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The AI PC:
Ready for Today's On-Device Workloads and Tomorrow's Agent-Centered Requirements

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Introduction

As companies large and small continue to adapt to the impact of artificial intelligence (AI) on their businesses, employees, and customers, one thing is clear: **The pace of AI adoption isn't slowing. An ever-increasing percentage of employees are leveraging AI in their daily work.**

However, to date, most of these AI workloads still run in the cloud. AI PCs with built-in NPUs are designed to run AI workloads locally, but operating systems and business applications have yet to fully leverage that capability. That is now beginning to change as OS updates and a new generation of AI-enabled applications finally start to unlock the on-device potential that AI PC hardware has long promised.

With software now beginning to deliver on the hardware's promise, forward-thinking companies that have already deployed AI PCs are well positioned to capture the benefits, from enhanced security and privacy to reduced latency to lower costs than cloud-based services. NPU-equipped devices will soon account for the majority of commercial PC shipments, and companies that continue to delay embracing the technology will find themselves rushing to catch up as more AI PC capabilities ship. In contrast, companies that embrace AI capabilities on PCs today will be best positioned to benefit from the next wave of agentic AI innovations.

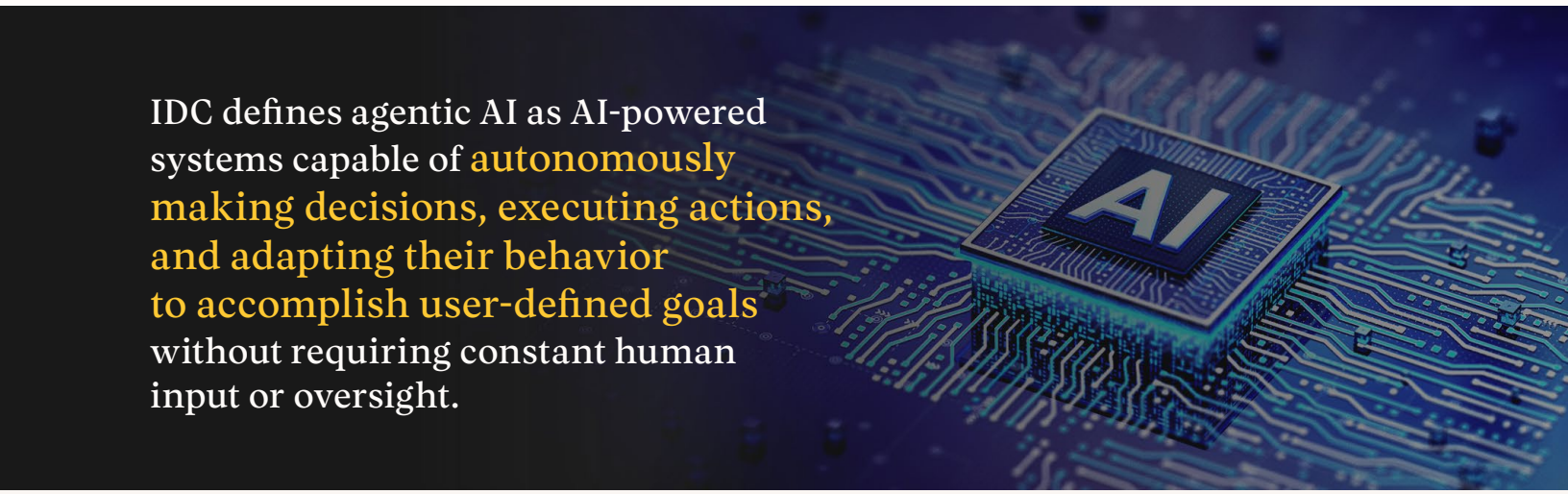
IDC defines agentic AI as AI-powered systems capable of autonomously making decisions, executing actions, and adapting their behavior to accomplish user-defined goals without requiring constant human input or oversight. Where traditional AI operates reactively in response to prompts, agentic AI takes a proactive approach, independently setting objectives, planning workflows, and carrying out tasks autonomously.

Today, agents are typically run sandboxed, in the cloud. Looking ahead, we believe the PC will play a key role in an agentic future, as AI PCs can provide the on-device performance, security isolation, access to employee data and context, and real-time responsiveness needed to support intelligent agents operating at the edge.

Despite this compelling roadmap, some IT decision makers (ITDMs) are still holding back from fully embracing the AI PC. They have concerns about security, integration with existing IT management tools, data compliance, and still-limited employee understanding of AI features. These concerns must be addressed head-on through conversations with PC manufacturers, OS providers, and silicon vendors, as well as internal education targeted at both IT and end users.

And the ramp of AI PC shipments into the market continues to accelerate. NPU-equipped devices will soon account for the majority of commercial PC shipments, and companies that continue to delay embracing the technology will find themselves rushing to catch up as more AI PC capabilities ship.

