

Lenovo ThinkPad X1 Carbon AI PC

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technology
for all

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Tap into Limitless Potential With Lenovo AI PCs

With Lenovo AI PCs powered by Intel® Core™ Ultra processor, you can do more—in less time, with less stress. Whether you want to drive workforce productivity, bolster cybersecurity, or streamline operations, **Lenovo delivers Smarter AI for all.**



Unlock new
AI experiences.

In this guide

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intel
CORE
ULTRA

intel
vPRO

EVO EDITION

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Your AI PC future starts with Lenovo

AI is no longer a dream of the future. It's here, and it's transforming the way business is done today. As workforces rapidly discover new use cases for AI, they need an experience that meets the demands of emerging workloads. That's why Lenovo has developed the most comprehensive portfolio of AI-powered devices and services in the industry. And that starts with the **AI PC, powered by Intel® Core™ Ultra processor and Intel vPro®.**

Every **Lenovo AI PC** features dedicated hardware and optimized software tools that allow it to run certain workloads locally. As a result, AI PCs can help speed up AI performance, mitigate security gaps, and lower costs associated with cloud infrastructure.

The time to embrace AI's potential is now—**and choosing the right partner for the journey is essential.**



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Unlock new AI experiences.

Support from the start for businesses of all sizes

Lenovo AI Services help you get to AI impact faster. With **AI Fast Start** and **AI Discover**, get from proof of concept to production in weeks, not months.

Lenovo Premier Support Plus keeps your devices running better, for longer. And with certified experts available 24/7, users are never on their own.

AI-capable PCs will make up around

60%

of all PCs shipped in 2027.¹

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Lenovo ThinkBook 13x AI PC

With Lenovo's AI solutions powering your business, you can:

1

Help employees deliver their best work

With the right hardware behind it, AI can help your workforce not only breeze through the routine tasks that distract from larger goals, but also spark creativity and inspiration as they explore ideas that generate impactful business results.

2

Protect your most valuable assets

Lenovo's AI-powered cybersecurity suite helps ensure that innovation doesn't come at the cost of vulnerability.

3

Streamline IT operations

Stretched IT departments can customize their PC fleets to meet their manageability needs, helping to maximize available resources and reduce costs.

4

Partner with a trusted AI leader

Backed by years of experience, an industry-leading portfolio and a zero-trust supply chain, Lenovo is a partner you rely on.



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Introducing Lenovo AI PCs

Flexible, reliable, compatible, manageable

- Protect workforces with industry-leading security features.
- Your business is ready for what's next using **Intel® Core™ Ultra processors** and **Intel vPro®**, which are designed with AI-boosted performance and security features.



Unlock new AI experiences.

Lenovo ThinkPad X1 Carbon AI PC and Lenovo ThinkPad X1 2-in-1 AI PC

Enterprise-grade performance meets portability and versatility

- OLED displays with 120Hz and HDR support
- MIL-STD 810H rating for durability in extreme conditions
- Intel vPro® configurations offer enhanced hardware security
- All-day battery life



Lenovo ThinkPad X1 Carbon AI PC

Lenovo ThinkBook 13x AI PC

Designed to help small businesses get things done

- Ultralight and ultramobile
- Lenovo LA3 AI chip monitors system usage and employs machine learning to optimize performance and power consumption
- All-day battery life
- Harmon/Kardon audio



Lenovo ThinkBook 13x AI PC

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Help employees deliver their best work

Modern workforces are overwhelmed by the growing number of video calls, emails, and chats they receive each day. They want solutions that can simplify their workday and free them up to make a bigger impact.

Working closely with Microsoft and Intel, we've designed the **Lenovo ThinkPad X1 Carbon**, **ThinkPad X1 2-in-1**, and **ThinkBook 13x** laptops to empower employees with AI-powered tools that drive productivity, spark creativity, encourage collaboration, and save valuable time.



