D&LL Technologies

Harness the power of AI

A guide to modernizing your workplace

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

The AI PC revolution is reshaping the Modern Workplace

How does this fundamental transformation influence business operations and individual contributions?

Understanding AI PCs ›

Unravel the basics of AI and its role in PCs core concepts

Refresh for AI ›

Delve into why AI is an essential need for your everyday work

Embracing AI ›

Discover how AI can become your ally in your work routine

Navigating AI ›

Addressing your AI challenges and concerns

Future-proofing for AI ›

Prepare the future workplace in an AI-driven era

Why Dell for AI ›

Bring AI to your data with Dell's end-to-end AI solutions

GenAI use cases anticipated to be significant within organizations

52% Knowledge management applications[1]

42% Marketing applications[1]

41% Code generation applications[1]

39% Design applications[1]

37% Conversational applications[1]

1   Source: An IDC Infobrief commissioned by Dell Technologies: Workforce Upskilling for the AI Era, IDC #US51331823, January 2024.

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

Surpass productivity and unlock human excellence with an AI PC

What are AI PCs?

AI PCs are devices designed with the new PC architecture combining the processing power of the CPU, GPU and NPU. They are designed to run AI workloads locally on-device for everyday workloads and also allow for AI development, deployment, and fine-tuning.
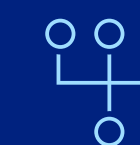
AI

Introducing the NPU
(Neural Processing Unit)

a built-in AI processor designed to optimize AI workloads while improving PC performance and battery life.

Enhanced AI capabilities

Achieve AI-level productivity with AI-powered tools to upgrade your work habits

Local AI processing

On-device AI processing without Internet connection

Low latency

Minimize processing time and quick responsiveness for AI tasks

Reduced security risks

On-device AI mitigates security vulnerabilities associated with data transmitted over networks

DELLTechnologies

Breaking down the anatomy of PCs to enable AI related tasks

The roles of processing units

Breaking down AI workloads ›

PC performance and its ability to handle various tasks are fundamentally shaped by its underlying architecture — it's essential to allocate the right workload to the right engine at the right time.
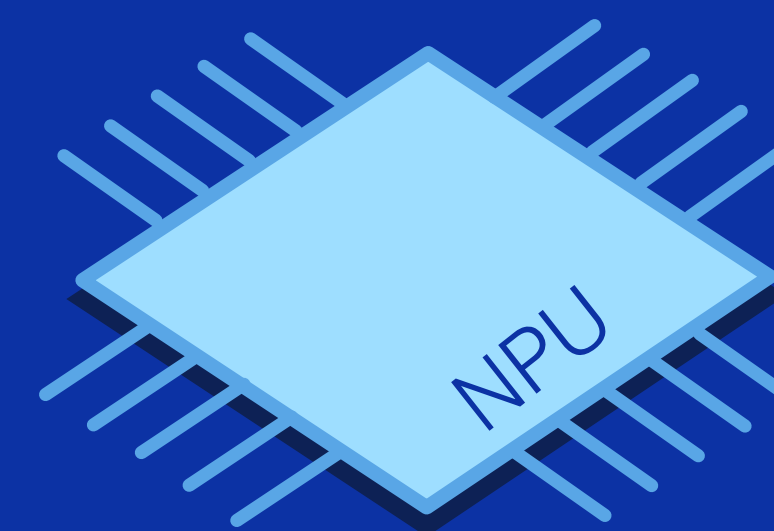
CPU
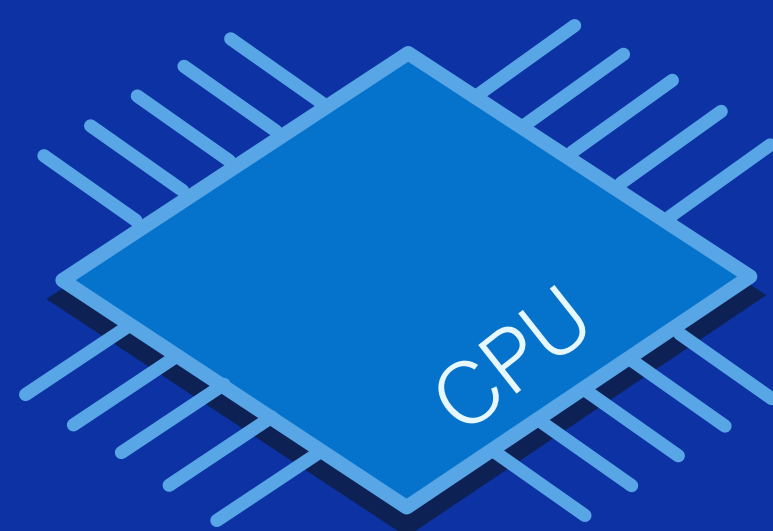
Brain of the PC
CPUs serve as the brain of PCs, executing general-purpose instructions and managing essential tasks that form the backbone of modern computing.

GPU
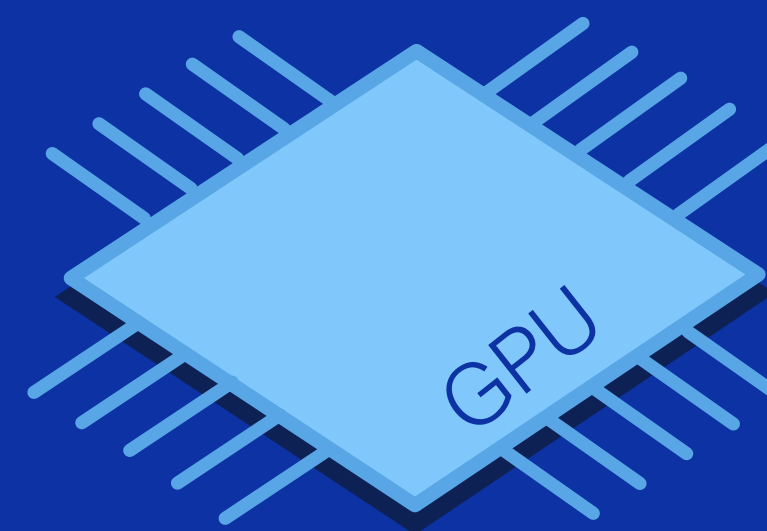
Designed to render graphics
GPUs handle complex graphical tasks and has found favor in parallel processing tasks.

NPU

Optimizing AI-intensive tasks
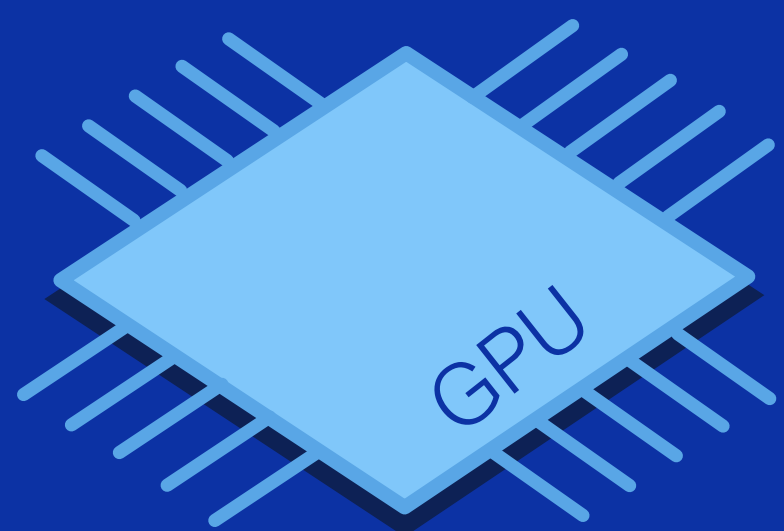NPUs have emerged as a driving force behind advancements in AI and offloads AI workloads and computation from the CPU.