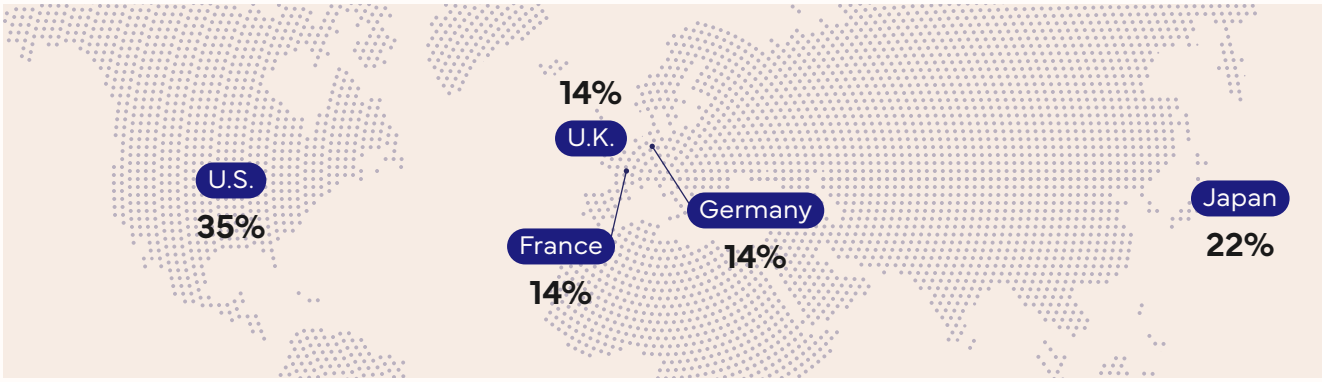
AI PCs are no longer speculative hardware; they are delivering benefits today and are essential for enabling the near-term transition to agentic AI for the enterprise. In the following pages, we'll examine how companies today are leveraging cloud-based AI to help employees work smarter, the drivers and benefits early AI PC adopter companies are seeing, and the areas of concern that ITDMs must consider as they move forward with plans to deploy AI PCs in their organizations. Finally, we'll explore the role of the AI PC in a fast-approaching agentic future.



IDC defines agentic AI as AI-powered systems capable of autonomously making decisions, executing actions, and adapting their behavior to accomplish user-defined goals without requiring constant human input or oversight.

Methodology

To understand how organizations approach AI PC purchasing decisions, IDC conducted an online survey in February 2026. All 519 respondents were involved in PC purchasing decisions and were, at a minimum, considering the future deployment of AI PCs (respondents with no interest were asked why and then removed).



- **Industries:**
  - Retail and consumer goods 19%
  - Manufacturing and industrial production 19%
  - Financial services 19%
  - Healthcare and life sciences 18%
  - Media 15%
  - Other 10%
- **Roles:**
  - Line-of-business (LOB) managers with direct impact on PC purchases 37%
  - IT leaders who manage PC purchasers and participate in decisions 32%
  - IT professionals directly responsible for PC selection and procurement 31%
- **Organization size (number of employees):**
  - 1–499 ..... 11%
  - 500–999 ..... 11%
  - 1,000+ 78%

Situation overview

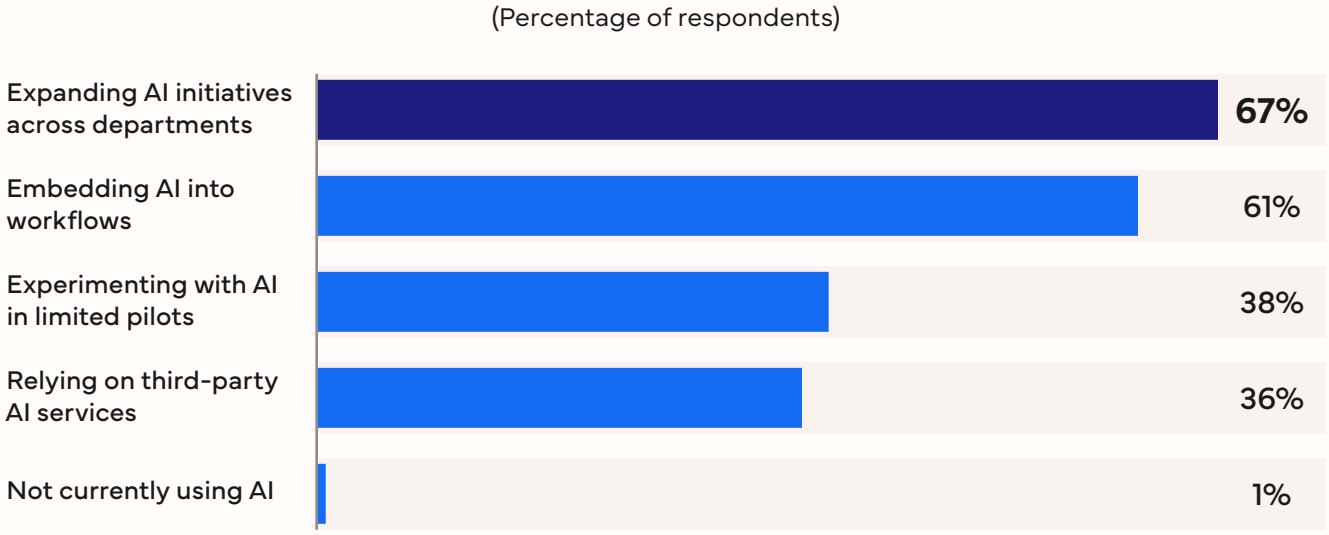
AI expansion is reshaping the enterprise and elevating the endpoint

Respondents in our survey show that AI is being operationalized across departments and embedded into daily workflows. Sixty-seven percent of respondents in our survey report expanding AI initiatives across departments, and 61% say they are embedding AI directly into workflows **(Figure 1, next page).** While a sizeable percentage of companies continue to experiment or rely on third-party AI services, an exceedingly small percentage report not using AI at all.