Lenovo ThinkPad X1 2-in-1 AI PC



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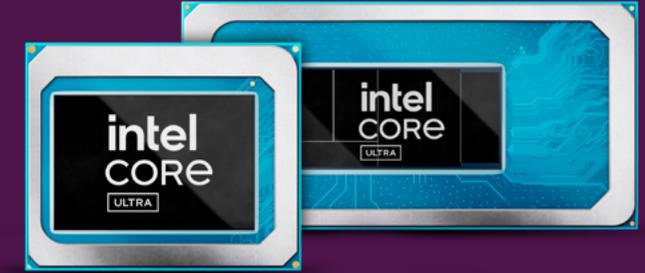
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Intel® Core™ Ultra processor

Combining performance cores and efficiency cores for real-world multitasking performance, every Intel® Core™ Ultra processor features a dedicated **Neural Processing Unit (NPU)**.

Purpose-built and optimized to run AI workloads, the NPU ensures that the power of AI doesn't come at the expense of the performance and battery life employees need.



Inside Intel® Core™ Ultra's NPU

The NPU is the processing unit found within Intel® Core™ Ultra processor that is specifically optimized for AI workloads. What makes NPUs so special for AI?

Let's break it down:

- The **Intel® Core™ Ultra NPU** completes significantly more calculations per second when compared to traditional CPU cores.
- It's optimized for **large language models (LLMs)** and complex algorithms, so it can work more efficiently with less bottlenecking.
- With the NPU dedicated solely to AI tasks, **Intel® Core™ Ultra processor** can deliver smoother all-around performance and better battery life.

And the benefits of the **Intel® Core™ Ultra NPU** will only grow over time. Throughout 2024, Intel is working closely with more than 100 Independent Software Vendors (ISVs) to optimize more than 300 AI-specific features and applications for Intel® Core™ Ultra processors..



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Smarter productivity tools for a better user experience

Customizable audio-visual enhancements and seamless smartphone integration keep your workforce productive.



Lenovo ThinkPad X1 Carbon AI PC

Intel® Unison™

Seamlessly connect your Lenovo AI PC with other devices, on Intel® Evo™ Edition:

- Send and receive calls and texts straight from your AI PC.
- View smartphone notifications.
- Quickly transfer files between devices.
- Automatically sync photo galleries.

Lenovo View

AI-powered webcam utility

Lenovo View's suite of AI-powered PCs leverages the Intel® Core™ Ultra NPU for an **improved webcam experience:**

- Always look good on camera (even in low light conditions).
- Prevent unwanted visitors from snooping with Privacy Alert and Privacy Guard.
- Stay front and center with Auto-framing.
- Maintain wellness with Posture Alert and 20-20-20 Eye Wellness.

Windows Studio Effects

In-camera effects studio

Windows Studio Effects utilizes Intel® Core™ Ultra's NPU to apply additional effects to the device camera or built-in microphone. **Supported effects include:**

- Background blur
- Eye contact
- Auto framing
- Voice focus
- Portrait light
- Creative filters
- Eye contact teleprompter



