IDC

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REGION FOCUS: ASIA/PACIFIC

CIO Playbook 2024
It's all about Smarter AI

- Healthcare -

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Why Lenovo

Executive Summary

In 2024, Asia/Pacific CIOs must respond to the tsunami of excitement, hype, fear, investment and application in artificial intelligence (AI) across their businesses. After many AI winters, the success of generative AI (GenAI) heralds a new AI summer, when these technologies can deliver on their promises to deliver greater transforming business by enabling greater efficiency and **potentially competitive differentiation**.

This Playbook draws insights from custom research commissioned by Lenovo, based on a survey of 900 IT and business decision-makers (ITBDMs) from selected organizations across Asia/Pacific. The research offers insights into prevailing attitudes and approaches toward AI adoption in Asia/Pacific, as well as business and IT investment priorities, key challenges, and spending imperatives in accelerating their digital business agenda in 2024.

Read on to discover the key insights and takeaways for CIOs charged with navigating AI in Asia/Pacific in 2024.

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CIO Playbook 2024

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Executive Summary

CIO Strategic Imperatives

IDC's survey of 900 IT and business decision makers (ITBDMs) reveals the following insights and strategic considerations for Asia/Pacific CIOs looking for a competitive edge from AI in 2024:

Key Insights	Considerations for CIOs in 2024
1 The tectonic shift – 45% increase in spending of AI	
Recognizing the pivotal role of the digital economy, CIOs are keen to embrace AI that confers a competitive edge. **Yet, the intricacies of AI, entailing complex connections with infrastructure, data, and human resources, pose a challenge.**	CIOs are pivotal in enlightening the C-Suite on the nuanced journey toward sustainable AI initiatives. **There are no swift triumphs here; strategic excellence is requisite, addressing intricacies across people, processes, and technology.**
2 AI holds the potential for transformative impact – a conviction 46% of CIOs held.	
A misalignment exists between business and IT leaders. Business leaders emphasize AI as a catalyst for customer engagement and revenue growth. The most affected domains are predicted to be cybersecurity, infrastructure automation, and operational efficiency. CIOs consider customer engagement to be #4 on the impact list.	With an "**AI for All**" approach, enhance operations using AI. The end goal is to **operationalize AI throughout the organization**, aligning with business goals like profitability, customer satisfaction, and increased revenues.
3 GenAI creates excitement, but CIOs are Cautious – #4 in CIOs' tech priority wish list	
While GenAI brings a new world of possibilities for the business, CIOs remain cautious due to two key concerns: **the challenge of identifying the right use case, and the complexity of building the right IT infrastructure and ecosystem to support.**	IT and Business Leaders will need to **identify the right AI Model** (Predictive/Interpretation AI vs GenAI), **define the appropriate use case categorization** and then explore **suitable implementation models**, as highlighted in this ebook (page 42).
4 Bring AI to the data – 69% of CIOs prefer AI workload in a non-public cloud environment	
On average, 31% of AI workloads will be deployed on the public cloud, 28% on the private cloud, and 28% on hybrid cloud solutions. Additionally, the allocation of 13% of AI workloads at the traditional data center level signifies **a growing recognition of the importance of edge computing, bringing AI capabilities closer to the source of data generation**.	**Performance, security** and **regulations** are key considerations when choosing where to run AI workloads. Increasing Edge investments also suggest a desire for greater performance amongst organizations, which should be a key consideration for CIOs in 2024.
5 The linchpin is IT talent – 45% of CIOs encounter challenges in securing AI-related roles	
Acquiring IT skills for effective AI implementation is proving challenging, Those who can overcome this **challenge and swiftly cultivate a "data culture" can achieve early success**.	**Creating AI centers of excellence (COEs)** can help build a data culture within the organization, as well as address training needs and skills gaps. Key areas of focus for training **are foundations in statistics and programming languages**.

Healthcare Overview (1/2)

Healthcare institutions are on the verge of the "intelligence revolution", where AI will accelerate a variety of use cases. In patient-centric care, key investment priorities include real-time analysis of clinical data and enhancing patient experiences. For example, AI-embedded systems capable of real-time vitals analysis with triggers that immediately highlight abnormalities for more accurate and faster imaging diagnostics. While such use cases are promising, healthcare institutions will need to balance data security and integration to ensure patient and clinical data are not only protected but accessible and accurate.

