Top Trends in Business PCs

5 Ways PCs Are Evolving to Support Today's Hybrid Workforce

Introduction

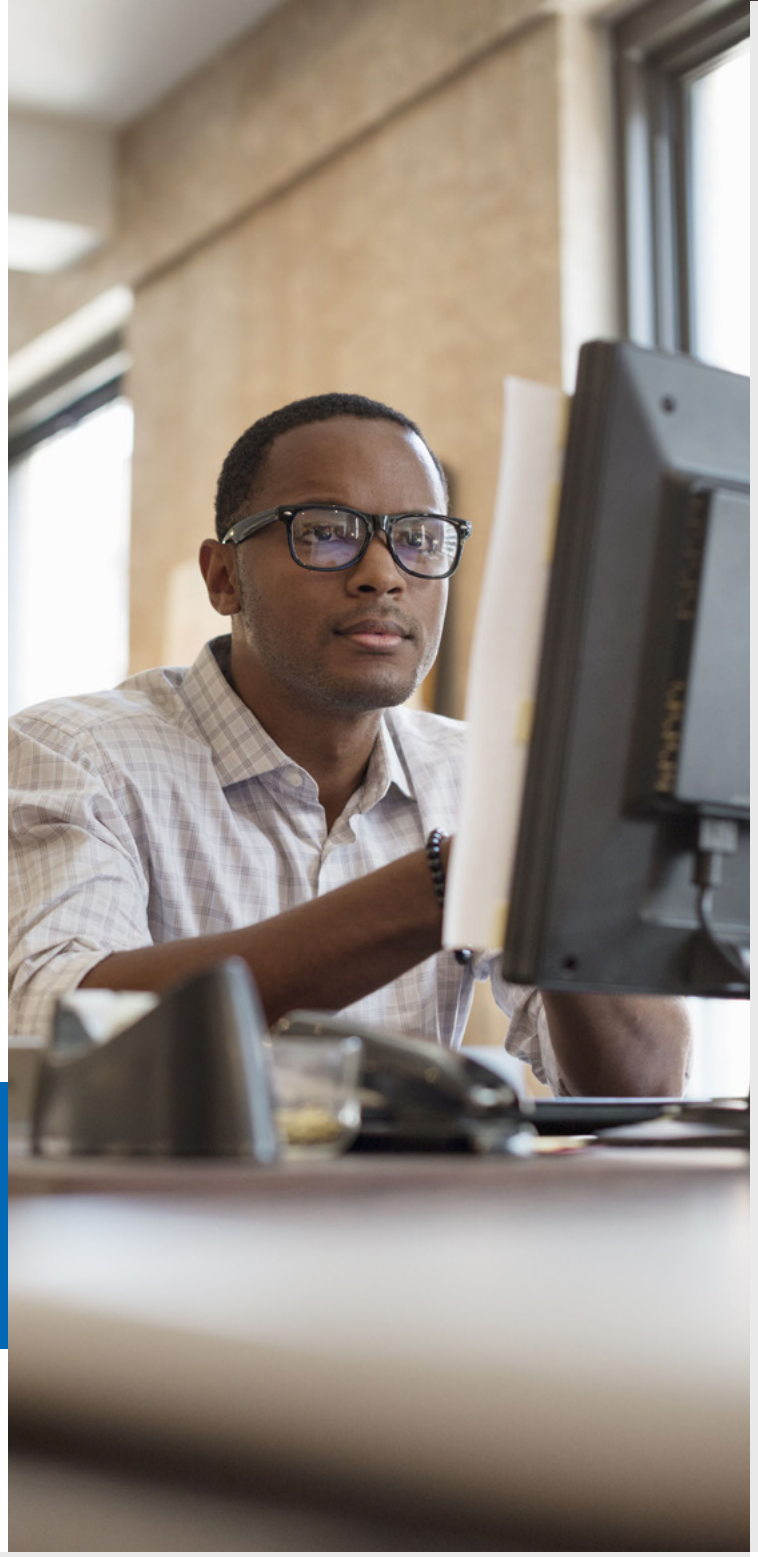
In 2020, digital transformation accelerated at warp speed. Many workplaces shifted to full or partial remote work, and many of these may never return completely to the old ways.

In a June 2021 survey, technology decision-makers estimated that 29% of their companies' workforce will be remote on a permanent basis and 42% will work in a hybrid model permanently.[1] In comparison, just 16.4% of employees worked remotely before the pandemic.[2] Some 83% of employees say a hybrid work model, which allows for remote work between 25% and 75% of the time, is optimal.[3]

As a hybrid workplace combining remote and in-office work rapidly becomes the norm, the PC has become the window through which employees interact with customers, coworkers, and the world. For employees who may work at home one day and in the office the next, the workplace is not an office building, it's their PCs.