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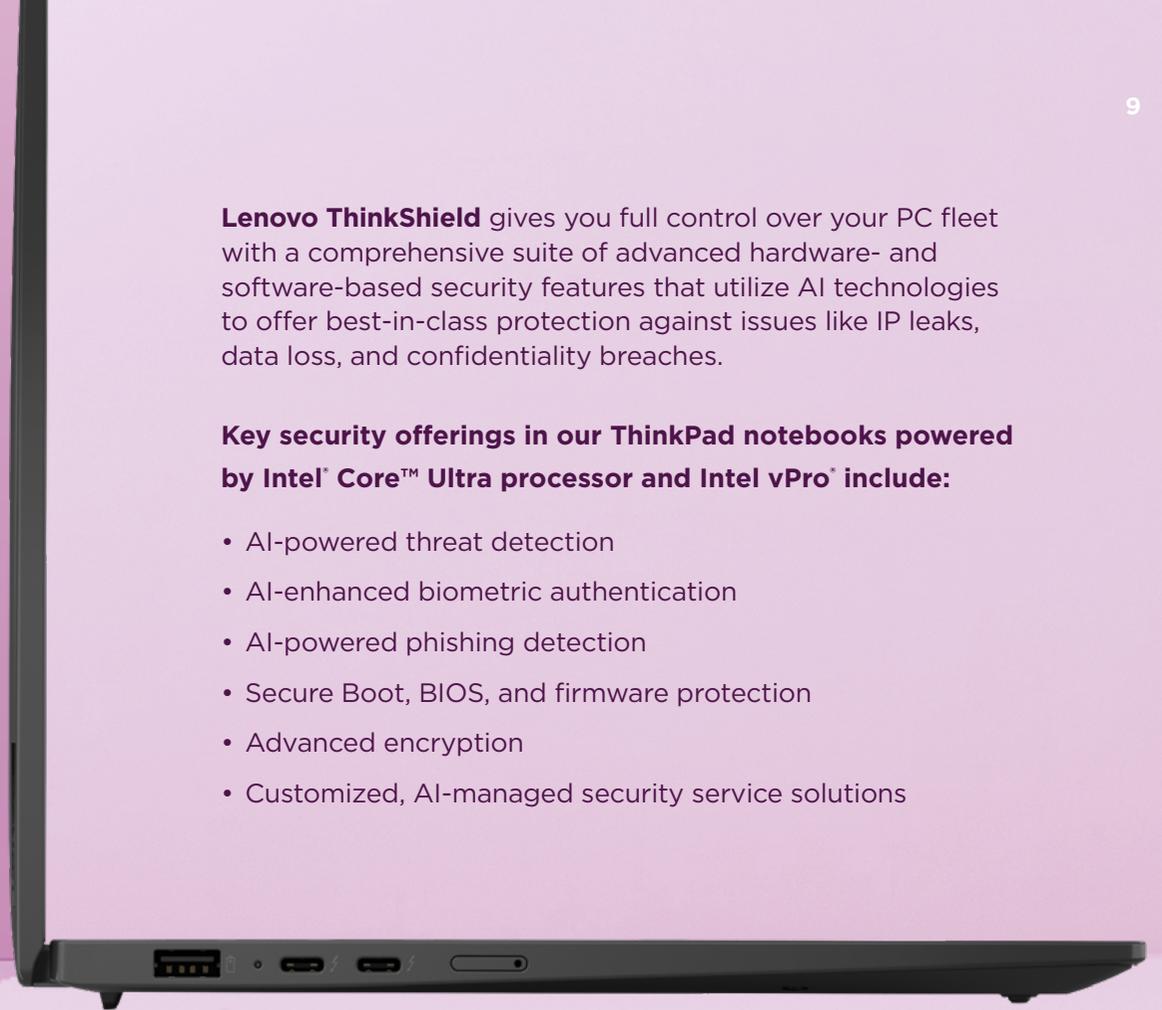
Protect your most valuable assets with AI

And with the **Lenovo ThinkPad X1 Carbon**, **ThinkPad X1 2-in-1** and **ThinkBook 13x** running more AI workloads on-device instead of the cloud, you can further minimize security gaps that bad actors exploit.

Lenovo ThinkShield gives you full control over your PC fleet with a comprehensive suite of advanced hardware- and software-based security features that utilize AI technologies to offer best-in-class protection against issues like IP leaks, data loss, and confidentiality breaches.

Key security offerings in our ThinkPad notebooks powered by Intel® Core™ Ultra processor and Intel vPro® include:

- AI-powered threat detection
- AI-enhanced biometric authentication
- AI-powered phishing detection
- Secure Boot, BIOS, and firmware protection
- Advanced encryption
- Customized, AI-managed security service solutions



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Security that works above and below the OS to keep your fleet safe



Keep your data safe with Microsoft Copilot

When employees are logged in with a **Microsoft Entra ID**, **Microsoft's Commercial Data Protection** ensures that Microsoft Copilot chats, searches, content, and other sensitive data will not be saved, viewed, or used to train AI models.

Windows 11 is the most secure Windows ever

AI is at the heart of **Microsoft Windows 11 Pro**, helping to process more than 78 trillion malicious cybersecurity signals every day. This threat intelligence helps **Microsoft constantly improve Windows 11's out-of-the-box defense.**

58% drop in security-related incidents following Windows 11 Pro adoption.⁴



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Unparalleled hardware security

Lenovo ThinkPads with **Intel vPro** go below the OS to intelligently protect against sophisticated cyber threats:

- AI-powered threat detection monitors CPU telemetry for anomalous behavior.
- Firmware, BIOS, RAM, and TPM 2.0 protections built directly into the silicon.
- Hardware-accelerated virtualization and encryption.



