



**DELL**Technologies

# Harness the power of AI

A guide to modernizing your workplace



# 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<sup>1</sup>

42% Marketing applications<sup>1</sup>

41% Code generation applications<sup>1</sup>

39% Design applications<sup>1</sup>

37% Conversational applications<sup>1</sup>

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





# Surpass productivity and unlock human excellence with an AI PC

What are AI PCs and AI Workstations?

**AI PCs** are devices designed with the new PC architecture combining the processing power of the CPU, GPU and NPU and have a Microsoft Copilot key.

**AI workstations** are powerful machines designed for AI development with Intel HX, Xeon or AMD Threadripper Pro CPUs and configurable with NVIDIA RTX 5000 GPUs or higher.



## 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

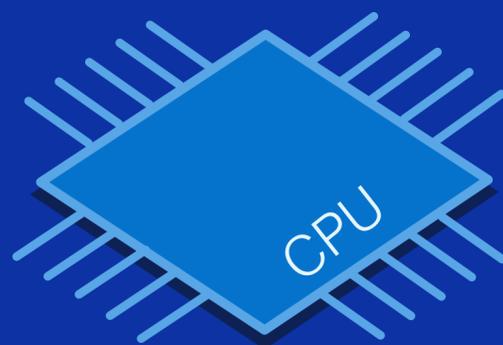


# Breaking down the anatomy of PCs to enable AI related tasks

## The roles of processing units

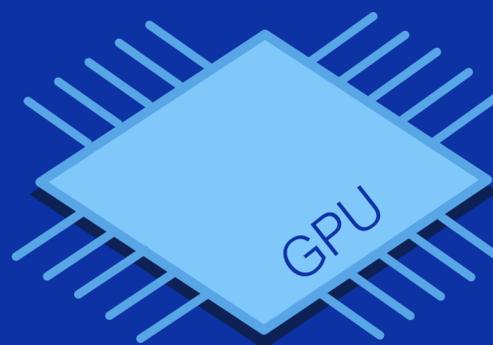
Breaking down AI workloads ›

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



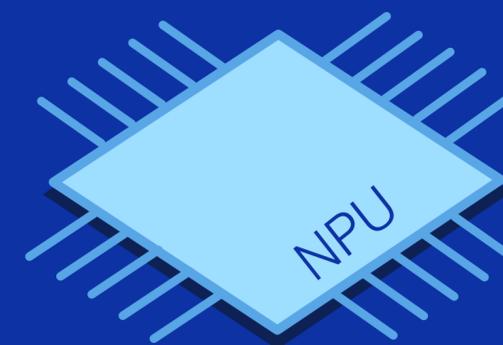
### Brain of the PC

CPUs serve as the brain of PCs, executing general-purpose instructions and managing essential tasks that form the backbone of modern computing.



### Designed to render graphics

GPUs handle complex graphical tasks and has found favor in parallel processing tasks.



### Optimizing AI-intensive tasks

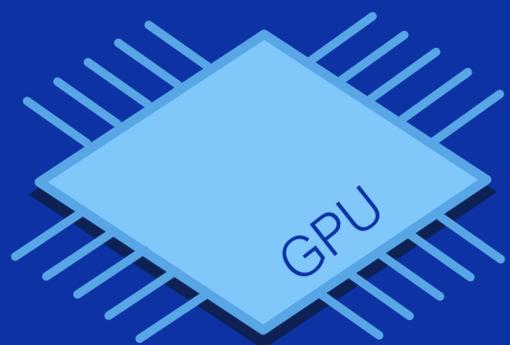
NPUs have emerged as a driving force behind advancements in AI and offloads AI workloads and computation from the CPU.



# 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.

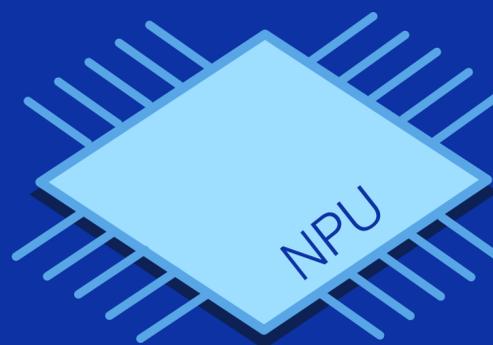
This first generation of RT Cores of powerful NVIDIA(R) RTX GPUs accelerated ray tracing by up to 25x compared to previous GPUs, and up to

**30x faster**  
than CPUs.<sup>2</sup>

<sup>2</sup> NVIDIA GPU Guide, GPU Features RT Core, based on NVIDIA Turning GPU Architecture Whitepaper, 2018

<sup>3</sup> Specific to Zoom. Based on Intel testing and external claims. Results may vary.

<sup>4</sup> Based on Intel testing, January 2024. Compares performance of 9450 using MTL processor to 9440 using RPL processor. Results may vary.



### 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.

**38%**

better power efficiency with running Zoom calls.<sup>3</sup>

**14%**

faster operations using MATLAB, a powerful tool for programming and numerical computing in engineering and scientific tasks.<sup>4</sup>



