

A futuristic, metallic robotic hand with a complex, segmented design is shown hovering over a laptop keyboard. The background is a dark, purple-toned image of a laptop screen displaying a network or data visualization. The overall aesthetic is high-tech and futuristic.

**FUTURE READY:**  
**Incorporating AI PCs into  
Your Refresh Road Map**



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# IDC Opinion



**These new AI PCs offer a range of new capabilities today, including efficient collaboration-focused features right out of the box.**

**Perhaps more importantly, however, they set the stage for ISVs to bring to market AI-infused versions of current business apps, as well as the next generation of AI-based software that will run locally on the PC.**

The challenges for IT decision makers (ITDMs) continue to mount as they are increasingly asked to do more with less while faced with the daunting task of transitioning their aging PC fleets to Windows 11 before Microsoft's October 2025 end of service (EOS) for Windows 10. Adding to this mix is the rapid ascent of new generative AI (GenAI) business tools that promise to radically change the computing environment across industries, company sizes, and use cases.

As companies begin their final push toward replacing the PCs they acquired four or more years ago, they must approach the task differently than in the past. It's no longer acceptable to simply seek out the lowest-cost configuration. How employees get work done has changed dramatically since 2020, from how they collaborate with colleagues to how they leverage new GenAI tools. Choosing the right PC isn't just about selecting a fast processor, adequate RAM, and enough storage. Today, you need to consider whether to buy a PC with a neural processing unit (NPU) that is purpose-built to run local AI capabilities efficiently right on the PC itself. These new AI PCs offer a range of new capabilities today, including efficient collaboration-focused features right out of the box. Perhaps more importantly, however, they set the stage for independent software vendors (ISVs) to bring to market AI-infused versions of current business apps, as well as the next generation of AI-based software that will run locally on the PC.

What are the benefits of running AI locally on the PC versus strictly in the cloud? Chief among them: better performance (reduced latency with fewer trips to the cloud), improved privacy and security (data remains on the PC), and lower lifetime cost (eliminating the need for costly cloud-only services). Perhaps most importantly,

the AI PC promises to not only increase employees' productivity but also enhance their satisfaction, an increasingly important metric for forward-thinking ITDMs.

IDC has forecast a fast ramp for AI PCs in the commercial market. While these PCs just started shipping into the market in meaningful numbers in 2024, we expect them to represent a majority of shipments within a few years.

As you begin your final push toward refreshing your PC fleet, it's important that you consider the simple fact that the PCs you buy now will be in your installed base for years to come. So, while the apps your employees use now may not have local AI features, there's a very good chance future updates will bring them. If you've not future proofed your fleet with AI PCs, you could very well find yourself unable to leverage these features, putting your employees at a productivity disadvantage.

## METHODOLOGY

### Online survey:

**514**  
respondents

**3**  
countries

**47%**  
IT decision makers

To better understand ITDM and line-of-business (LOB) managers' perspectives on the current and future advantages of AI PCs, IDC conducted an online survey with 514 respondents in April and May 2024. We fielded the survey in three countries: the United States (n = 303), the United Kingdom (n = 105), and Japan (n = 106). ITDMs represented 47% of respondents, and LOBs represented 53%. It included a range of companies across different industries and sizes, ranging from 25–99 employees up to 10,000+ employees. Respondents represented companies with employees working in the office (75%), hybrid (19%), and full-time remote (6%). In addition, we conducted in-depth interviews with four United States–based ITDMs in May 2024.

We asked respondents about their current notebook and desktop installed base, and it's worth noting that even though Microsoft's EOS for Windows 10 is fast approaching in October 2025, on average, the OS represented 55% of respondent companies' PCs. In other words, you're not alone if you feel behind in your fleet's Windows 11 migration.

