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Transformation

On the clock: Agentic AI in the workplace

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Key takeaways

- Agentic AI refers to autonomous, action-taking AI systems that have the potential to automate complex business processes. This evolution shifts generative AI from a reactive tool to a proactive and goal-driven virtual collaborator.
- While enterprise adoption of agentic AI remains in very early stages, momentum is building. By the end of 2025, International Data Corporation predicts half of all organizations will use enterprise agents tailored to specific business functions.
- As AI technology improves at a breakneck speed, it's challenging to predict the pace and magnitude of the agentic AI adoption cycle. Yet the long-term potential is undeniable. In fact, BofA Global Research predicts that agentic AI's total addressable market (TAM) will reach $155 billion by 2030.

Agentic AI 101

What is it?

Agentic AI refers to AI systems that can achieve a set goal or task with limited supervision.[1] Unlike generative AI, which creates content in response to a user's prompt or request, agentic AI is made up of agents that can autonomously make decisions or perform tasks, utilizing reasoning capability to choose the correct tools for the job. For example, an AI agent could fill out forms, make dining reservations, or book your travel arrangements – by itself. Does this topic seem familiar? For more, look back at our January publication, The new wave: Agentic AI.

Agentic AI architecture

Agentic AI is made up of a number of agent layers. There are common components that help structure each agent layer, and these components remain very similar across different types of agentic AI. According to BofA Global Research, as agents become more advanced, the number of existing agent layers is likely to expand, however, the core components are anticipated to remain unchanged (Exhibit 1).

According to International Data Corporation (IDC), agents operate by combining three distinct layers of capability. First, we have *interaction* – where agents interact with their environment to receive information about a required goal. They monitor the environment to receive feedback about progress toward the goal and to provide feedback to the requester. Second is *planning*. Given a goal and knowledge about its current environment, an agent creates a plan (a set of actions) that will enable it to achieve its goal. Lastly, there's *action*, which may involve sending messages, invoking external systems, updating data, and setting goals for other agents (to enable "multi-agent collaboration").

For example, consider what it would look like if a large enterprise leveraged agentic AI to manage IT incidents across its infrastructure – servers, networks, and applications. *Interaction* indicates that the agent would consistently monitor system logs, performance metrics, user reports, etc. – to look for anomalies. Once identifying an issue, it would then receive a goal: restore performance to normal levels. It could also communicate with IT staff, providing updates and receiving feedback. For *planning*, based on the agent's understanding of its environment, it would formulate a plan for issue resolution, which it would then execute in the *action* stage. If the issue required broader coordination, it could also set goals for other agents – to successfully ensure multi-agent collaboration.

[1] Stryker, C. (n.d.). *What is agentic AI?* IBM.

Exhibit 1: Agentic functionality is built upon a variety of agent layers which incorporate various components
Summary of the various agent layers and their common components

Agent Layer	Common Components
User / Touchpoints	Chat, email, APIs, voice
Orchestration / Planner	Central logic flows task to agents
Specialized Agents	Domain- specific tools and LLM calls
Memory / Knowledge	RAG, enterprise knowledge bases, context storage
Tool Integration	APIs, DB access, function execution
Feedback & Refinement	Observe → Reflect → Improve loops
Security / Compliance	Permissions, logging, governance layers

Source: BofA Global Research

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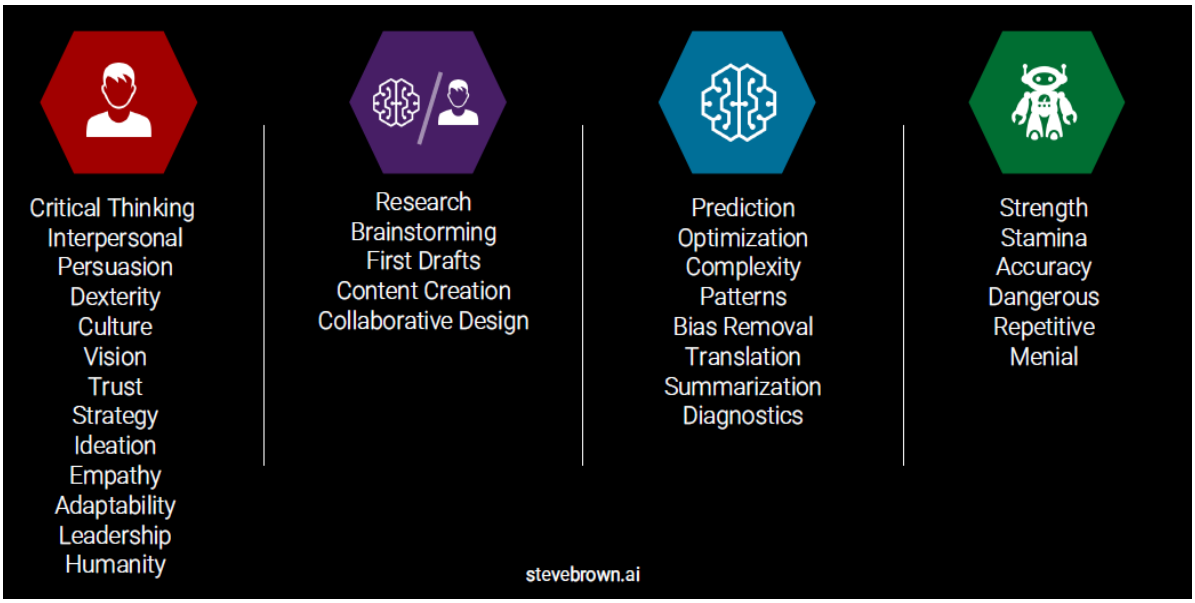
Agentic AI in the workplace