Figure 1

Enterprise AI Adoption in 2026

Which, if any, of the following best describes your organization's current approach to AI? Please consider AI across all functions of the company (e.g., IT, HR, sales, R&D, supply chain).



Note: Managed by IDC's Global Primary Research Group. Data not weighted. Multiple dichotomous table — total will not sum to 100%. Use caution when interpreting small sample sizes. n = 519 (all respondents); Source: IDC's *AMD AI PC Survey 2026,* February 2026

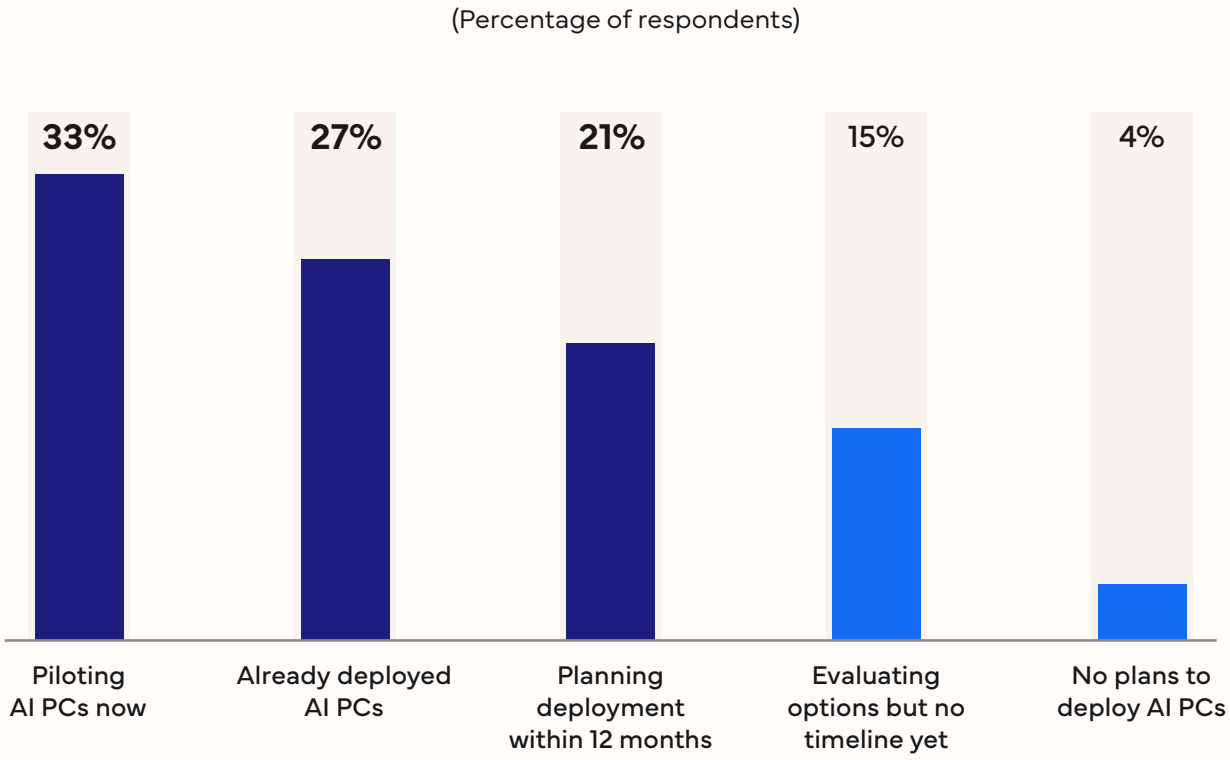
As AI becomes more pervasive, organizations are also building internal familiarity with the hardware required to support it. More than four in five respondents report meaningful knowledge of AI PCs, including 46% who say they "know a lot" and 35% who say they "know something." That level of awareness is notable for a relatively new device category and reflects deliberate evaluation rather than passive curiosity.

Awareness is translating into action. Twenty-seven percent of organizations have already deployed AI PCs, 33% are actively piloting them, and 21% plan to deploy them within 12 months. In total, 81% are deploying, piloting, or planning adoption in the near term **(Figure 2, next page).** Among the handful of respondents who said they didn't have current plans to deploy AI PCs, the key reasons included the belief that current PCs meet performance and productivity needs (30%), the need for further validation before adoption (30%), satisfaction with cloud-based services (22%), and security concerns around on-device AI.

Figure 2

AI PC deployments

Which best represents your organization's timeline for adopting AI PCs?



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As AI scales across the enterprise, endpoint strategy is evolving in parallel. The PC is increasingly viewed not simply as a productivity machine but as an AI-capable device that enables distributed processing, local inference, and tighter integration with evolving AI workflows.