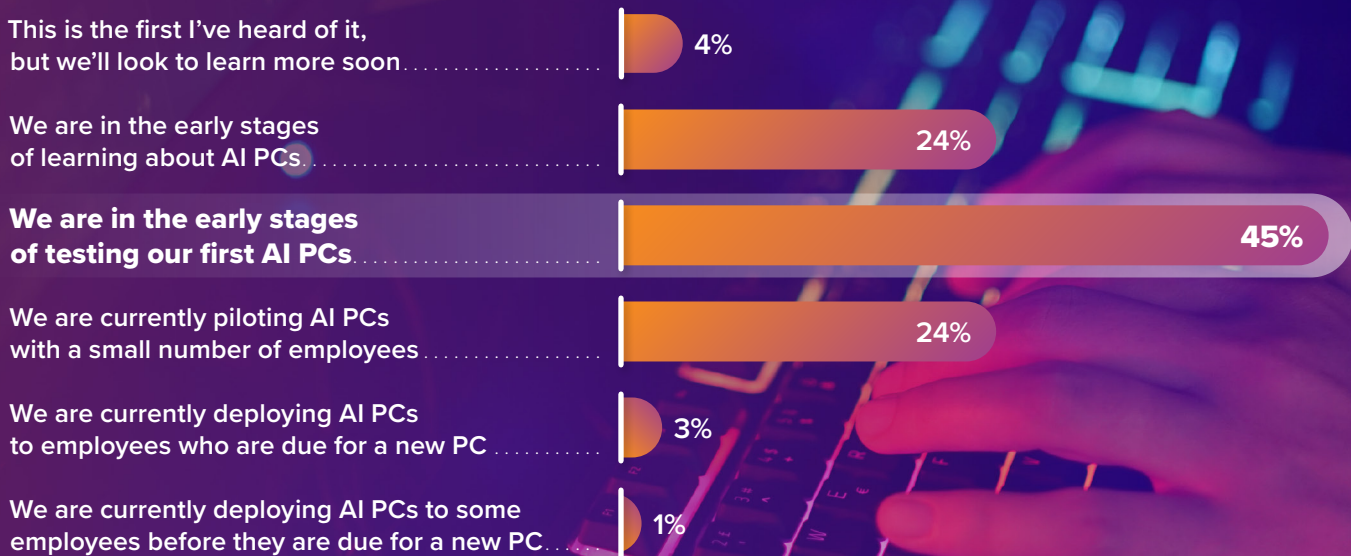
*Note: All percentages in this document may not equal 100% due to rounding.*

# Situation Overview

At the time this document was written, the first commercial-focused AI PCs were just starting to ship into the market. Despite the newness of the category, both survey respondents and interviewees showed a remarkable level of knowledge about NPUs and AI PCs. An impressive 63% knew the term NPU, and 80% had heard of AI PCs. Perhaps more importantly, 59% said they were very interested or extremely interested in AI PCs. This reflects the excitement that companies feel about the potential benefits of this new segment of products.

While interest is high, most of the respondents we interviewed are still quite early in the process of adopting AI PCs. About one-quarter are in the early stage of learning about the category, 45% are testing their AI PCs, and 24% are piloting them with a small number of employees. **Figure 1** shows details about how respondents interested in AI PCs characterized their interest.

**FIGURE 1**  
**Respondents' Interest in AI PC**  
You expressed interest in AI PCs. How would you characterize your company's interest?



n = 399; Source: IDC's *Intel AI PC Survey*, 2024

**Four AI PC collaboration features include:**

- **A voice focus feature** that mutes background noises so others can hear the person speaking more clearly
- **Automatic background blur** that doesn't require power-draining usage of the CPU
- **Automatic framing** that keeps the subject in the frame even as they move around in their physical space
- **An eye contact feature** that makes it appear that the subject is looking directly into the camera even when they are looking at the screen below their camera

Some of the key benefits of AI PCs right out of the box focus on improved video collaboration features designed to enhance productivity. Because the NPU is a much more power-efficient place to run persistent AI workloads, moving the following feature capabilities from the CPU or GPU to the NPU will not only drive improved experiences but also improve performance on all PCs and help extend laptop PC battery life.