D&LL Technologies

Breaking down the anatomy of PCs to enable AI related tasks

‹ The roles of processing units

Breaking down AI workloads

GPU based AI-acceleration

GPUs are optimized for parallel processing and are commonly used in super computers and data centers for accelerating various AI tasks like deep learning training and inferencing.

This first generation of RT Cores of powerful NVIDIA(R) RTX GPUs accelerated ray tracing by up to 25x compared to previous GPUs, and up to

30x faster

than CPUs.[2]
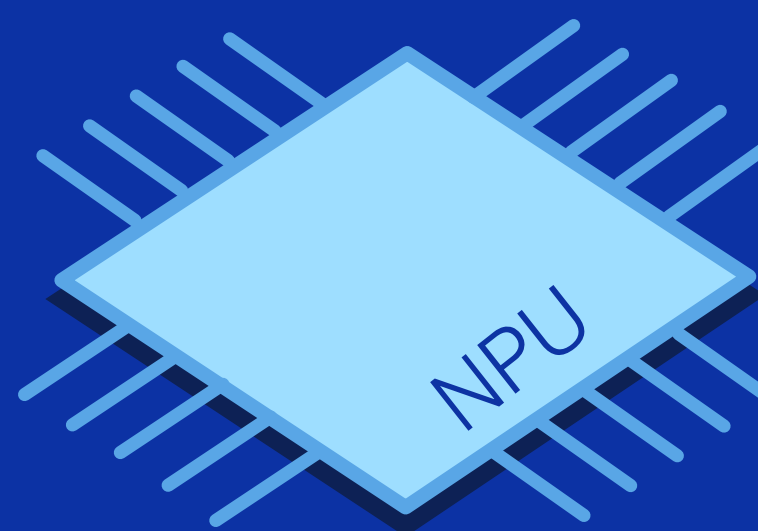
Delivering on-device AI processing

The NPU brings a transformative AI experience made to handle the day-to-day AI tasks for faster, better, and efficient performance.

Use up to

42%

less power when using AI-enhanced collaboration effects on Zoom.[3]

3x faster

inferencing speed when using running widely used large language models[4]

2   NVIDIA GPU Guide, GPU Features RT Core, based on NVIDIA Turning GPU Architecture Whitepaper, 2018

3   Based on internal analysis and testing, compared to previous generation Intel® Core™ Ultra processor, September 2024. Select AI-enhanced collaboration features include, eye contact correction, standard blur, portrait blur, automatic framing, calls with audio only, virtual background running on devices with Intel® Core™ Ultra 200V series processor. Results may vary.

4   Based on LLMWare testing, November 2024 on Dell devices with Intel® Core™ Ultra 200V series processor compared to devices with Mac M3 Max processors. Large Language Models include: llama, llama2, mistral, phi-3, and yi-9b

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

The opportunity to refresh PCs with modern technology has never been greater
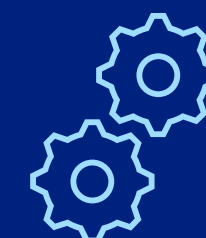
In the new era of technology, AI PCs offer a boost in productivity leveraging modern technology ensures the latest collaboration, security, and AI features to safeguard data and enhance user experience.
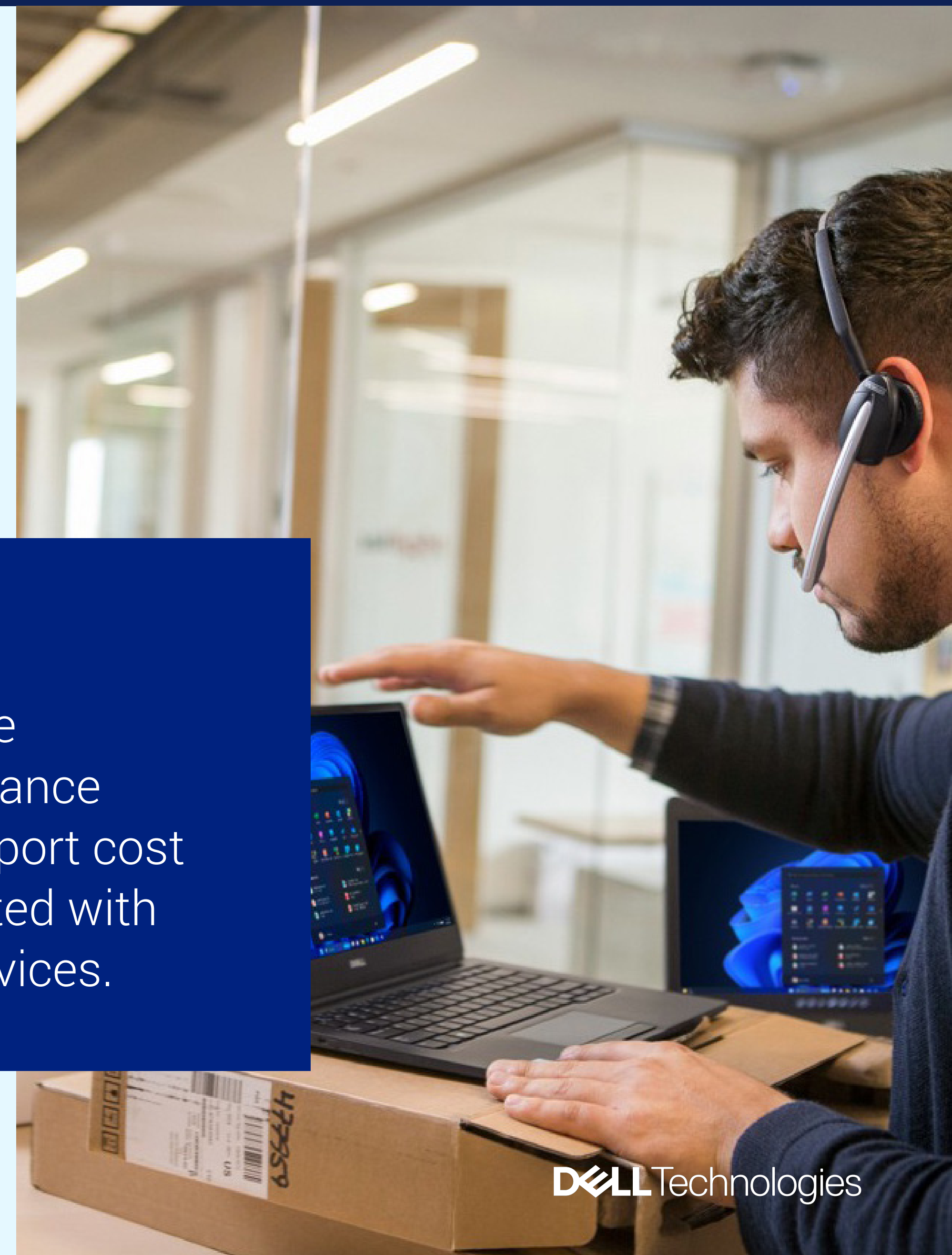
Increase productivity with optimized performance.