# 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.



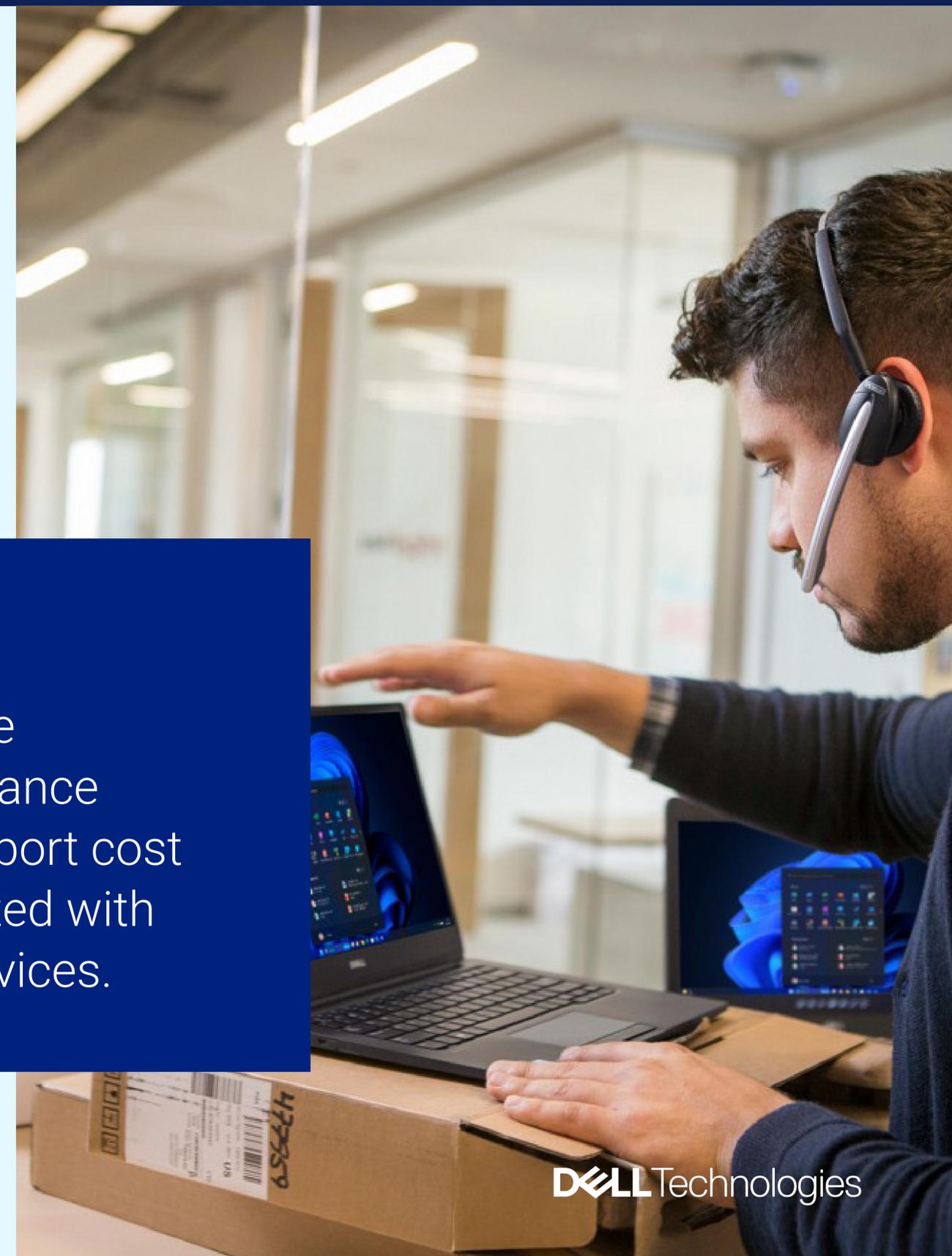
Increase productivity with optimized performance.



Improve battery discharge with more efficient hardware components.



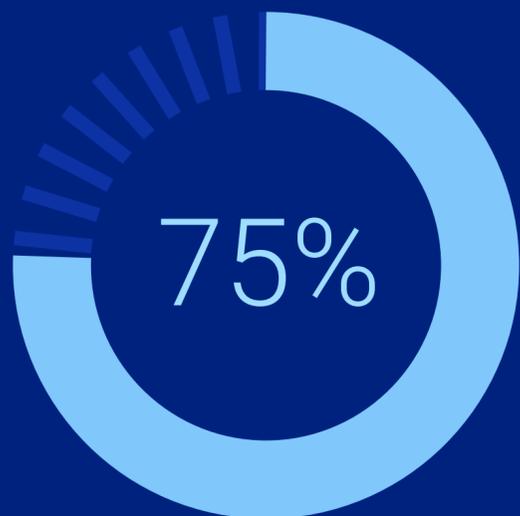
Minimize maintenance and support cost associated with older devices.



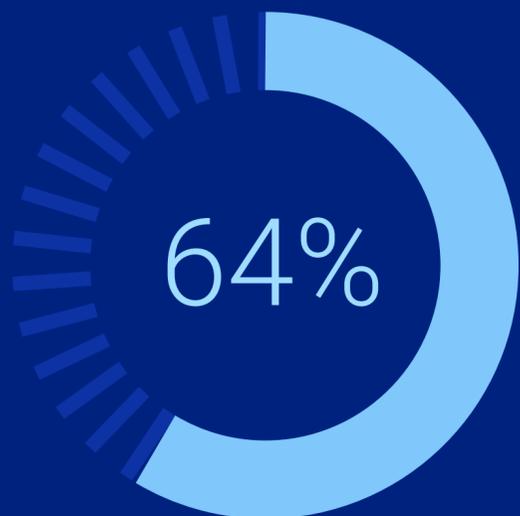


# Refresh to AI PCs to future-proof your organization

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



75% of large enterprises will adopt AI for quality and efficiency.<sup>5</sup>



64% of business leaders believe GenAI will help them gain a competitive advantage.<sup>6</sup>

## Achieve more with Windows 11

Find new levels of productivity with Copilot<sup>7</sup> and improve security with the most secure windows ever.

