively, often in decentralized or loosely structured networks, to tackle complex tasks that exceed the capabilities of a single monolithic agent.

In real-world scenarios, many challenges require distributed intelligence. Multi-agent systems enable:



Dynamic collaboration:

Agents share data, delegate subtasks, and synthesize results in real time.



Scalability:

Tasks can be divided and conquered efficiently, improving performance and adaptability.



Specialization:

Each agent can be optimized for a specific function, enhancing overall system intelligence.

Multi-agent orchestration and enterprise integration transforms these isolated AI agents into a coordinated force.

Agentic orchestration provides a coordinated management of multiple AI agents working together to achieve complex goals. Unlike traditional automation, it will enable agents to dynamically collaborate, delegate tasks, and adapt in real time —mirroring the behavior of high-performing human teams.

As enterprises scale AI adoption, agentic orchestration will be key to unlocking distributed intelligence—where agents not only think and act independently but also coordinate seamlessly to drive strategic outcomes across the organization.

Enterprise integration will enable these agents to share context, trigger workflows, and collaborate seamlessly across systems—unlocking intelligent, scalable, and near-autonomous operations within complex enterprise environments.

Looking ahead, we envision a future where agents not only collaborate within an organization but also interact across organizational boundaries. For example:

 In a global supply chain, agents from manufacturers, logistics providers, and

- retailers could work together to optimize end-to-end operations.
- In financial services, agents from different institutions could collaborate to detect fraud or manage risk in real time.

This interconnected ecosystem of agents will be powered by robust **enterprise integration and agentic orchestration** with a secured API infrastructure, enabling seamless cooperation across the digital enterprise landscape.

The road ahead

To unlock the full potential of multi-agent systems, organizations shall be investing in:

- Interoperability standards for agent communication.
- Secure and scalable integration platforms.
- Governance models to manage agent behavior and accountability.

By combining the power of agentic AI, enterprise integration and agentic orchestration, and partner ecosystems, businesses can revolutionize how they operate, enabling a new era of intelligent collaboration.



Better outcomes. Better impact.

Integrated agentic AI is no longer a future promise. It's delivering real, measurable impact across industries, right now.

Industry	Description	Outcome
Manufacturing and supply chain	Precision, resilience, and real-time orchestration In manufacturing, agentic AI integrates data from IoT sensors, production lines and maintenance logs to predict equipment failures before they happen. This enables pre-emptive action, reducing costly downtime, and improving asset longevity. In supply chains, AI agents continuously analyze variables like weather, traffic, and demand signals to optimize logistics and inventory.	Streamlined operations, improved delivery accuracy, and greater resilience to disruption
⊚ ← ∰ Healthcare	Smarter systems, better outcomes Agentic AI is enhancing the clinical and operational sides of healthcare. On the frontline, AI agents support personalized care by analyzing patient data and recommending tailored interventions. Behind the scenes, they automate administrative tasks such as scheduling, billing, and compliance, freeing up clinicians to focus on patients.	Improved patient outcomes, reduced burnout, and more efficient care delivery.
Financial services	Real-time intelligence, real-world protection In finance, agentic AI is redefining risk management and customer engagement. Agents monitor transactions in real-time, detect anomalies, and take immediate action, blocking fraud, flagging suspicious activity, or escalating cases for review. They also support advisors by analyzing market trends, customer profiles, and regulatory changes to inform smarter, faster decisions.	Enhanced security, improved compliance, and more personalized financial services.
Energy and utilities	Gaining autonomous optimization at grid scale With rising demand, aging infrastructure, and the push for renewables, energy providers face mounting complexity. Agentic AI helps manage this by integrating across IoT sensors, SCADA systems, and enterprise platforms to monitor grid performance, detect anomalies, and trigger predictive maintenance. These agents collaborate in real-time, analyzing load patterns, weather forecasts, and equipment health to optimize energy distribution.	Fewer outages, lower maintenance costs, and a more resilient, sustainable grid.

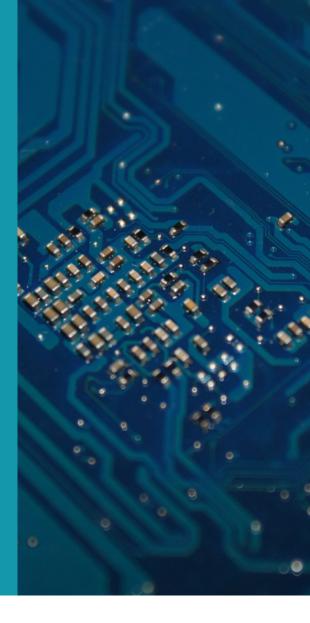
Customer service: From transactions to trusted interactions

Across all industries and business sectors, agentic AI is transforming customer service from providing reactive support to enabling proactive, personalized engagement. Intelligent agents now handle complex queries end-to-end, accessing live systems, interpreting sentiment, and adapting responses in real-time. These agents don't just answer questions. They resolve issues, update records, and learn from every interaction.

