

Executive Summary

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Key takeaways were derived from the interview insights gathered

Reader-Insights



Inevitable AI Integration: Use of AI is unavoidable and expanding. AI PCs with advanced processors (TPUs, NPUs) will be essential to stay and capitalize on this AI-driven world



Accelerated Software Development: The market is quickly developing software for AI PCs, driving improvements in work experiences and making workers smarter and more efficient



Improved Data Security and Cost Efficiency: AI PCs can improve data security and reduce costs by enabling local AI processing and minimize dependence on cloud-based models



Minimal Investment for Futureproofing: Investing in AI PCs now requires minimal capital, strategically staying ahead of tech advancements and avoiding future catch-up costs.



Distributed AI Processing: Combining local and cloud-based AI processing enhances efficiency, security, and sustainability, optimizing data processing in the most effective environment.

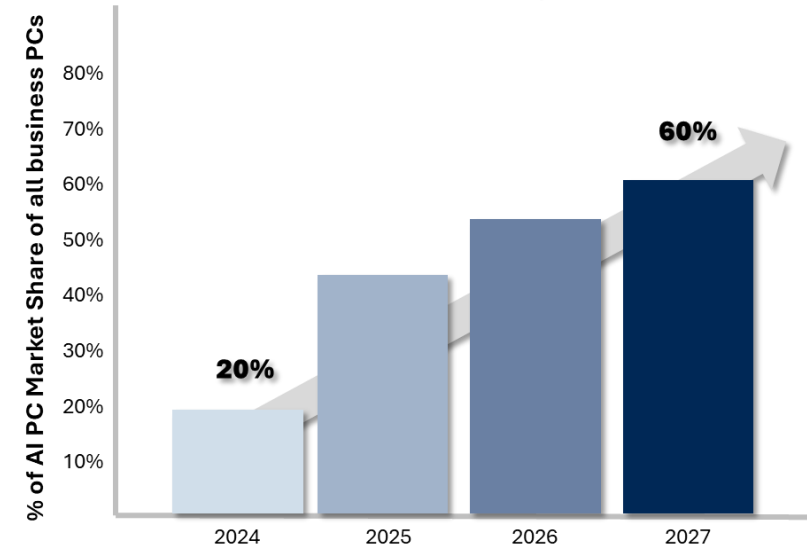
Key Insight #1: Inevitable AI Integration



Inevitable AI Integration: Use of AI is unavoidable and expanding. AI PCs with advanced processors (TPUs, NPUs) will be essential to stay and capitalize on this AI-driven world

- **Gartner predicts growing demand for AI PCs**, significantly impacting both consumer and enterprise markets due to the expanding AI ecosystem
- The upcoming Windows 11 migration and **strategic refresh cycles** are driving market growth for AI PCs, as organizations prepare for the end of Windows 10 support in 2025 and align with new processor technologies, ensuring future-ready operations and competitive advantage
- **Organizations are shifting from expensive cloud-based AI solutions to localized AI processing** to address costs, latency, data privacy, security, and operational efficiency
- **Key industries such as finance and healthcare** are driving AI PC adoption due to the advantages in data analytics, compliance, and the high risks associated with data breaches
- **Modern AI PCs are designed to be more energy-efficient**, reducing their overall **carbon footprint** and aligning with **corporate social responsibility directives** and stringent environmental regulations which are in EMEA

Gartner predicts the share of AI-enabled business PCs will rise 40% by 2027



“People want to jump on the AI PC ship. A lot of people are aware that if they miss this boat, it will impact them”