42%

faster completion of demanding workloads.<sup>8</sup>

3.1x

reduction in firmware attacks.<sup>9</sup>



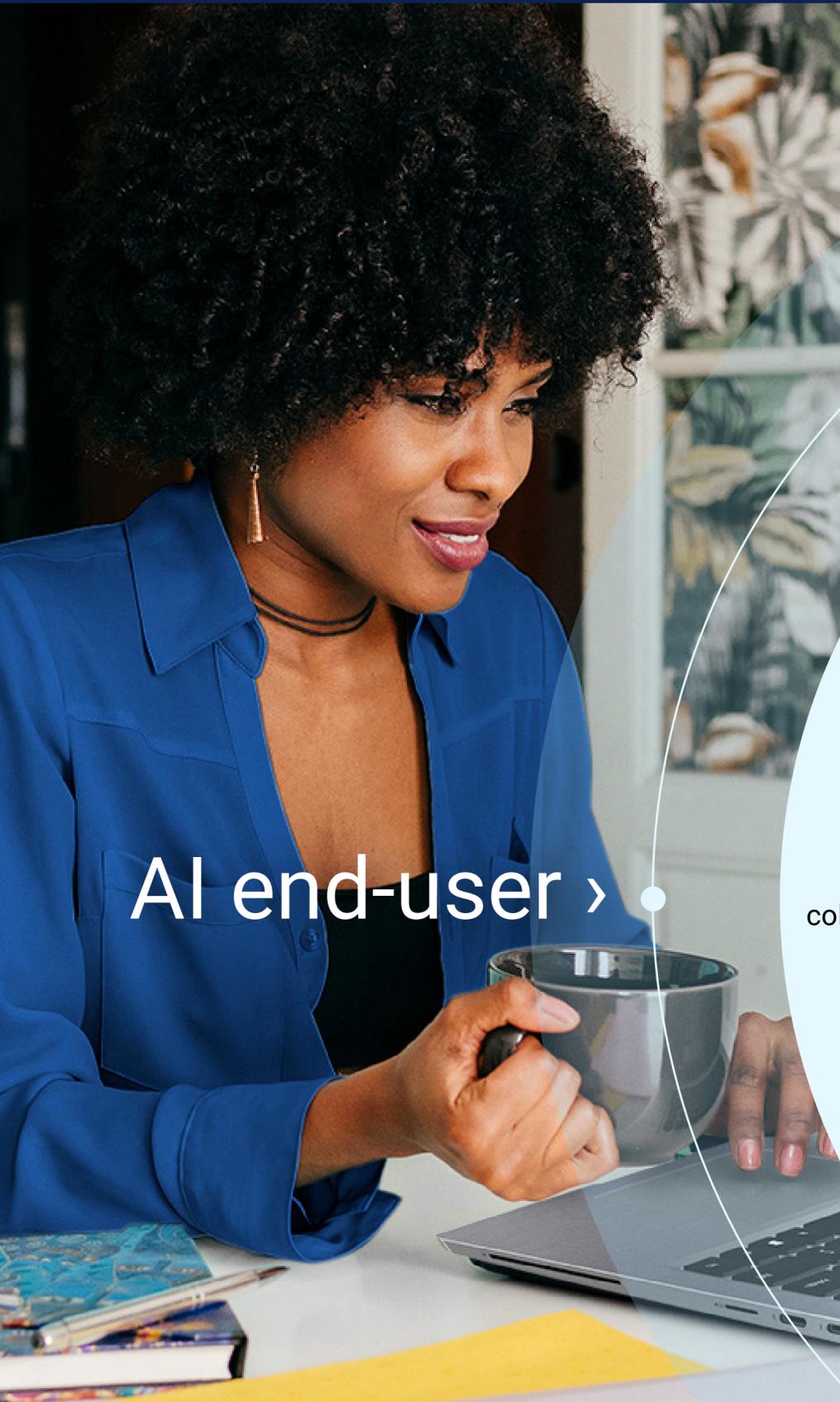
<sup>5</sup> IDC, "IDC Futurescape, Worldwide AI and Automation 2023 Predictions", 2022.

<sup>6</sup> KPMG, Generative AI: From Buzz to Business Value, May 2023.

<sup>7</sup> Timing of feature delivery and availability varies by market and device. Screen simulated, subject to change. Use Copilot with a Microsoft Account or use Copilot with commercial data protection at no additional cost by signing into a work or school account (Microsoft Entra ID) with Microsoft 365 E3, E5, F3, A3 or A5 for faculty, Business Premium, and Business Standard. Coming to more Entra ID users over time.

<sup>8</sup> Compared to Windows 10 devices. "day-to-day experience with Windows 11 Pro laptops," Principled Technologies, February 2023. LINK.