Lenovo ThinkPad X1 2-in-1 AI PC

With **Lenovo ThinkShield**, **Microsoft Windows 11 Pro**, and **Intel vPro** working in unison, **Lenovo AI PCs** are protected by defense in depth, making you less vulnerable to crippling cyberattacks.

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Give your workforce a personalized experience

Employees want technology that is powerful, reliable, and tailored to the way they work, which leaves IT departments stretched. Lenovo AI PCs powered by Intel® Core™ Ultra processor and Intel vPro® offer powerful IT management utilities that streamline IT tasks and anticipate needs so they can do more, faster.



Lenovo ThinkPad X1 2-in-1 AI PC



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Stay one step ahead of employee needs with Lenovo Device Intelligence

Lenovo Device Intelligence Solutions (LDI/LDI+) monitor the performance and health of fleet PCs, use AI analytics to predict and prevent device issues, and deliver insights that help IT admins work more effectively and efficiently.

When it comes to predicting the most common PC issues, LDI+ has an accuracy rate of **85%**⁵

Organizations using predictive analytics see a **10-40%**

reduction in IT maintenance costs and a 30-50% reduction in total device downtime.⁶

Lenovo ThinkPad requires **13.5%**

fewer repairs than average, compared to competitors' models.⁷



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Make the AI PC personal with Lenovo Commercial Vantage

Lenovo AI PCs offer improved reliability with reported

80%

drop in Help Desk requests.⁸

While IT management can be a harrowing process when remote and hybrid workforces are involved, it doesn't have to be. The **Lenovo ThinkPad X1 Carbon** and **ThinkPad X1 2-in-1 powered by Intel® Core™ Ultra processor** deliver enterprise-class manageability with **Lenovo Commercial Vantage**.

FOR EMPLOYEES: Personalize and optimize performance settings, request software updates, check device health, and more.

FOR IT ADMINS: Efficiently manage and control the core system settings and automated updates users have access to.



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Optimize small-business IT operations and lower costs with Lenovo Vantage

For end users and IT admins alike, Lenovo Commercial Vantage makes PC configuration and management a dream.

With Lenovo Vantage and the ThinkBook 13x, any employee can:

- Safely perform hardware scans and monitor device health.
- Self-install updates to keep devices running smoothly.
- Access cybersecurity tools and resources.

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Supercharge remote IT management with Windows Autopilot and Intel vPro[®]

While remote and hybrid workforces can leave IT departments stretched, the **Lenovo ThinkPad X1 Carbon** and **ThinkPad X1 2-in-1** deliver enterprise-grade solutions that make operations more efficient.



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Organizations can deploy Windows 11 Pro PCs

25% faster.⁹

With **Windows Autopilot**, you can use cloud-based services to simplify device management for both IT and end users. Using cloud-based services, **Windows Autopilot**:

- Reduces the time IT spends on deploying, managing, and retiring devices.
- Reduces the infrastructure required to maintain the devices.

Lenovo AI PCs with Intel vPro[®] are also compatible with **Intel[®] Active Management Technology (Intel[®] AMT)** and **Intel[®] Endpoint Management Assistant (Intel[®] EMA) out of the box**:

- Intel AMT enables out-of-band access for remote devices, even if they're powered off.
- Intel EMA leverages the cloud to help IT admins access fleet PCs inside and outside corporate networks.

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Efficiently support your remote and hybrid workers with Lenovo TruScale DaaS

Part of our **Remote Work Enablement Solution**, **Lenovo TruScale Device as a Service** lowers the burden on enterprises and small businesses by streamlining the IT procurement process for remote and hybrid employees.

Our easy-to-deploy solution can be tailored to the specific tasks, roles, and preferences of your workforce and quickly sets them up with endpoint devices, monitors, accessories, software, and premium services in one go.