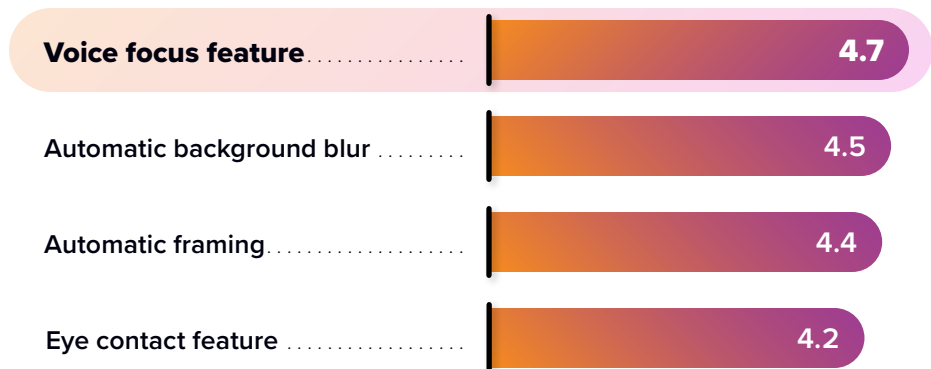
**One of our in-depth respondents, an ITDM for a medical device manufacturer, summed up the potential benefits of these collaboration features succinctly:**

*“We do a lot of collaboration, a lot of calls, a lot of videos, and not only for calls among ourselves but with clients and customers. We also do training. Quite often, we train surgeons on our medical devices, things like that. So it would be compelling.”*

Respondents found all four features compelling, with the voice focus topping the chart, as reflected in **Figure 2**.

**FIGURE 2**  
**Importance of AI PC Collaboration Features**

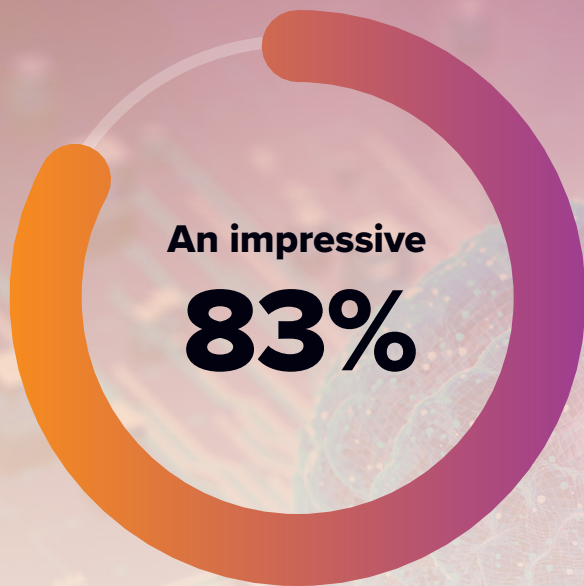
PC vendors are rolling out new features that leverage the NPU to improve these experiences. How compelling do you find the following modern collaboration features?  
(Mean)



n = 514; Source: IDC's Intel AI PC Survey, 2024

# Understanding the Impact of GenAI

In the past two years, the rollout of new GenAI apps and GenAI-based functionality to existing apps has captured the imagination of companies of all sizes. To better understand the current perspective of respondents, we asked about their companies' current use of the technology.