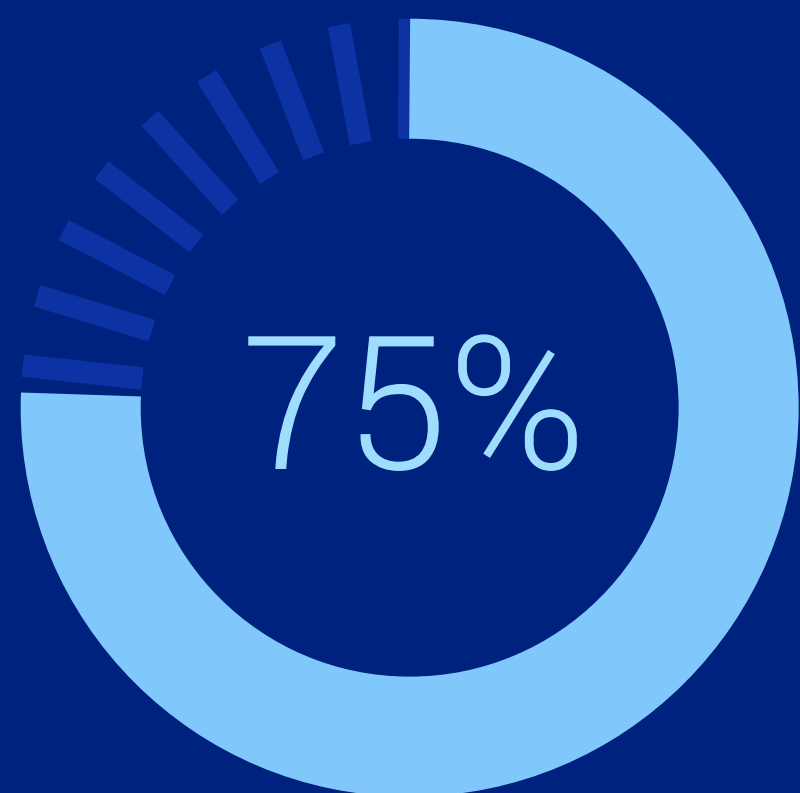Improve battery discharge with more efficient hardware components.

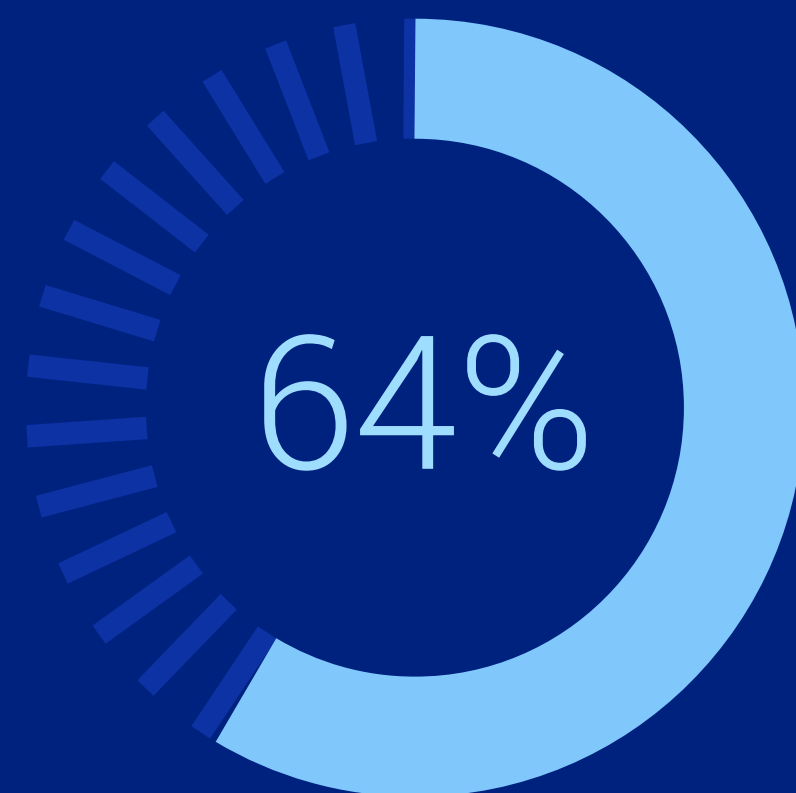Minimize maintenance and support cost associated with older devices.

DELLTechnologies

Refresh to AI PCs to future-proof your organization

Upgrade to newer hardware, seize the latest AI advancements and ensure future compatibility.

75%

of large enterprises will adopt AI for quality and efficiency.[5]

64%

of business leaders believe GenAI will help them gain a competitive advantage.[6]

Achieve more with Windows 11

Find new levels of productivity with Copilot and improve security with the most secure windows ever.

42%

faster completion of demanding workloads.[7]

3.1x

reduction in firmware attacks.[8]

5   IDC, "IDC Futurescape, Worldwide AI and Automation 2023 Predictions", 2022.
6   KPMG, Generative AI: From Buzz to Business Value, May 2023.
7   Compared to Windows 10 devices. "day-to-day experience with Windows 11 Pro laptops," Principled Technologies, February 2023. LINK.
8   SMB Windows 11 Survey Report. Techaisle, February 2022. Windows 11 results are in comparison with Windows 10 devices.

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI
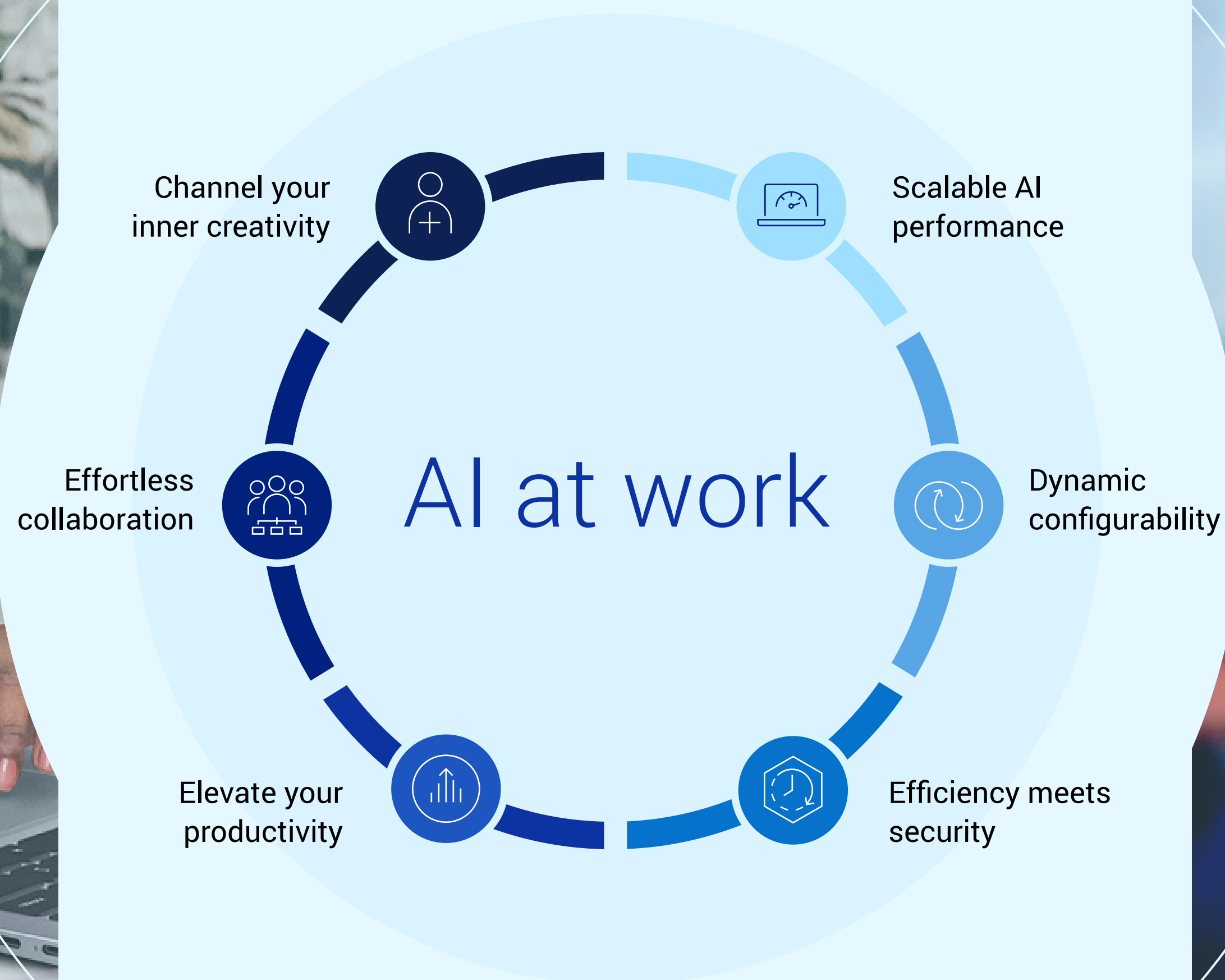
Transform the way you work with AI by your side

