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KEYNOTE INTERVIEW

Data centers are 'a generational opportunity'



AI-driven demands for data centers and constraints on the supply of land and power have created a sweet spot for investing in developments and stabilized assets, says PGIM Real Estate's Morgan Laughlin

Data centers have become essential digital infrastructure for modern life, underpinning the global economy and providing the architecture for business and leisure applications. Furthermore, the development of AI and machine learning has sparked a new wave of demand, as these applications require colossal processing power.

Morgan Laughlin, managing director and global head of data center investments at PGIM Real Estate, believes that this has created an investment opportunity in data center development across key global markets more compelling than anything he has seen in his 35-plus year career.

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Q How has the data center space evolved since you started investing in it?

The most significant change is obviously AI, which has hit the industry in three ways. One of those is overall demand, which has ramped up and accelerated the rental growth in the sector.

We had already identified a growing mismatch between demand and supply in hyperscale data centers, but the unexpected speed of growth in AI-associated requirements hugely

accelerated demand. We suddenly moved from measured positive rental growth to upward of 15 percent per annum across most Tier 1 markets as supply went from being tight to being severely constrained.

Secondly, the design of data centers has been impacted. The need to house and cool much more power-dense GPU server arrays led to the increased use of liquid-based cooling solutions and triggered some corresponding changes to building design and specifications.

Lastly, geographic options for data centers have expanded. Latency is a key measurable in data center land.

For traditional cloud services, having sufficiently low latency for information flowing between the end user and the data center defines the suitability of a location. In an AI training application, the critical latency measure is within the training process – the latency between the training algorithm and the data set. This means that proximity to major metros – a key consideration for a cloud services-focused data center – is much less of a concern for an AI training campus.

Q Why is data center development attractive today?

I believe the opportunity to make attractive risk-adjusted returns in data

center development is going to have a long run, underpinned by expansive demand for these assets and the restrictions on supply. However, there is a shorter window to make outsized returns before land prices fully adjust and push down development margins and development yields.

Over the longer term, we believe that development returns in the sector will remain relatively high compared with other types of infrastructure development, but not at the levels that are presently achievable.

Q What factors make investing in stabilized data centers attractive? Where is it best to invest?

I believe that there is a good long-term story for the ownership of stabilized data centers due to an enduring disequilibrium between supply and demand. This mismatch won't go away in the near term, and it is likely to intensify due to the unfettered growth

in demand set against the increasingly constrained supply.

This is especially true for traditional cloud locations with low latency to the end customer. I believe these areas face the greatest limits on new powered land sites, while continuing to have strong demand growth.

AI has taken the headlines, but the majority of hyperscale demand still comes from traditional cloud services. Going forward, the demand for this low latency capacity will be amplified as AI inference applications continue to multiply.

Value growth will be achieved through two primary means – rising rents and tightening cap rates. Today, 15-year service level agreements are being written with 2-3 percent annual escalators, while market rents are rising annually at double digits. That is a highly attractive thesis to buy into and I believe this will result in rising capital flows into the sector.

I see parallels between data centers

“The opportunity to make attractive risk-adjusted returns in data center development is going to have a long run, underpinned by expansive demand for these assets and the restrictions on supply”

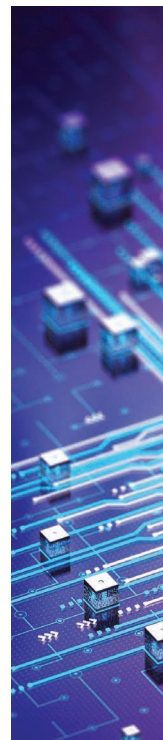
Q How does the ‘operator independent’ model work and how does this compare with alternatives, such as finding a global operating partner or developing an in-house capability?

Compared to the operator independent model, the captive operator model is more of a traditional private equity approach, exclusively utilizing an in-house operator to originate, develop and operate the data center projects. The focus on creating value in the operator entity results in the fund being captive to its operator's capabilities.

