Infrastructure RACE

Where Hyperscale Al is Taking Off



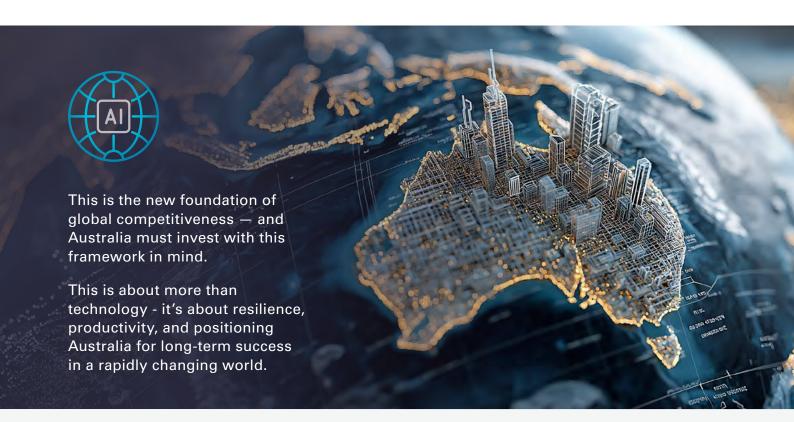
Strategic imperatives for hyperscalers:

The APAC advantage

The intelligence economy isn't just emerging; it's here. And for global hyperscaler executives, the Asia-Pacific (APAC) region is no longer simply another market, it's the very epicentre where the next generation of global Al platforms will be built.

As the world races to build out AI capability, leadership will be defined by five enduring pillars:





As the race to scale advanced AI capabilities intensifies, APAC has become the most strategically vital battleground for infrastructure deployment. The traditional way of calculating optimal locations, based merely on land availability and power capacity, has been fundamentally disrupted. Today, hyperscalers aren't just seeking physical space; they are critically evaluating entire countries based on their ability to deliver:



Sovereign-grade compliance

Meeting strict local data and operational regulations.



Ultra-high-density readiness

Facilities equipped for the extreme power and cooling needs of AI.



Geopolitical agility

Navigating complex international relations and regional nuances.

This isn't merely a growth story. It's a high-stakes global competition to secure the foundational components – the right land, sustainable power, and strategic partnerships – that will underpin the entire Al revolution.

This document delves deep into the rapidly shifting data centre landscape across APAC. We'll highlight where demand is surging, where critical constraints are emerging, and why market leaders like Google, Microsoft, and AWS are fundamentally rethinking their regional infrastructure strategies. We'll unpack how the intricate interplay of sovereign risk, evolving AI regulation, and sustainable energy availability is reshaping site selection frameworks, and explore where a national footprint in Australia offers a distinct, future-proof advantage.

If your mandate is to understand precisely where Al infrastructure is truly taking off and, more importantly, how to get ahead of this unprecedented curve, this is your essential guide.

Explore the key regions, regulatory landscapes, and infrastructure dynamics shaping the future of AI deployment across APAC.

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Market overview:

APAC in the AI infrastructure spotlight

The Asia-Pacific (APAC) region is drawing in global cloud providers like never before. It's a unique combination of powerful market forces that makes it an absolutely vital place for investing in AI infrastructure.



Explosive end-user demand for Al services

With its vast and digitally native populations, APAC is a fertile ground for the rapid adoption of Al-driven applications. From generative Al transforming industries to advanced analytics optimising operations, the demand for computational horsepower at the edge and core is unprecedented. This isn't just about scaling; it's about being proximate to billions of future Al consumers.



Diverse geography and infrastructure readiness

APAC encompasses highly developed, mature digital economies alongside rapidly emerging markets. This presents both opportunities for greenfield expansion and challenges in ensuring consistent, high-quality infrastructure deployment, demanding tailored strategies for each sub-region.