Now more than ever, the PC user experience has a direct effect on employee attraction, retention, and satisfaction. This places new demands on IT teams already tasked with creating more business value with fewer resources. Fortunately, these challenges can be solved with the right PCs—PCs designed to support the way we work today.

Read on to discover the biggest challenges the hybrid workforce presents and how PCs are evolving to meet those demands.



Challenge 1:

Deploying and managing PCs for a hybrid workforce

When employees are in the office, it's easy for IT to troubleshoot, monitor, manage, and repair PCs. Employees can simply contact the help desk or, when physical intervention is needed, can drop their devices off with IT support for repair. But when employees work remotely, bringing PCs in for service or repairs is impractical and inefficient for both users and IT.

PC trend:

Remote manageability

PCs with remote management features enable IT teams to easily discover, monitor, repair, restore, and help protect networked PCs and other devices, no matter where the device is located. For example, PCs built with Intel vPro® feature Intel® Active Management Technology that allows IT to engage with the PC below the OS and remotely manage and repair PCs that are out of band, on-premises, or off-premise. IT professionals can even wake up sleeping machines to patch, debug, or reprovision them remotely.

Remote management has many benefits. It increases IT efficiency, lowers costs, and reduces the number of support calls. Some 74% of IT decision-makers (ITDMs) surveyed found PC management costs were reduced with Intel vPro.[4] Updates and repairs can take place when employees aren't using their machines, reducing interruptions and downtime, and improving productivity.

Challenge 2:

Securing PCs in a de-centralized environment

Supporting a hybrid workforce requires looking at security through a new lens. To meet employees' remote work needs, IT teams enabled applications outside the enterprise firewall, allowed employees to use their home Wi-Fi for work, and moved apps and data from on-premises to the cloud. At the same time, cyber threats are growing in number, complexity, and magnitude. Combined, these changes pose new risks to the organization's security.

PC trend:

Built-in security features

Newer PCs with hardware-based security features are designed to protect against today's cyber threats. For example, Intel® Hardware Shield, available exclusively on devices with Intel vPro, features integrated hardware-based PC protection to enable more secure productivity. Built-in capabilities guard the PC's firmware and BIOS, providing hardware, software, and data protection below the OS level.

PCs that defend against the latest cyber threats out of the box reduce IT professionals' workloads while allowing employees to work more securely from anywhere. Intel® Threat Detection Technology, part of Intel Hardware Shield, uses AI-based threat detection to help guard against ransomware and crypto mining attacks without negatively affecting PC performance. PCs built with Intel® Core™ vPro® mobile processors include Control-flow Enforcement Technology (CET) to help defend against return-oriented programming-based attacks.

Challenge 3:

Supporting collaboration

Digital collaboration is placing new demands on employees' PCs. A poor collaboration experience reduces productivity, frustrates users, and negatively affects how partners, customers, and employees view your company. A 720p webcam and spotty Wi-Fi are no longer sufficient for professional collaboration. Today's business users need a stable Wi-Fi connection, quality camera and microphone, and reliable image processing to work effectively and maintain a professional image.

PC trend:

Built-in collaboration tools

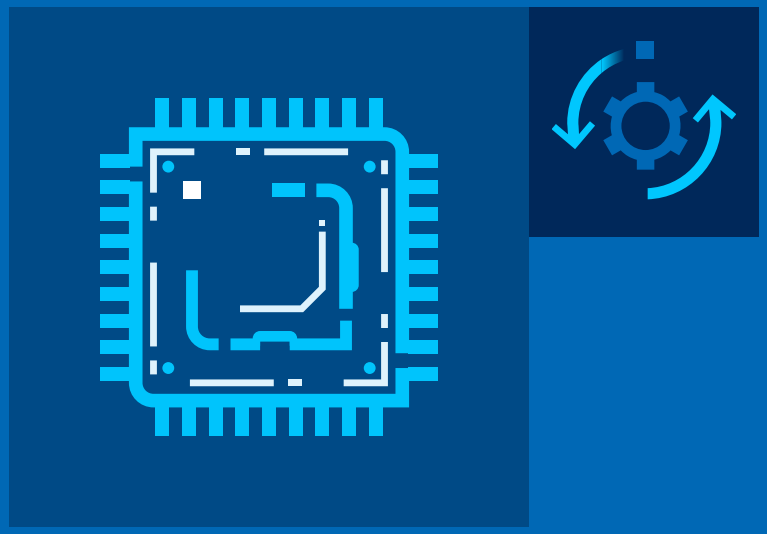
PCs with built-in features to enable seamless collaboration help ensure employees can always get work done, whether in the office or at home. To provide a reliable connection, 12th Gen Intel Core processors enable nearly 3x better Wi-Fi connectivity compared to standard Wi-Fi.[5] Thunderbolt™ 4 is 4X faster than USB 3.2 (10 Gbps) for data and video.[6] Intel vPro provides 41% faster office productivity during a video call[7] and 52% better Microsoft Office performance.[8]

