

Unlocking Business Agility Through Private Cloud Modernization in Asia/Pacific



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*The Asia/Pacific markets covered in this InfoBrief are Australia, Greater China (mainland China, Hong Kong, Taiwan), India, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, and Thailand.

Executive summary

Customer focus demands flexibility

Customer expectations are at an all-time high. Meeting them requires infrastructures to be dynamic, fast, and reliable. To support critical customer-facing applications, organizations need a more versatile approach to infrastructure deployment.

A **multi-hybrid cloud strategy** is emerging as the best solution. It enables a “fit-for-purpose” modern architecture while enabling seamless migration across the cloud continuum as business and customer demands change. This means organizations must avoid architectural and financial lock-in, which has historically hindered agility and long-term value creation.

Modernization requires a cloud-native approach

IT teams face multiple pressures: rapid advances in AI, resource drain from legacy systems, growing security risks, and relatively static budgets. These challenges are creating a perfect storm of inefficiencies and operational risks.

To address these issues and ensure that IT teams deliver expected efficiencies, the underlying infrastructure – compute, storage, and networking – must be sufficiently flexible and agile to meet current and future performance demands. This calls for a fundamental reset in procurement strategies, taking into account critical attributes such as:

- ➔ Independent scaling: Components can be resized as demand changes.
- ➔ Cost efficiency: Refresh at a component level, not the entire stack.
- ➔ Open ecosystem: Vendor-neutral foundation supporting multiple virtualization, cloud, and AI stacks.
- ➔ Simplified operations: Centralized, software-driven management that automates provisioning, patching, and life-cycle tasks.
- ➔ AI-ready and designed for modern workloads: Optimized for data-heavy AI, microservices, and mixed workloads.

The path forward

Modernizing the core means transforming it into the on-premises anchor of a multi-hybrid cloud architecture. It must enable seamless movement of applications into and out of private and public clouds, as the business demands, without adding complexity for IT teams. It must embed high levels of automation, freeing IT teams from routine maintenance to focus on strategic initiatives. Systems should integrate easily with existing environments while remaining scalable and configurable, providing flexibility for both general and specialized workloads.

Private cloud solutions need to be flexible, simple, and highly automated, delivered through an open environment.



Market trend: The imperative to modernize

Organizations across Asia/Pacific face mounting pressure to modernize their technology environments. Historically, cost and time constraints have resulted in sub-optimal implementations that eventually became legacy systems, creating technical debt and operational inefficiencies. Over time, all infrastructure ages into legacy, making **continuous modernization a business necessity**.

Moving forward, enterprises must ensure that new infrastructure does not replicate past mistakes. Modern platforms must be:

- Flexible
- Scalable
- Cost-efficient
- Reconfigurable

Today's critical drivers – AI and multi-hybrid cloud architectures – demand a more manageable way to deploy and operate compute, storage, and networking resources. These systems must be able to support new workloads while enabling re-platformed and cloud-repatriated applications.

With IT teams already stretched thin by the scale of demands, automation is essential. Modern infrastructure should deliver higher levels of automation across the entire stack, allowing virtualization and containerization in an open and easily managed environment. Underpinning this is a need to deploy **AI-ready infrastructure**.

APJ* top 3 C-suite technology priorities over the next 12 months



1

Technology modernization



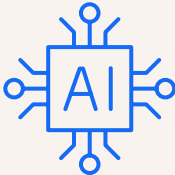
2

Improve customer-focused digital experiences

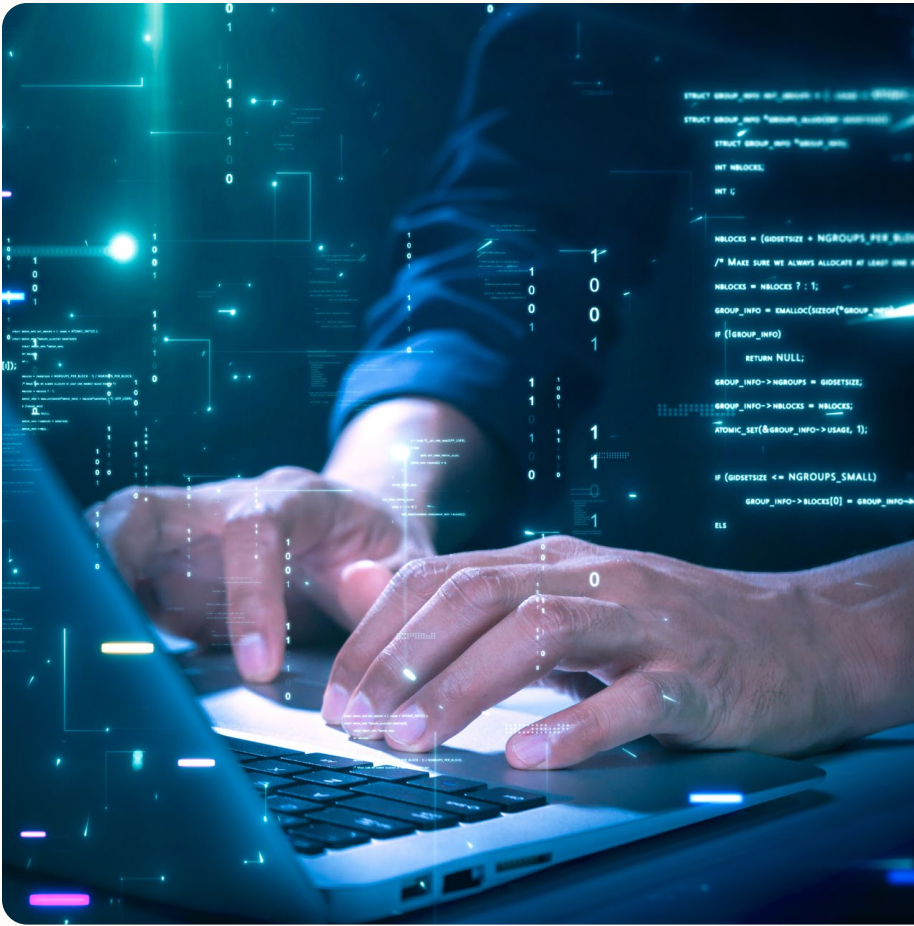


3

Improve IT support



Underpinning these priorities is a need to deploy AI infrastructure.



*APJ – Asia/Pacific (including Japan)

Source: *Worldwide C-Suite Tech Survey 2025*, IDC, n = 300 APJ

The importance of a hybrid cloud strategy

Right-sizing workloads is now critical for all organizations. A multi-hybrid cloud approach offers the best balance of flexibility and control. However, the rapid shift to cloud has left many organizations with gaps in their on-premises environments. To avoid creating new problems during repatriation, applications must be re-platformed to cloud-native architectures (virtualized and containerized) to deliver maximum efficiency and interoperability.

Organizations need to reconsider their approach to virtualization to ensure that the past mistakes of vendor lock-in and escalating costs do not resurface. There is more than one approach to this; regardless of the approach, applications must take on the cloud-native characteristics previously mentioned.

AI is inevitable – and complex. As AI adoption matures, organizations will realize that they do not require huge GPU farms of their own but will need to focus on training and inferencing. This means dedicating part of the new on-premises environment to AI-specific private cloud stacks.

Cloud migration remains a top priority. Nearly half of all organizations **(46%) cite cloud migration as their number 1 infrastructure modernization strategy**, but not all are taking the right hybrid cloud approach.

Key challenges to hybrid cloud success



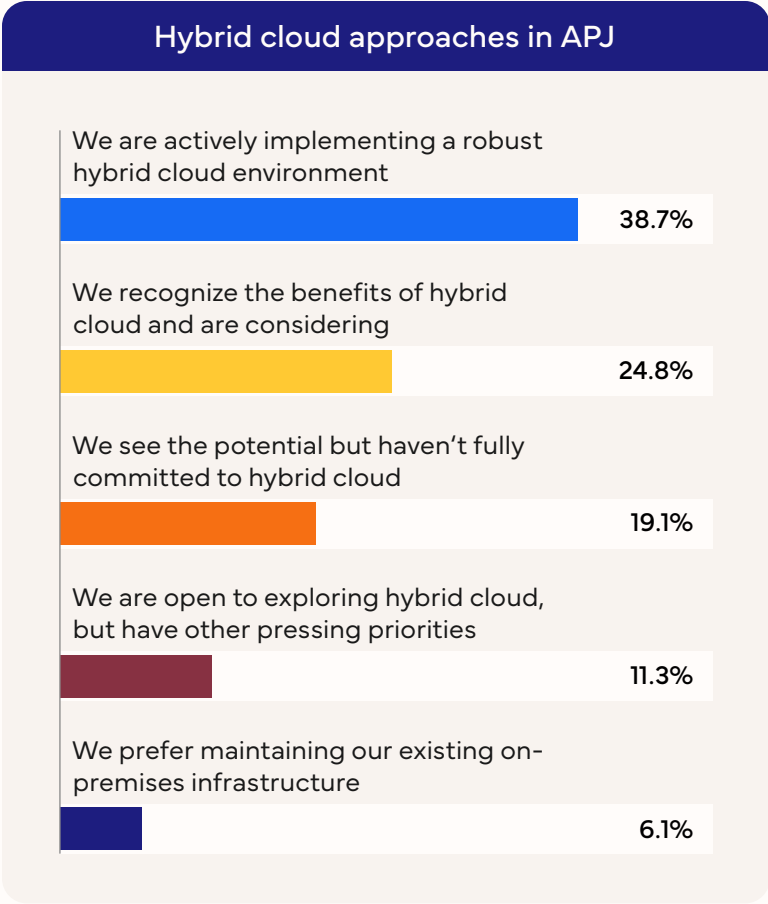
Skills shortage: Infrastructure teams are sorely under-resourced, with funding shifted toward upstream roles such as AI, development, and security. This means that new systems must be embedded with automation across the full stack to compensate.