Complex regulatory environments demanding data sovereignty

The regulatory landscape across APAC is a patchwork of stringent and evolving data privacy laws (e.g., Australia's IRAP, Japan's APPI, Singapore's PDPA) and national security frameworks. For hyperscalers, this means that simple colocation is insufficient; in-country data residency, sovereign control, and robust compliance mechanisms are non-negotiable, particularly for sensitive government and enterprise workloads. Navigating this complexity with a resilient strategy is paramount.



Strategic subsea cable landing zones

As the global data superhighway, APAC hosts numerous critical subsea cable landing zones connecting the region to the Americas, Europe, and beyond. Proximity to these vital network arteries is crucial for minimising latency, optimizing global Al inference, and enabling seamless data transfer for distributed Al models.

The competitive landscape is fierce. Hyperscalers aren't just expanding, they're aggressively racing to secure the right strategic partners that can deliver land, sustainable power, and hyper-reliable connectivity before the window of opportunity closes. This is about locking in strategic choke points for the Al-driven future.

Region-by-region breakdown:

navigating APAC's opportunities and constraints for AI deployment

The strategic lens for APAC site selection is sharper than ever, balancing rapid growth with inherent risks.

Singapore

The premium, power-constrained nexus

Historically a connectivity powerhouse, Singapore's stringent moratorium on new data centre developments, though recently seeing some easing of capacity, has fundamentally altered its proposition. This has driven a severe supply crunch, escalating real estate and power costs, making it a high-premium, constrained market for new, large-scale Al deployments.

Constraint

Hyperscalers face significant hurdles in securing contiguous land and reliable, sustainable power for the truly massive, high-density Al clusters now required. The focus is shifting to maximum efficiency within existing footprints.

Strategic pivot

This scarcity is forcing hyperscalers to pivot strategically. They are actively exploring proximate hubs like Johor (Malaysia) and Batam (Indonesia) for latency-sensitive, high-volume workloads. Simultaneously, they are looking to more sovereign-stable, high-capacity, and sustainably powered alternatives across APAC, such as Australia, for critical enterprise and government AI workloads that demand long-term resilience and compliance.



Australia

APAC's sovereign-grade AI launchpad and strategic alternative

Australia is rapidly solidifying its position as a critical, high-trust destination for hyperscalers seeking to deploy advanced Al infrastructure. Its unique blend of geopolitical stability, robust regulatory frameworks, and advanced infrastructure capabilities makes it a strategic choice, whether as a primary hub or a complementary node for APAC deployments.



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Al is a once-in-a-generation transformation and Australia is ready.

Matt Garman CEO

Amazon Web Services (AWS)

Global low-latency connectivity

Sydney and Melbourne offer unparalleled low-latency connectivity, acting as pivotal global nodes bridging the US and Asia. This is crucial for enabling the distributed training and inference demands of modern Al.

National compliance and strategic sovereignty

Australia maintains national compliance with critical infrastructure, defence, and privacy frameworks, providing a secure and sovereign environment for even the most sensitive Al workloads. It is also recognised under U.S. strategic technology policy, such as the Diffusion Act, as a Tier 1 allied infrastructure nation. This designation enables streamlined access to advanced Al technologies and reinforces Australia's role as a trusted partner for secure deployments, setting it apart from many other nations across the APAC region.

NEXTDC's AI Factory

NEXTDC is pioneering the next wave of digital infrastructure with facilities purpose-built for the era of Al. Our "Al Factory-ready" environments are engineered to support the extreme density and performance requirements of today's most advanced workloads. We're already designing to deliver up to 600kW per rack using liquid-to-chip cooling and other advanced thermal solutions enabling the deployment of dense GPU clusters and high-performance Al systems.

Certified for AI excellence

As a NVIDIA DGX-Ready Data Centre certified provider, NEXTDC meets the rigorous power, cooling, and operational standards required to support NVIDIA's most powerful AI platforms. This certification underscores our capability to deliver enterprise-grade infrastructure aligned with hyperscaler and AI-native needs. At NEXTDC, this isn't just capacity, it's infrastructure built for the future of AI at scale.