Do employees on the go need thin-and-light laptops for their busy workdays? Laptops with Intel vPro, an Intel Evo design, are built for how business users collaborate today. They're built to run smoothly with many applications open at once, heavy media use, and constant toggling. With 9 or more hours of real-world battery life on designs with FHD displays,[9] laptops with Intel vPro, an Intel Evo design, help keep business collaboration from running out of power. They are 40% more responsive on average than a three-year-old premium business laptop while on battery.[10]

Challenge 4:

Processor-intensive workloads

The increasingly CPU-intensive apps required in a typical workday, such as Zoom and security software, are just the beginning. As remote collaboration becomes the norm, many employees want to use sophisticated background blurring technology, noise cancellation, and other tools that place new demands on their computers' CPUs and GPUs.



PC trend:

More powerful processors

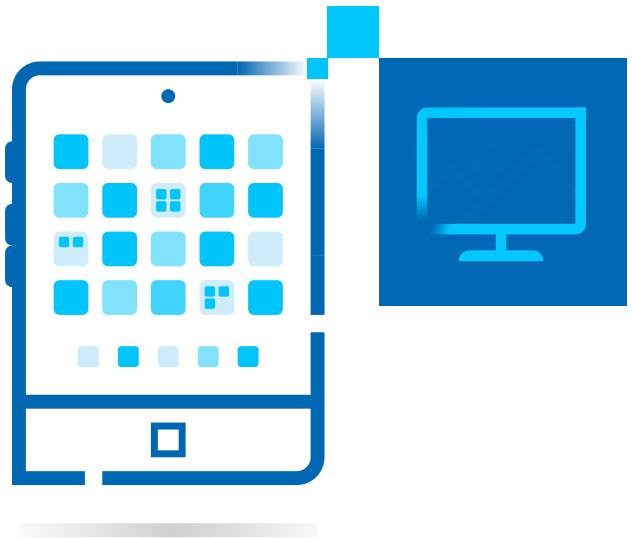
Newer PCs incorporate processors with the power today's employees need for a wide range of tasks and settings. Intel VPro, for instance, offers an array of mobile processors designed for each employee's unique business computing needs. For employees on the go, choose business-class notebooks with Intel Core vPro U-series processors. To meet the needs of specialized users and content creators whose PCs must handle intense workloads, select high-performance business-class notebooks with Intel Core vPro H-series processors.

Challenge 5:

Enhancing the user experience

In a competitive hiring market, the PC user experience is critical to attracting and retaining top talent. As employees spend less time in the office and more time on their computers, the PC has become a key differentiator between your workplace and your competitors'. So important is the PC experience that 89% of employees would be willing to take a pay cut if they could choose their own device.[11]

Although IT teams remain under pressure to maintain flat budgets, trying to cut costs by using outdated PCs can cost you qualified employees. It can also reduce the productivity of your current employees: PCs that are two to three years old can lower productivity by 12.89%, while those more than five years old can lower productivity as much as 43.70%.[12]



PC trend:

Design with UX in mind

Newer PCs designed with the user experience in mind can improve employee productivity and motivation. In addition, newer PCs are more reliable. Even a few years can make a big difference: A PC just two or three years old is more than three times as likely to fail as a new PC.[13]

With so many PC form factors and options available, it's easier than ever to match the right device to the right person, whether they are a mobile user or an engineer. For instance, laptops based on Intel vPro, an Intel Evo design, are developed with Intel's industry partners and use key platform indicators to deliver the optimal user experience for a range of business needs.

Modern PCs can even help IT provide proactive tech support, further enhancing the user experience. Using built-in telemetry in Intel vPro PCs, IT professionals can monitor different users, see what they need, and intelligently tune the PC's features to suit.

A mix of laptops, desktops, and two-in-one devices can provide maximum value in a hybrid workplace. Desktops with larger monitors can fit more focused use cases, such as in office conference rooms where users may need lots of real estate during meetings. Mobile users may want two-in-ones to interact with customers, such as a salesperson using a touch screen to walk customers through product features.

What does the future hold?

How will PCs continue to evolve? Virtualization is one trend that will simplify life for both IT teams and employees. In the future, users may have one PC with virtual partitions to separate their personal and work life, or even different operating systems, without compromising performance.

Widespread availability of 5G will also be transformational. Integrated cellular connectivity for every PC will reduce the latency of the cloud-only experience, making it easier for users to access their data seamlessly across multiple devices.

New PCs with the tech specs to handle tomorrow's developments can equip your employees for the future. You can also future-proof your organization's PC investments with the following steps.