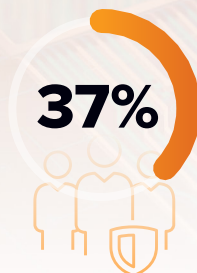


of respondents said **they are already testing services such as Microsoft 365 Copilot or OpenAI's ChatGPT.**

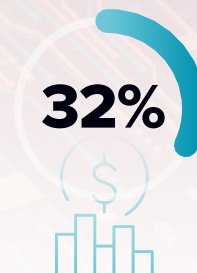
**Among the 16% who said they are not currently testing these services, the primary reasons were concerns about:**



**employee privacy and security**



**company data security**



**cost**

**Data security is a key concern for all companies, but even more so for those in the healthcare industry. We talked to an ITDM for a healthcare services company who noted:**

*“In healthcare, privacy and security are extremely important because we’re dealing with patients’ confidential health information. I think that’s also one of the reasons that if you can do the computing at the edge, that means less data is submitted in the cloud, so there is less vulnerability for any security risk.”*

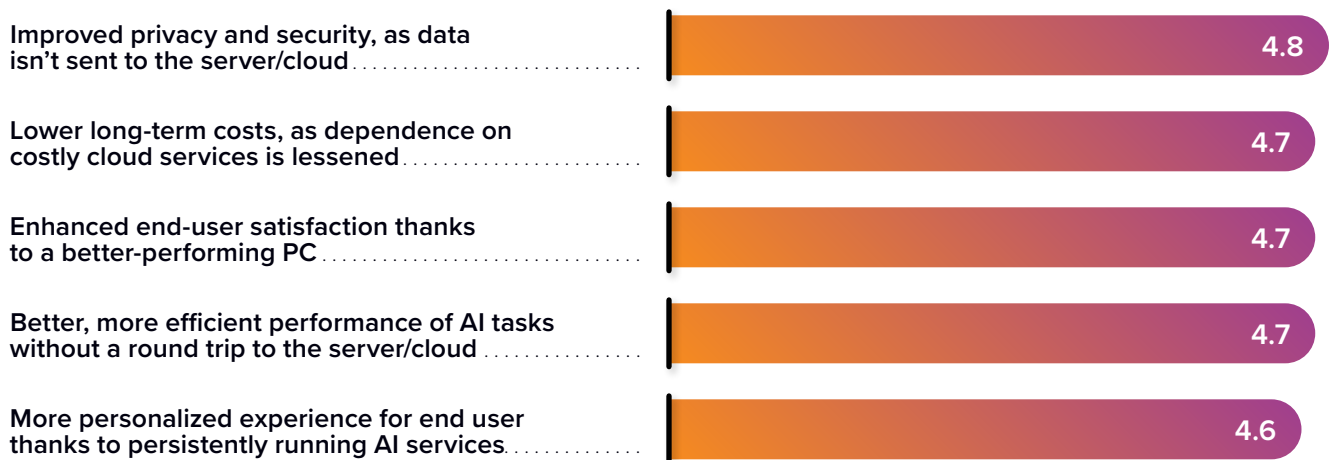
The good news is that the AI PC can address all these major concerns and more by leveraging the NPU to do more of the work locally versus in the cloud. The potential benefits of shifting the workload this way include better privacy and security, lower long-term costs, better performance, enhanced user experiences, and a more personalized end-user experience. We asked respondents to rate these potential benefits on a scale of 1–6, with 6 being the most compelling. The results appear in **Figure 3**.

**FIGURE 3**

**Benefits of Running GenAI Workloads Locally**

In addition to enabling new features on the PC, the NPU is expected to bring a list of other potential benefits to AI and GenAI workloads performed on the PC versus only in the cloud.

(Mean)



n = 514; Source: IDC's Intel AI PC Survey, 2024



**We interviewed an ITDM for a wholesaler business who immediately saw the potential benefits of bringing AI workloads from the cloud to the PC:**

*“The challenge companies have with generative AI is that most of the compute is not on the local PC but on the servers within the datacenter. This latency impacts productivity, and security can also be impacted. But if I have AI on my laptop ... I can do things offline without having to have access to the servers and stuff like that. So, I think in the future, that’s something we are going to aggressively look at as we buy our next generation of laptops and desktops.”*

Another potential long-term benefit of moving more AI workloads from the cloud to the edge is around potential power savings, as AI compute is pushed from power-hungry datacenters to the more efficient edge.