Lenovo TruScale DaaS also scales to fit your evolving needs with a pay-as-you-go model that helps you:

Reduce device-related IT costs by **35%**¹⁰

Make procurement move **30%** faster¹¹

Reduce costs on delivered services by **20%**¹²



Lenovo ThinkPad X1 Carbon AI PC



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Partner with a trusted AI leader

With Lenovo, you won't have to choose between enhanced security and interrupted workflows, between giving people powerful technology and adding IT resources, or between staying ahead of the competition and keeping costs down.



Lenovo ThinkBook 13x AI PC

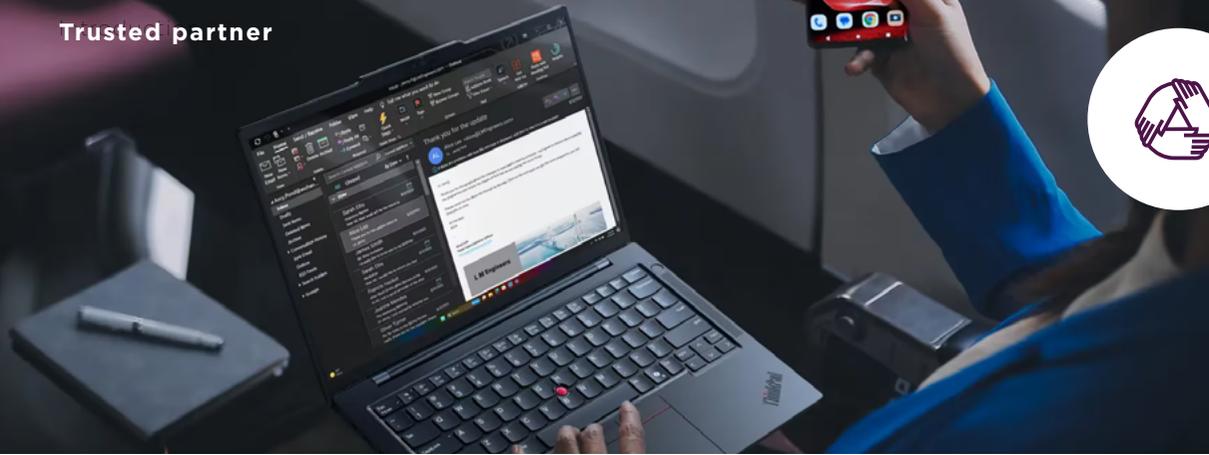


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Trusted partner



Support matters

Lenovo can answer your AI questions, accelerate your advantage, and help you exceed expectations.

Since 2017, Lenovo has invested more than

\$1.7B

into AI.

TOP 10

Lenovo's ranking in the 2024 Gartner Supply Chain Top 25.¹³

- AI-powered digital workplace solutions help you drive IT efficiency at scale.
- We have a global network of **1,500 service-authorized PC resellers**, plus an **international warranty service (IWS)**.
- Our AI-driven IT process optimization frees up your team to focus on critical tasks.



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Sustainability matters

Lenovo understands that what's better for people is also better for business, which is what drives every decision and investment we make.

Our sustainability pledge extends to the **Lenovo ThinkPad X1 Carbon, ThinkPad X1 2-in-1, and ThinkBook 13x**, which are manufactured using recycled materials, ship in plastic-free, FSC-certified packaging, and carry the **following certifications:**

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- ErP Lot 6/26
- RoHS compliant
- TCO Certified 9.0
- BSI Carbon Neutral Certified (Lenovo ThinkBook 13x only)