1. Seek ways to standardize and scale IT support and tools.

2. Invite HR and the CISO to play a role in device decision-making.

3. Shift IT from a service delivery mentality to a middleman mindset in which IT outsources and manages services rather than deploying them directly.

Unleash your organization's potential with PCs

The PCs you choose can be your company's biggest asset. Selecting the right PCs can increase employee productivity and satisfaction, helping to attract and retain top talent. Modern PCs with built-in collaboration tools, hardware-based security, remote management capability, and powerful processors can minimize downtime, enhance cybersecurity, and help IT teams do more with less. By matching employees with the ideal PC for their needs, you can unleash the full potential of your employees and your organization.

To learn more, visit **Intel.com**.

[1] Enterprise Technology Research, "ETR Macro Views September 2021." ETR regularly polls samples of decision-makers from Global 1000 organizations and above. **Results from the surveys are then analyzed** using statistical techniques to infer information about the population. The data points cited here are from the September 2021 version of that survey series, which saw participation from 1,483 IT decision makers across a subset of enterprise size, key industry verticals, and geographic locations.

[2] Enterprise Technology Research, "**Permanently remote workers seen doubling in 2021 due to pandemic productivity**." ETR fielded this survey as part of its COVID-19 impact series, initially launched in March of 2020. ETR regularly polls samples of decision-makers from Global 1000 organizations and above. Results from the surveys are then analyzed using statistical techniques to infer information about the population. The data point cited here is from the September 2020 version of that survey series, which saw participation from 1,049 IT decision makers across a subset of enterprise size, key industry verticals, and geographic locations.

[3] Accenture, "**The Accenture Future of Work Study 2021**." Accenture Research fielded a survey during the month of March 2021 to 9,326 global workers across the following countries: Australia, Brazil, Canada, China, France, Germany, Japan, Singapore, Sweden, UK, and US and the following industries: Banking, Insurance, Capital Markets, High Tech, Retail, Customer Goods & Services, Public Sector, Healthcare, Communications and Media, Utilities, Energy and Life Sciences. Extensive statistical cluster and regression analyses were completed to determine mindsets of the workforce and what resources were necessary to make people feel healthy and productive remotely, onsite or in hybrid models.

[4] "The Total Economic Impact™ of the Intel vPro Platform," an Intel-commissioned study by Forrester Consulting, January 2021, which surveyed 416 ITDMs at enterprises across the world using Intel vPro® platforms, including US, UK, Germany, Japan, and China. 74% respondents marked "agree" or "strongly agree" to this statement. **Read the full study**. Results may vary.

[5] Versus standard Wi-fi. See **www.intel.com/PerformanceIndex** (connectivity) for details. Results may vary.

[6] Thunderbolt™ 4 provides a 40Gbps connection compared with the speed of USB 3.2 Gen 2 (10 Gbps).

[7] As measured by Productivity and Collaboration Workflow 11th Gen Intel® Core™ vPro® i7-1185G7 Processor vs. 8th Gen Intel® Core™ vPro® i7-8650U Processor.

[8] As measured by PC Mark 10 Application overall score 11th Gen Intel® Core™ vPro® i7-1185G7 Processor vs. 8th Gen Intel® Core™ vPro® i7-8650U Processor.

[9] Time taken to drain from 100% to critical battery level while performing workflows under a typical-use environment comprising multiple cloud-based and (where available) local apps and web pages. The typical-use environment includes Google Chrome browser, Google G-Suite or Microsoft Office 365, YouTube and Google Meet or Zoom. Testing is conducted on unplugged laptops, connected to 802.11ax wireless, and with shipped hardware configurations including Windows 11 (Windows-based devices) and Chrome OS (Chrome-based devices) and 250-nit (LCD displays)/200-nit (OLED displays) screen brightness. Individual system results may vary; power and performance vary by use, configuration and other factors. Testing results are as of February 2022 and do not guarantee individual laptop performance.

[10] Measured average responsiveness of premium Windows OS-based designs while performing typical workflows in a realistic environment, compared to 3-year-old premium design. Visit **www.intel.com/11thgenvpro** for details. Results may vary.

[11] Jamf, "**Employee Choice and its Impact on the Future of Work**." Survey conducted in summer 2021 by Vanson Bourne and commissioned by Jamf. A total of 2,000 employees from enterprises across the US (400), UK (300), France (300), Germany (300), the Netherlands (100), Japan (200), Australia (150), Mexico (100) and India (150) were interviewed. Respondents had to be from organizations with 100 or more employees and were from both the private and public sectors.

[12] J.Gold Associates, "**Older PCs in SMB Cost Study—Selected Results**," a web-based survey consisting of a total of 3,297 responses from 16 countries. This data was collected in 2 phases, with the initial phase of collecting data from the first 5 countries conducted in April, 2018, and the second phase of data collection from the remaining 11 countries conducted in July, 2018.

[13] Ibid.

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