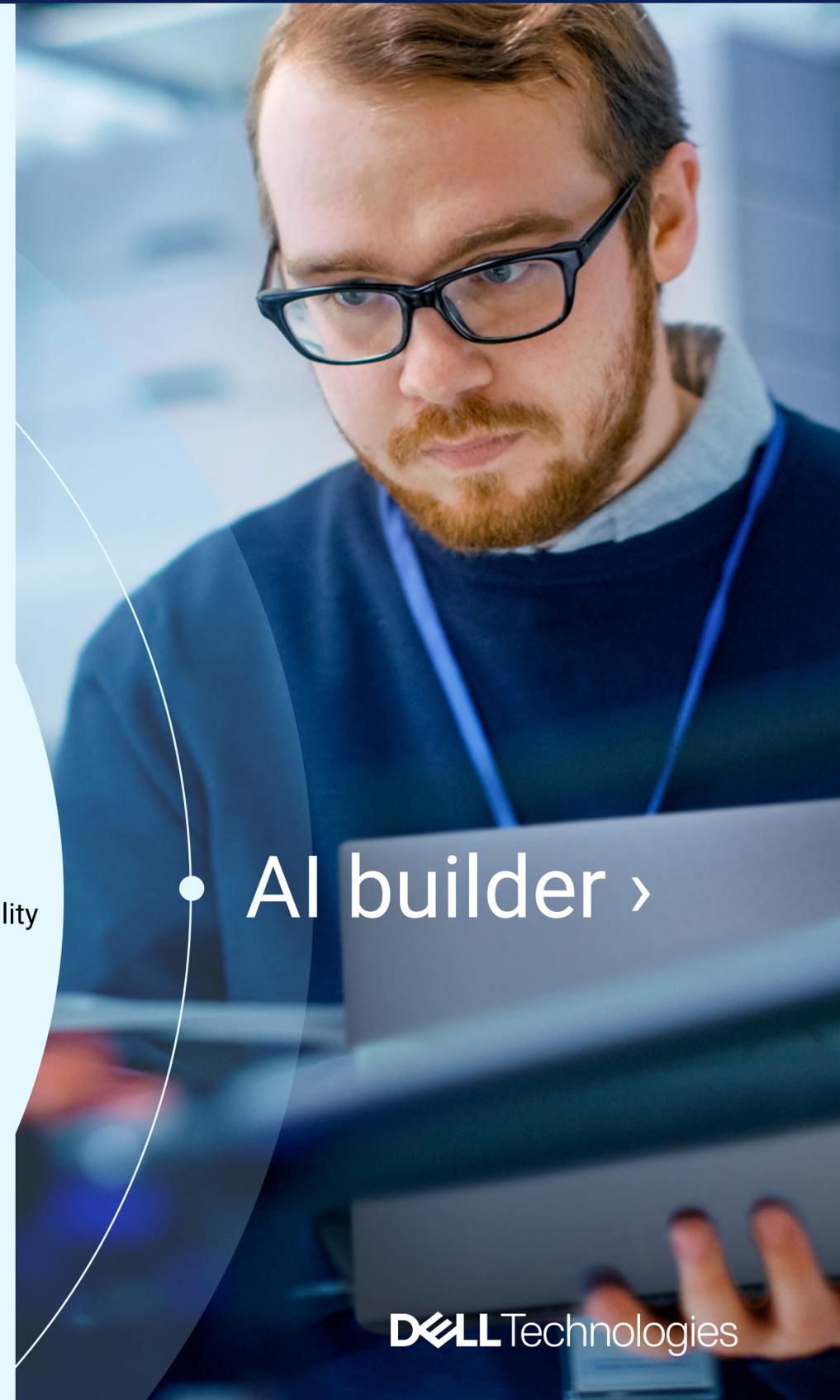
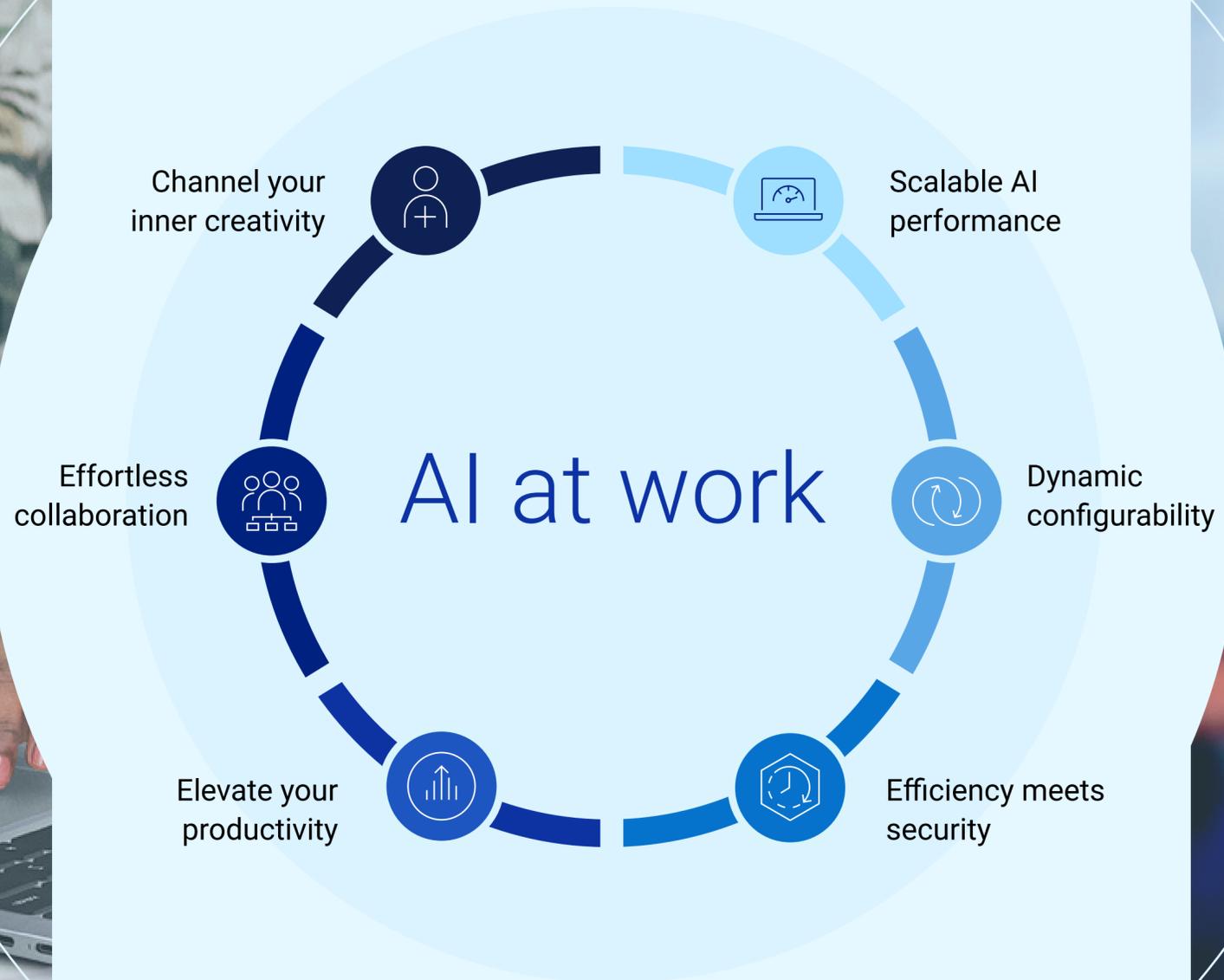
<sup>9</sup> SMB Windows 11 Survey Report. Techaisle, February 2022. Windows 11 results are in comparison with Windows 10 devices.



AI end-user >

# Transform the way you work with AI by your side

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



AI builder >



## AI BUILDER

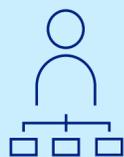
# Unleash data potential and turn it into operational efficiencies

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



### Precision 5000 series

Great for utilizing, hosting, and inferencing AI models.



### Precision 7000 series

Designed to accelerate AI and GenAI development, deployment, and fine-tuning.



### AI BUILDER

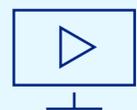
# Unlock the power of AI with Precision AI-ready workstations



## Scalable AI performance



Speed up delivery and secure AI development locally on the device with powerful NVIDIA GPUs on the world's **#1 workstation brand**<sup>10</sup>.



Dell Precision AI-ready workstations are perfect sandbox environment devices and entry-level machines for companies to jumpstart their AI journey.

<sup>10</sup> Based on IDC Quarterly Workstation Tracker, Q3 2023.