The expansion of AI initiatives across departments creates practical demands around performance, security, privacy, and responsiveness that cannot always be met solely through centralized infrastructure. As organizations embed AI into everyday processes, the endpoint becomes a more strategic component of the overall AI architecture.

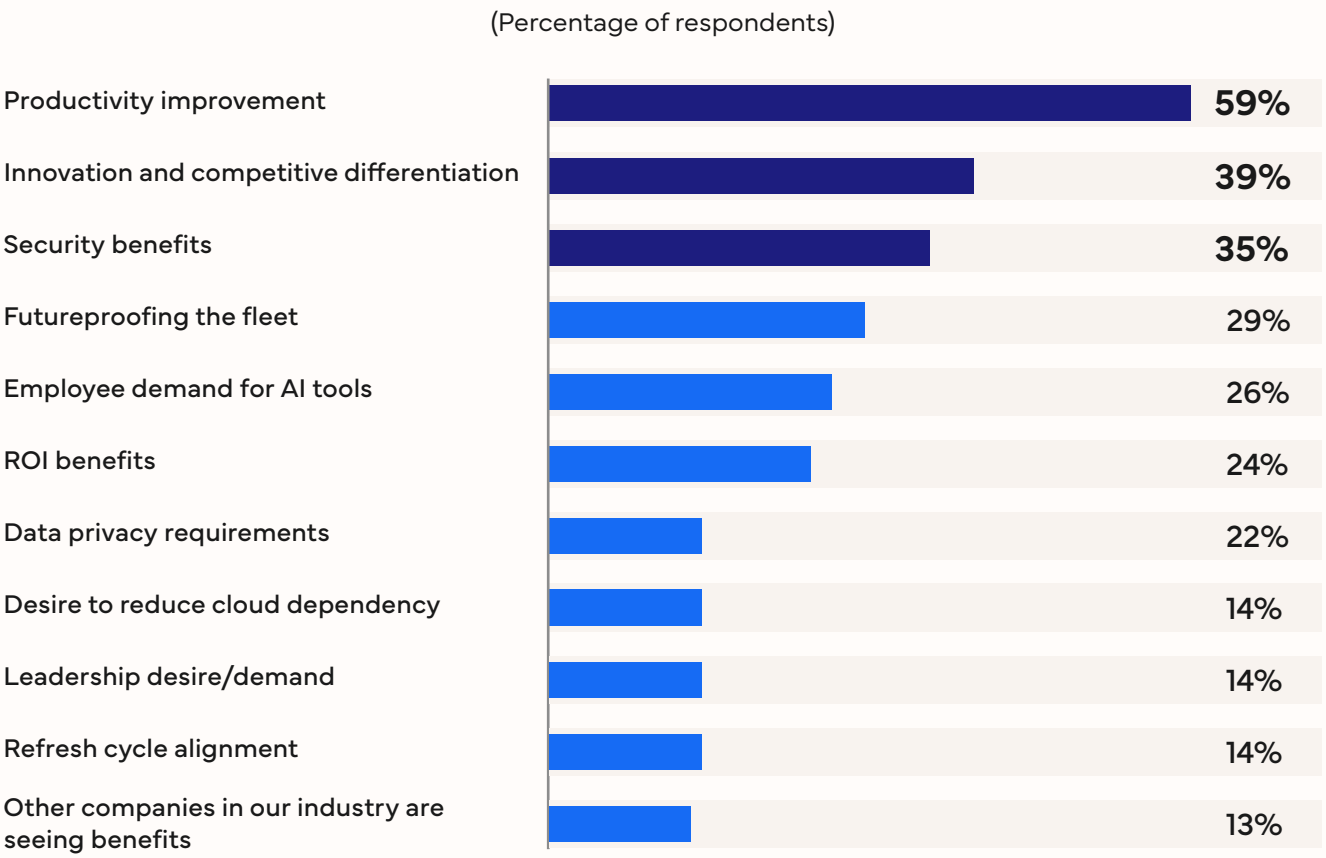
Productivity, security, and innovation define the business case

When organizations articulate their reasons for investing in AI PCs, the motivations are clear and pragmatic. Productivity improvement is the leading driver for investment at 59%, followed by innovation and competitive differentiation at 39% and security benefits at 35%. For the full list, see **Figure 3, below.**

Figure 3

Reasons for investing in AI PCs

What are your organization's top 3 drivers for investing in AI PCs in 2026?



Note: Managed by IDC's Global Primary Research Group. Data not weighted. Multiple dichotomous table — total will not sum to 100%. Use caution when interpreting small sample sizes. n = 519 (respondents indicating their organization's more than 0% PC purchases in 2026 will be AI PCs); Source: IDC's *AMD AI PC Survey 2026,* February 2026

These top 3 drivers define the AI PC value proposition. First, enterprises seek gains in workforce performance. Second, they see AI PCs as enabling differentiation and faster innovation cycles. Third, they recognize that running AI workloads on the device rather than in the cloud can drive a higher level of security for a company's data. Another key driver is long-term planning: 29% cite futureproofing the fleet as a top driver for investment.

Companies have always endeavored to buy PCs with adequate processing power, memory, and storage to ensure employee productivity across a device's multi-year lifecycle, but the insertion of AI into employees' workflows has raised the stakes. No ITDM wants to be the one responsible for employees being held back from running a future local AI workload on a one-year-old PC.

