KEYNOTE INTERVIEW

Data centres reach an inflection point

As AI and high-performance compute continue to shift the digital infrastructure paradigm, markets beyond North America increasingly offer compelling investment opportunities, say Partners Group's Nicholas Kuys and Ismail Afara

Global demand for digital infrastructure shows little sign of stalling, with a growing proportion stemming from markets beyond North America, including in Europe and fast-growing economies in Asia-Pacific. Although gigawatt-scale capacity is projected to come online in 2025, this will not be enough to meet expected demand. Looking across the global landscape, investors are increasingly finding compelling data centre investment opportunities outside of the more mature US market.

From a demand perspective, continued growth in cloud workloads complemented by new developments in AI are accelerating the need for significantly larger data centre facilities, say Nicholas Kuys, managing director at Partners Group, and Ismail Afara, a member of management at the firm. With new chips leading to higher-density server racks, the moment is ripe for operators to innovate the design of their facilities, creating more sustainable and future-proof infrastructure.

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Q What does the data centre opportunity set look like outside of the established North American market?

Ismail Afara: The European data centre market continues to grow strongly. Tier 1 cities benefit from an established ecosystem and therefore continued demand. We are also seeing overflow capacity from European and international enterprises go to other markets, such as the Nordics, where green energy is available under faster timelines and at cheaper cost. In light of the geopolitical context, domestic demand for capacity driven by data sovereignty considerations is growing.

We are also seeing a broader universe of scalable off-takers, be it

enterprises with substantial compute requirements or AI/high-performance compute (HPC) players. Each customer profile is solving for different requirements based on the type of workload they intend to run. The combination of high-density co-location needs and cloud demand has led to a surge in data centre capacity under development.

Time to market remains the most important driver of demand. The majority of clients that our portfolio company atNorth has onboarded came with short fuse requirements. Access to sustainable compute is also essential for many customers who are looking to limit the carbon footprint of their IT stack. Lastly, the ability to offer infrastructure that can cater to liquid cooled designs is a must to attract and retain AI workloads.

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>
> **NICHOLAS KUYS**

Q How do you see the outlook for demand beyond AI?

IA: AI is just one type of application running in the servers. There continues to be growing demand from cloud providers and enterprises looking to run other types of large workloads. Projections of power consumption for the coming years in all markets are multiples of where we are today, and that is not just coming from AI.

NK: There is a huge migration of enterprise workloads to the cloud. As organisations think about the digitisation of their business models, demand for cloud computing from the hyperscalers will continue to grow significantly. While there will be many more AI use cases as new tools are developed, it is more a systematic move to the cloud that will require ongoing capacity.

Nicholas Kuys: The Asia-Pacific region is seen as the "third leg of the stool", as hyperscale customers seeking a global footprint look to develop and lease cloud capacity in Asia to complement their US and European presence. The current compute capacity in Asia-Pacific does not reflect what the region represents as a percentage of the global population. Asia-Pacific houses 60 percent of the world's population, but less than 30 percent of global data centre capacity.

Compare this to the US, which has 4 percent of the global population, but 50 percent of data centre capacity. The result is that there is a huge amount of growing demand coming out of the Asia-Pacific region. This trend has directly led to our investment in GreenSquareDC, a data centre operator in Australia, earlier this year.

The recent AI Chip Diffusion Act passed in the US has designated five Asia-Pacific countries as Tier 1: South Korea, Taiwan, Japan, New Zealand and Australia. Given the complexity around permitting, build costs and geopolitics, we specifically like Australia for several key reasons: abundance of land, availability of power and strong rule of law.

The country is obviously also very aligned with the US, through the broader Five Eyes intelligence policy and the AUKUS security pact, which we anticipate will increase defence workloads significantly. We see a lot of positive tailwinds from these initiatives, combined with good sub-sea connectivity back into the broader Southeast Asia region and further connection upgrades underway.

The Southeast Asia market has also been growing significantly. Some geographies have been constrained, like Singapore, which a few years back introduced a moratorium on new data centre capacity due to power limitations. And while the moratorium has

since been lifted, new capacity approvals have been limited. That has led to overflow markets, like Johor Bahru in Malaysia, where we have just acquired a new platform, Digital Halo, stepping up significantly in recent years to provide an alternate data centre hub.

Q What lessons from different regions could be applied across geographies?

NK: Established data centre markets are becoming power-constrained, so we are being really proactive on the power front in new markets. While there is currently an abundance of power in these new regions, it is expected it may be locked up quickly. We are extremely focused on securing the power capacity, but also where possible, 'greening' that supply to make our data centre offering more attractive to customers. Certain regions are more attractive for that, like the Nordics, but we are also looking to apply that technology and design across our broader data centre portfolio.

Some providers are global platforms. We believe regional platforms are a better option because there are pertinent nuances, such as sourcing power and how local legislation works. You need a local presence to best understand them.

That said, while we are looking to establish regional platforms around the globe, we are also thinking about how we can combine design and procurement best practice across the various regions to industrialise our development and delivery capability. There are a lot of long-lead items and supply chain bottlenecks, so how can we collectively form strategic procurement framework agreements with leading suppliers? It is not just about cost, it is about being able to secure manufacturing slots, delivery timetables and after-sales service. How can we be viewed as a key strategic client of data centre equipment suppliers, so that we can ultimately deliver a high-quality product to our customer in the timeframes required?

IA: A successful operator needs to excel across all dimensions, from site selection to operations, and scale adds complexity. Customers commit substantial budgets to acquire servers that will run for many years in our infrastructure. Managing that portfolio and building a track record requires a highly experienced management team.

The market has already substantially evolved and will continue to change, which has led us to future-proof our infrastructure from the start. That means being mindful of where and how we build and at what density. But it is also essential to listen to what the customer is solving for, what matters to them and how we can grow together. Half of atNorth's yearly sales come from existing clients who decide to continue to expand with us.

Q How much of a priority is sustainability, given power constraints?

IA: That is still very relevant for most of the market. Some customers have come to the Nordics to reduce their carbon footprint. Others pick locations where power is most readily available, but not at any cost. It has always been and will continue to be a mixed picture. If we focus on the largest offtakers in the market, running green compute continues to be a key priority.

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In the Nordics, we consume most of our energy from geothermal or hydro sources to reduce emissions. However, sustainability is more than just what type of power generation feeds into your site. There are also circularity concepts. We are implementing heat reuse solutions, effectively recycling the heat from the servers and providing it to residential and industrial users. That is a key site selection requirement. We are also looking to recycle equipment, to limit water usage and to use sustainable construction materials. Sustainability for us is similarly about engaging with the community. It is about local job opportunities and restoring biodiversity on the land where we build.

NK: On green power, it will be evolution, not revolution. Uptime is the critical factor for data centres. That said, given the huge amounts of power that these facilities consume, anything that we can do around lowering the emissions footprint is extremely beneficial to our customers. For example, where we have diesel backup generation facilities, we are investigating whether we can look at alternative lower carbon dual fuel supplies. We have extensive experience building out renewable platforms and writing green power purchase agreements for clients. Now, as data centre owners, we can be those clients on the other side of the negotiation table.

The other major move on sustainability for the data centre sector is water consumption. New facility designs are focused on significantly lowering water usage as campuses go from 5MW, 10MW, 20MW to potentially multi-hundred-megawatt facilities. Water usage becomes very relevant. There is also the potential for operators to make use of wastewater, treat it themselves onsite and supply it to their facilities. Building out greenfield sustainability-focused platforms is much easier than trying to retrofit old campuses, which in turn allows us to benefit from the current disruption. ■