CIOs' top business priorities in 2024

1. Driving digital business innovation
2. Higher customer experience & satisfaction
3. Accelerating revenue & profit growth

Top tech investment priorities in 2024

1. Automating digital infrastructure management & security
2. Common data management platform
3. High-performance compute platforms for AI/ML workloads

Challenges CIOs foresee in 2024

1. Digital transformation
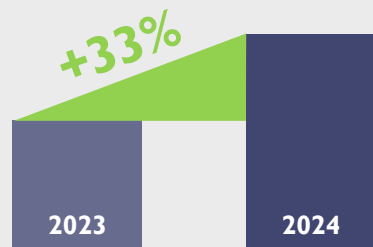2. Data management & analytics
3. Cybersecurity & data privacy

Impact of AI on organizations

- Distraction — 12%
- Game changer — 22%
- Hygiene factor — 66%
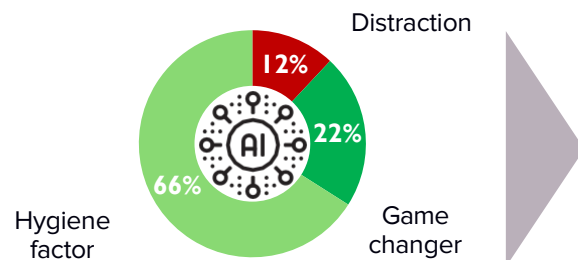
Top technologies impacted/influenced by AI

1. Natural language processing & chatbots
2. Enhanced analytics & insights
3. Predictive maintenance & IoT

Edge computing spending increase

+33%

2023 — 2024

Edge use cases most impacted by AI

1. Real-time analytics & insights
2. Retail & customer experience
3. Remote monitoring & telehealth
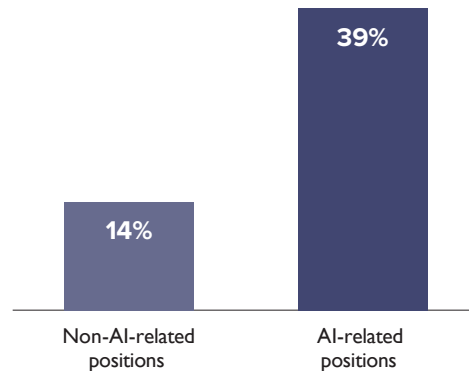
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Healthcare Overview (2/2)

Healthcare organizations are investing in GenAI by bolstering their infrastructure and security as well as upskilling their people to ensure sustainable adoption of AI. GenAI brings possibilities in impacting administrative and operational tasks such as clinical documentation. As clinical data structure and digital infrastructure evolve, there is an expectation of growth in the number of uses cases in diagnostics, early disease detection and hyper personalization of patient experiences. Anticipated challenges on the horizon include the lack of structured and curated clinical data, regulatory compliance, and the skills gap to leverage the massive data needed for adoption of AI strategies. In healthcare where mistakes can be life-threatening, topics such as explainability and data security are important to address the risks of AI.

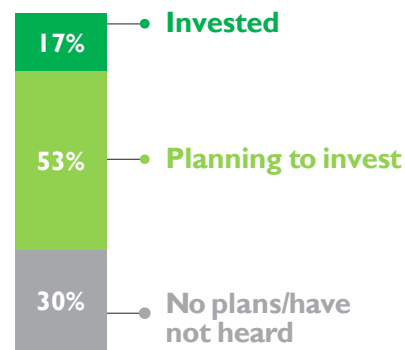## Top challenges when deploying AI

1 Employees are concerned that AI will threaten their jobs

2 Making a business case for AI

3 Difficulty keeping up with AI tech requirements

Recruitment difficulty
Respondents selected
extremely or moderately difficulty

- Non-AI-related positions: **14%**
- AI-related positions: **39%**

GenAI investment

- **17%** • **Invested**
- **53%** • **Planning to invest**
- **30%** • **No plans/have not heard**

Preparation for GenAI

1 End-to-end network security

2 Networking infrastructure

3 Employee skills development

GenAI types of interest

1 Business intelligence (e.g., compliance & fraud detection)

2 Conversational AI (e.g., virtual assistants for claim management)

3 Enhancing Cost Efficiency (e.g., reducing manpower on clinical outcomes such as imaging/diagnostics)

Top challenges when adopting GenAI

1 Monitoring for potential misuse & AI hallucinations

2 Security

3 Model capability limitations (e.g., lack of data required)

CIO Playbook 2024
Message from sponsor

Lenovo

Lenovo AI for All

Bringing AI to your Data, when and where you need it.

At Lenovo, we recognize the challenges that come with adopting AI as a business imperative, and we also acknowledge the immense potential AI can bring to your business and people. Our robust infrastructure solutions, coupled with our deep ecosystem of independent software vendors (ISVs) ensures the seamless and scalable AI solutions that are suitable for business of all shapes and sizes.

