Navigating Asia's data center boom



Explosive growth is shaping unique opportunities in the Asia-Pacific data center market, explains Actis' Thomas Liu

The Asian data center market is experiencing unprecedented growth fueled by digital transformation, cloud adoption and artificial intelligence (AI). Lessons learned in the region can be applied to promising growth opportunities beyond Asia as the rapid acceleration of AI adoption increases demand worldwide, according to Thomas Liu, managing director at Actis, who explains how strategies are evolving with the rise of global hyperscalers.

Why are data centers considered such a critical growth opportunity in Asia?

I think that infrastructure that enables data, and the utilization of green SPONSOR **ACTIS**

energy to solve the increasing power demand consumed by AI, are two of the largest investment opportunities globally in the infrastructure space. Data centers have evolved into essential infrastructure due to an explosive growth in digital data consumption and processing demands. Even before the widespread advent of AI around 2023, cloud migration of enterprises and governments - powered by major providers like AWS and Microsoft - required hundreds of megawatts of new capacity annually across the globe.

The rapid uptake of AI applications has dramatically intensified demand, transforming requirements from hundreds of megawatts into multiple gigawatts of necessary capacity.

Hyperscalers, which mainly include tech giants from the US like Amazon, Microsoft and Google, along with an increasing group of Chinese hyperscalers, account for about 80 percent of all new data center capacity demand globally.

Asia stands out because its population is huge, yet most markets have relatively low per capita data center capacity compared with more mature markets, such as the US and most of Europe. Digitization across Asian

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How is AI and machine learning influencing data center Location preferences in Asia?

We are seeing interest from hyperscalers in establishing new data center regions in Asia. Traditional data centers, primarily utilized for cloud services, have been concentrated in or near major urban centers due to latency requirements and proximity to customers.

However, AI workloads, particularly generative AI and machine learning, do not have the same low-latency requirements, allowing for placement further from city centers where land is cheaper, power is more abundant and development timelines can be shorter.

New locations such as Johor Bahru near Singapore, Batam Island, Kyushu in Japan and Busan in Korea are being considered as AI-specific data center clusters. This shift mirrors similar trends in the US, where mega-scale AI data center campuses are being developed beyond the traditional cloud hubs of Northern Virginia or Washington state. This is just beginning in Asia. These new location strategies support the high energy demands of AI workloads while optimizing costs and capacity scale.

economies is still at an early growth stage, sustaining a rapidly expanding, yet far-from-saturated, market. Even for the biggest markets like India and China, representing a combined total capacity of approximately 6GW, there is significant growth still to come.

How can a developer differentiate itself in this attractive market?

Epoch Digital, Actis' data center platform with nearly 260MW of IT load, targets emerging and less saturated markets rather than established clusters. We believe this approach positions us as one of the few operators able to deliver capacity to hyperscalers where demand is strong but competition remains limited.

Actis was the first non-Korean firm to invest in data centers for hyperscalers in Seoul, securing contracts with major US cloud services providers ear-

Similarly, in Taipei, Actis provided scarce available capacity to US hyperscalers, supporting the launch of their services in this new cloud computing region.

Looking ahead, Actis plans to expand to other Asian markets such as Kyushu in Japan, aiming to be first movers serving the evolving AI demand. Our approach is proactive and client-focused rather than reactive or engaging in competitive bidding.

What does client-focused mean in data center development?

To attract hyperscalers, data center development strategies must account for the specifics of site acquisitions and align solutions with the precise timing and geographic needs of each company.

Actis commits to land and power acquisitions only after thoroughly mapping hyperscaler growth trajectories and demand forecasts, as hyperscalers typically sign a colocation contract one to two years before actually needing that capacity, so it may change.

When sourcing a site to build a data center, Actis assesses whether it meets the requirements of multiple hyperscalers. This means satisfying both their capacity requirements and their location requirements, usually within established clusters. Timing of capacity is key for hyperscalers. Delivering purpose-built, timely assets mitigates the risk of idle capacity.

What is behind the increasing interest in new



data center development from Chinese hyperscalers?

Until a couple of years ago, Chinese hyperscalers, led by the cloud service providers, had a huge presence domestically, but limited footprint internationally. Their capacity in each of the major Asian markets was typically less than 20 percent of that of their US peers. Recently, however, this dynamic has changed. ByteDance's rapid global expansion, driven by TikTok and e-commerce, has resulted in close to a gigawatt of capacity contracted in Asia alone over the past three years.

Additionally, the traditional Chinese cloud service providers have been actively building AI and machine learning infrastructure both domestically and outside China. In the last 12-18 months, we have seen a single Chinese hyperscaler signing up several hundred megawatts of demand in Asia (excluding China).

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How do developers approach those high energy demands?

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Unlike Western markets, most power markets in Asia are not liberalized, requiring developers to navigate monopolistic distribution channels and regulatory frameworks.

Actis builds and operates clean energy across growth markets, and while Epoch does not directly manage renewable energy projects, we believe being part of Actis provides an advantage in helping hyperscale customers secure renewable power for their data centers.

For example, in Southeast Asia, we are collaborating with Actis' renewable energy platform, Levanta, on renewable power supply in Malaysia. In Japan, we are exploring the sourcing of renewable energy for new data center sites with Actis' Nozomi renewable energy platform. In other markets such as Peru, Actis' energy platform, Orygen, is supplying power to NextStream, Actis' pan-Latin American data center platform.

Where do you see the main growth areas for data center development around the world?

Actis was among the first movers in data centers in Asia in 2016. Since then, we have expanded to Latin America, and we see opportunities in other growth markets, including the Middle East and Central and Eastern Europe. Currently, we have over 350MW of IT load across Asia and roughly 30MW in Latin America, with pipelines of over 1GW.

Countries like Brazil, Mexico, Colombia and Chile in Latin America already host substantial hyperscale demand from both US and Chinese players.

The Middle East is experiencing rapid investments in AI infrastructure driven by government initiatives. Central and Eastern Europe stand out due to plentiful renewable energy and lower costs compared with Western Europe, appealing to hyperscalers as they look for new markets for their cloud/AI infrastructure expansion.