### AI BUILDER

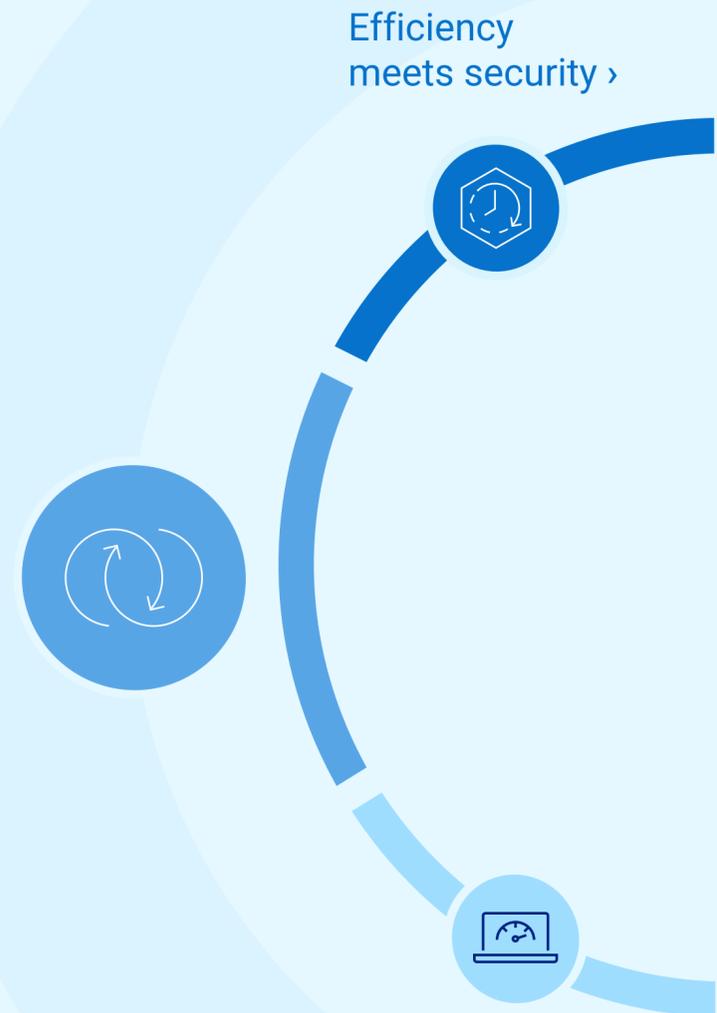
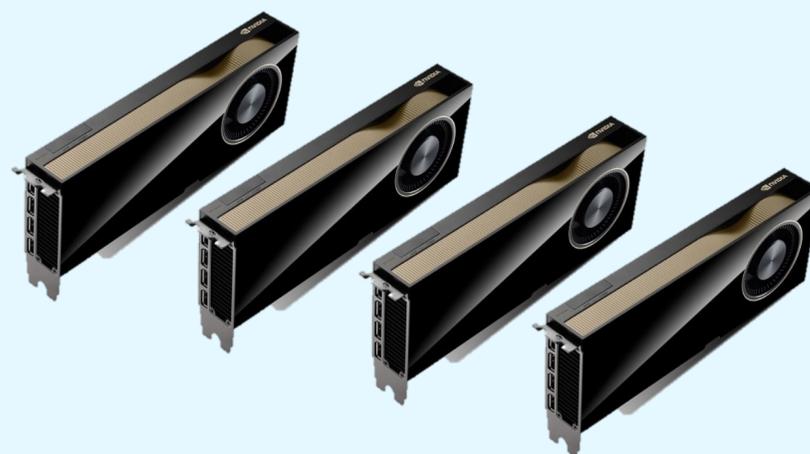
# Unlock the power of AI with Precision AI-ready workstations



## Dynamic configurability



Elevate your AI workspace by customizing your Dell Precision AI-ready workstations with configurations of RAM, storage and GPU with up to 4 NVIDIA™ 6000 Ada GPUs in a single workstation.





## AI BUILDER

# Unlock the power of AI with Precision AI-ready workstations



# 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.

Less than

# 42%

CPU usage with CrowdStrike to detect malware effectively.<sup>11</sup>

<sup>11</sup> Based on Intel and CrowdStrike testing. Results may vary.





### 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.



**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.



**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.

## Recommended solutions



### Latitude series

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



### Precision 3000/5000

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



## 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 Latitude and Precision laptops featuring Microsoft's Copilot Key.

### 14%

faster operations using MATLAB for powerful programming and numerical computations.<sup>12</sup>

- Game-changing performance and efficiency running at 40+ NPU TOPs.
- 13B+ parameters running on devices delivers lower latency.
- All day battery life up to 24 hours.

Less than

### 1%

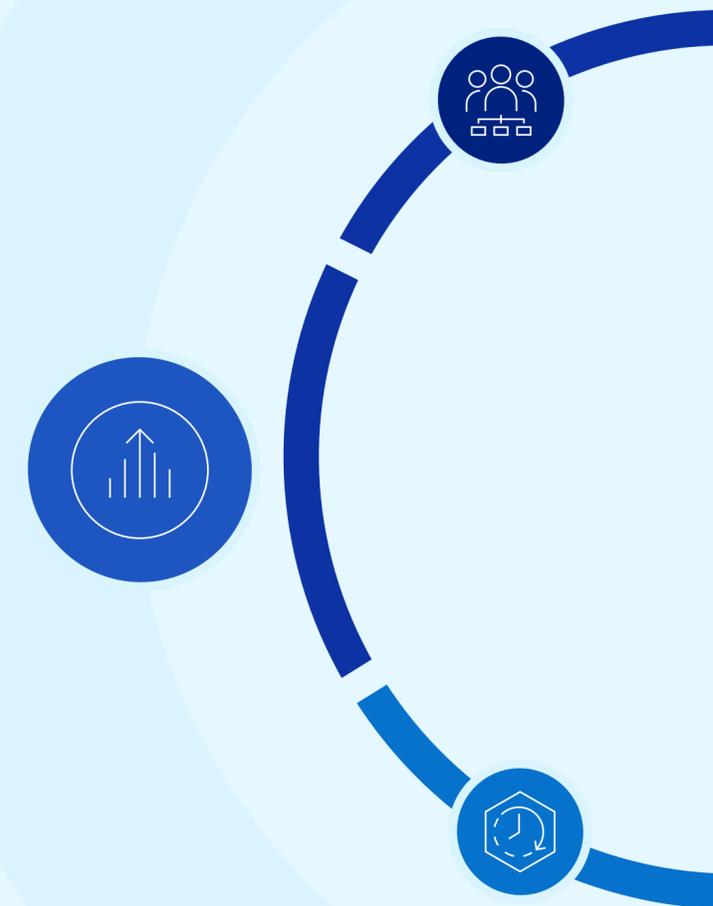
CPU usage with CrowdStrike to detect malware effectively.<sup>13</sup>

World's

## most secure

commercial PCs.<sup>14</sup>

Effortless collaboration >



<sup>12</sup> Based on Dell internal analysis, September 2023. Applicable to PCs on Intel processors. Not all features available with all PCs. Additional purchase required for some features.