Japan

Stability amidst regional uncertainty

Japan remains a non-negotiable market, viewed as a critical "safe harbour" amidst broader regional geopolitical shifts. Its stability and forward-looking government policy make it ideal for specific, high-value AI deployments.

High operational maturity and political stability

Japan provides a secure, predictable, and highly mature environment for critical AI workloads, offering a crucial hedge against geopolitical instability in neighboring markets. This is underscored by companies like NEXTDC, which is in the planning phase to expand its data centres into Tokyo, recognising Japan's strategic importance.

Aggressive public investment

The Japanese government is making massive public investments in semiconductors, Al innovation, and renewable energy. Recent legislative efforts like the "Japan Al Bill" (under deliberation) and significant subsidies for projects like Rapidus underscore a national commitment to fostering a world-leading Al ecosystem, creating an attractive environment for hyperscale expansion.





Southeast Asia

Growth and growing pains – the scale vs. stability equation

The diverse nations of Southeast Asia are experiencing explosive demand for digital services, fueled by immense, young populations and rapid economic development. This makes them crucial for Al at the edge.

Explosive demand and favourable economics

Markets like Malaysia, Vietnam, Indonesia, and the Philippines present colossal opportunities due to their proximity to population hubs and generally more affordable land and power, driving the adoption of Al services.

Challenges in maturation

Hyperscalers must navigate variable infrastructure reliability (power grid stability, network resilience) and a mosaic of evolving regulatory frameworks that can complicate compliance and data governance. There's also inherent risk exposure from climate events, logistics complexities, and evolving political landscapes that demand careful due diligence.

Australia's complementary role

For hyperscalers building out multi-region APAC redundancy, Australia is increasingly positioned as a vital regional HQ and disaster-resilient node. It offers a secure, stable, and compliant counterpart to the high-growth, but potentially higher-risk, markets in Southeast Asia, ensuring continuity and performance for critical workloads.

Emerging markets to watch: the next frontier

Beyond the core established and rapidly expanding markets, several other regions are drawing attention for their long-term potential in the Al infrastructure landscape:

South Korea

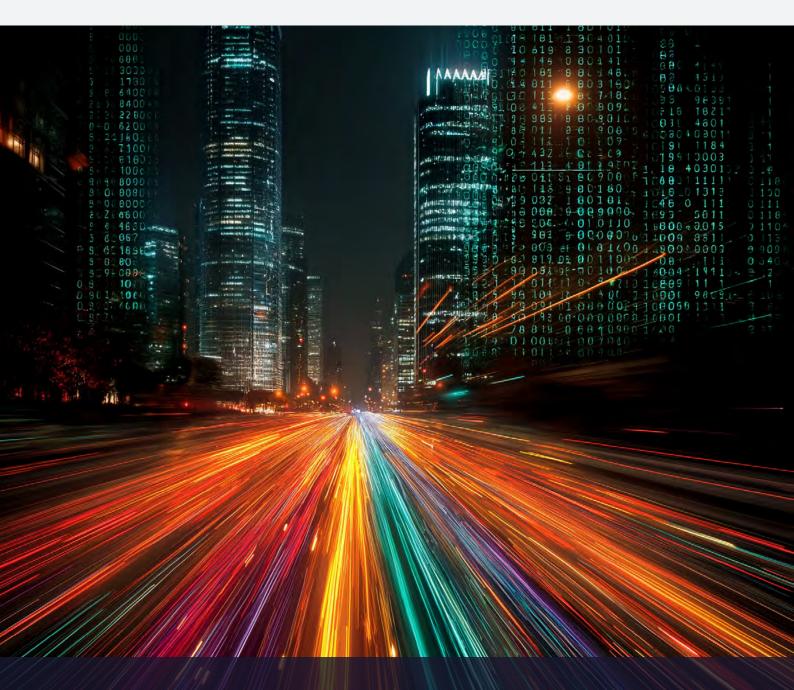
Rapid cloud growth and robust domestic Al ambitions, supported by widespread 5G and a strong semiconductor industry. The government is actively investing in becoming a global Al leader, including plans for one of the world's largest Al data centers by 2028.