Adoption requires elevated workflow orchestration

As illustrated in Exhibit 2, increased enterprise adoption of agentic AI would elevate the need for workflow orchestration and task management, seeing as roles and tasks in the workplace would be distributed between humans, robots, and AI systems, depending on skills required (for more on this topic, read AI dictionary, part 2: The next generation). Ultimately, chatbots and copilots (i.e., generative AI that acts as a "virtual assistant" by providing support, suggestions and automating tasks) will complement agents as they develop and mature.

Exhibit 2: Agentic AI will increase the need for workflow orchestration and task management, choosing between humans, robots, and AI systems to complete tasks independently or collaboratively based on competencies
Illustration of Human / Machine skills and teaming: human, agentic AI-human, agentic AI, and robots



Source: Steve Brown, BofA Global Research

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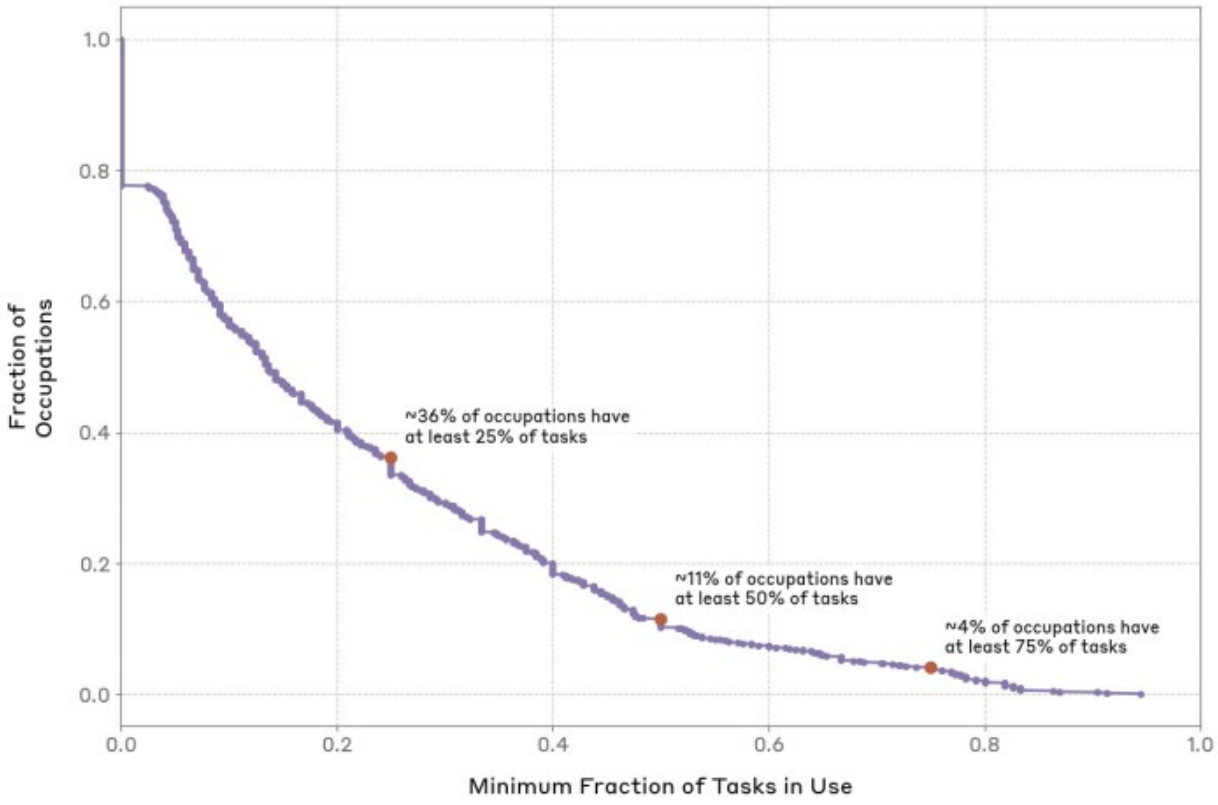
How much more productive could AI agents make humans?