Customer services and support, IT, and sales are the functions where most executives predict that AI agents will be actively performing at least one process or sub-process daily within the next 12 months. These functions often involve high volumes of interaction, require responsiveness over precision, and depend on contextual, conversational engagement. As a result, they operate effectively with nondeterministic, probabilistic agents that are context aware and highly adaptable.

Outcome: Faster resolution times, higher customer satisfaction, and reduced operational overhead.

According to Gartner "By 2029, agentic AI will autonomously resolve 80% of common customer service issues without human intervention, leading to a 30% reduction in operational cost".





Integrated agentic AI collaborators have huge transformative potential to enhance your human teams. But to enable the optimum implementation, you'll need to address several complex challenges in the integration process. Here's what to watch for:

Data compatibility and quality the foundation of agentic intelligence

Al is only as good as the data it sees. However, enterprise data is frequently fragmented across numerous siloed systems, such as CRMs, ERPs, and legacy applications. Often it exists in incompatible formats, uses inconsistent terminologies, and suffers from quality issues like duplicates, missing fields, or inaccuracies. Data issues can lead to inaccurate insights, flawed decision-making by the Al agent, poor user experiences, and an erosion of trust in the Al system.

Solution: Invest in enterprise data platforms and adopt a data-centric culture. To operationalize AI effectively, enterprises must also integrate enterprise data in a way that ensures consistency, accessibility, and real-time availability. Clean, connected data is the foundation of intelligent action.

2. Integration complexity and interoperability - navigating a heterogeneous landscape

Integrating diverse tools and systems into a single AI framework is complex and demanding. Each integration involves researching the API of the target application, understanding varied authentication methods, and handling specific data structures and error codes. This complexity can slow down development cycles, increase implementation costs, and introduce weak connections that are prone to failure.

Solution: Implement an enterprise iPaaS platform with the right integration strategy. This will ensure the seamless connectivity of AI agents with data sources and business systems, without causing excessive disruption. Emerging standards like the model context protocol (MCP) aim to standardize interfaces and communication for agents to interact with tools and data sources.



3. Scalability and performance - meeting enterprise demands

As agentic AI scales, so do the data volumes, simultaneous user requests and frequent API calls. This places a significant load on both the AI agent's underlying infrastructure and the connected systems. The impact can result in performance degradation, delayed responses, and an inability to handle growing workloads. This can limit the practical usefulness of Agentic AI in high demand enterprise environments.

Solution: Adopt a composable modular distributed architecture that enables the dynamic allocation of computational workloads across available resources. And the introduction of specialized AI agents based on demand, ensuring high scalability and flexibility. In short, by distributing tasks, multi-agent AI systems are highly scalable and resilient.

4. Security and ethics - ensuring responsible autonomy

The decision-making capabilities of agentic AI could raise significant ethical questions about accountability, bias, and potential misuse. In addition, agentic AI systems can be vulnerable to cyberattacks if not properly secured, with hackers potentially manipulating AI decisions or accessing sensitive data. In worst-case scenarios, impacts could include erosion of trust, regulatory non-compliance, unintended harmful outcomes, and severe reputational damage.

Solution: To ensure responsible autonomy, enterprises must integrate AI systems with security, governance, and ethical oversight frameworks across the stack. This includes use of identity and access management (IAM), and a secured API gateway with the right policy enforcements for data encryption and access. Essentially, this means designing for transparency and control, with human values firmly at the center. It means embedding principles like fairness, transparency, and human agency directly into the design of your system.

5. The human-in-the-loop imperative - balance human/agent collaboration

The human-in-the-loop approach is essential. It integrates human judgment at critical decision points and, when handling edge cases, enables you to establish clear escalation protocols for Al-driven decisions. You'll be able to implement real-time monitoring dashboards, so you can analyze the actions your Agentic AI collaborators are making, as they happen. At the same time, you'll be able to capture human feedback to refine AI agent decision-making over time.

The rise of human agent teams

It's essential to put the human-in-the-loop. According to the CRI report over 60% of organizations expected to deploy AI agents as tools or collaborators within human teams in the next year. As AI matures, these agents will evolve into supervised team members, enhancing productivity and decision making.

Nearly 90% of executives see human oversight in AI workflows as beneficial or cost-neutral, especially in aligning outcomes with strategy and values. Organizations integrating human agent collaboration report up to 65% more engagement in high-value tasks, 53% more creativity, and 60% higher productivity, highlighting the transformative potential of seamless human-AI teamwork⁵.

Itai Asseo, Head of Incubation and Brand Strategy (AI Research) at Salesforce, says, "Human-AI interaction patterns are still taking shape and a seamless way to interact with AI agents is yet to surface. Just as the shift from BlackBerry to iPhone in early days of the smartphone era redefined how we engage with technology, the sooner humans can intuitively interact with AI agents, the faster will be the adoption of agentic AI and its subsequent benefits"⁶.



06

Unlock the value of agentic through enterprise integration and orchestration



Why Capgemini is your trusted partner for agentic Al integration and orchestration

At Capgemini, we see integration as more than a technical requirement. It's a strategic enabler for agentic AI. In a world where AI agents are becoming trusted collaborators, we help organizations embed them seamlessly, securely, and at scale.