And deploying AI PCs isn't just about future benefits; early adopters are already seeing employee benefits. Reported benefits among organizations that have deployed or piloted AI PCs closely mirror these drivers. The top observed outcome is faster performance and reduced latency (70%), followed by increased employee productivity (66%) and improved innovation and idea generation (59%**).** Improved data security (58%) and higher employee satisfaction (53%) further reinforce the business case **(Figure 4, next page).**

In short, enterprises are aligning AI PC investment with measurable productivity gains, innovation objectives, security priorities, and long-term infrastructure planning. The business case is multi-dimensional but anchored in practical outcomes.

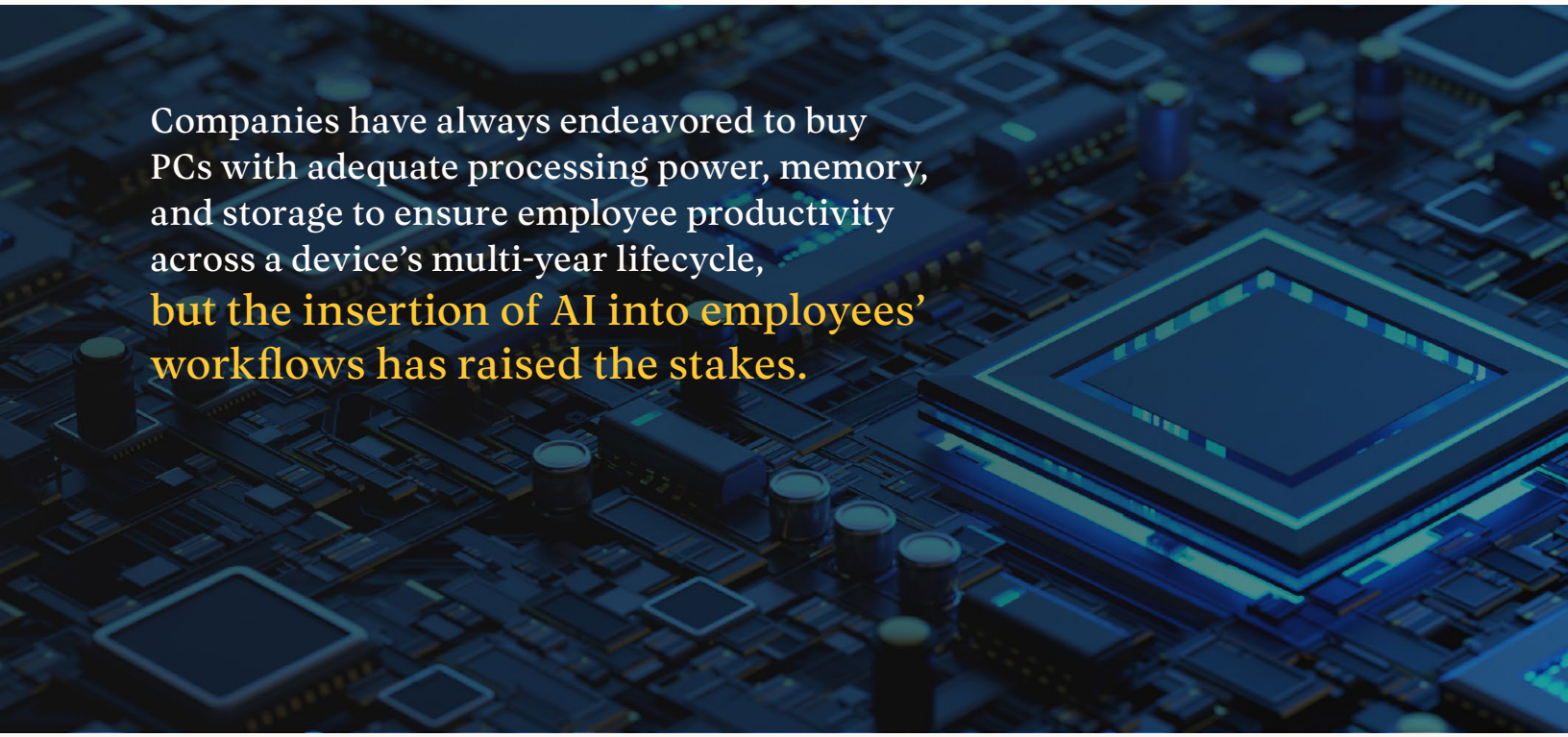


Figure 4

Top benefits derived from AI PCs

Which, if any, benefits has your organization observed from AI PC use?

(Percentage of respondents)

Note: Managed by IDC's Global Primary Research Group. Data not weighted. Multiple dichotomous table — total will not sum to 100%. Use caution when interpreting small sample sizes. n = 519 (respondents indicating piloting/deployed AI PCs);
Source: IDC's *AMD AI PC Survey 2026,* February 2026

The alignment between investment drivers and realized benefits suggests that AI PC adoption is not speculative. Organizations are seeing performance improvements and productivity gains, which in turn reinforce their future purchasing plans.