- Former Head of Technology at an IT Infrastructure Solutions Company

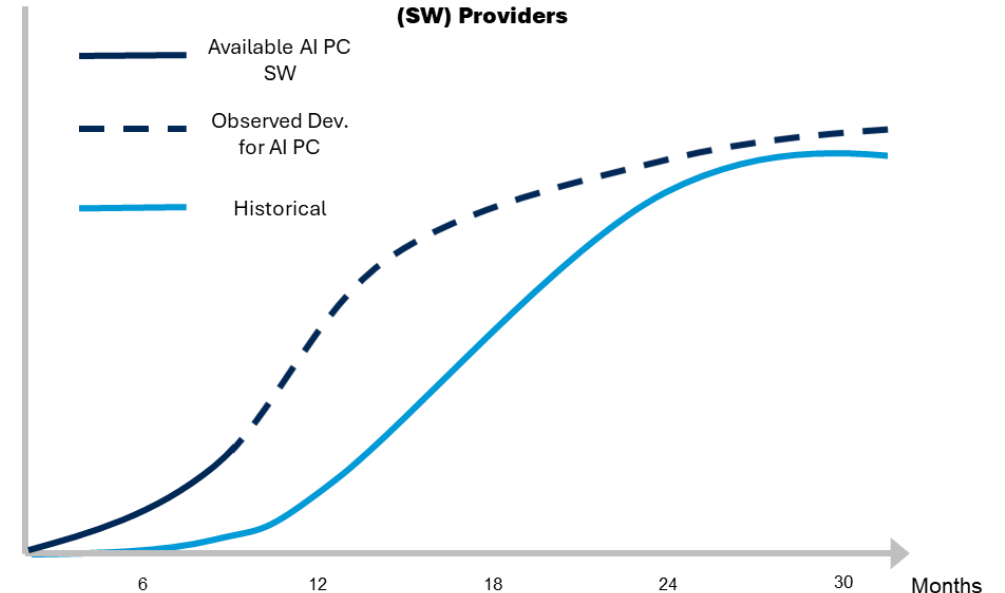
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Key Insight #2: Accelerated Software Development

2 Accelerated Software Development: The market is quickly developing software for AI PCs, driving improvements in work experiences and making workers smarter and more efficient

- **Independent software vendors (ISVs) are capitalizing** on the advanced features of AI PCs, including Neural Processing Units (NPUs) and Tensor Processing Units (TPUs), to create more sophisticated applications
- Intel is partnering with **hundreds of ISVs**, with adoption rates surpassing previous benchmarks, supporting the growth and development of AI PC applications
- **By combining local AI processing with cloud capabilities**, organizations can achieve a more efficient, secure, and cost-effective AI infrastructure, enhancing operational efficiency and data security
- The latest generation of AI PCs, such as Intel's Core Ultra Series 2, is fueling demand for cutting-edge applications by significantly **enhancing battery life and performance**
- AI PCs offer **real-time data processing benefits across sectors**: improving analytics, trading, and fraud detection in finance; enhancing imaging, drug discovery, and diagnostics in healthcare; streamlining workflows and personalizing marketing in retail; and aiding equipment monitoring and predictive maintenance in manufacturing

Unprecedented Adoption Rate of Intel Hardware for AI PCs by PC Software (SW) Providers



"Intel aims to have 100 ISVs and 300 AI features by the end of 2024, with a 4x increase in feature adoption"

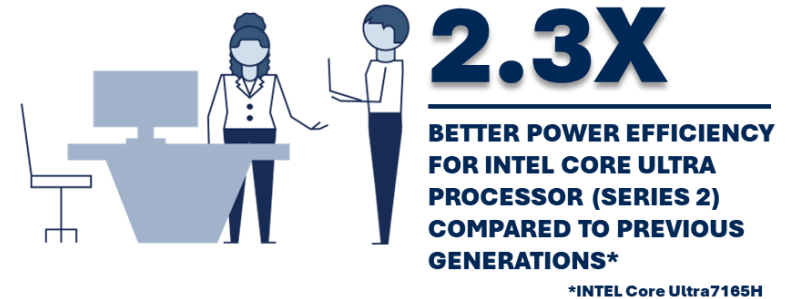
- Partnerships Manager at a leading Semiconductor Company

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Key Insight #3: Improved Data Security and Cost Efficiency

3 Improved Data Security and Cost Efficiency: AI PCs can improve data security and reduce costs by enabling local AI processing and minimize dependence on cloud-based models

