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EXECUTIVE BRIEF

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Executive Brief: The commercial PC installed base is aging. This Executive Brief examines some key reasons companies should consider a PC refresh ahead of Microsoft's planned October 2025 Windows 10 End of Service (EOS).

The Refresh Imperative: The Value of Deploying New, More Secure, Generative AI-Centric PCs Ahead of the Windows 10 End of Service

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The Importance of the PC

It's been nearly four years since many organizations pulled forward PC purchases to equip their employees with the devices they needed to be productive during the COVID-19 pandemic. This move reflected the renewed recognition of the importance of the PC to business continuity and success. According to IDC's PC Tracker, in 2020 and 2021 combined, more than 650 million PCs were shipped into the market, and more than 55% of those went into the commercial installed base. Moreover, a recent IDC survey of IT decision makers (ITDMs) in the United States found that about one-quarter of the average company's fleet today comprises PCs deployed before January 2020.

Windows 10 EOS Is Fast Approaching

Windows 10 is coming to EOS in October 2025. While many firms have begun their journey to migrate all computers to Windows 11, the deadline should be a major driving factor for those who still have many Windows 10 PCs in their installed base.

ITDMs with experience managing a Windows migration understand that choosing new systems, qualifying those systems, and preparing IT to acquire, deploy, and manage them takes planning and time. When considering the scale of the job ahead, the finish line suddenly seems much closer. While some Windows 10 hardware installed today may technically run Windows 11, this paper will articulate why most companies should focus their Windows 11 migration on new PCs, from enhanced security, advanced connectivity, and next-gen manageability to improved collaboration tools. New hardware will radically improve employees' ability to leverage new generative AI (GenAI) tools. Finally, new hardware is the best way to ensure all employees, including IT, have a better experience that makes them happier and more productive.

Security, Management, and Connectivity Requirements Have Evolved

Forward-looking companies have many reasons to consider a refresh of these PCs, mainly the numerous hardware updates that improve life for employees and IT support staff.

One of the critical improvements in today's PCs is simply better networking capabilities. Connectivity is huge in a world burgeoning with video calls and online collaboration spaces. Today's PCs ship with much faster and more secure Wi-Fi capabilities and, in some cases, 5G cellular connectivity. In addition, the newest operating systems (OS) offer easier, more seamless control over connectivity, making it easier for employees to stay connected.

Another critical reason to upgrade is security. Bad actors continue to increase, and today's PCs offer better hardware, firmware, and OS security. While security is unprecedented, today's PCs have eliminated much of the friction associated with security, driving a better employee experience.

Finally, since the pandemic, many ITDMs have faced a nagging challenge of employees still using consumer-centric hardware instead of the company-selected and deployed hardware due to supply constraints in 2020 and 2021. This can make managing and securing these devices more challenging than enterprise-grade products. Getting these devices out of the installed base should be critical for ITDMs.

The Modern Workforce Requires Modern PCs

The dramatic change in how most employees use their PCs to collaborate with peers and customers online is another major impetus in upgrading hardware across the company. Many PCs deployed three or more years ago were designed before most users shifted to a large percentage of their collaborative work occurring online. While today, many employees have returned to the office for at least part of their work week, in reality, online collaboration is here to stay.

As a result, too many employees struggle to use outdated hardware to collaborate online. For example, older laptops tend to have lesser-quality integrated cameras with poor resolution, terrible accommodations for bad lighting, and little zoom functionality. The results are poor video calls, subpar meetings, missed visual cues, and a substantial risk of creating a poor impression among colleagues, customers, and prospects. To address these shortcomings, many companies are forced to buy and deploy expensive external webcams, forcing employees to troubleshoot the installation and use of this additional hardware.

These older laptops often have poor microphones and shoddy speakers. As we all know, the key to great collaboration is good communication. Employees who struggle to hear and understand each other on video calls disrupt the meeting and impact productivity. Again, many companies are forced to address these shortcomings by deploying additional hardware, such as standalone speakers and mics or headsets, or asking employees to acquire and then expense what they need. The result is a workforce with a wide range of solutions, lots of potential help desk queries, and different levels of audio quality.

The beauty of new PCs is their design for the current and future collaborative use cases that employees of companies of all sizes experience today. Next-generation, high-resolution cameras that can accommodate a range of lighting situations ensure good video. Multiple high-quality microphones target the user's voice-over background noise to ensure an employee's comments are always captured. Improved speakers ensure they hear every word of a conversation.

While new cameras, microphones, and speakers are critical, another key element to driving enhanced online collaboration has come to PCs. Behind the scenes, artificial intelligence (AI) is working to enhance the overall experience by blocking out and blurring background noise. This is just one way AI is improving the employee's PC experience.

Generative AI Readiness Is Critical

AI, specifically GenAI, has become a hot topic and key business imperative. As more companies embrace GenAI and land on specific use cases for the technology, many are looking to leverage it on the PC better. Today, when an employee

engages with GenAI, it runs almost entirely in the cloud. This is fine for now, but if companies hope to scale the use of GenAI over time, they will look to do more inferencing on the PC versus in the cloud.