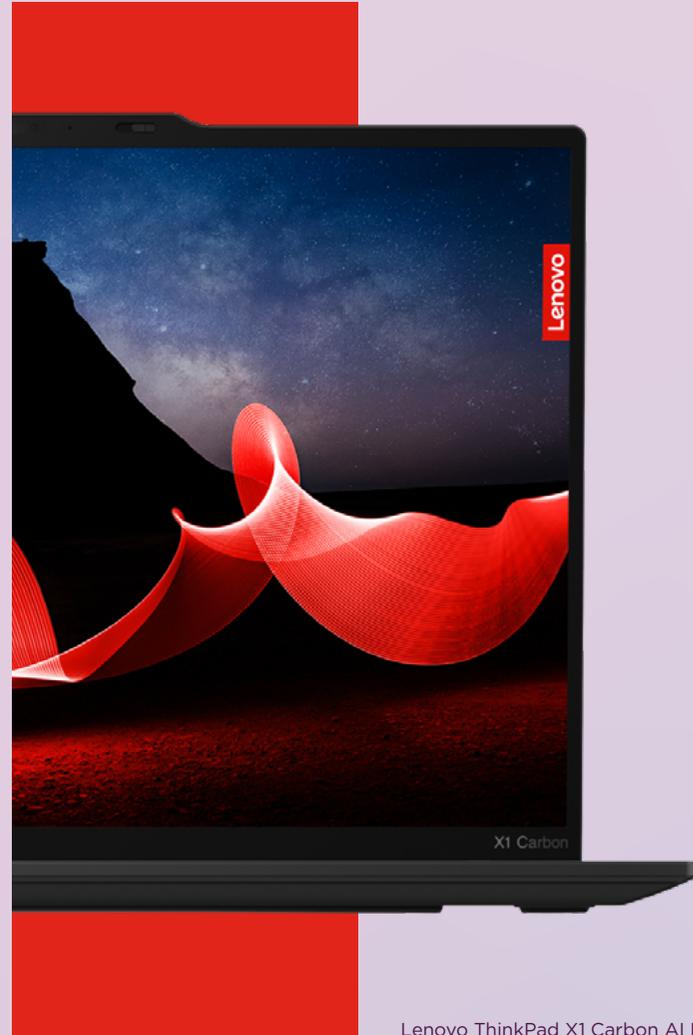
Our sustainability services include a robust asset recovery service (ARS) for extending device life with premium warranty and support offerings, plus hassle-free disposal.



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Lenovo ThinkPad X1 Carbon AI PC

Lenovo AI solutions do more for every aspect of your work experience. And with **Lenovo AI PCs** in everyone's hands, no one needs to worry about reliability, security, processing speed, and battery life—everything you've already come to rely on from Lenovo.

You'll have the power of **Intel® Core™ Ultra processor** to unlock new AI experiences and other next-gen workloads.

You'll have the flexibility to drive performance faster and with less risk, and you'll have the support of Lenovo's services throughout the journey.

**You'll have a trusted partner and a clear purpose.
You'll have Smarter AI for all.**

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¹ Canalys, "[Now and next for the PC market in 2024](#)," December 2023

² Work Trend Index Report "[What can Copilot's earliest users teach us about generative AI at work](#)," November 2023.

³ Commissioned study delivered by Forrester Consulting, "[The Total Economic Impact Of Windows 11 Pro Devices](#)," December 2022.

⁴ Windows 11 Survey Report. Techaisle, February 2022. Windows 11 results are in comparison with Windows 11 devices.

⁵ Demonstrated under laboratory conditions when testing for the networking/telecom industry's most common causes of BSOD, (Sept 2020.)

⁶ McKinsey & Company, "[The future of maintenance for distributed fixed assets](#)," June 2020.

⁷ TBR Notebook Reliability Study 2021.

⁸ Commissioned study delivered by Forrester Consulting "[The Total Economic Impact of Windows 11 Pro Devices](#)," December 2022.

⁹ Commissioned study delivered by Forrester Consulting "[The Total Economic Impact of Windows 11 Pro Devices](#)," December 2022.

¹⁰ Lenovo TruScale DaaS ROI Tool. This is a sample representation of Lenovo customer data assuming a 3-year replacement cycle with a modern management approach at an average DaaS monthly price, device repair rate of 2%, and IT resource annual salary of \$70,000 USD. The above does not constitute a guarantee of savings. Actual customer savings may vary. All purchases of DaaS are subject to conclusion of a formal contract.

¹¹ Lenovo, "[Empowering product engineers to collaborate more effectively](#)," 2023

¹² Lenovo TruScale DaaS ROI Tool. This is a sample representation of Lenovo customer data assuming a 3-year replacement cycle with a modern management approach at an average DaaS monthly price, device repair rate of 2%, and IT resource annual salary of \$70,000 USD. The above does not constitute a guarantee of savings. Actual customer savings may vary. All purchases of DaaS are subject to conclusion of a formal contract.

¹³ Gartner, "[Supply Chain Top 25 for 2024](#)," 2024



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