<sup>13</sup> Based on Intel testing, January 2024. Compares performance of 9450 using MTL processor to 9440 using RPL processor. Results may vary.

<sup>14</sup> Based on Intel and CrowdStrike testing. Results may vary.

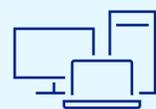


## AI END-USER

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



# Effortless collaboration

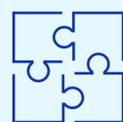


Work better together using the world's most collaborative commercial PCs<sup>15</sup> and a comprehensive intelligent ecosystem.



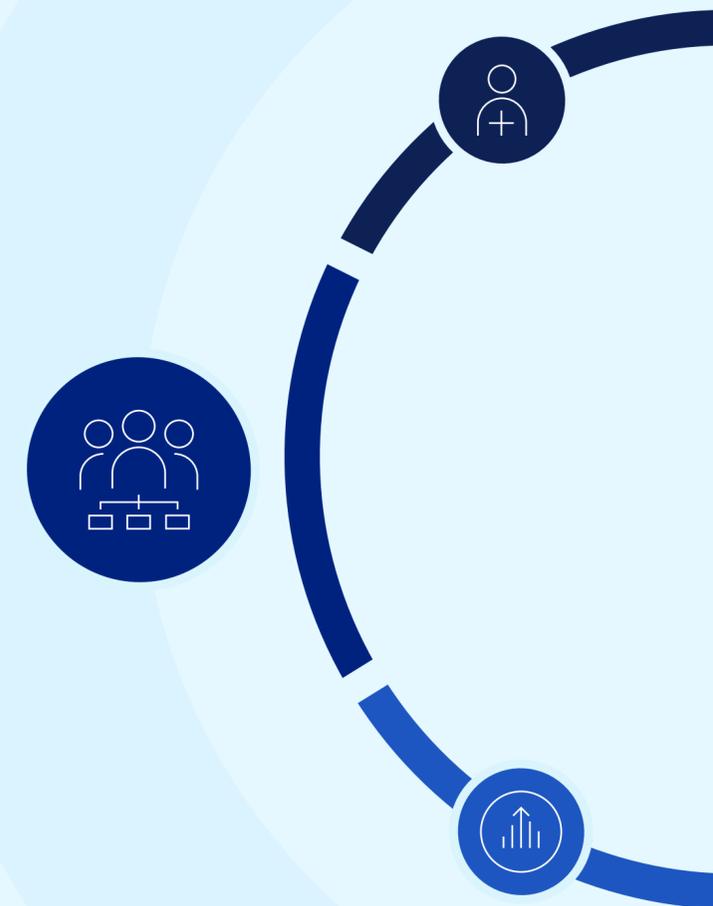
Polish your virtual presence with smart conferencing technology from Windows Studio Effects.

Up to **38%** less power when running zoom calls.<sup>16</sup>



Get a more inclusive experience with integrated AI ASL auto-translations via Omnibridge. [Watch now >](#)

Channel your inner creativity >



<sup>15</sup> Applies to Dell Latitude 9450 2in1. Based on Dell analysis of publicly available information, October 2023.

<sup>16</sup> Specific to Zoom. Based on Intel testing and external claims. Results may vary.



### 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 production tools from **Blackmagic DaVinci Resolve**.

# 132%

faster performance when running on-device AI photo editing on Adobe.<sup>17</sup>