Boost your productivity, creativity, and collaboration to new levels.

AI end-user ›

AI builder ›

AI at work

- Channel your inner creativity
- Scalable AI performance
- Effortless collaboration
- Dynamic configurability
- Elevate your productivity
- Efficiency meets security

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges
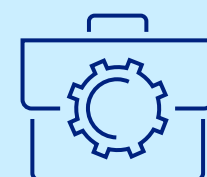
Futureproofing for an AI driven world

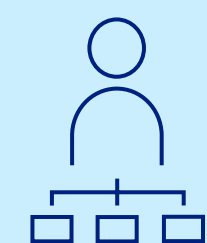Why Dell for AI

AI BUILDER

Unleash data potential and turn it into operational efficiencies

AI Builders are professionals engaged in the field of AI, focusing on designing, building, and implementing AI models and systems.
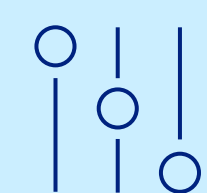
Workplaces
Work spans across various industries including tech, healthcare, finance, automotive, and more.

Job titles
AI/ML engineers, data scientists, research scientists, software developers with a focus on AI and professors or researchers in academia.

Technological needs
Require PCs with advanced CPUs, GPUs and NPUs to handle complex computations, large datasets and intensive model training.

Recommended solutions

Dell Pro Max Premium
Great for utilizing, hosting, and inferencing AI models.

Dell Pro Max Plus
Designed to accelerate AI and GenAI development, deployment, and fine-tuning.

DELLTechnologies

AI BUILDER

Unlock the power of AI with Dell Pro Max AI PCs

Scalable AI performance

Dynamic configurability ›

Speed up delivery and secure AI development locally on the device with powerful NVIDIA GPUs on the world's **#1 workstation brand**[9].
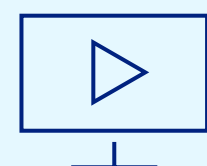
Dell Pro Max AI PCs are workstations that are perfect sandbox environment devices and entry-level machines for companies to jumpstart their AI journey.

9   *Based on IDC Quarterly Workstation Tracker, Q3 2023.*

DELLTechnologies

AI BUILDER

Unlock the power of AI with Dell Pro Max AI PCs

Dynamic configurability

Elevate your AI workspace by customizing your Dell Pro Max AI PC with configurations of RAM, storage and GPU with up to **4 NVIDIA™ 6000 Ada GPUs** in a single workstation.
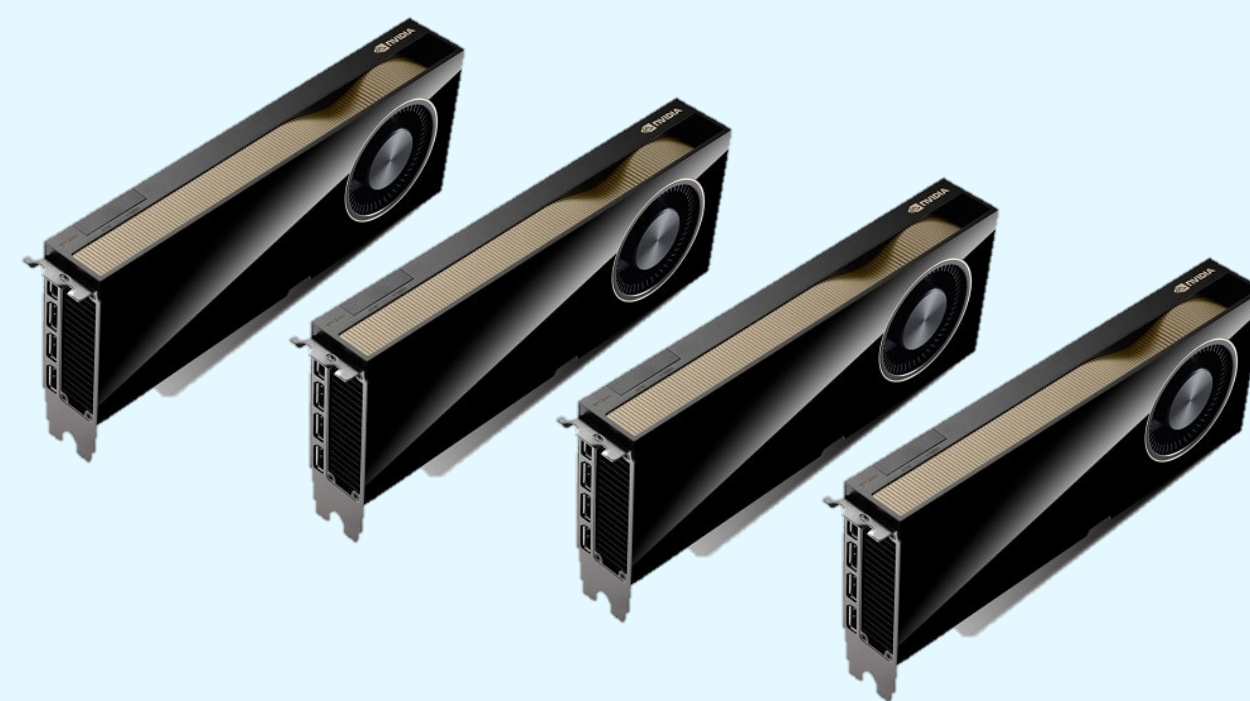
Efficiency meets security ›