Security and resiliency: Security is a huge concern of the C-suite. Avoiding downtime has proven to be a challenging approach, so funding rapid recovery is a far more acceptable strategy. Complexity is the enemy of security; hence, new systems must smoothly integrate with existing environments and include intrinsic security controls.



Cost pressures: Many organizations increasingly favor consumption-based pricing models, as these align better with new budgeting processes that have evolved since the emergence of cloud. These models also reduce upfront investment risks.



Source: AP IT Services Survey 2025, IDC, n = 560

Market trend: Virtualization migration landscape and alternatives

Leading organizations across Asia/Pacific are moving from a cloud-first strategy to a multi-hybrid cloud approach as this provides greater financial control and operational flexibility. Many organizations currently find themselves locked into costly cloud contracts that may not be delivering the value anticipated, prompting a wave of **workload repatriation**.

Cloud-native is the desired end state. Achieving this will require a robust virtualization and containerization strategy. However, the markets have discovered that reliance on a single proprietary virtualization vendor introduces challenges, and many now seek to redress this.

A simple lift-and-shift approach to moving workloads to the cloud is no longer sufficient. Workloads moved hastily to the cloud have become difficult to repatriate due to skill shortages and evolving technologies. **A private cloud architecture based on disaggregated infrastructure offers a more sustainable solution – enabling independent scaling of compute, storage, and networking resources.**

Addressing the key challenges is critical. Modern infrastructure must be able to deliver:

- ➔ Observability and automation to simplify operations
- ➔ Seamless integration with existing environments to reduce security and compliance risks
- ➔ Intrinsic security controls to mitigate threats during transformation



Top 3 cloud journey challenges today

- 1 Observability and operations
- 2 Cloud architecture and workload migration
- 3 Hybrid/multi-cloud integration

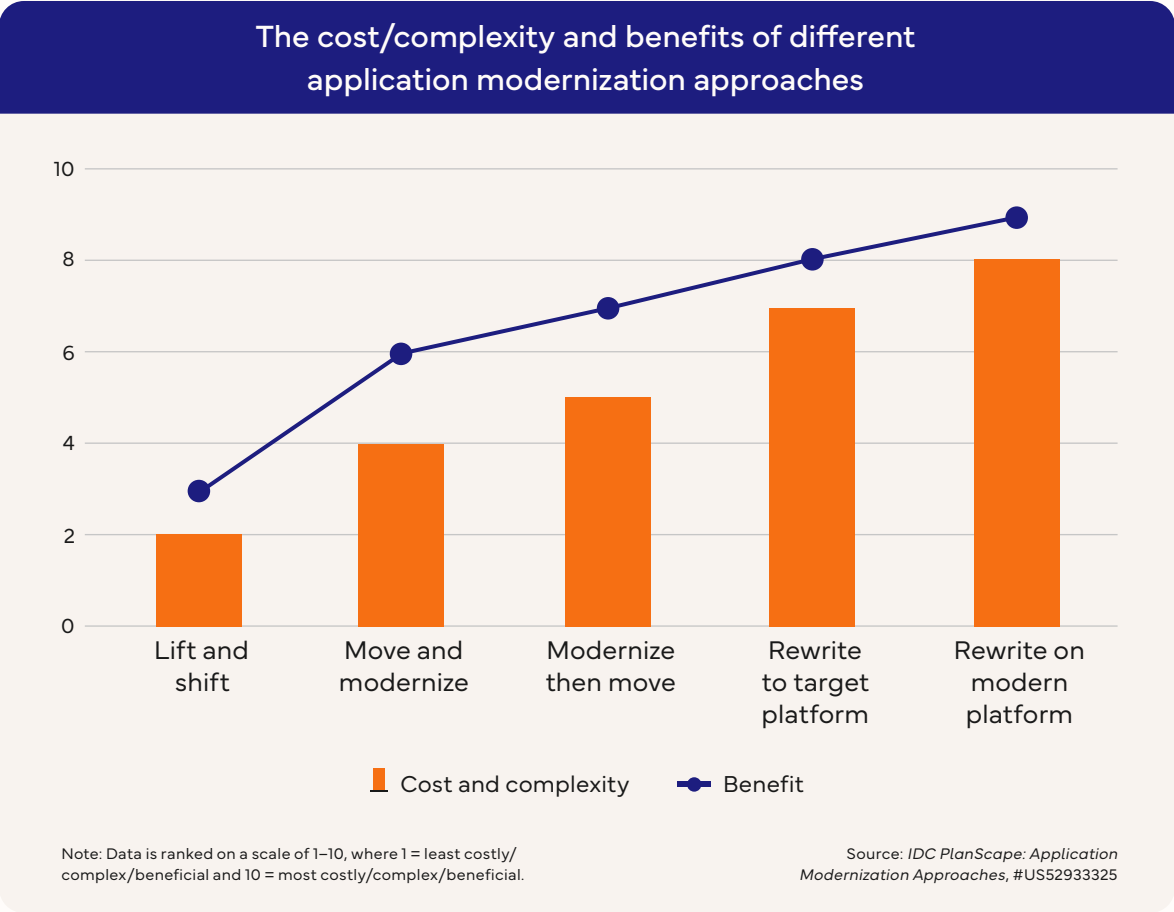


Top 3 infrastructure transformation challenges

- 1 Integration with legacy systems
- 2 Cybersecurity and compliance risks
- 3 Managing multi/hybrid environments effectively

Source: AP IT Services Survey 2025, IDC, n = 560

Ensuring portability through choice



IDC’s analysis of cloud adoption strategies reveals that many organizations initially adopted a “lift and shift” approach to migrate applications to the cloud quickly. While this strategy delivered short-term gains, these benefits diminished over time.

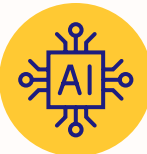
Organizations now recognize that a complete rewriting of applications for a modern platform, though more complex and costly, offers the best long-term value. The chart shows that the returns for organizations are three times greater than that of a lift-and-shift approach.

94%

IDC data also shows that 94% of organizations plan some form of cloud repatriation, spanning a range of three-tier architecture applications. Ensuring these are suitably re-platformed, virtualized, and containerized will be critical to ongoing success and to avoid early legacy and technical debt issues.

Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 675

Market trend: Winning the AI race



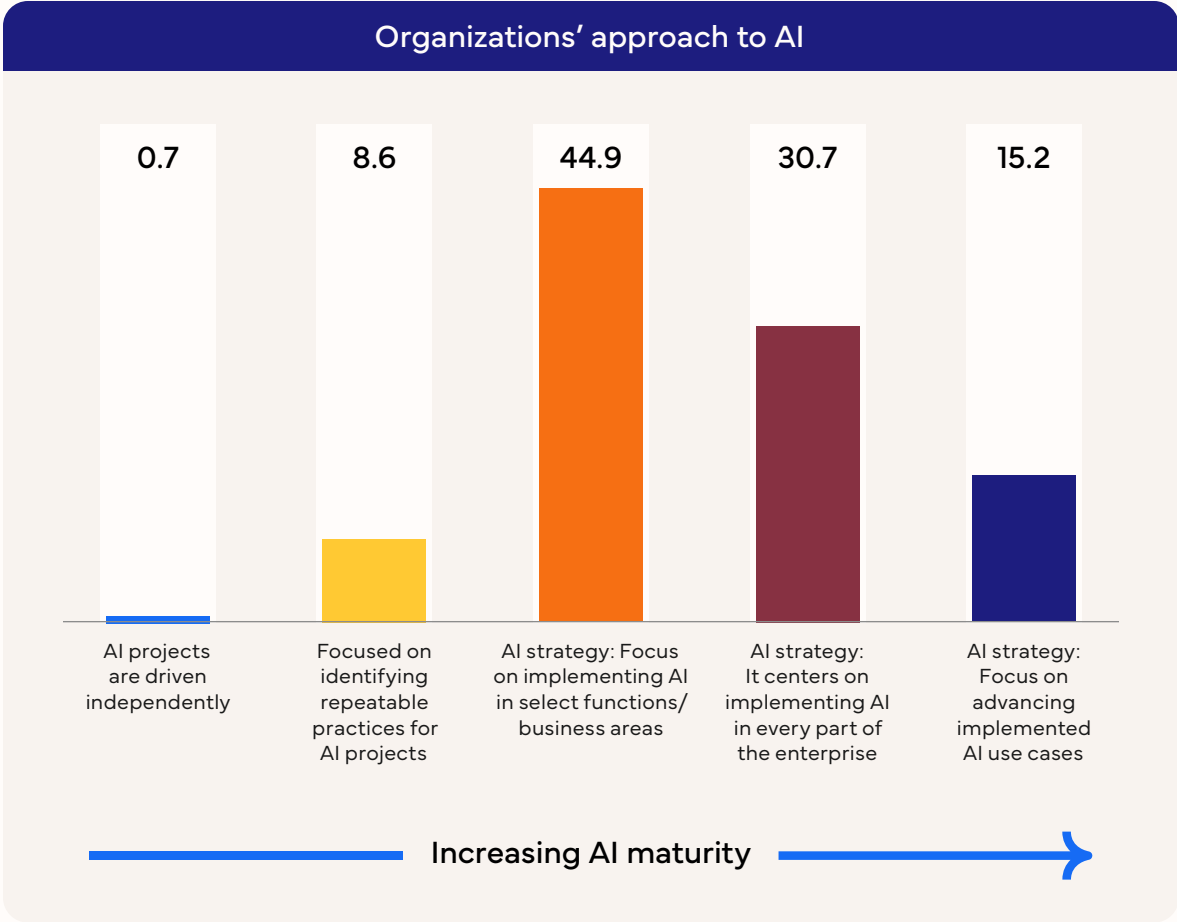
AI has become the focus of the C-suite. Their strategy is one of “first to market”, where speed, efficiency, and productivity are critical. As organizations mature in their AI journey, requirements evolve, and many are realizing that a hybrid cloud strategy offers the most cost-effective way to deliver on the AI promise.