Create images

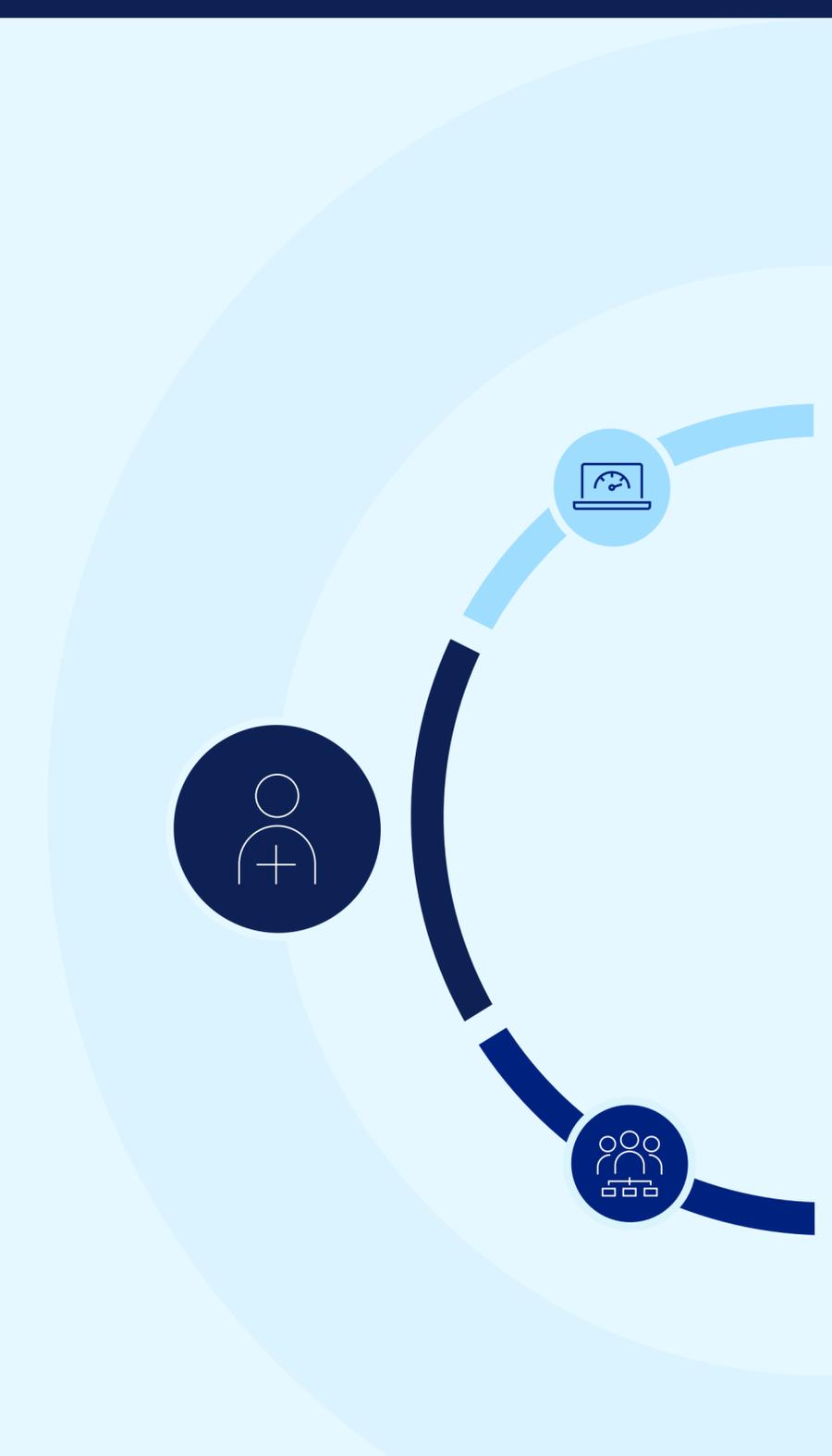
# 1.7x

faster with StabilityAI<sup>18</sup>

Up to

# 67%

faster AI video editing performance using DaVinci Resolve Studio.<sup>19</sup>



<sup>17</sup> As measured by an AI video editing workload using Adobe Premiere Pro Beta. Based on Intel testing and external claims. Results may vary.

<sup>18</sup> Specific to Stable Diffusion A1111. Based on Intel testing and external claims. Results may vary.

<sup>19</sup> As measured by an AI video editing workflow with DaVinci Resolve Studio. Based on Intel testing and external claims. Results may vary.



# 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.



# 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



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.<sup>20</sup>

Visit Dell APEX PC-as-a-Service >

<sup>20</sup> Based on a Forrester Total Economic Impact™ Study commissioned by Dell "The Total Economic Impact™ Of Dell's PC As A Service" November 2022. Results derived from customer interviews and survey data.



# Trust and secure your data

Protect your data and devices with the world's most secure commercial PCs.<sup>21</sup>



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%.<sup>22</sup>



Attack surface reduction vs older PCs, according to Intel® and IOActive.<sup>23</sup>

<sup>21</sup> Based on Dell internal analysis, September 2023. Applicable to PCs on Intel processors. Not all features available with all PCs. Additional purchase required for some features.

<sup>22</sup> Windows 11 results are in comparison with Windows 10 devices. "Windows 11 Survey Report," Techaisle, February 2022.

<sup>23</sup> 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](http://www.intel.com/performance-vpro) [intel.com]. Results may vary.



# 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.



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

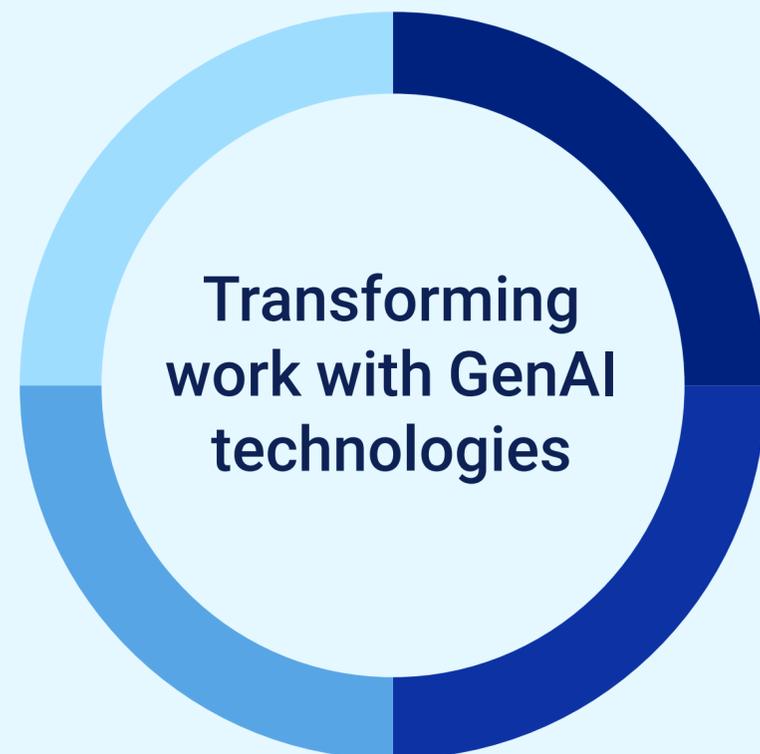
Tap into the full power of your workplace by setting up the right programs and building a strong AI foundation to transform how we work.

37%

of organizations will invest in technologies for improvement communication and collaboration.<sup>24</sup>

45%

of organizations will invest in technologies for training and skill development.<sup>24</sup>



32%

of organizations believe that GenAI will save employee time and bring productivity gains.<sup>24</sup>

29%

of organizations believe that GenAI will enable faster decision making.<sup>24</sup>



<sup>24</sup> Based on IDC Workforce Upskilling for the AI Era, 2024.