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI
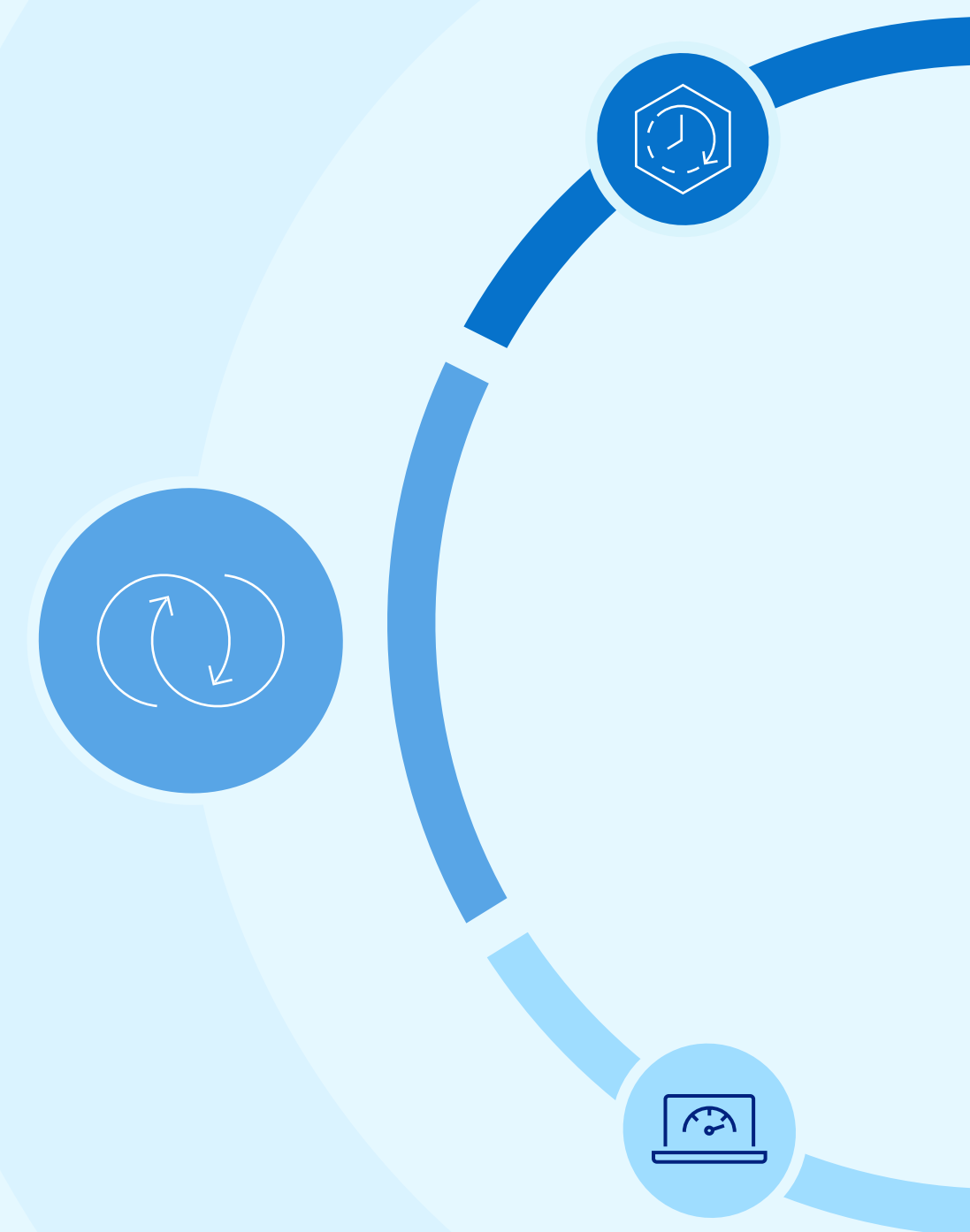
AI BUILDER

Unlock the power of AI with Dell Pro Max AI PCs

Efficiency meets security

Empower data scientists and developers with greater control by **utilizing on-premise AI development and deployment on AI-ready devices**, enabling efficient, secure and cost-effective AI innovation.

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

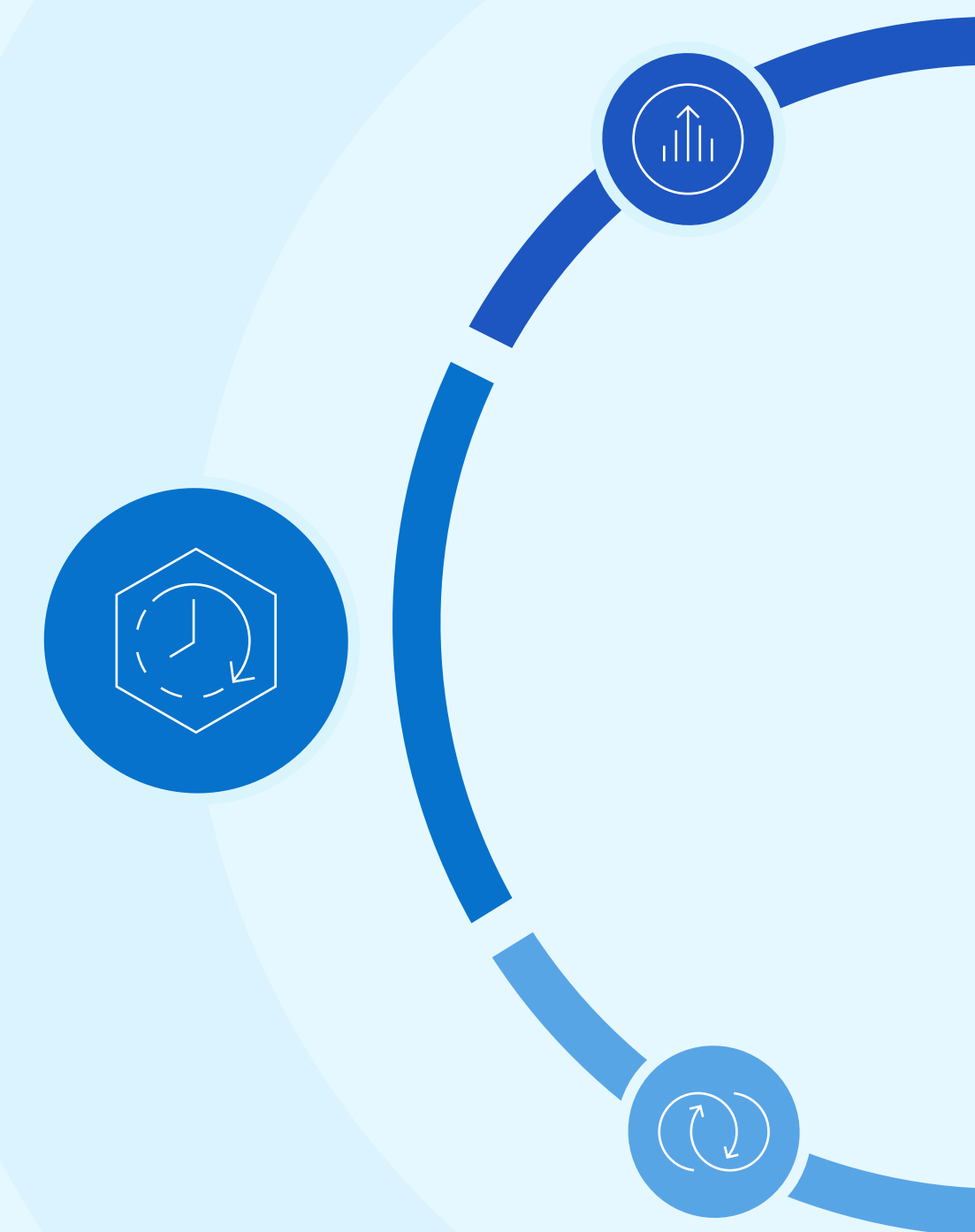**Embracing AI in your daily work**

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

AI END-USER

Enhance productivity and elevate creative potential

AI End-Users are split between the everyday knowledge workers and the creative power-users that are eager for productive innovation.