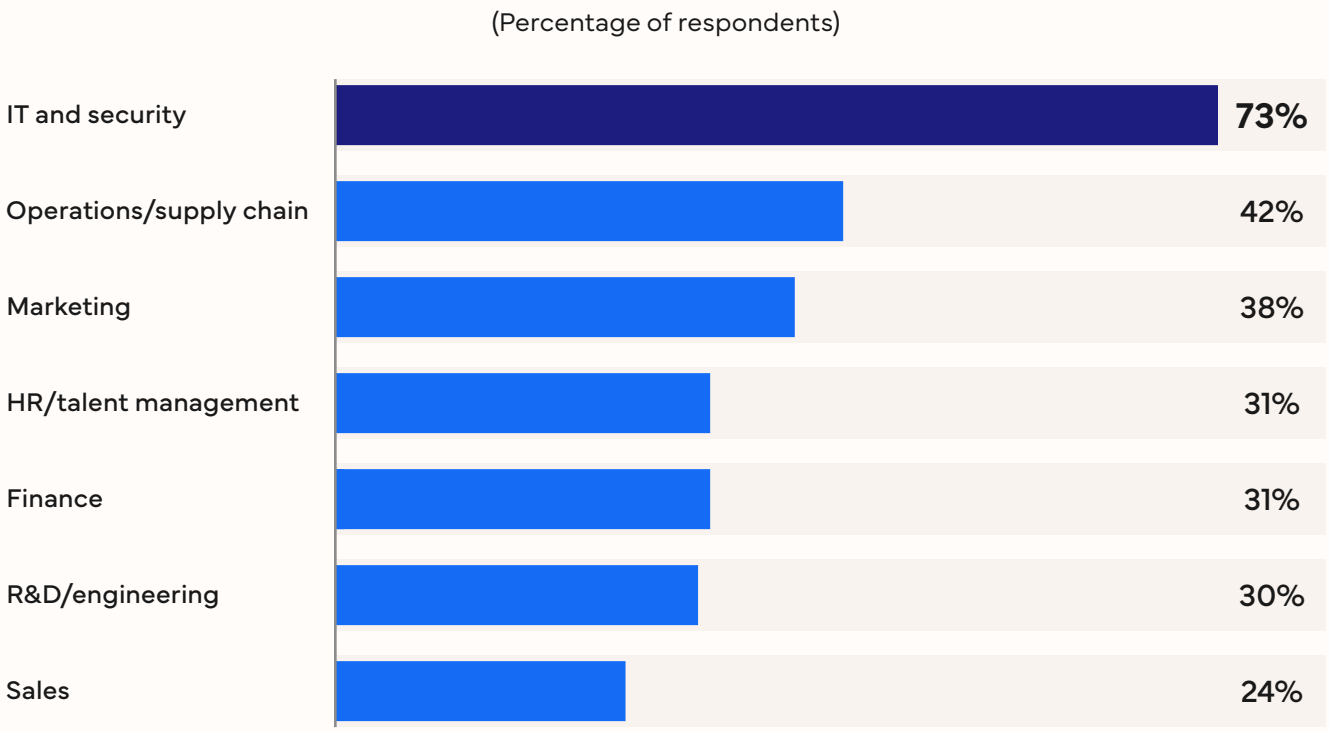
The most common on-device AI activities include document or presentation drafting (71%), local data or spreadsheet analysis using AI models (68%), and meeting transcription and summarization (62%**).** These represent core knowledge work functions rather than experimental edge cases. Security scanning or anomaly detection (55%) and programming or code assistance (48%) further demonstrate that AI PCs are supporting both technical and non-technical roles. Image or video generation for communications (51%) highlights their role in creative and marketing workflows.

Deployment patterns reinforce this broad applicability. IT is the leading early deployment target at 73%, reflecting its central role in infrastructure governance and security. However, AI PCs are also prioritized in operations (42%), marketing (38%), and HR (31%). Several of these figures differ notably from a similar IDC survey conducted in 2024. For example, sales was in the top 5 at 44% in 2024 but dropped to the bottom in 2026 at 24%. Conversely, HR increased from 26% in the last survey to 31% in the new one. What didn't change were the top 3: IT, operations, and marketing **(Figure 5, below).**

Figure 5

Key AI PC deployment departments

Which departments at your organization will benefit most from agentic AI on PCs?



Note: Managed by IDC's Global Primary Research Group. Data not weighted. Multiple dichotomous table — total will not sum to 100%.
Use caution when interpreting small sample sizes. n = 519 (respondents familiar with agentic AI); Source: IDC's *AMD AI PC Survey 2026,* February 2026

It is important to note that these early adopters aren't looking past the challenges of deploying AI PCs to only see the benefits. The top tier of challenges ITDMs have encountered while evaluating or deploying AI PCs includes security (33%), integration

with IT management tools (33%), limited employee understanding of AI features (32%), and regulatory/data compliance uncertainty (31%). IT must be clear-eyed about each, recognize that they mirror the same concerns around cloud-based AI, and then work closely with their partners to make sure each is addressed before on-device AI workloads become widely embraced within their company.