## 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.<sup>25</sup>

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.<sup>25</sup>

## 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

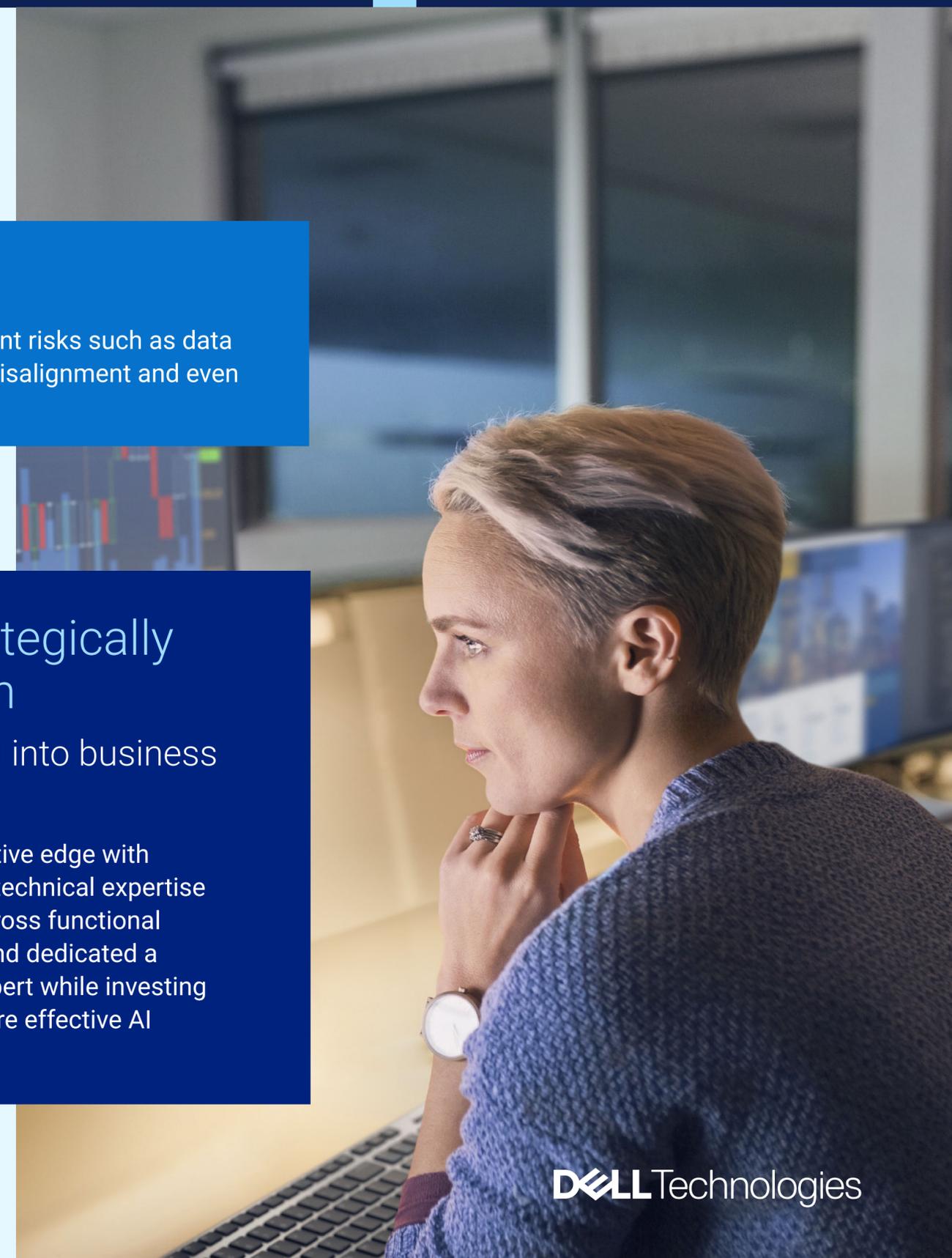
Develop a robust AI governance framework encompassing policies and standards to align AI developments with organizational objectives, implementing ethical principles, alongside designed roles to oversee AI initiatives for regular compliance.

### 3 Strategically align

Integrate AI into business processes

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

<sup>25</sup> Based on Dell Technologies Primary Research 2024 n=356.





Dell PC Solutions & Ecosystem for Business Workers



Dell Precision Workstations for Developers



Dell Trusted Workspace



Dell Services APEX PCaaS



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<sup>26</sup>, with deep partner relationships.

26 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 High-performance Computing, Data Storage, Cloud Native Software-Defined Infrastructure, Networking Switches, Data Protection, HCI and Services.



# Why Dell for AI Client Solutions?



## Delight the End-User

**Best Designs with powerful fixed workstations with more memory and storage.<sup>27</sup>**

**Most scalable mainstream laptops and mobile premium<sup>28</sup> laptop designs.**

**World's most intelligent PCs<sup>29</sup> since 2020, and now Copilot for Windows adds even more.**



## Simplify IT

**World's most secure commercial PCs<sup>30</sup> with Dell Trusted Workspace.**

**Our portfolio of professional services empowers our customers to build a future-ready IT environment.**

**Easily invest in new technology with flexible payment options offered by APEX PCaaS.**



## Advance Sustainability

**Improve energy efficiency by up to 21% on devices with AI-based Dell Optimizer.<sup>31</sup>**

**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.**

<sup>27</sup> Based on Dell analysis, September 2023.

<sup>28</sup> Based on Dell Internal Analysis, October 2022.

<sup>29</sup> Based on Dell analysis, November 2023. Dell Optimizer not available in OptiPlex 3000 series, Latitude Chromebook Enterprise, and Linux-based devices. Feature availability and functionality may vary by model. For more details visit: <https://www.delltechnologies.com/asset/en-us/solutions/business-solutions/technical-support/dell-optimizer-features-availability-matrix.pdf>.

<sup>30</sup> Based on Dell internal analysis, September 2023. Applicable to PCs on Intel processors. Not all features available with all PCs. Additional purchase required for some features.

<sup>31</sup> This is based on a Dell internal study, testing power and performance within our Dell Optimizer power module. These workers primarily focus on general compute activities such as video conference calls, web browsing and general response time of opening and closing applications. White paper published November 2022 <https://www.delltechnologies.com/asset/en-us/solutions/business-solutions/industry-market/maximizing-power-efficiency-with-dell-optimizer-a-case-study.pdf>.



## 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/AI >



Reach out to your Dell Sales Representative

**DELL**Technologies