Many AI processes require specialized compute environments, specifically, the need for graphics processing units (GPUs) and accelerators. This means part of the on-premises infrastructure must be architected not only for today’s AI needs but also for future use cases.

Beyond infrastructure challenges, there is a range of concerns around data trapped in older systems with outdated data structures. Legacy systems create technical debt through issues such as rogue data, data sprawl, poor hygiene, duplication, inconsistent data silos, manual data entry and manipulation, and hoarded or decayed data with no business value. These problems degrade analytics, hinder AI readiness, and increase risk.

AI-related risk is also a rising concern, where the need to ensure data integrity and availability throughout the AI life cycle is driving organizations to rethink data security and how that is architected to ensure availability in the event of a compromising event.

Additionally, data and digital sovereignty regulations require critical data to remain geo-fenced. This places public cloud infrastructures at a disadvantage due to the challenges of tracking and auditing such data. On-premises or co-located infrastructure avoids this issue, but does place the onus of governing and securing the data on the technology buying organization. For many organizations in Asia/Pacific, this is an acceptable trade-off.



Source: IDC Future Enterprise Resiliency & Spending Survey, Wave 5, 2025, n = 300 APJ

AI infrastructure strategies for today and tomorrow



Modern AI infrastructure must support **data-intensive workloads, microservices, and mixed environments**

through fast compute refresh cycles, high-performance shared storage, and scalable networking—all under a unified framework.

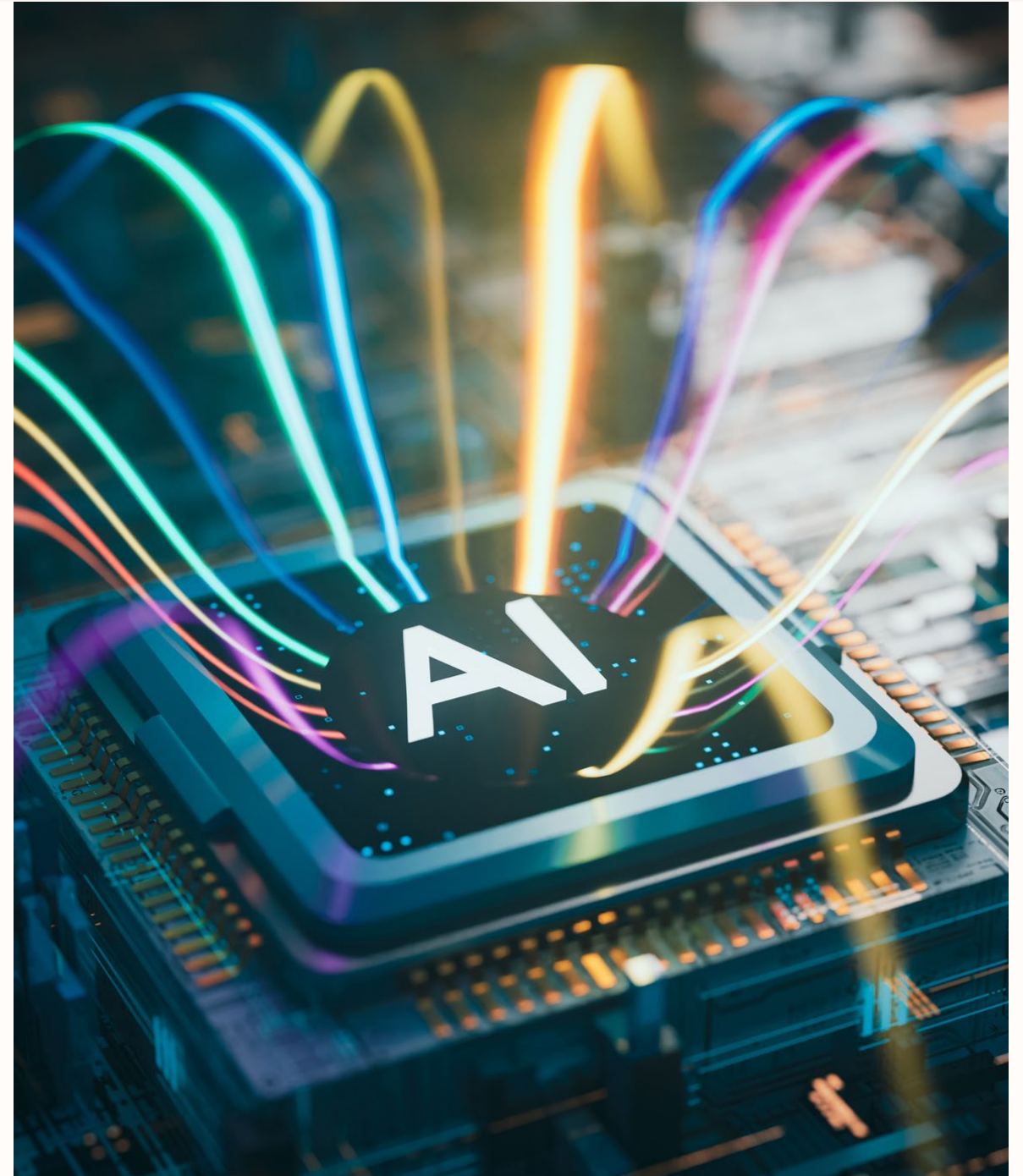
As AI strategies mature, workloads shift from training to inferencing. Training requires specialized, high-cost GPU resources, while inferencing typically relies on conventional central processing units (CPUs), which are more affordable and can be repurposed for other workloads if business needs change.

To optimize costs, IDC recommends leveraging AI infrastructure for intermittent, non-critical workloads when it is not actively used for AI model training. Examples include:

- Data conversion between formats
- Data cleaning
- Periodic analytics and reporting

This approach is only feasible for businesses that have other workloads that, like AI model training, can run intermittently, or can be paused and restarted when an AI workload requires access to the infrastructure. Most standard applications and services do not meet these conditions.

Source: IDC PlanScape: AI Infrastructure Cost Optimization, IDC #US51835924



Legacy concerns and the growth of technical debt

Asia/Pacific is only beginning to experience the impact of technical debt, and it is set to grow.

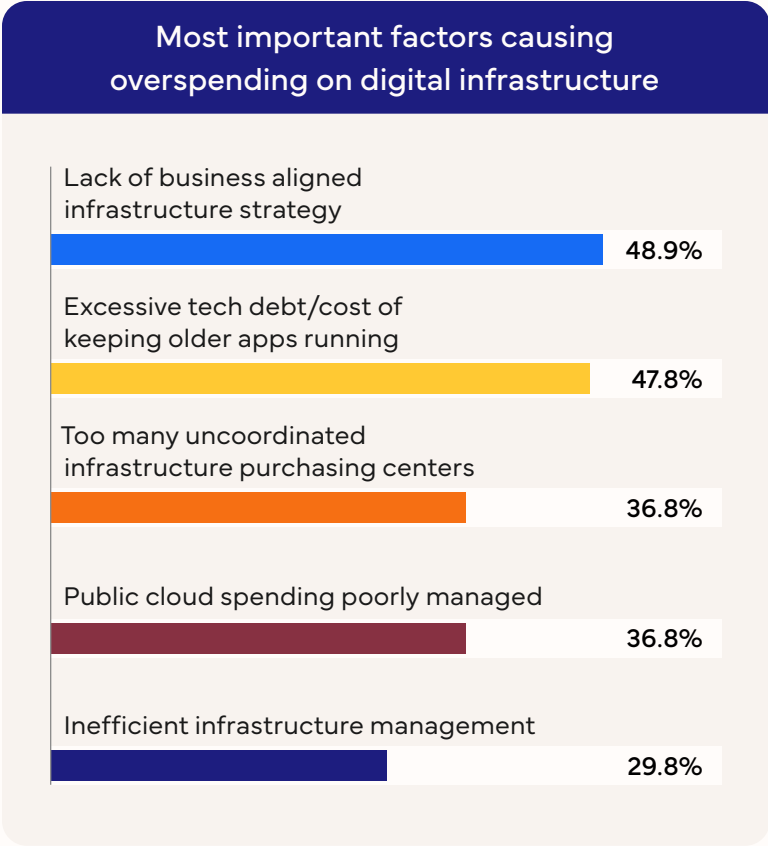
In 2024, excessive technical debt was the second biggest driver of digital infrastructure overspending, yet by 2025, only 30% of organizations had proactively embedded modernization into their IT strategy.

The rising cost of keeping older systems running and the challenges of transitioning to cloud-native architectures are forcing many organizations to strategically address modernization. This is also the key technical requirement the C-suite expects from the office of the CIO.

Modernization may require re-platforming to cloud-native architectures, or repatriating workloads from the cloud. In either case, success depends on a cloud-ready infrastructure that is flexible. Decoupling resource domains enables organizations to refresh compute, storage, or networking on their own cadence, instead of replacing full stacks just to upgrade one later. This approach lowers both capital and operating costs through better consolidation, fewer systems per rack, and more efficient power, cooling, and storage footprints.



Less than one-third of Asia/Pacific organizations have a proactive plan to retire older systems.