Recommended solutions

Knowledge worker

Role:
Information-processing professionals who make informed decisions in their day-to-day activities.

Workplace:
Work spans across various industries including tech, healthcare, finance, automotive, and more.

Technological needs:
Introduction of AI PCs can significantly enhance productivity, efficiency, and ability to derive insights with large amounts of data.

Dell Pro Series

Boost productivity and efficiency with AI capabilities, optimizing organization, collaboration, and preserving battery life.

Power users, creators

Role:
Highly skilled individuals that use advanced computing capabilities to innovate, create content, and solve intricate problems.

Workplace:
Work spans across various industries including tech, healthcare, finance, automotive, and more.

Technological needs:
Demand high-performance computing solutions to effectively utilize AI technologies to push boundaries of what's possible.

Dell Pro Max/Premium

Designed for Power users, as well as creative, design and other complex compute and graphical tasks.

DELLTechnologies

AI END-USER

Accomplish more with AI PCs to help you be productive and innovate like never before

Elevate your productivity

Work smarter, not harder with our new AI-enabled Dell Pro and Dell Pro Max AI PCs

#1 commercial AI PCs worldwide[10]

World's
most secure and mangeable
commercial AI PCs.[11]

3x faster
inferencing speed when running widely used large language models[12]

Effortless collaboration ›

10 Based on IDC Worldwide Quarterly Personal Computing Device Tracker, Nov 6, 2024 – Units
11 Most secure is based on Dell internal analysis, October 2024. Applicable to PCs on Intel processors. Not all features available with all PCs. Additional purchase required for some features. Validated by Principled Technologies. A comparison of security features, April 2024. Most manageable commercial PCs when comparing the systems management capabilities of Dell Update Processes, Dell Manageability Solution capabilities and integrations with 3rd Party Management Solutions, with competitor update processes, systems management solution capabilities and integrations with 3rd party management solutions. 3rd Party Management Solutions - Microsoft Intune, Workspace ONE, are separate purchases. Intel vPro, to support out-of-band systems management, is an additional system configuration upgrade. Based on Dell internal analysis, April 2024.
12 Based on LLMWare testing, November 2024 on Dell devices with Intel® Core™ Ultra 200V series processor compared to devices with Mac M3 Max processors. Large Language Models include: llama, llama2, mistral, phi-3, and yi-9b
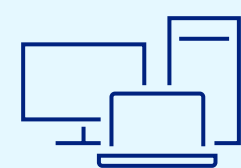
DELLTechnologies
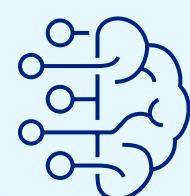
AI END-USER

Accomplish more with AI PCs to help you be productive and innovate like never before

Effortless collaboration

Channel your inner creativity ›

Bridge the language gap with on-device AI when activating live captions to instantly translate 40+ languages into english -- even without internet connection

Polish your virtual presence with smart conferencing technology from **Windows Studio Effects.**

Up to **42%** less power when running calls on Microsoft Teams.[13]
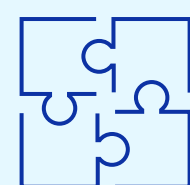
Get a more inclusive experience with integrated **AI ASL auto-translations via Omnibridge. Watch now ›**

13   Based on internal analysis and testing, compared to previous generation Intel® Core™ Ultra processor, September 2024. Select AI-enhanced collaboration features include, eye contact correction, standard blur, portrait blur, automatic framing, calls with audio only, virtual background running on devices with Intel® Core™ Ultra 200V series processor. Results may vary.

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

AI END-USER

Accomplish more with AI PCs to help you be productive and innovate like never before

Channel your inner creativity

Turn ideas into reality with **Copilot for Microsoft 365** and AI applications that help you draft your visions quickly.

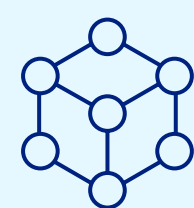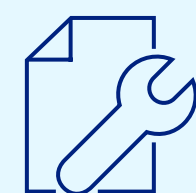Unlock creative possibilities with AI video and photo editing tools with **Cyberlink**

2.5x
longer battery life when using Cyberlink's PowerDirector AI Background Remover feature, with NPU hardware acceleration enabled.[14]

Create fully editable custom designs and text

1.9x
faster, even offline with Cyberlink's Promeo AI Magic Designer[15]

Use up to

49%
less power when utilizing AI editing features like Image Upscale to enhance low-quality images[16]

14   Based on internal analysis and testing, November 2024. Cyberlink's Power Director AI video editing features running on devices with Intel® Core™ Ultra 200V series processors with NPU hardware acceleration enabled compared to Intel® Core™ Ultra 200V series processors without NPU hardware acceleration enabled. Results may vary.
15   Based on internal analysis and testing, November 2024. Cyberlink's Promeo AI Magic Designer running on devices with Intel® Core™ Ultra 200V series processors was compared to previous-generation Intel® Core™ Ultra processors.
16   Based on internal analysis and testing, compared to previous generation Intel® Core™ Ultra processor, November 2024. Results may vary.