**We interviewed an ITDM at a financial management and services company who noted:**



Cloud-based AI-intensive operations churn through a tremendous amount of energy, and I think that’s going to become a very big consideration. As people start to embrace these models, they have to start to think about the actual electric and cooling power that they’re going to need.”

While it's still early days for AI PCs, there is a massive mobilization of the PC ecosystem to provide developers with the tools they need to begin leveraging the power of the NPU for local AI. For example, in 2023, silicon provider Intel launched its AI PC Accelerator program, promising 300 new AI features across 100 ISVs' applications. Respondents to our survey are confident that ISVs will move quickly to embrace these local AI features to bring new capabilities to the commercial applications they use every day (see **Figure 4**).

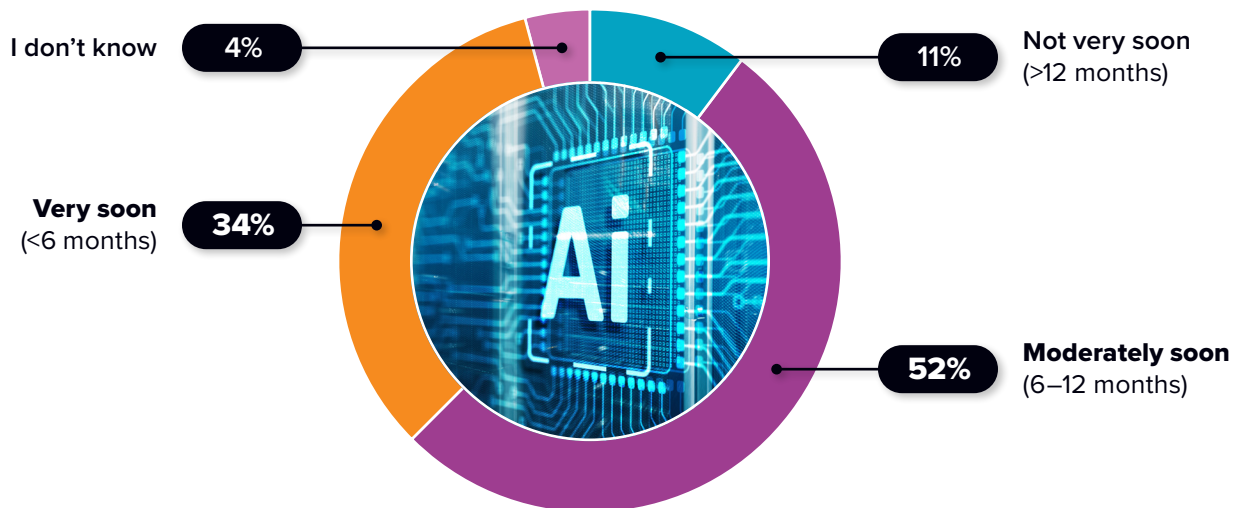
ITDMs and LOB managers are already thinking ahead about how they expect new AI PCs to benefit both their employees and the company. The chief benefit they see for the company is increased user productivity, followed by stronger security and compliance. For employees, they expect to see improved automation and efficiency as well as improved security and privacy. And after we articulated the potential benefits of AI PCs, an overwhelming percentage said that they were more interested in buying them for their company (75%). An equal percentage (75%) said the availability of AI PCs would cause them to speed up their Windows 11 transition plans (see **Figure 5**, next page).

**FIGURE 4**

### ITDMs Expect Their Apps to Embrace Local AI Functions

How soon do you expect the current apps your company uses the most to begin leveraging on-device AI capabilities?