Agentic AI accelerates the strategic role of the AI PC

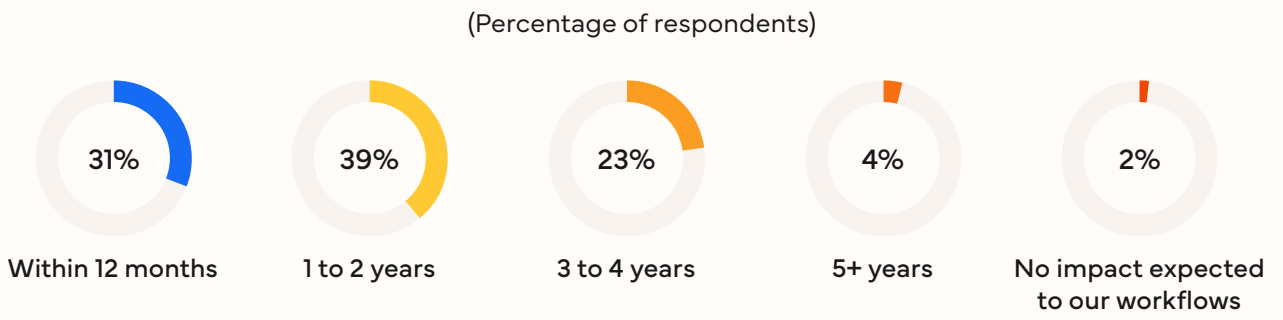
Looking ahead, organizations are preparing for the next evolution of AI: agentic AI. As previously noted, IDC defines agentic AI as AI-powered systems capable of autonomously making decisions, executing actions, and adapting their behavior to accomplish user-defined goals without requiring constant human input or oversight.

Expectations for agentic AI impact are near-term. Thirty-one percent of respondents expect it to impact end-user workflows within 12 months, and 39% anticipate impact within one to two years. Only a small minority believes the impact is five or more years away **(Figure 6, below).**

Figure 6

Agentic AI impact expectations

How soon do you expect agentic AI to impact end users' workflows in your organization?



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This timeline suggests that enterprises do not view agentic AI as a distant concept. They expect it to influence employee workflows, task automation, knowledge management, resource management, and decision support in the short to medium term.

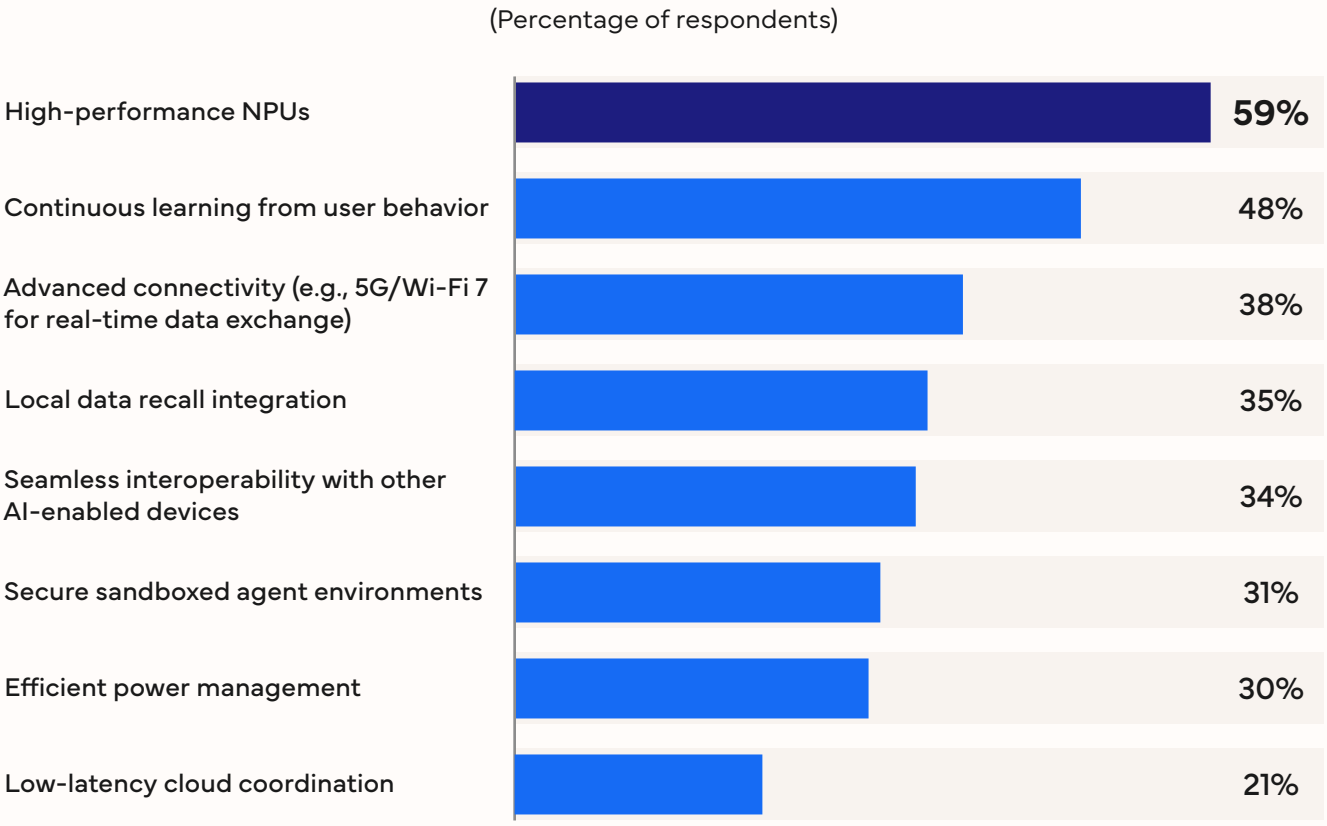
In that context, the PC assumes an expanded role. Fifty-one percent of respondents see the PC as the user interface for cloud agents, while 47% view it as a secure local execution hub. These two roles are complementary. As the primary device through which employees interact with enterprise systems, the PC becomes both the control center for cloud-based agents and a location for secure on-device processing.