Sources: IDC Future Enterprise Resiliency & Spending Survey, Wave 3, 2025, n = 300 APJ;
IDC Future Enterprise Resiliency & Spending Survey, Wave 3, 2024, n=152 APJ

Essential guidance



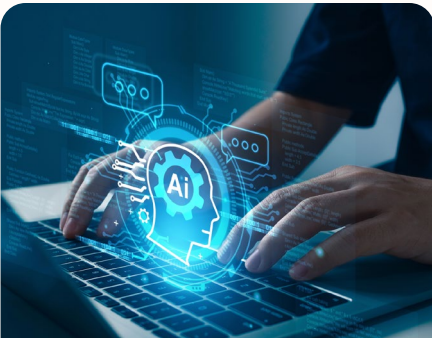
Align modernization with business goals
CIOs must ensure infrastructure modernization initiatives directly support strategic business and technology objectives.



Prioritize a cloud-agnostic architecture
Select the modernization approach that will future proof critical applications.



Avoid vendor lock-in
Ensure purchasing decisions do not lock the organization into restrictive technology or financial practices. New systems should be open, scalable, and can evolve with the organization's needs.



Enable flexibility for rapid innovation
The pace of AI is accelerating — from machine learning, to GenAI and emerging agentic models, to the next, yet-to-be-defined wave. Deploying a flexible infrastructure that can evolve quickly will be critical.



Embed observability and automation
Invest in solutions that deliver ease of integration, and include automation capabilities that simplify operations and improve efficiency.



Market Insights



Australia & New Zealand

Strategic imperatives for modernization



A hybrid cloud architecture delivers the most strategic benefits for enterprises, yet fewer than half of Australia and New Zealand (ANZ) organizations have adopted this approach. IDC research shows that the top three infrastructure goals for ANZ organizations are:

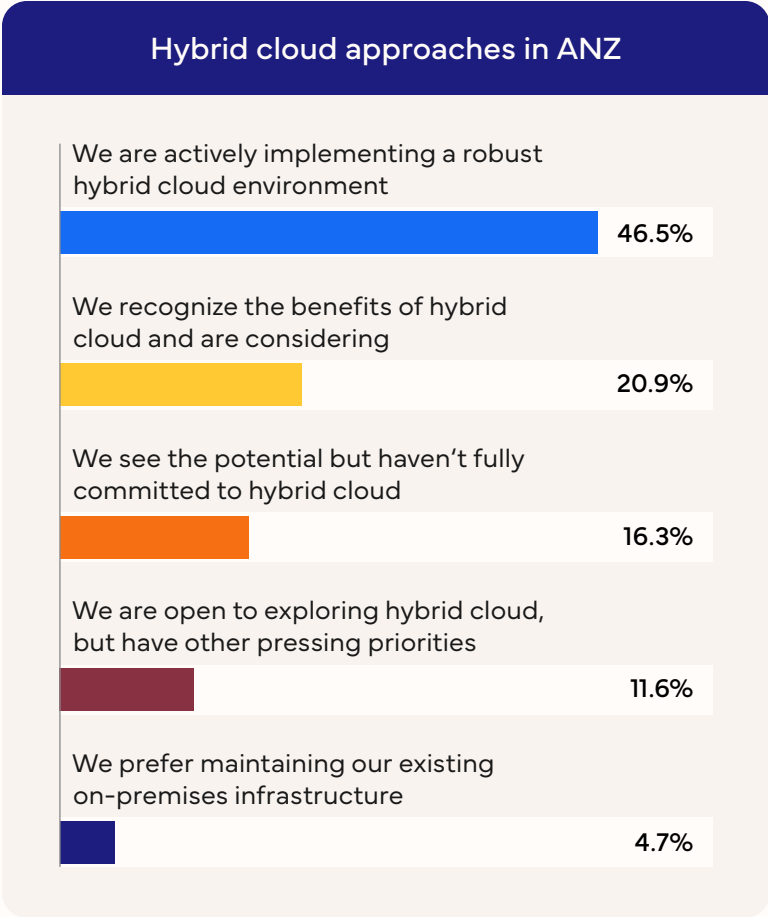
- ➔ Achieving operational efficiency through automation
- ➔ Enabling AI-led product innovation and business growth
- ➔ Using cost optimization as a strategic approach for maximizing business value

Aligning infrastructure strategy with these goals significantly increases the likelihood of achieving them.

Embedding automation across the platform is unavoidable, as a mature hybrid environment relies on virtualization and containerization, both of which depend on automated systems for effective management.

Hybrid cloud also provides the flexibility to leverage compute, storage, and networking resources wherever they deliver the most value – on-premises or in the cloud.

Ensuring that the underlying infrastructure for hybrid cloud can support evolving AI demands will drive long-term cost efficiencies and enable innovation.



Sources: IDC's AP IT Services Survey 2025, n = 60; IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 75

Australia & New Zealand

ANZ’s cybersecurity-driven workload repatriation process



This trend is driven primarily by cybersecurity concerns, which strongly influence decisions on infrastructure deployment locations in ANZ.

To ensure repatriation success, organizations must design new environments that

- ➔ deliver the architectural characteristics required by mission-critical workloads;
- ➔ embed robust underlying security for both applications and data; and
- ➔ support long-term flexibility and scalability.

Top drivers for repatriation from public cloud

1

AI and GenAI life-cycle platforms

2

Application development and testing

3

Enterprise applications, including enterprise resource management applications, human capital management, and supply chain management systems

Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 75



Australia & New Zealand

On-premises and hybrid strategies take center stage

Over half (57%) of ANZ organizations plan to invest in on-premises infrastructure to support AI initiatives.

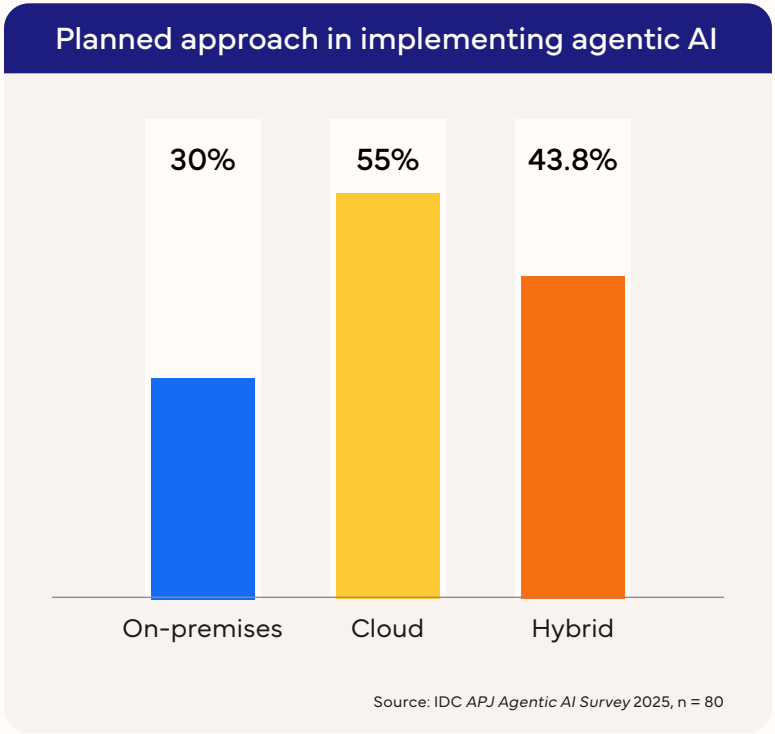
The top 3 use cases are:

- 
- Content marketing
 - Intelligent risk assessment, investigation, and fraud analytics
 - Sales planning and prospecting

As agentic AI adoption accelerates, both on-premises and hybrid cloud emerge as strong deployment options.

However, organizations choosing a cloud-based option must ensure that the AI agents they build are portable enough to be repatriated into their hybrid cloud environments. Failure to do so risks creating new cycles of vendor lock-in and technical debt.

While SaaS-based AI solutions may make sense, enterprises must remain cautious as the cost of compute, network, and storage evolves over time. Strategic planning today will determine organizational flexibility and cost efficiency tomorrow.



Source: IDC Asia Pacific Enterprise Infrastructure Survey 2025, n = 75

Greater China

Strategic imperatives for modernization



A hybrid cloud architecture delivers the most strategic benefits for enterprises, yet fewer than half of Greater China (GRC)* organizations have adopted this approach. IDC research shows that the top three infrastructure priorities for these organizations are:

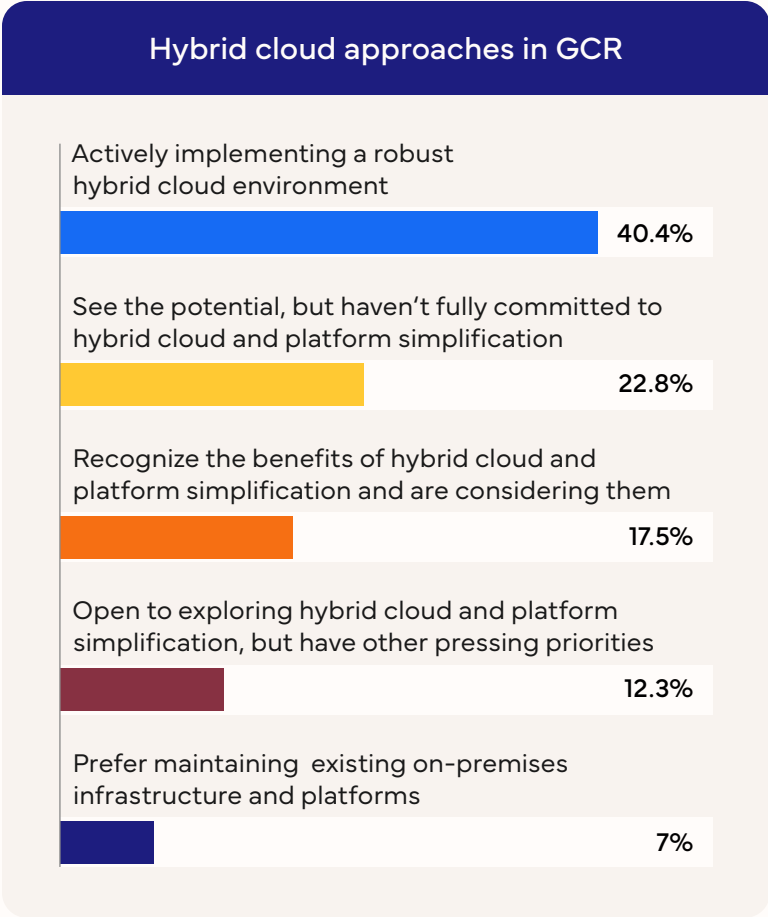
- ➔ Operational efficiency through automation
- ➔ Cost optimization as a strategic approach for maximizing business value
- ➔ Driving customer success and improving satisfaction

Aligning infrastructure strategy with these priorities significantly improves the likelihood of achieving these goals.