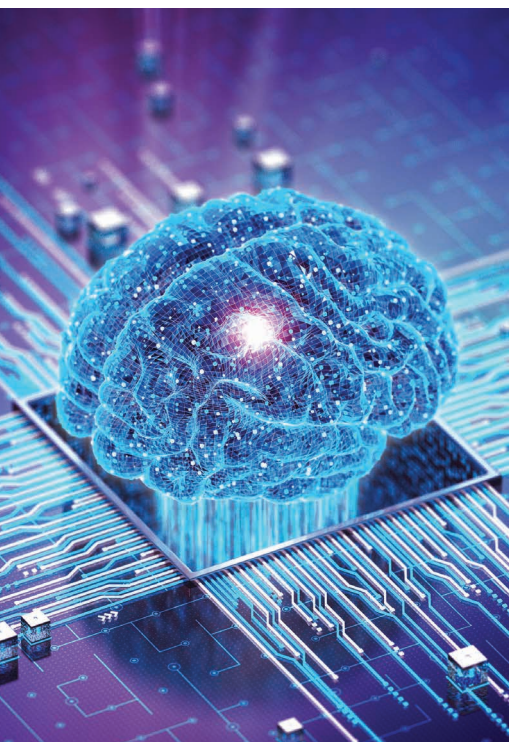
In contrast, the operator independent model that PGIM Real Estate uses allows us to select projects from a range of opportunities focusing purely on the investment merits and the operator's abilities resulting in more options and lower execution risk.

Exceedingly strong customer demand is causing many well-established data center operators to seek incremental capital to fund their development pipelines. These operators often have shovel-ready land but lack the necessary funding to develop them. As a highly experienced and yet “neutral” data center investor, we are well placed to provide the capital needed to unlock the value of their land holdings.

Furthermore, we leverage our global platform to originate land suitable for data centers development and select the best-suited operating partners for these sites. Unlike the captive operator model, this allows us to enter new markets without the added risk of building a local operating team.



“Data centers are integral to the digital infrastructure on which we are highly dependent for virtually every aspect of our lives”



and the logistics sector's evolution. Previously, logistics was seen as highly specialized, attracting few direct institutional investors, whereas now logistics is integral to most institutional portfolios. I predict a similar, but quicker, progression for data centers.

This evolution will cause cap rates to compress along with increased sector liquidity. Currently, data centers generally trade wide of prime logistics. I believe this is unsustainable given data centers have stronger demand growth and are less tied to macroeconomics, with less elasticity in supply.

Q How difficult is it to acquire good quality data center assets?

Theoretically, there is quite a bit of stock available in the market, but presently there is a bit of a bid/ask challenge. When interest rates went up, cap rates for stabilized data centers moved out. People who had built assets to a 6.5-7 percent development yield found they could no longer capture an attractive differential to stabilized yields.

Assets that might have traded in the low 4s before interest rates rose are now finding limited interest at 6-6.25 percent type pricing. While the market does not need to get back down into the 4s to clear, we are seeing few active sellers at the present yields with some deals being pulled following disappointing market response.

However, I strongly believe that this is temporary condition. As investors increasingly understand the investment case for data centers relative to other sectors, it will attract more capital.

This increase in sector liquidity, with a bit of tailwind from the expected fall in interest rates, will result in tightening caps. It is worth also noting that, as time moves along, pressure will also increase on development funds to sell completed assets and return investor capital.

Q How much of an opportunity is there in

acquiring and upgrading older data centers?

I am certain that someday strategies will develop around this theme, but presently the incremental investment needed to meaningfully improve the efficiency of a data center can't be offset by the increase in capacity and rental income. That said, if rents get high enough, the value of adding, say, another 10MW of capacity to a 20MW 2.00x PUE facility through improved cooling systems could be a compelling investment story.

Q Do you see anything which could undermine the rising value of data centers?

The only thing I can see making a significant difference would be a major technological leap that removes the power constraints on the sector. For example, broad adoption of micro nuclear, nuclear fusion or a major breakthrough in high efficiency solar technology allowing every home to be energy self-sufficient. Still, such changes would take years for widespread implementation, especially those requiring regulatory approvals.

The primary challenge and opportunity in the industry is the ability to deliver new supply. In addition to the physical infrastructure problems tied largely to power availability and distribution, there are a host of other micro limitations such as zoning, local legislation and NIMBYism that constrain growth. These limitations on growth ultimately means that existing data centers will continue to rise in value.

I also don't see demand falling away. Data centers are integral to the digital infrastructure on which we are highly dependent for virtually every aspect of our lives.

Today, I believe digital infrastructure is the most important infrastructure, because no other infrastructure works without it. Roads, ports, bridges and airports simply don't function without digital infrastructure. ■