D&LL Technologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI
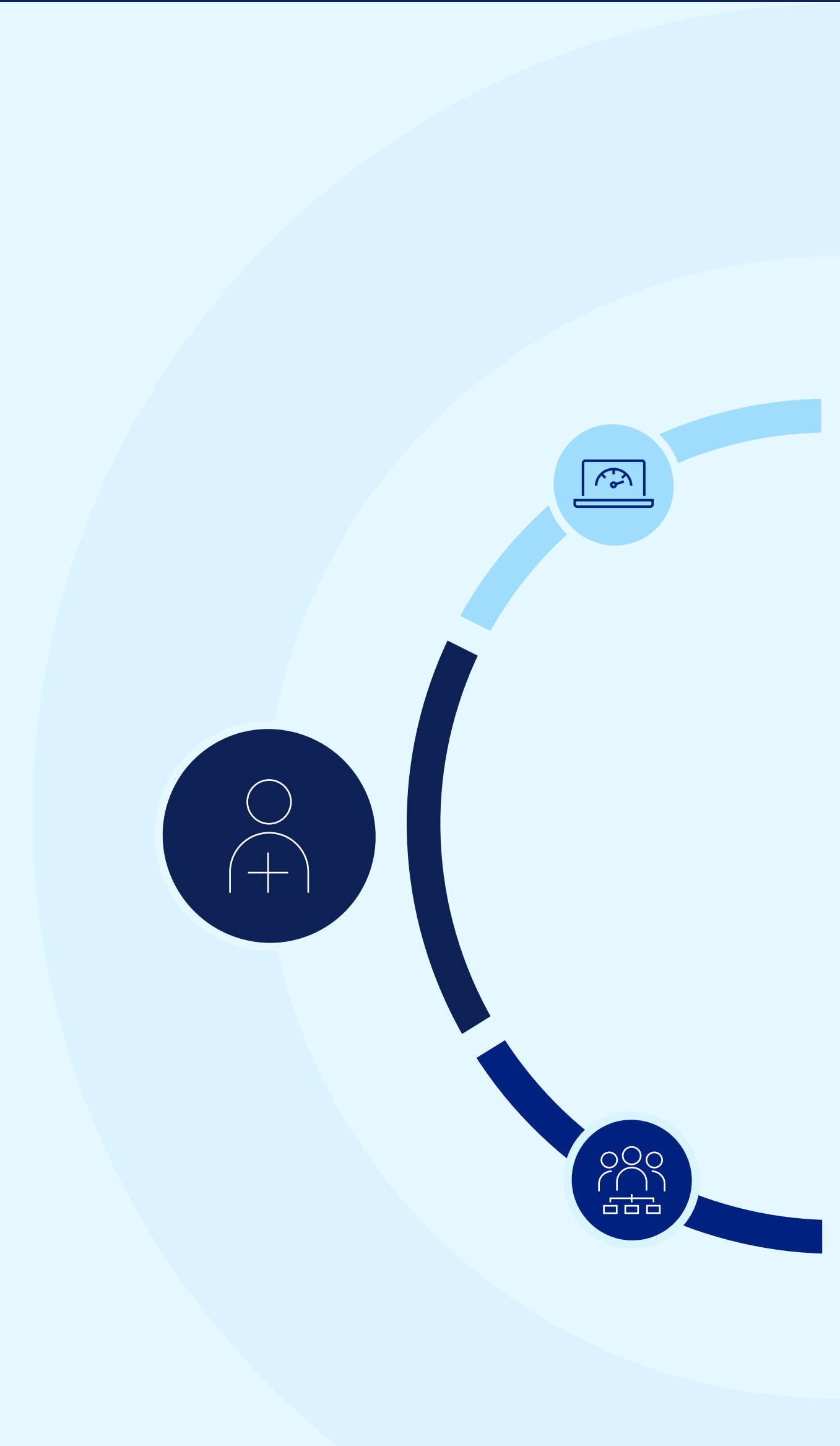
The AI revolution is shaping industries and bringing potential for transforming the way we work

But diving into AI can feel daunting with all the uncertainties around.

Where do I start? ›

Is it secure? ›

Is it sustainable? ›

At Dell, we have implemented tailored services and solutions to accelerate your AI Journey.

DELLTechnologies

Harness the
power of AI

Introduction

Understanding
AI PCs

Modernize with an
AI PC Refresh

Embracing AI in
your daily work

**Addressing AI
challenges**

Futureproofing for
an AI driven world

Why Dell for AI

Simplify your AI journey

Take advantage of Dell's expertise with end-to-end AI support
and services from inception to expansion and strategic
investment in AI technologies.

Dell Professional Services can help you

Establish
strategy → Prepare
data → Choose
platform → Deploy
and test → Operate
and scale

Implement Microsoft Copilot offerings across your
organization with Dell Services ›

Tailor GenAI technologies to the needs of end users with
Dell Digital Employee Experience Services for GenAI ›

Get started with Dell Accelerator Workshop today ›

**Access the latest technologies to quickly
transform your IT with flexible payment
options with Dell APEX PC as-a-Service**

30% savings in support costs
with Dell APEX PCaaS.[17]

Visit Dell APEX PC-as-a-Service ›

17   Based on a Forrester, Total Economic ImpactTM (TEI) study commissioned by Dell Technologies, September 2023.

D∕ELL Technologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

Trust and secure your data

Protect your data and devices with the world's most secure commercial PCs.[18]

Stay secure using our device's built-in defenses with AI-enabled cybersecurity software integrations for advanced threat combat and improved cyber resilience.

Get powerful protection by default with Windows 11. With phishing safeguards, passwordless security, and app control, Windows 11 reported a reduction in security incidents by up to 58%.[19]

70%
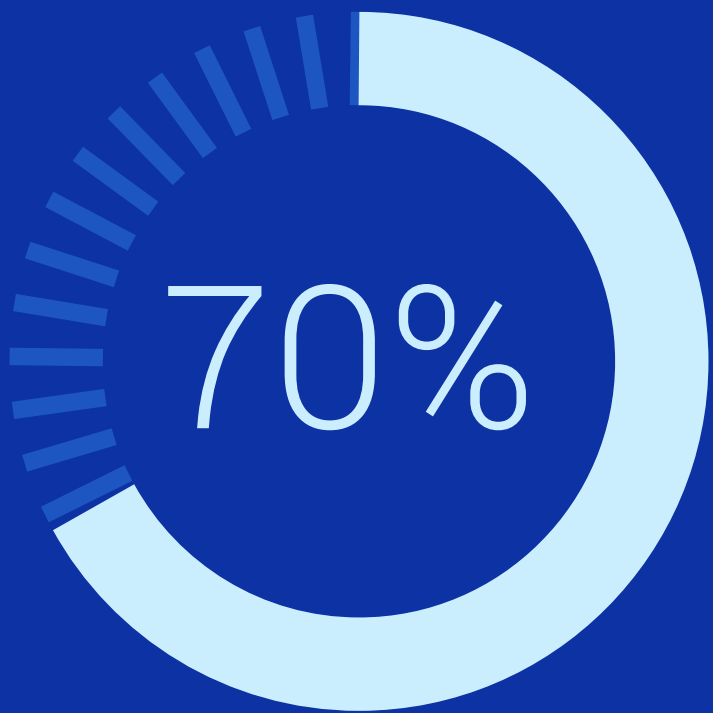
Attack surface reduction vs older PCs, according to Intel® and IOActive.[20]

18   Based on Dell internal analysis, October 2024. Applicable to PCs on Intel processors. Not all features available with all PCs. Additional purchase required for some features. Validated by Principled Technologies. A comparison of security features, April 2024.
19   Windows 11 results are in comparison with Windows 10 devices. "Windows 11 Survey Report," Techaisle, February 2022.
20   Based on IOActive's "Intel vPro 13th Gen Attack Surface Study" published March 2023 (commissioned by Intel), which evaluates Intel vPro devices powered by 13th Gen Intel Core processors against four-year-old Intel-based PCs on Windows OS. Details at www.intel.com/performance-vpro [intel.com]. Results may vary

D∅LL Technologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

Advance sustainability

Responsibly use AI and take advantage of AI-driven insights for energy and resource consumption.

Use AI-driven insights and data to act on your business and sustainability goals.

Put AI to work faster with responsible, right sized AI investments for energy efficient workloads.

Implement secure, private, and ethical AI to prioritize your goals with maintaining data sovereignty.