Embedding automation across the platform is unavoidable. Mature hybrid environments rely on virtualization and containerization, both of which depend on automated systems for effective management.

Hybrid cloud also provides flexibility to deploy compute, storage, and networking resources wherever they deliver the greatest value, whether on-premises or in the cloud, helping optimize cost and efficiency.

Finally, the underlying hybrid infrastructure must be able to support the demands of DevOps and the critical applications used by employees, partners, and customers. This capability underpins customer success and satisfaction, reinforcing the third priority.

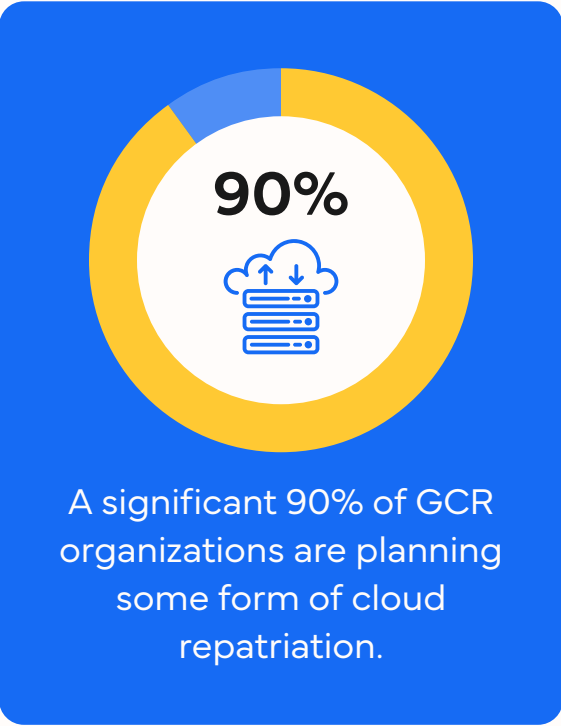


*GRC – Mainland China, Hong Kong, Taiwan

Sources: AP IT Services Survey 2025, n = 80;
IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 150

Greater China

Power and performance drive workload repatriation process



This trend is driven primarily by power and space constraints, as well as performance and latency concerns, which strongly influence decisions on infrastructure deployment locations in GCR.

To ensure success, organizations must design new environments that

- optimize on-premises architectures for economic use of power and space;
- enable configurability and scalability to meet the evolving workload demands of the business; and
- reduce risk by embedding robust security and compliance controls without introducing new vulnerabilities.

Top drivers for repatriation from public cloud

1

Adequate power and space availability

2

Performance and latency requirements

3

Cybersecurity considerations

Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 75



Greater China

On-premises and hybrid strategies take center stage

Nearly half (49%) of GCR organizations plan to invest in on-premises infrastructure to support AI initiatives, signaling a continued shift toward hybrid strategies.

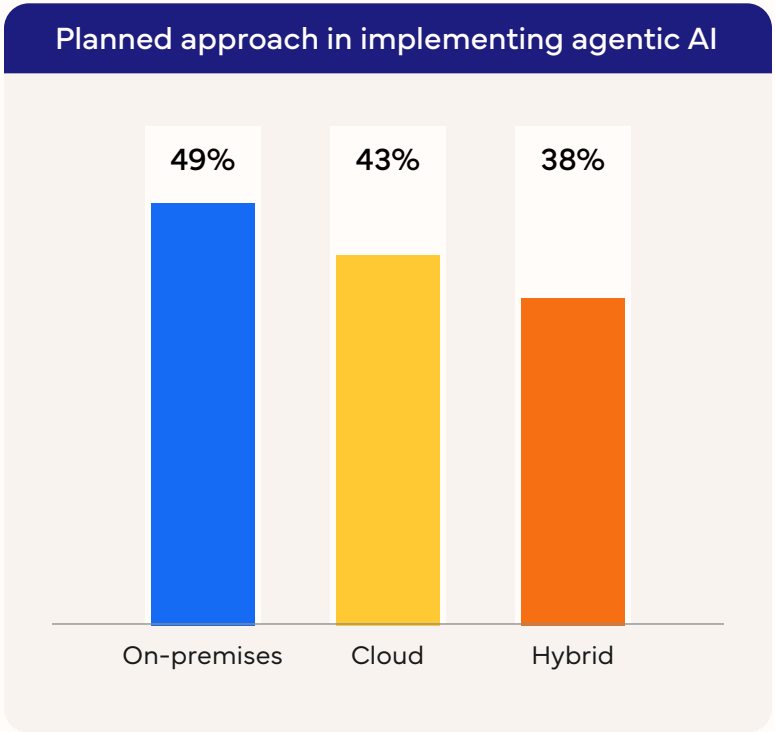
Top 3 use cases are:

- 
- Customer automation
 - Real-time decision support
 - Productivity enhancement

As agentic AI adoption accelerates, both on-premises and hybrid cloud environments emerge as preferred deployment options.

However, organizations choosing a cloud-based option must ensure that the AI agents they build remain portable for repatriation into hybrid cloud environments. The inability to do so may result in new cycles of vendor lock-in and technical debt.

While SaaS-based AI solutions may make sense, enterprises must remain cautious as the cost of compute, network, and storage evolves over time. Strategic planning today will determine organizational flexibility and cost efficiency tomorrow.



Source: IDC APJ Agentic AI Survey 2025, n = 150

India

Strategic imperatives for modernization



A hybrid cloud architecture delivers the most strategic benefits for enterprises, yet fewer than half of organizations in India have adopted this approach. IDC research shows that the top three infrastructure goals for Indian organizations are:

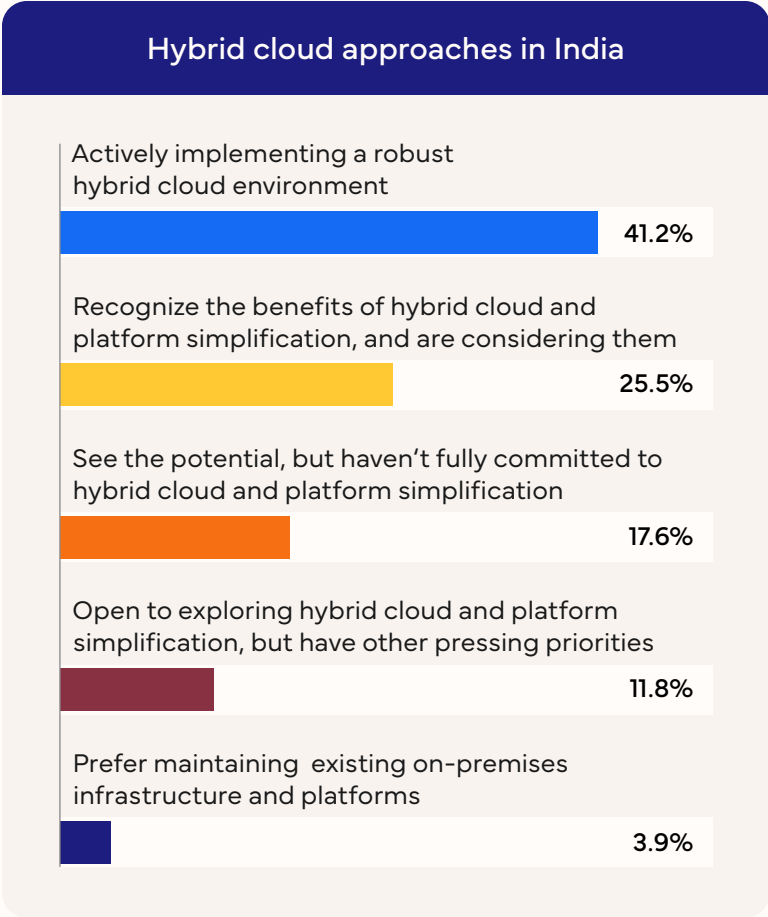
- ➔ Achieving sustainability objectives
- ➔ Modernizing data to build GenAI capabilities
- ➔ Accelerating innovation through digital infrastructure

Aligning infrastructure strategy with these priorities significantly increases the likelihood of success.

A multi-hybrid cloud enables organizations to place workloads where they best align with business priorities, whether on-premises or in the cloud. This flexibility supports sustainability initiatives and optimizes resource utilization.

AI strategies in India span operational requirements for edge, core, and cloud operations, which necessitate a unified architecture for efficiency. Only a hybrid cloud architecture can deliver this level of integration.

Innovation thrives on elasticity and scalability. Hybrid environments support rapid experimentation and quick termination of initiatives that do not meet expectations, making them far better aligned with the demands of innovation than any other architecture.



Sources: AP IT Services Survey 2025, n = 70; IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 150

India

Cybersecurity drives cloud workload recalibration



The surge in cloud workload recalibration among organizations in India is driven primarily by cybersecurity concerns, along with power and space limitations, and performance and latency requirements. These factors strongly influence decisions about where workloads should reside.