- Embracing the shift to edge computing, even with recent trends favoring centralized security, follows the historical pattern of alternating between distributed and centralized models. AI PCs will not only **challenge but also enhance current security measures**, offering advanced options to manage data at the edge and support this new transition.
- Running AI models locally on AI PCs **reduces reliance on expensive cloud services**. Additionally, localized AI processing on edge devices **minimizes energy consumption** associated with centralized data processing, supporting environmental sustainability goals and reducing operational costs
- AI PCs with NPUs improve security by **running AI algorithms locally**, enabling real-time threat responses and ensuring sensitive data remains on the device
- AI PCs can prevent unintended data transmission to the cloud, **reducing the risk of data breaches and enhancing overall privacy**
- Security improvements from AI PCs **depend on the organization's current security posture and data residency**, suggesting a stronger role for IoT distributed computing in enhancing AI PC security in the near future



“Less data movement is inherently more secure, and successful early adopters are focusing on data governance to ensure secure and accurate AI model inference”

- Head of Gen AI Models at leading Cloud Provider

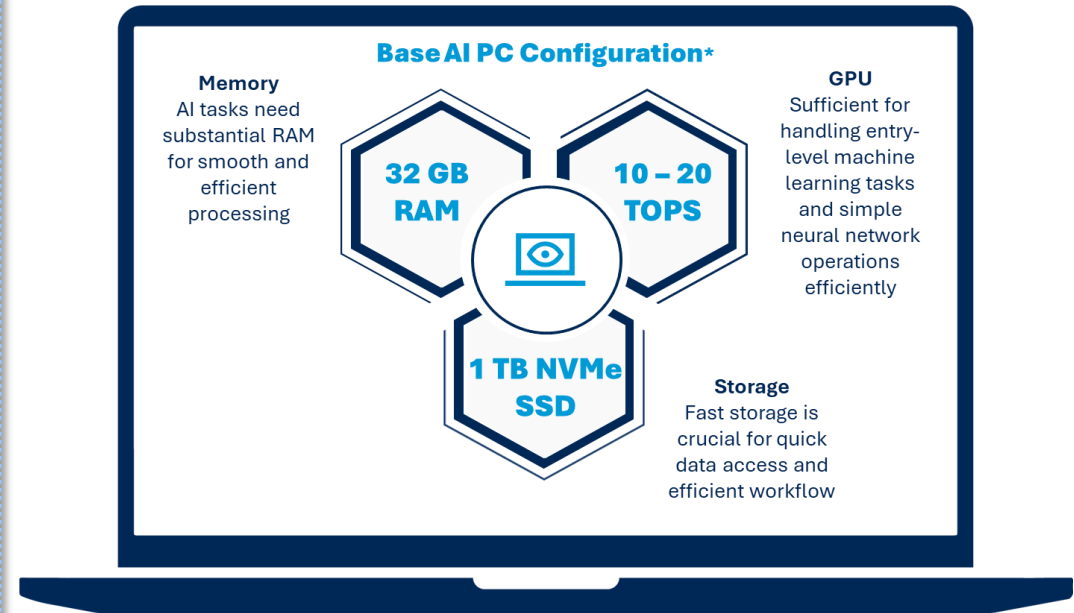
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Key Insight #4: Minimal Investment for Futureproofing



Minimal Investment for Futureproofing: Investing in AI PCs now requires minimal capital, strategically staying ahead of tech advancements and avoiding future catch-up costs

- **AI PCs with TPUs and NPUs are essential for handling complex AI tasks.** High-capacity RAM and SSDs ensure efficient data management and processing, providing the necessary computational power and speed for current and future AI applications
- To ensure long-term value, AI PCs should be equipped with essential specifications that can handle future software updates and refresh cycles. This includes **advanced processors, ample memory, robust connectivity, and pre-installed AI frameworks.**
- AI PCs **need high-speed Ethernet and Wi-Fi 6** for smooth integration with cloud services and networked devices. This ensures seamless data transfer and communication, essential for real-time AI applications and operational efficiency.
- **AI PCs with pre-installed frameworks** like TensorFlow, PyTorch, and OpenVINO allow immediate use of advanced AI features without extra development.
- AI PCs must include robust security features like real-time threat detection, biometric authentication, and intelligent privacy controls. **By running AI algorithms locally and using advanced security measures, AI PCs can provide enhanced data protection, reduce the risk of data breaches, and maintain user privacy.**