The capabilities organizations consider most critical for enabling agentic AI on PCs reinforce this dual function. High-performance NPUs are cited most frequently at 59%. It can't be overstated how important this new processing unit is for providing the always-on, contextual awareness necessary for today's persistent AI workloads and tomorrow's agentic AI workflows, all performed using dramatically less power than a traditional graphics processing unit (GPU). Other critical capabilities necessary for enabling agentic AI included continuous learning from user behavior, ranked second, followed by advanced connectivity, including 5G and Wi-Fi 7, to enable real-time data exchange. You can find the complete list in **Figure 7, next page**.

Figure 7

Local capabilities key to agentic AI

Which, if any, on-device capabilities will be most critical for agentic AI on PCs?



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As AI systems evolve from assistive tools to autonomous agents, the AI PC will likely have an important role to play. The convergence of expanding AI initiatives, employee productivity gains, clear investment drivers, and accelerating expectations around agentic AI paints a consistent picture. Enterprises are embedding AI deeper into operations, and the AI PC is emerging as a foundational layer of that transformation.

Challenges/opportunities

As AI PCs move to enterprise scale, organizations face two primary challenges, each connected to aspects of governance.

1. **Operational integration:** Embedding AI directly into workflows requires more than deploying new hardware. Organizations must redesign processes, train employees, and update governance models to ensure AI enhances productivity rather than creating friction. Without careful management, the benefits of AI-enabled endpoints may remain uneven across departments.

2. **Governance and security complexity:** AI raises new questions around data management, accountability, and policy enforcement. Ensuring secure local execution while maintaining compliance and visibility will demand tighter coordination between IT, security, and business teams.

Balanced against these challenges are two significant opportunities:

Workforce acceleration

AI PCs can automate repetitive tasks that previously took hours, freeing employees to spend additional time on higher-level strategic decision-making and more engaging work.

Architectural flexibility

By buying AI PCs now, companies are preparing their workforce for a future state in which the AI-enabled operating systems and applications are fully developed while simultaneously planning for the devices' possible role in an agentic AI future.

Conclusion

AI is reshaping how businesses operate, and the PC is poised to play a central role in that transformation. While most AI workloads today run in the cloud, for AI to truly scale, more of it will need to run on device.

Operating systems and applications are finally catching up to the hardware capabilities that NPU-equipped AI PCs already provide, and the benefits, from enhanced security and privacy to reduced latency to lower costs, will become increasingly tangible for early adopters.

More importantly, organizations that invest in AI PCs today are positioning themselves for the agentic future ahead. As AI agents move from sandboxed cloud environments to the edge, the AI PC should play a key role in allowing autonomous, secure, and context-aware AI to operate where work actually happens. Companies that delay risk falling behind as this transition accelerates.

NPU-equipped devices will soon represent the majority of commercial PC shipments, making inaction an increasingly costly choice. The window to get ahead of this shift is open now, and forward-thinking organizations should move decisively to take advantage of it.

Consider AMD

AMD supports enterprise AI adoption from datacenter to client with a broad portfolio of high-performance CPUs, GPUs, and AMD Ryzen™ AI PRO processors built for AI PCs. Based on an open ecosystem approach, AMD enables organizations to deploy AI across cloud and edge environments with flexibility and interoperability.

For commercial systems, Ryzen AI PRO processors deliver strong performance, dedicated neural processing units for on-device AI acceleration, multilayered security features, and support for industry standard manageability tools. With long-term platform stability and consistent software images, IT teams can deploy and manage AI-capable fleets using the processes they already rely on.

Working closely with OEMs, ISVs, and ecosystem partners, AMD helps enterprises deliver security-focused and scalable AI experiences across cloud and client environments.

About the IDC Analyst

Tom Mainelli

Group Vice President, Device and Consumer Research, IDC

Tom Mainelli heads the Device and Consumer Research Group, overseeing a wide array of hardware and technology categories that cater to both home and enterprise markets. His team's research spans PCs, tablets, smartphones, wearables, smart home devices, thin clients, displays, and virtual/augmented reality headsets. He also co-manages IDC's supply-side research team, which monitors display and ODM production across various categories. IDC's consumer research, anchored by the Consumer Market Model, employs regular surveys and proprietary models to forecast numerous consumer-focused activities and spending across hardware, software, and services. As group vice president, Mainelli collaborates closely with company representatives, industry contacts, and other IDC analysts to provide comprehensive insights and analysis on a diverse range of commercial and consumer topics.

More about Tom Mainelli →

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