To ensure success, organizations must design new environments that

- ➔ Reduce risk without introducing new vulnerabilities
- ➔ Optimize on-premises architectures for economic use of power and space
- ➔ Enable configurability and scalability to support evolving workload demands

Top drivers for repatriation from public cloud

1

Cybersecurity considerations

2

Adequate power and space availability

3

Performance and latency requirements

Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 150



India

Addressing cloud limitations through strategic repatriation

A significant 96% of organizations in India are planning some form of cloud repatriation, driven by key challenges associated with public cloud infrastructures, including:

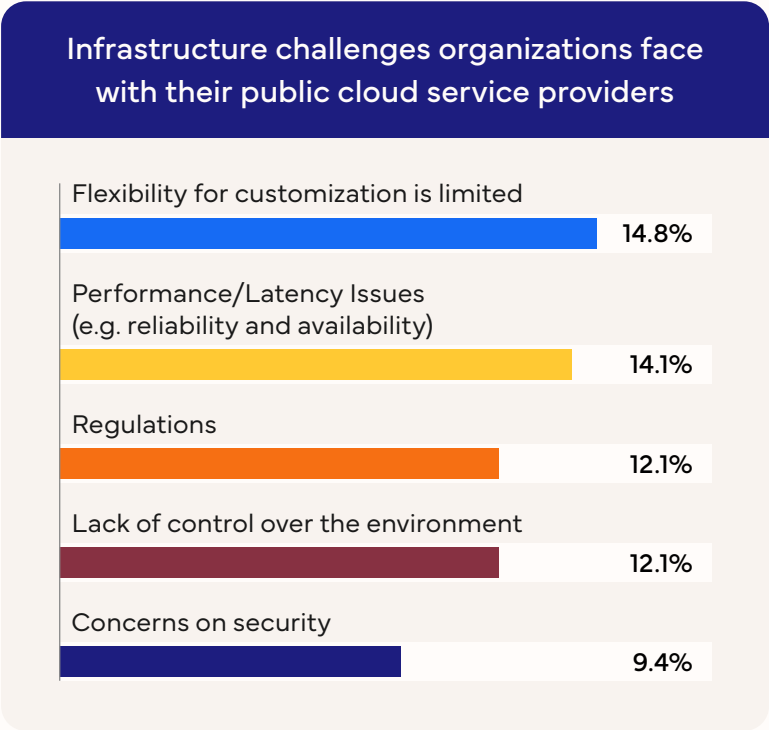
- Limited flexibility for customization
- Performance and latency issues
- Lack of control over the environment
- Security concerns
- Regulatory compliance challenges

A major hurdle in adopting a multi-hybrid cloud strategy is the lack of alignment across security controls, which increases complexity – and complexity is the enemy of security.

Relocating critical workloads helps address this issue. In India, AI and GenAI life-cycle platforms top the list of applications being repatriated. Moving these workloads to a suitable platform allows businesses to



- Simplify security management
- Enable required levels of customization
- Improve performance and interoperability
- Mitigate most, if not all, of the key challenges posed by public cloud infrastructures



Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 150

Korea

Strategic imperatives for modernization



A hybrid cloud architecture delivers the most strategic benefits for enterprises, yet fewer than half of organizations in Korea have adopted this approach. IDC research highlights three top infrastructure goals for Korean organizations:

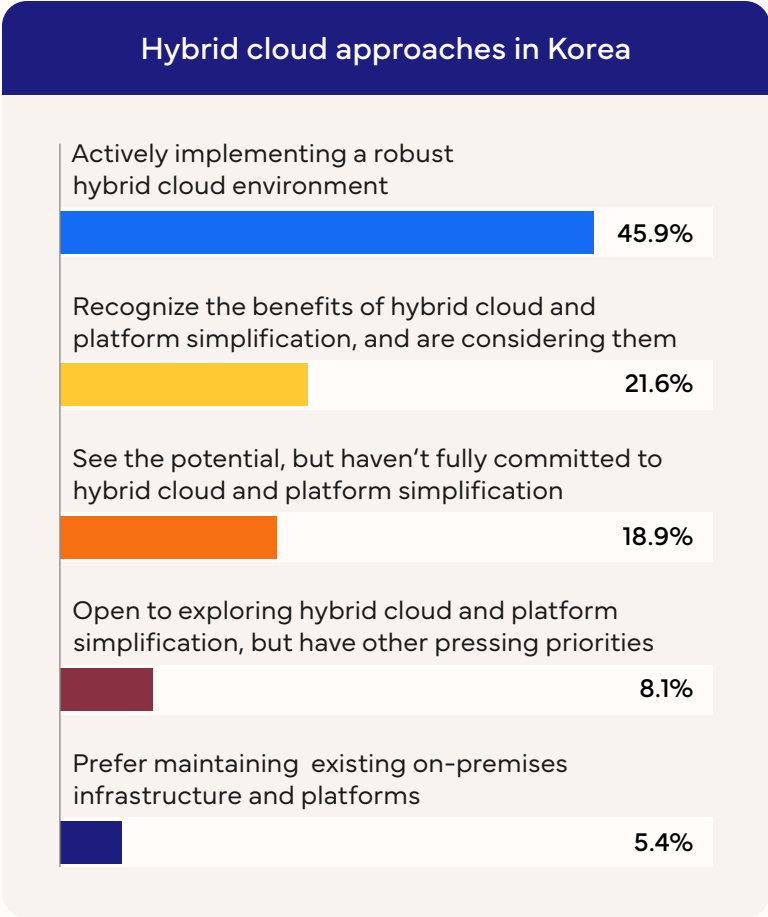
- ➔ Achieving operational efficiency through automation
- ➔ Driving AI-led product innovation and business growth
- ➔ Accelerating innovation through digital infrastructure

Aligning infrastructure strategy with these goals significantly improves the likelihood of achieving these objectives.

Automation is no longer optional. Mature hybrid environments rely on virtualization and containerization, both of which require automated systems for effective management.

Korean organizations’ AI strategies span edge, core, and cloud operations. Only a hybrid cloud architecture can deliver this level of efficiency.

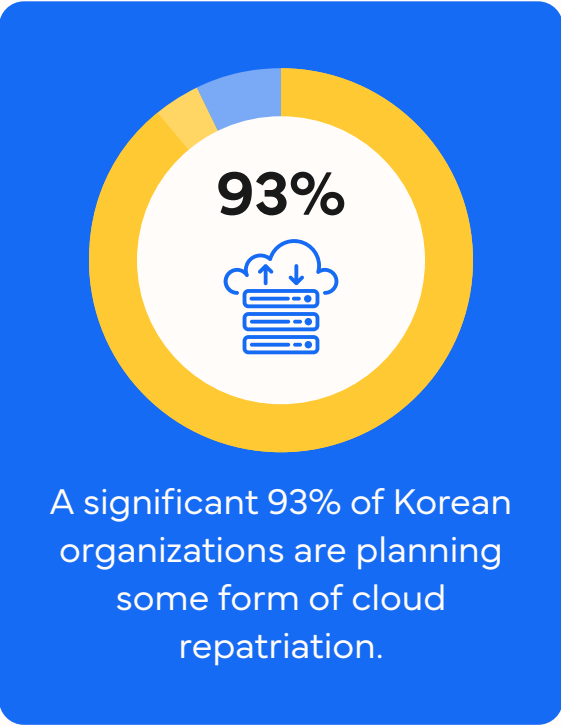
Innovation thrives on elasticity and scalability. Hybrid environments support rapid experimentation and quick termination of initiatives that do not meet expectations, making them far better aligned with the demands of innovation than any other architecture.



Sources: AP IT Services Survey 2025, n = 50; IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 75

Korea

Performance and security concerns drive workload repatriation



Organizations in Korea are increasingly reassessing where their workloads should reside, driven primarily by power and space limitations, performance and latency requirements, and security concerns. These factors play a critical role in determining optimal infrastructure deployment locations.

Organizations must design new environments that

- Provide the right configurability to support the workloads that will be hosted on-premises, and ensure the infrastructure can scale with evolving business demands
- Reduce risk without introducing new vulnerabilities
- Support the needs of a diverse workload mix, not just AI, within the same environment

Top drivers for repatriation from public cloud

1

Lower-than-expected performance and increased latency

2

Data security and regulatory compliance

3

Poor integration with existing systems

Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 75



Korea

Hybrid cloud built on open standards can address key risks

Korean organizations are increasingly prioritizing hybrid and on-premises infrastructure to support AI initiatives, with 71% planning to invest in these environments.

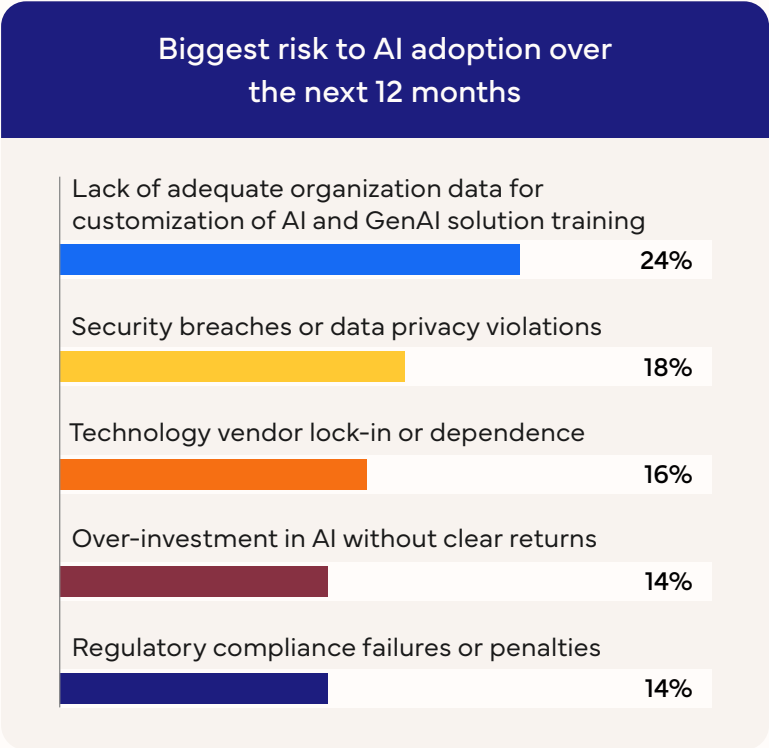
The top 3 use cases are:

- 
- Customer automation
 - Productivity enhancement
 - Risk management and fraud detection

Top risks to AI adoption

The top three risks to AI adoption relate to data quality challenges — a recurring theme across the globe – along with security breaches and technology or vendor lock-in.

