

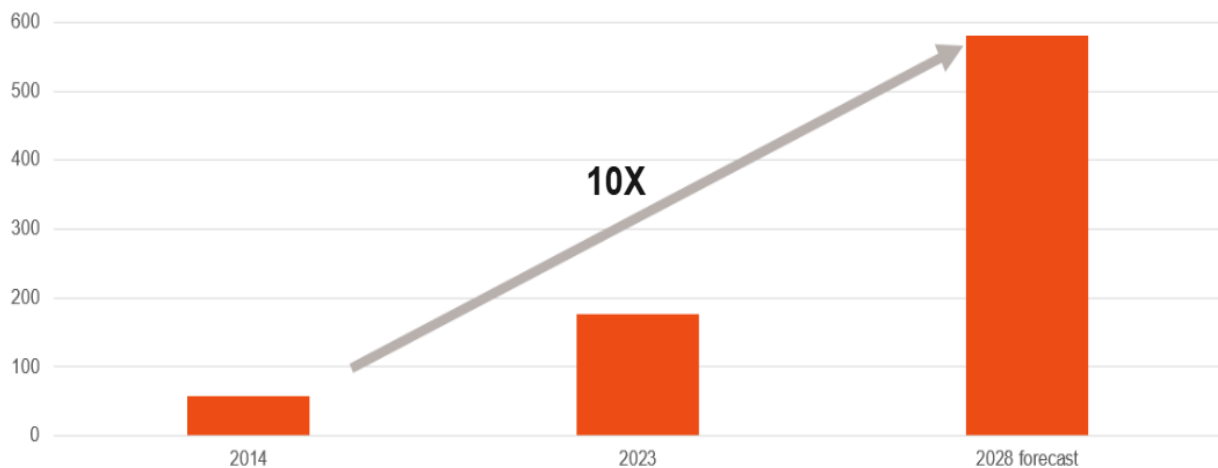
The digitalisation infrastructure revolution

June 2025

Digital was an established infrastructure sector before COVID-19 but gained prominence during the pandemic due to society's reliance on digital communications during lockdowns. While data consumption and processing growth was already a trend, it accelerated during and after the pandemic, making digital infrastructure an essential service. Since the launch of ChatGPT in November 2022, the emergence of generative artificial intelligence (AI) has only added to these tailwinds for digital infrastructure.

Digital infrastructure had developed a track record for strong, stable returns driven by “more than a decade of double-digit year-on-year (YoY) mobile data growth”, according to Dean Steinberg, Consultant, Frontier Advisors. “Data processing demand is energy demand, and that energy will have to come from somewhere.”

Chart 1: United States data centre electricity demand (TWh)



Source: US Department of Energy

Lucy Minichiello, Frontier's Head of Real Assets, said that while the focus in recent years has primarily been on data centres, the broader digital infrastructure universe comprises more than just data centres. “10 to 15 years ago, the debate was around whether fibre and towers, historically referred to as telecommunications assets, could be considered infrastructure assets. Today, the debate is very much focussed on data centres and whether they are appropriate for the infrastructure asset class.”

Minichiello noted that when evaluating opportunities in the digital sector, there are key infrastructure characteristics that investors need to look for, including cash flow stability provided by long contract lengths with annual escalators (CPI or fixed); high barriers to entry; and demand not being correlated with GDP so the assets should continue to perform well in difficult economic environments. Mobile towers, for instance, are capex-intensive, and the long-term leases and mature networks provide significant barriers to entry for new players looking to compete.

Julian Gray, Investment Director from IFM Investors, added the market for towers "...is quite mature and consolidated...especially in the US where high-quality platforms have been built out over time. So, finding the right niche in the right segment is really important for infrastructure managers".

Meanwhile, investment outcomes in fibre have been mixed due to high levels of overbuild and competition. A deep understanding of the revenue structure for the different fibre businesses is critical, as it can vary widely depending on the type of network, market and regulation.

Kate Misisic, Acting Chief Investment Officer, TelstraSuper explained that TelstraSuper's foray into the data centre market was a manager-led journey. She explained how the value-add infrastructure manager started by developing co-location facilities but has since evolved with the market to also provide for hyperscale customers and now is building data centres specifically for AI training.

Gray highlighted the sheer demand for data centre capacity sharing that "In New South Wales there are about 12-14 GW of applications from developers to build data centres and the forecast is that only 5-6 GW will be built over the next ten years. So, there's a lot of scrambling to get sites, [to] get power, [to] create optionality." Still, both he and Misisic were wary of overbuild risk.

Minichiello highlighted that different types of data centres have different lease profiles, which can provide downside risk mitigation that infrastructure investors are looking for. "Co-location facilities, for example, are subject to shorter-term contracts, which can present re-leasing risks, ...[but] hyperscale data centres like Airtrunk where the contract could be five to ten years... re-leasing is less of an issue." Conversely, the co-location model provides data centre owners with a diversified customer base, whereas the hyperscale model leaves owners with single-customer concentration risk.

Data centres are facing increasing expectations around sustainability, regulatory compliance and environmental responsibility. "Now you can demand data centres to be renewably powered – that was something you couldn't demand ten years ago," said Misisic. "There's a lot of work being done to reduce embodied carbon footprint, akin to what has occurred in the real estate sector. Some tenants are very conscious of their carbon footprint and demanding lower upfront carbon in terms of construction and design." Misisic also pointed out that most of the energy demand in data centres is generated by the customers themselves as they own the energy-intensive computing inside the data centre. Those customers, especially hyperscalers, sign their own renewable power purchase agreements to reach their net zero aspirations.

On valuations, Gray noted several data centre deals have transacted at very high valuations. "There's a lot of closed-ended infrastructure funds that are invested in very large data centre businesses, and over the next ten years they will be looking to exit," he added. "The ability of the listed markets to absorb these businesses, both locally and in the US, is going to be interesting".

Next steps

Frontier has written an extensive research paper on [digital infrastructure](#), which clients can access through Partners Platform. For non-Frontier clients, if you are interested in learning more, get in touch with Dean Steinberg, Consultant in our Real Assets Team at dsteinberg@frontieradvisors.com.au.

Frontier can also advise investors on their digital infrastructure allocations including the right manager to partner with.