(% of respondents)



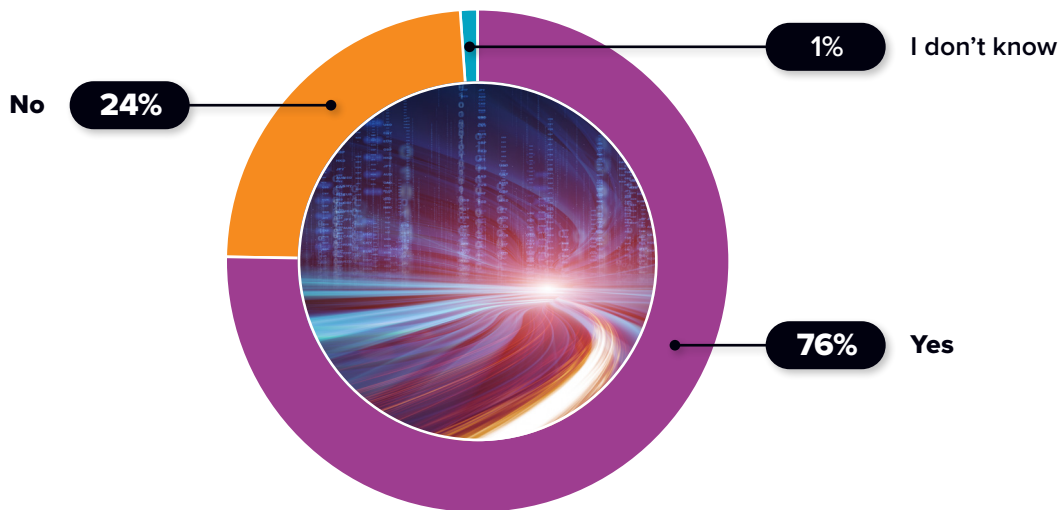
Note: Total may not sum to 100% due to rounding. n = 514; Source: IDC's *Intel AI PC Survey*, 2024

In other words, knowledgeable ITDMs and LOB managers across industries and countries are quickly waking up to the potential near- and long-term benefits of moving fast to deploy AI PCs into their installed base.

FIGURE 5

### The Availability of AI PCs Will Speed Up Transition Plans

Would the availability of AI PCs cause you to speed up your existing Windows 11 transition plans?  
(% of respondents)



Note: Total may not sum to 100% due to rounding. n = 514; Source: IDC's *Intel AI PC Survey*, 2024

# Challenges/ Opportunities

As with any new technology, the rollout of AI PCs won't be without its obstacles. Two of the key challenges to consider when moving to adopt AI PCs are the higher cost over non-AI PCs and the near-term lack of applications. Initially, AI PCs carry a premium over systems that lack an NPU, which is directly related to the higher cost of adding the NPU to the silicon. However, it is important to recognize that this slightly higher cost will be relatively minor when you amortize it over the PC's life. Moreover, the integrated AI features, plus support for future AI app functionality, will likely drive a substantially higher return on investment. And regarding apps getting local AI functionality, it is simply a matter of time. Talk with your most important ISVs to understand their road map, and remember that you're buying systems that will be in place for years to come.



**Forward-thinking companies are moving fast to adopt AI PCs** as they plan their final push toward completing their Windows 11 transition.

## Conclusion

The AI PC era has only just begun. However, as the results of our survey and interviews with ITDMs show, excitement is high. As more companies embrace AI and GenAI workloads, it is becoming increasingly apparent that more of these workloads will move from the cloud to the client to drive improved performance, enhanced security and privacy, and lower overall costs. Forward-thinking companies are moving fast to adopt AI PCs as they plan their final push toward completing their Windows 11 transition. As you contemplate your next fleet refresh, consider whether you want to buy PCs that will ready your workforce for the future or leave it stuck in the past.

# About the IDC Analyst



## **Tom Mainelli**

**Group Vice President, Device & Consumer Research**

Tom Mainelli heads the Device & 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, Tom 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. A frequent speaker at public events, he travels extensively, enjoying every opportunity to engage with colleagues and clients worldwide.

[More about Tom Mainelli](#)

# Message from the Sponsor



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