India

A high-volume market with significant government investment incentives (e.g., India AI Mission), projecting massive data center capacity growth. However, it presents considerable infrastructure complexity and diverse regional requirements for compliance and deployment.

Taiwan

A global epicenter for advanced chip manufacturing, creating a unique ecosystem for Al. Its focus on digital resilience through cloud adoption is notable. However, persistent geopolitical risks remain a significant consideration for long-term strategic infrastructure deployment.



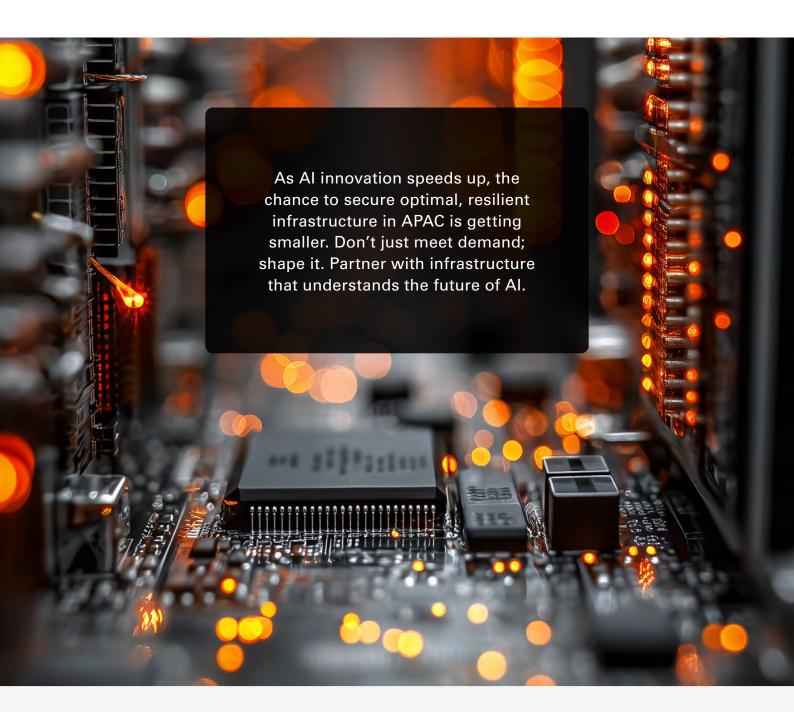
Conclusion:

securing your AI future in APAC's dynamic landscape

The Asia-Pacific (APAC) region is absolutely vital for hyperscalers who are building the future of AI. What we've learnt from mapping this market highlights a key point: putting AI infrastructure in APAC successfully means looking beyond just buildings and power. It requires a deep understanding of geopolitical changes, evolving rules, and the exact technical needs for very high-density, AI-specific tasks.

For executives tackling this complex area, it's not just about growing; it's about growing strategically. This means putting locations first that offer not

only scale but also sovereign trust, outstanding connectivity, and a clear path to sustainable, future-proof Al infrastructure. Australia, in particular, stands out as a crucial facilitator in this new approach, providing a unique mix of geopolitical stability, advanced compliance, and purpose-built "Al Factory" capabilities that modern Al platforms require. This is further bolstered by NEXTDC's planning phase to expand its data centres into Japan, recognising its strategic importance as a stable and forward-thinking market for Al deployments.



Ready to accelerate your Al infrastructure in APAC?

Understanding the APAC market is just the first step; executing a winning strategy is the next.

Don't leave your next-generation Al platform to chance. Our team of experts is ready to deep-dive into your specific requirements for sovereign compliance, ultra-high-density workloads, and strategic market positioning.



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Connect with our sales team today to map out a resilient and future-proof Al infrastructure strategy that secures your competitive edge.

Speak with our sales team





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