There are several reasons to bring this task down from the cloud to the PC. The primary reasons are faster performance due to lower latency (no more bandwidth-intensive roundtrips to the cloud), lower cost (cloud-based inferencing is and will likely remain expensive), and enhanced data privacy (keeping company data on devices and out of the cloud).

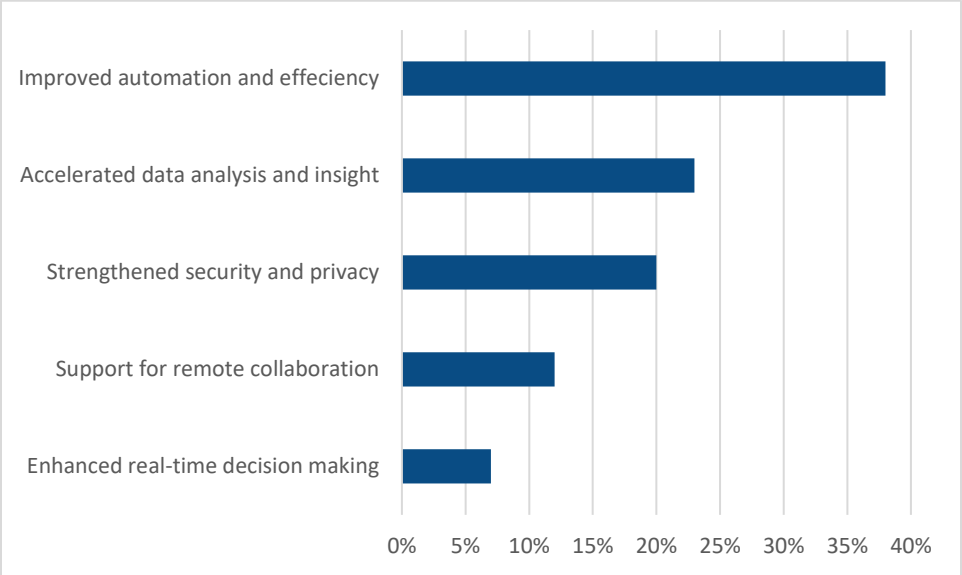
Previous generation PCs are not particularly well equipped to drive GenAI workloads locally. Older CPUs and GPUs may technically offer some capabilities, but they are not optimized for the job and will often cause dramatic system slowdowns. Another key challenge is memory. Older systems often lack the memory necessary to run these workloads, and even if they do have the memory, it may not be sufficiently fast to do the job well. Finally, those systems running older operating systems and software are less likely to have full optimization for GenAI workloads.

This focus on bringing GenAI to users is critical. A recent IDC survey showed that ITDMs say improved automation and efficiency, plus accelerated data analysis and insights, will be the key benefits employees will derive from AI on the PC (See Figure 1).

The good news is that new PCs shipping today can better support GenAI workloads. All the major silicon providers are now shipping products with integrated neural processing units (NPUs) specifically designed to offload AI workloads from the CPU and GPU to run them faster and more efficiently. In addition to this powerful new silicon, today's systems offer faster memory in larger configurations better suited to upcoming AI tasks. New PCs ship with the latest operating systems, which are increasingly tuned to bring GenAI to the forefront for users. As such, many ITDMs we surveyed say they expect to move quickly to acquire systems with these capabilities.

Figure 1: ***Potential Benefits of AI PC for End Users***

Q Which potential feature of AI PCs would your users benefit most?



Source: IDC's 2023 U.S. Commercial PCD Survey — AI PC Results (IDC # US51194123, September 2023), n=414

Employee Experience Matters

IDC surveys show that US companies generally seek to refresh their PCs every 3.5 to 4 years. In addition to the numerous benefits of new hardware outlined above, there are several additional reasons to do so, and they have to do with one of the new requirements being placed on IT, namely, driving employee satisfaction. In an era of high competition for employees and IT staff, new hardware can be a differentiator when hiring and retaining high-performing employees.

From the employee perspective, new hardware makes collaboration easier, enhances connectivity with the latest networking standards, and opens a new world of GenAI-enhanced productivity options. All this technology will help employees work smarter, not harder, by removing friction and creating more opportunities to focus on what matters.

New hardware benefits the IT department by streamlining deployment and management tasks, simplifying user interactions and dramatically cutting back on helpdesk calls. This is critically important to IT departments that consistently have to do more with less. Finally, new hardware brings a long list of security improvements that benefit employees and IT, eliminating bottlenecks and driving improved experiences through technologies such as biometrics (face/finger login), multifactor authentication, and single sign-on capabilities.

Summary

Most companies face an aging PC-installed base of devices ill-suited to how employees work, collaborate, and drive productivity today. New hardware brings many benefits, including new functionality focusing on the rise of GenAI. Forward-looking companies know a PC refresh is critical to their continued success and recognize the value of making it happen well ahead of the planned Windows 10 EOS in 2025.

Sources:

» IDC's *2023 U.S. Commercial PCD Survey — AI PC Results* (IDC # US51194123, September 2023)

» IDC, *WW PCD Tracker*, November 2023

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