AI: From Pocket to Cloud

$2.2B
AI Investment Commitment

#3
Global AI Infrastructure Provider IDC Global AI Survey*

Lenovo AI Infrastructure

8
Platform Categories

80+
AI-Ready Platforms

High Performance Storage, Compute DC and Edge portfolio that scales with your demand

Lenovo AI Discover
Center of Excellence

4
Global COEs

180+
Countries Served

Find Faster Time to Value by Leveraging Lenovo's AI Center of Excellence

Lenovo AI Innovators
Partner Ecosystem

50+
AI Solution Partners

165+
Enterprise AI Solutions

Leverage Certified Solution Partners to Confidently Address Your Requirements

Commitment to Honest AI

We believe technology should solve some of humanity's toughest challenges, that's why Lenovo is committed to ensuring AI is used in the most ethical and beneficial way. We have committed to support initiatives such as the "Women & AI Pledge" and launched Lenovo's Responsible AI Committee to ensure Responsible AI is part of our Product Diversity Office.

Explore the Possibilities of AI and Lenovo

Smart Cities

Improve and Regulate Customer Experiences with Lenovo AI

Together, Lenovo and WaitTime™ have developed an AI solution utilizing real-time data to help you regulate crowd traffic. WaitTime's real-time AI software also uses state-of-the art imaging techniques to monitor and engage with crowds.

Smart Manufacturing

Make Zero Incidents A Priority in Your Organization with Lenovo AI

Incorporate Lenovo and Graymatics™ into your organization's best practices for safety to help manage risk and practice continuous improvement of processes. Graymatics offers an AI-based solution that detects workplace hazards such as accidents, defective machinery, and fire.

Smart Retail

Lenovo AI Shapes the Self-checkout of Tomorrow

Happy customers and loss prevention is a receipt for success for retailers! The Everseen Visual AI™ platform can enable a retail solution for your organization. Learn how Lenovo and supermarket retailer Kroger® leveraged the Everseen Visual AI platform to create a better customer experience while reducing loss.

Improve and Regulate Customer Experiences with Lenovo AI

Lenovo
AI Innovators
Partner Ecosystem

Adopt & Fast-Track Your AI Journey

Lenovo's AI Innovators Program encompasses a network of top-tier software partners collaborating with Lenovo to furnish customers with customized, proven, and readily deployable AI solutions across their entire operations, encompassing computer vision, audio recognition, predictive analytics, security, and virtual assistants tailored to every industry's unique needs.

Partners access Lenovo AI-ready infrastructure

Working with our AI Innovator partners, we fine-tune our AI-ready, best-in-class servers to help ensure rapid ROI and ongoing success for our mutual customers.

Partners leverage Lenovo AI expertise and ecosystem

Our ecosystem includes AI centers of excellence, serving 180 countries and more than 20,000 business partners, for customized proofs of concept.

Collaboration brings customers rapid deployment

By providing, performance-optimized AI-ready solutions across various industries, we ensure customers can deploy AI faster, and more confidently.

165+ Turnkey AI Solutions

50+ AI Solutions Partners

30K+ Channel Partners

Learn More

Lenovo AI For All
Driving Intelligent Transformation from Pocket to Cloud

Digital Workspace

Lenovo provides end-to-end digital workplace solutions from the device to the data center

Lenovo offers a wide range of building and workforce solutions for the new era of hybrid work

Solutions available through traditional purchase or as-a-Service

Hybrid Cloud

Fully integrated ThinkAgile solutions enable edge-to-cloud agility, performance, and resilience for complex workloads

Cost-efficient and infinitely simple single pane of glass management

Security by design - keep your data on-prem or in the cloud

TruScale

Subscription-based access to IT resources to provide cost-efficient, faster deployment, improved security, and better management

Solutions for data management, Hybrid Cloud, HPC, and VDI

Services include deployment, implementation, IT management

AI & Edge

Building AI Solutions all over the world with 165+ AI solutions with 50+ AI innovators across every vertical market

Leading Edge Portfolio, from the far edge to the near edge, bringing AI to where our customers need it

Empowering individuals, businesses, and governments with a full stack of pocket-to-cloud technology, enabling AI for all

Sustainability

Neptune™ Liquid Cooling reduces power and CO_2 emissions

Heat mitigation tactics on every level of the server Packaging containing recycled foam and plastic
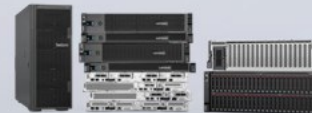
Factory-integrated racks reduce packaging waste

Infrastructure Solutions

Software Defined   Tower, Rack, & Dense Servers   Storage

Lenovo ThinkAgile

Lenovo ThinkSystem

Lenovo ThinkEdge

Lenovo Services

Discover Design Implement Optimize Security
Customer Support Retire Sustainability

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