The potential use cases for agentic AI are vast, spanning from an increase in productivity for marketing professionals to software developers. In fact, a recent study conducted by the Massachusetts Institute of Technology (MIT) evaluated potential productivity increases for marketing professionals via the usage of AI agents.[2] Interestingly, the study found that individuals placed on teams collaborating with AI agents were 60% more productive and created higher-quality ad copy than the individuals placed on human-human teams (with the exception of images, suggesting AI agents require fine-tuning for multimodal workflows).

Current state of play

According to a recent academic paper published by Anthropic – which analyzed 4 million+ Claude.ai conversations through the lens of tasks and occupations – roughly 36% of occupations use AI for at least a quarter of their associated tasks (Exhibit 3).[3] As illustrated in the distribution of the below chart, while AI could be touching many occupations today, deep integration across most tasks within any given occupation remains low. Per BofA Global Research, most generative AI pilots within businesses have focused on using large language models (LLMs) to help individuals or teams improve administrative productivity.

Exhibit 3: While many occupations see some AI usage (~36% have at least 25% of tasks), few occupations exhibit widespread usage of AI across their tasks (only ~4% have 75% or more tasks)
Cumulative distribution showing what fraction of occupations (y-axis) complete at least a given fraction of their tasks with AI (x-axis)



Source: BofA Global Research, Anthropic

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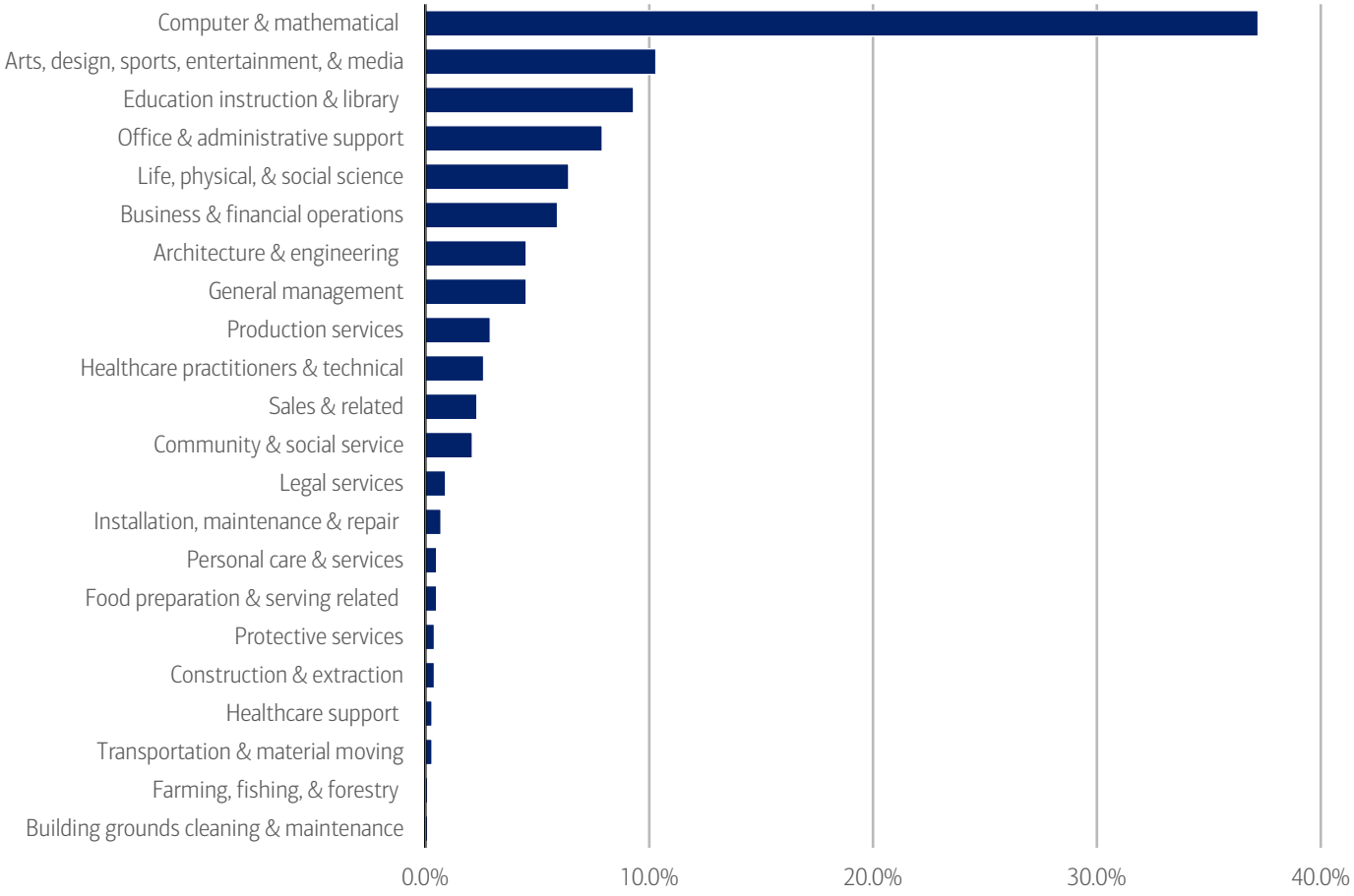
According to Anthropic, 37% of Claude conversations are attributed to individuals in computer and mathematical occupational categories (Exhibit 4).[4] Within these conversations, popular tasks to request assistance for included developing software applications, programming and debugging computer systems, and designing database systems. Occupational categories that generated the least Claude conversations, on the other hand, were building grounds cleaning and maintenance, and farming, fishing, and forestry.