“AI PCs require increased memory to be fully utilized (properly configured AI PCs should have good processors, ample memory (32GB RAM), and advanced security features”

- VP Analyst at a leading Research & Advisory Company

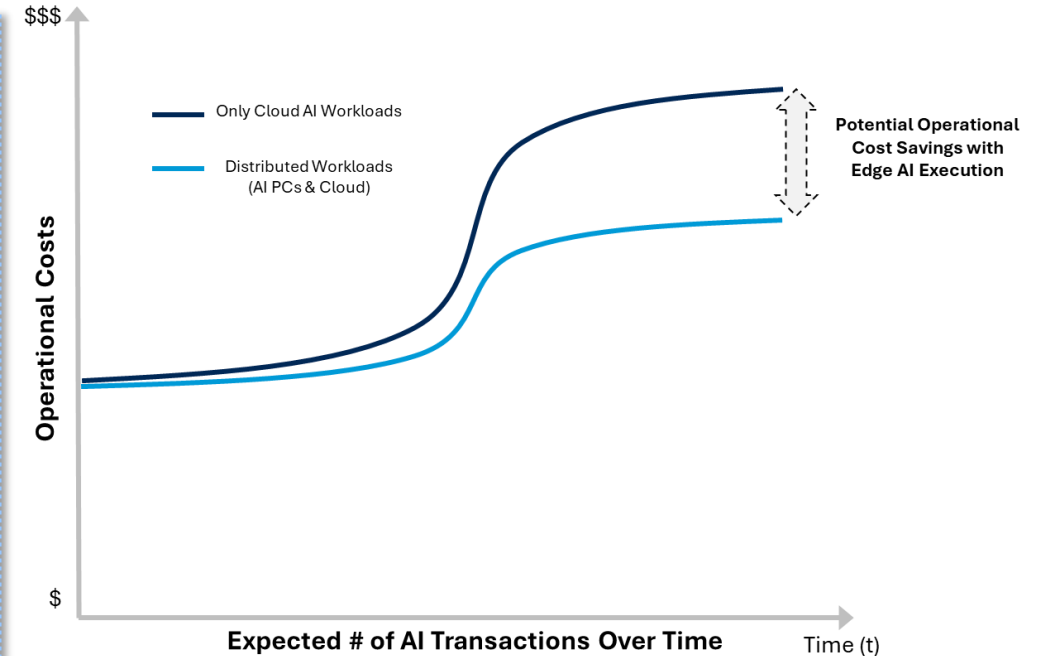
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Key Insight #5: Distributed AI Processing



Distributed AI Processing: Combining local and cloud-based AI processing enhances efficiency, security, and sustainability, optimizing data processing in the most effective environment.

- **Organizations are developing hybrid approaches to balance local and cloud processing**, optimizing performance, addressing latency issues, and enhancing security against threats like deepfakes and phishing.
- **Local AI processing on AI PCs lowers reliance on expensive cloud services**, cutting costs and boosting operational efficiency by improving resource utilization.
- **Enterprises are conducting pilot tests to evaluate the performance and energy consumption of localized AI PCs.** These tests aim to achieve substantial reductions in processing time and operational costs, demonstrating the benefits of distributed AI processing.
- **A hybrid approach to AI processing maximizes the value derived from AI investments**, driving innovation and ensuring enterprises remain competitive and future-ready.
- **AI PCs help achieve sustainability goals by reducing the energy consumption typically associated with centralized cloud-based data processing**, thus lowering the organization's carbon footprint.



“Shifting compute to the edge reduces costs associated with massive data centers and electrical usage – cloud services run unoptimized at 50-60% utilization”

- Former CTO at IT Infrastructure Solutions Company

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