According to the CRI report "Rise of Agentic AI" Most (62%) of organizations surveyed prefer to partner with solution providers, such as Salesforce, SAP, and ServiceNow, and system integrators to implement or tailor AI agents that are already available as part of those product suites. The ready availability of in-built agents, pre-existing integrations with legacy systems, and fluency of staff to use these tools likely contribute to the preference⁷.

A connected enterprise, ready for what's next

We help businesses evolve into truly connected enterprises, in which systems, data and experiences work in harmony. From CX platforms and enterprise systems to agentic platforms and data platforms, our integration solutions are built to drive agility, resilience, and innovation.

Our **Business APIs and Apps Integration offerings** are designed to align your technology landscape with your business strategy. We don't just connect systems, we build intelligent, adaptive ecosystems that unify data, processes and platforms. The result? A more agile, responsive enterprise ready to scale innovation and respond to change.

We embed the AI across the software development lifecycle to:

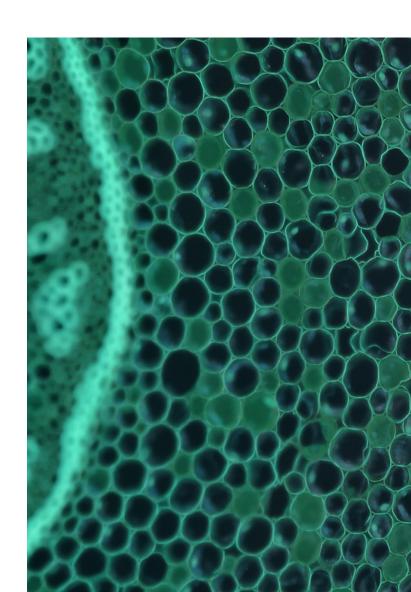
- Modernize legacy systems with minimal disruption
- Accelerate transformation through intelligent automation
- Enable scalable adoption of Agentic AI solutions

Global scale, proven expertise

With 22,000+ integration specialists worldwide and a track record of delivering complex, large scale integration programs globally, we bring scale and experience to make integration work. Whether through API-led modernization, enterprise-wide orchestration, or AI-assisted delivery.

Powered by partnerships, tuned to your industry

We collaborate with leading iPaaS providers and hyperscalers to co-develop scalable, innovative solutions. These partnerships give us early access to cutting edge tools, so you benefit from the best the market has to offer. Our solutions are tailored to your industry's unique needs. From financial services and manufacturing to healthcare, energy, and the public sector, we bring domain-specific APIs and accelerators that deliver faster time to value.



Let's make agentic integration and orchestration work for you

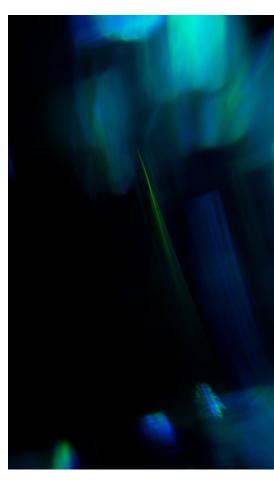
Whether you're modernizing your architecture, scaling AI adoption, or building a connected enterprise, Capgemini is your partner to turn vision to value. We bring together the right talent, the cutting-edge integration platforms, and deep proven expertise to transform integration into strategic business advantage.

To learn about our integration solutions and business APIs for industries including public services, telecom, banking, automotive, and consumer products and retail, contact our experts:

More reading on business APIs and application integration:

Orchestrating excellence with business APIs and application integration

Business APIs and Application Integration - Capgemini



¹ Gartner Report: Innovate Business Models Using AI Agents, Daniel Sun, Jorge Lopez, et al., Jan 16, 2025 (Accessible to Gartner clients only) GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved.

² MuleSoft 2025 Connectivity Benchmark Report

³ Gartner Research, Top Strategic Technology Trends for 2025: Agentic Al, October 2024

⁴ Gartner Press Release, <u>Gartner Predicts Agentic AI Will Autonomously Resolve 80% of Common Customer Service Issues Without Human Intervention by 2029</u>, March 2025, https://www.gartner.com/en/newsroom/press-releases/2025-03-05-gartner-predicts-Agentic-ai-will-autonomously-resolve-80-percent-of-common-customer-service-issues-without-human-intervention-by-20290

⁵ Capgemini Research Institute "Rise of Agentic AI". 2025.

⁶ Salesforce event "Agents at Work: The Human-Al Partnership" (part of Dreamforce 2024 series).

⁷ Capgemini Research Institute "Rise of Agentic AI". 2025

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About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2023 global revenues of €22.5 billion.

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Disclaimer: This paper examines the evolving landscape of artificial intelligence (AI), with a particular focus on the essential role of integration in Agentic AI. As AI – and in this context Agentic AI - continues to advance at an unprecedented pace, success increasingly depends on how effectively it is integrated into existing systems, processes, and teams. Not just on the capabilities of AI itself. This paper draws on insights from leading research, industry experts, and our own practical experimentation with clients and internal teams. While the future of AI remains dynamic and uncertain, we aim to outline likely trajectories and integration strategies that can help organizations harness AI in meaningful, scalable, and sustainable ways.