[2] Aral, S., Harang, J. (2025, August 19). *Collaborating with AI Agents: A Field Experiment on Teamwork, Productivity, and Performance.*
[3] Handa, K., Tamkin, A., et al. (2025, February 11). *Which Economic Tasks and Performed with AI? Evidence from Millions of Claude Conversations.* Anthropic.
[4] Ibid.

Exhibit 4: Individuals in the computer & mathematical occupational categories, such as software developers, make up a substantial portion (37%) of total Claude conversations
Summary of the percentage of total Claude conversations by occupation category of total Claude conversations



Source: BofA Global Research, Anthropic

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Furthermore, according to BofA Global Research, sustainable business efficiencies are likely to be derived from use cases where core generative AI technologies are combined with corporate data, content, knowledge, tasks, and processes to improve the effectiveness of workflows and decisions. Now enter agentic AI, which – according to BofA Global Research – can serve as a bridge to addressing more sophisticated, specific, and needle-moving generative AI use cases.

However, agentic AI deployments remain in very early stages. According to PwC's May 2025 AI Agent Survey, which gathered perspectives from 308 senior business executives across industries, 17% responded that AI agents were being fully adopted throughout their company. Meanwhile, 35% said they were being broadly adopted, and 27% said limited adoption.[5] But, per PwC, "broad adoption" in this case doesn't necessarily equate to deep impact yet. At this stage agentic AI is used to speed up routine tasks, which aids productivity, but doesn't necessarily transform organizations.

Companies plan to pursue agentic AI

To be clear – the fact that agentic AI is in early stages of adoption does not mean that companies aren't planning to pursue applications in the future. Within PwC's AI Agent Survey, they also found that 88% of executives said their businesses planned to up their AI-related budgets over the next 12 months due to agentic AI.[6] And 8% indicated their budgets would increase more than 50%, while 18% indicated budgets would go up by 26-50%.

By the end of 2025, IDC predicts that 50% of organizations will use enterprise agents configured for specific business functions to achieve faster business value from AI. And BofA Global Research anticipates enterprises will move projects from pilots to deployment in 2025 or 2026 for easier to accomplish use cases (e.g. customer support functions), before moving to more broad-based implementations.

[5] Priest, D. (n.d.) *PwC's AI Agent Survey*. PwC.
[6] Ibid.

How big could agentic AI really be?

AI technology is improving at breakneck pace, making it a challenging endeavor to predict with any certainty the cadence and magnitude of the AI agent adoption cycle. In fact, AI capabilities/use cases could look vastly different in just a few years. However, BofA Global Research predicts that agentic AI's total addressable market (TAM) will reach $155 billion by 2030. This underscores their belief that agentic functionality could be the defining catalyst for AI monetization, as agents have the potential to serve as the unlock for sustainable, measurable, and material workforce productivity improvements.

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