D∉LL Technologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

Unlock the boundless potential of people by choosing to invest in AI

Tap into the full power of your workplace by setting up the right programs and building a strong AI foundation to transform how we work.
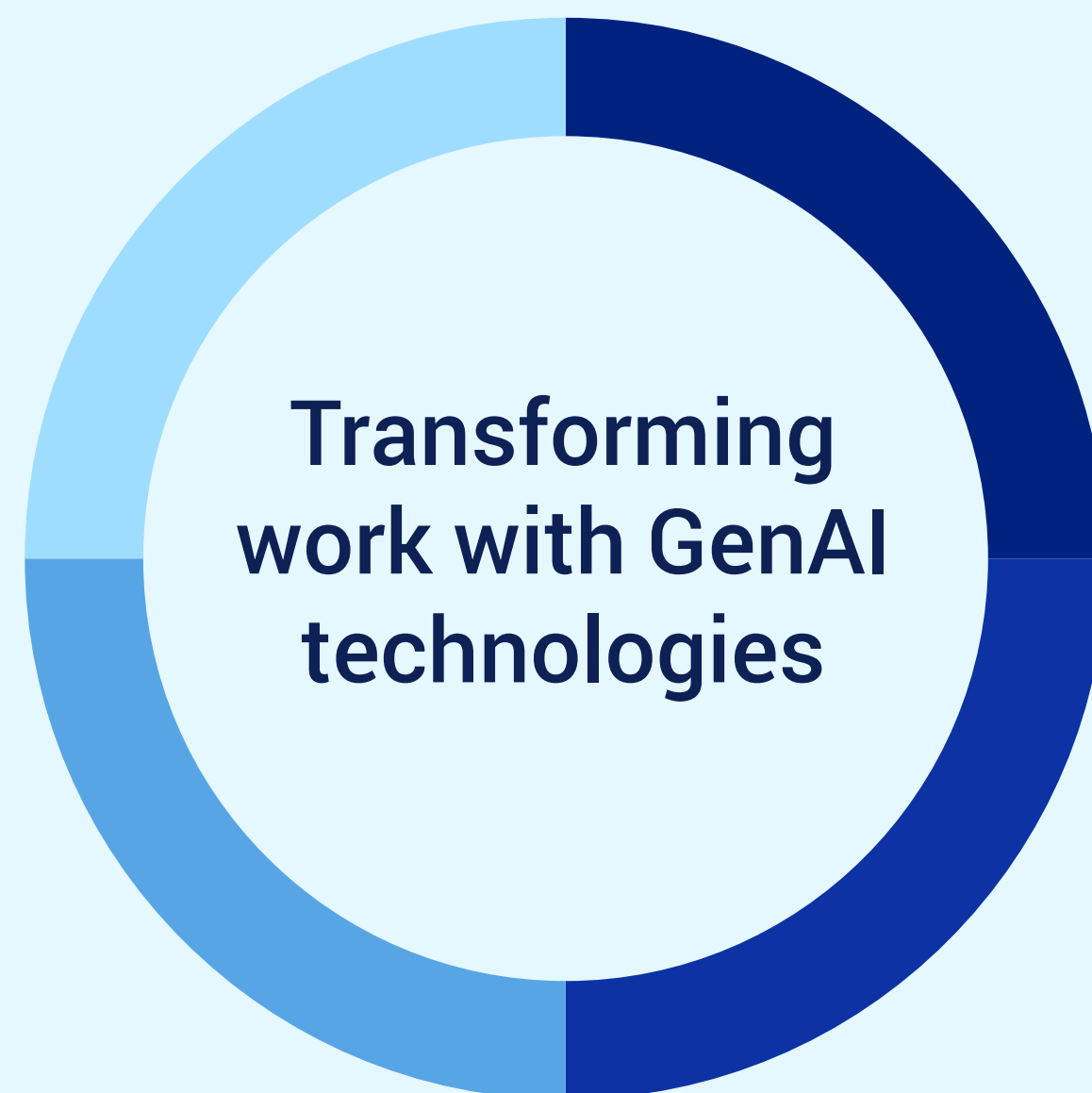
37%
of organizations will invest in technologies for improvement communication and collaboration.[21]

32%
of organizations believe that GenAI will save employee time and bring productivity gains.[21]

Transforming work with GenAI technologies

45%
of organizations will invest in technologies for training and skill development.[21]

29%
of organizations believe that GenAI will enable faster decision making.[21]

21 Based on IDC Workforce Upskilling for the AI Era, 2024.

DELLTechnologies

FROM VISION TO REALITY

Establishing an AI-ready workplace

80%

of workers reported using Generative AI in their lives in some capacity and 63% indicated that they've used it for work.[22]

45%

of companies lack a Generative AI policy, exposing them to significant risks such as data breaches, unintended biases by ungoverned AI systems, strategic misalignment and even potential legal complications.[22]

3 Steps to AI Workplace Transformation.

1 Foster a culture of learning

Educate and empower your employees

Identify AI evangelists and prioritize workforce upskilling for AI by identifying skill gaps and offering targeted AI, while fostering experimentation within supportive guidelines to spark innovation and demystify AI.

2 Craft the AI blueprint

Set up governance & ethical guidelines

Develop a robust AI governance framework encompassing policies and standards to align AI developments with organizational objectives, implementing ethical principles, alongside designed roles to oversee AI initiatives for regular compliance.

3 Strategically align

Integrate AI into business processes

Gain a competitive edge by promoting cross functional collaboration and dedicated a technical AI expert while investing in tools to ensure effective AI deployment.

22 Based on Dell Technologies Primary Research 2024 n =365.

D&LL Technologies

Harness the power of AI

Introduction   Understanding AI PCs   Modernize with an AI PC Refresh   Embracing AI in your daily work   Addressing AI challenges   Futureproofing for an AI driven world   **Why Dell for AI**

Dell AI PC Solutions & Ecosystem for Business Workers

Dell Pro Max AI PCs for Developers

Dell Trusted Workspace

Dell Services

Strategic AI partners

END-TO-END AI CAPABILITIES

Dell has the world's broadest AI solutions portfolio from desktop to data center to cloud, all in one place[23], with deep partner relationships.

23 Based on Dell analysis, August 2023. Dell Technologies offers hardware solutions engineered to support AI workloads from Workstations PCs (mobile and fixed) to Servers for Highperformance Computing, Data Storage, Cloud Native Software-Defined Infrastructure, Networking Switches, Data Protection, HCI and Services.

DELLTechnologies

Why Dell for AI Client Solutions?

Delight the End-User

Dell Technologies is the #1 in commercial AI PCs worldwide[10]

Best Designs with powerful fixed workstations with more memory and storage.

Most scalable mainstream business laptops[24]

Simplify IT

World's most secure and mangeable commercial AI PCs[11]

With Dell Validated Designs for AI PCs, only Dell delivers seamless cross-silicon optimization, crucial for rapid on-device AI deployment using NPU technology.[25]

Invest in new technology with flexible payment options offered by APEX PCaaS.

Advance Sustainability

Improve energy efficiency on devices with AI-based features and optimize AI investments through Dell's Professional services to reduce waste and lower energy cost.

Responsibly retire hardware with Asset Recovery Services and recover value to invest in new AI PCs.

24   Based on Dell analysis, October 2022
25   Based on Dell internal competitive analysis, October 2024

DELLTechnologies

Harness the power of AI

Introduction

Understanding AI PCs

Modernize with an AI PC Refresh

Embracing AI in your daily work

Addressing AI challenges

Futureproofing for an AI driven world

Why Dell for AI

Fast-track your AI transformation with

- Dell APEX PC-as-a-Service
- Professional Services

Don't know where to start?

Get started with the Dell AI Accelerator Workshop ›
*fee waived

Learn more on Dell.com/simplifiedtech ›

Reach out to your Dell Sales Representative

Explore our products on Dell.com/Shop PCs ›

D&LL Technologies