While a modern private cloud environment does not directly resolve data issues, it can provide a secure, highly automated platform for remediated data, reduce exposure to security breaches, and avoid software level lock-in through openness and interoperability. This enables a more resilient and adaptable AI infrastructure strategy.



Source: IDC Asia/Pacific Data, AI and GenAI Survey 2025, n = 50

Singapore

Strategic imperatives for modernization



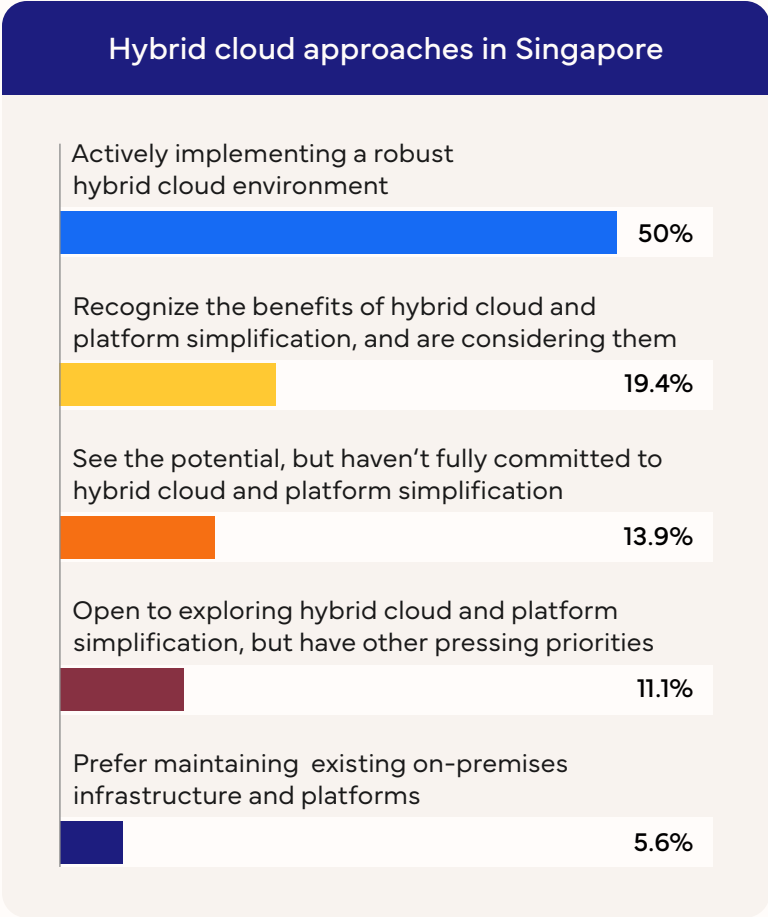
A hybrid cloud architecture delivers the most strategic benefits for enterprises. While Singapore leads the Asia/Pacific region in hybrid cloud adoption, only half of organizations have implemented this approach. IDC research shows that the top three infrastructure challenges for Singapore organizations are:

- ➔ Network optimization – building intelligent, high-performance networks to facilitate workloads across edge, core, and cloud
- ➔ Managing cybersecurity risk and data governance
- ➔ Implementing a hybrid/multi-cloud management platform for seamless applications and data mobility across locations

As the most advanced market in the region for hybrid cloud deployment, organizations in Singapore are facing a new set of challenges that can be addressed by deepening the adoption of hybrid cloud.

Hybrid cloud spans edge to core to cloud, enabling a more homogeneous approach to interconnecting data and devices across the broad range of applications running as workloads on this platform. A unified architecture simplifies connectivity and reduces complexity – critical because complexity is the enemy of security.

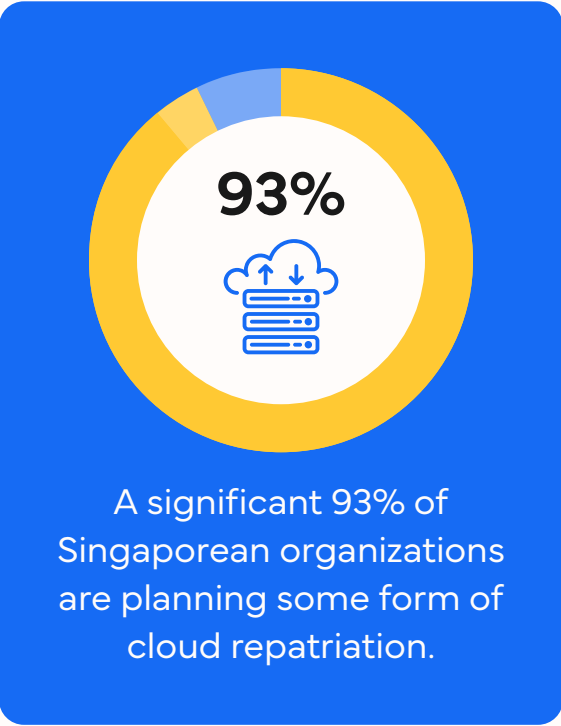
Organizations in Singapore must now focus on solutions that accelerate the seamless deployment of their hybrid cloud environments to address the third infrastructure challenge, ensuring interoperability and resilience while maintaining governance and compliance.



Sources: AP IT Services Survey 2025, n = 50; IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 75

Singapore

Cybersecurity drives workload repatriation



The growing trend of cloud repatriation in Singapore is driven primarily by cybersecurity concerns, as well as power and space limitations, performance and latency requirements, and the need to access newer technologies. These factors strongly influence decisions on infrastructure deployment locations in Singapore.

To ensure success, organizations must design new environments that

- Reduce risk without introducing new vulnerabilities
- Optimize on-premises architectures for economic use of power and space
- Support the demands of a diverse mix of workloads, not just AI, within the same environment

Top drivers for repatriation from public cloud

1

Cybersecurity considerations

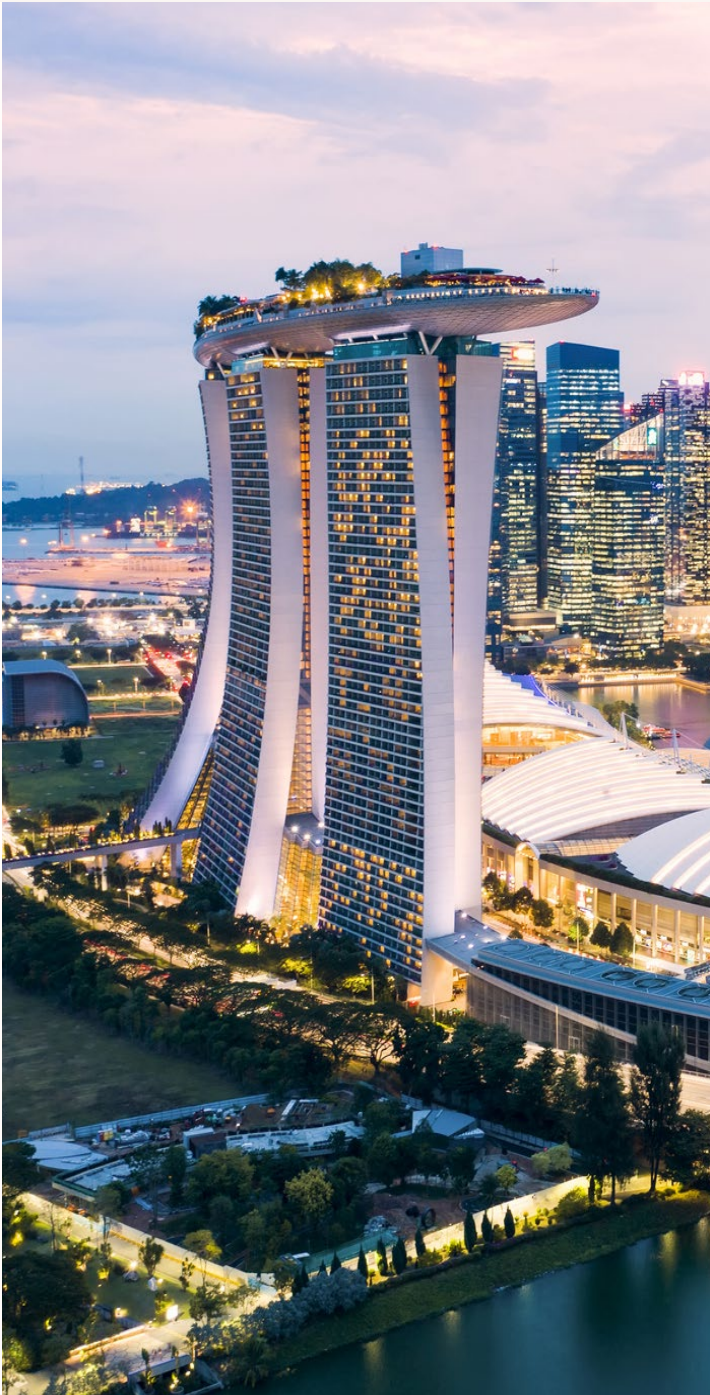
2

Adequate power and space availability

3

Access to new-generation technologies (AI/Gen AI, RPA, IOT, HPC)

Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 75



Singapore

On-premises and hybrid strategies take center stage

Only 28% of organizations in Singapore plan to invest in on-premises infrastructures to support AI initiatives – a relatively low figure compared with hybrid adoption trends.

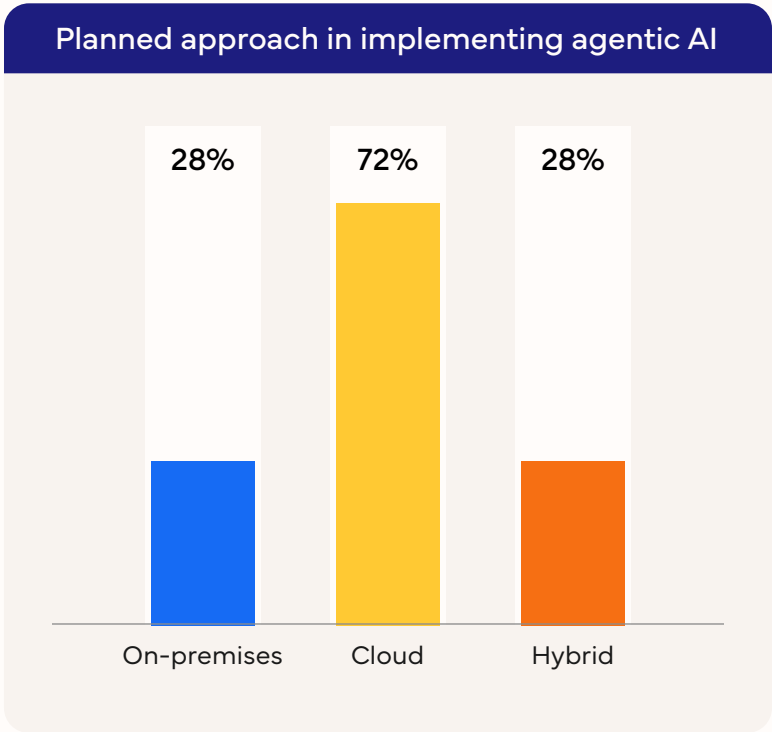
The top three use cases are:

- 
- Customer automation
 - Supply chain optimization
 - Content management

As agentic AI adoption accelerates, both on-premises and hybrid cloud environments are emerging as strong deployment options.

However, organizations choosing a cloud-based option must ensure that the AI agents they build remain portable for repatriation into hybrid cloud environments. Failure to do so risks creating new cycles of vendor lock-in and technical debt.

While SaaS-based AI solutions may seem attractive, enterprises must remain cautious as the cost of compute, network, and storage evolves over time. Strategic planning today will determine organizational flexibility and cost efficiency tomorrow.



Source: IDC APJ Agentic AI Survey 2025, n = 70

Southeast Asia (excluding Singapore)

Strategic imperatives for modernization



A hybrid cloud architecture delivers the most strategic benefits for enterprises, yet fewer than half of Southeast Asia (excluding Singapore) (SEA)* organizations have adopted this approach. IDC research shows the top three infrastructure goals for SEA organizations are:

- ➔ Modernizing data to build GenAI capabilities
- ➔ Driving AI-led product innovation and business growth
- ➔ Strengthening cyber resiliency and ensuring business continuity

Aligning infrastructure strategy with these priorities significantly increases the likelihood of achieving these objectives.

Data modernization requires the ability to easily access information spread across the edge, core, and cloud. A hybrid environment simplifies this process by providing an interconnected architecture that reduces complexity.

AI strategies in SEA encompass operational demands across edge, core, and cloud. Only a hybrid cloud architecture can deliver the required level of integration and efficiency.

A unified hybrid architecture also enhances cyber resiliency, as complexity is the enemy of security. When paired with advanced data security technologies, a fully autonomous hybrid cloud provides robust protection and business continuity.

Hybrid cloud approaches in SEA

Recognize the benefits of hybrid cloud and platform simplification and are considering them



Actively implementing a robust hybrid cloud environment



See the potential, but haven't fully committed to hybrid cloud and platform simplification



Open to exploring hybrid cloud and platform simplification but have other pressing priorities



Prefer maintaining existing on-premises infrastructure and platforms

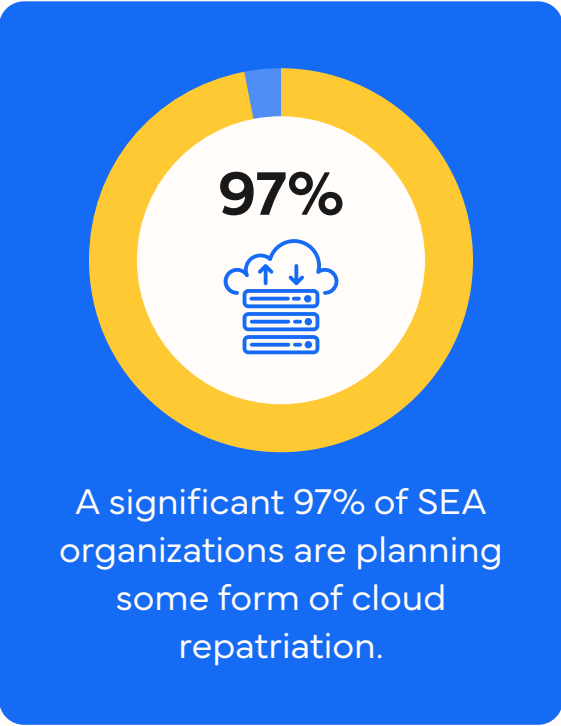


*The Southeast Asia markets covered are Indonesia, Malaysia, Philippines, and Thailand

Sources: AP IT Services Survey 2025, n = 140; IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 150

Southeast Asia (excluding Singapore)

Power, performance, and governance drive workload repatriation



The surge in cloud repatriation across SEA is driven primarily by power and space constraints, performance and latency requirements, and governance and compliance needs such as data sovereignty and resiliency. These factors strongly influence decisions on where workloads should be hosted.

To ensure repatriation success, organizations must design new environments that:

- ➔ Optimize on-premises architectures for efficient power and space utilization
- ➔ Integrate critical storage infrastructure to meet data governance and compliance requirements
- ➔ Enable configurability and scalability to support evolving workload demands

Top drivers for repatriation from public cloud

1

Adequate power and space availability

2

Governance and compliance (e.g., data sovereignty, resiliency)

3

Performance and latency requirements

Source: IDC Asia/Pacific Enterprise Infrastructure Survey 2025, n = 150



Southeast Asia (excluding Singapore)

On-premises and hybrid strategies take center stage

Only 30% of SEA organizations plan to invest in on-premises infrastructure to support AI initiatives.

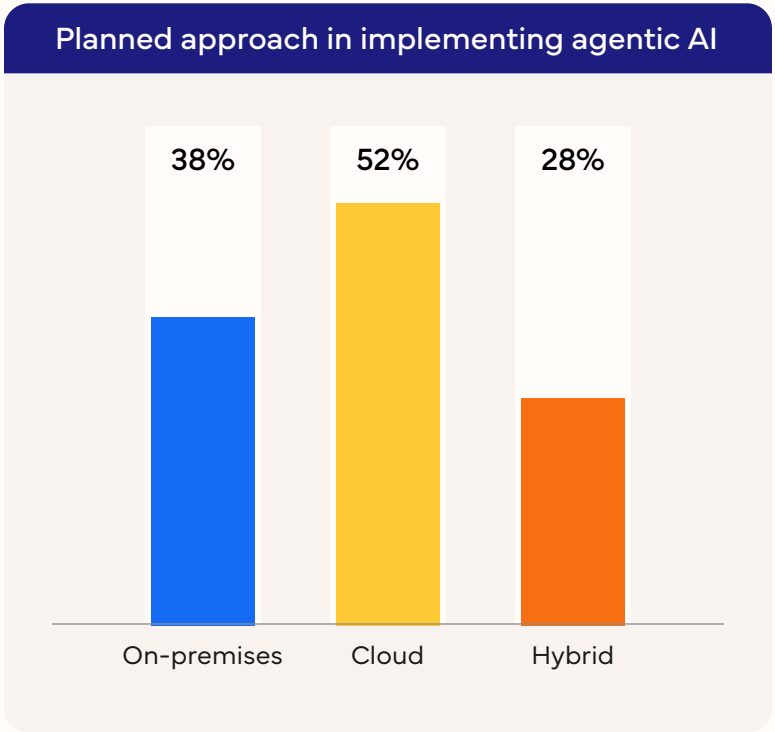
The top 3 use cases are:

- 
- Productivity enhancement
 - Risk management and fraud detection
 - Real-time decision support

As agentic AI adoption accelerates, both on-premises and hybrid cloud environments are emerging as strong deployment options.

However, organizations choosing a cloud-based option must ensure that the AI agents they build are sufficiently portable for repatriation into hybrid cloud environments. Failure to do so risks creating new cycles of vendor lock-in and technical debt.

While SaaS-based AI solutions are an attractive option, enterprises must remain cautious as the cost of compute, network, and storage evolves over time. Strategic planning today will determine organizational flexibility and cost efficiency tomorrow.



Source: IDC APJ Agentic AI Survey 2025, n = 70

About the IDC analyst



Simon Piff
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Simon Piff is the Research Vice President for IDC’s Asia/Pacific region, based in Singapore. With nearly 30 years of experience in the Asia/Pacific IT landscape, he has worked across a broad spectrum of technology domains, including cloud computing, business intelligence, datacenter management, security, and automation. Simon currently leads IDC Asia/Pacific’s Future of Digital Infrastructure research program. His remit spans data management, security, cloud architectures, and the foundational layers of digital infrastructure — storage, compute, and networking.

[More about Simon Piff →](#)

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