

Africa's data centre growth opportunity

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Africa is amid a rapid digital transformation and this is creating attractive opportunities for investors looking to generate significant economic returns and investment impact.

New ways of doing business digitally, a rapid acceleration in mobile data consumption, and a booming tech sector across the continent's major industrial hubs is putting new strains on Africa's digital infrastructure.

Datacentres, fibre-optic broadband expansion and telecom towers are set to become the new backbone of Africa's economic growth. Investment in this new wave of digital infrastructure requires extensive local knowledge and a growth mindset.

More businesses and households are connecting to the internet for the first time, and the continent is experiencing the fastest increase in internet penetration worldwide. Mobile data consumption across Africa is expected to increase by 40% each year until 2025.

This is nearly double the global average growth rate.

Meeting this new demand is an opportunity for the continent to leapfrog outmoded technologies like the copper cables still spanning many developed countries and create a new generation of high-tech African jobs.

Growth in data generation and demand

Africa's data demand boom is partly fuelled by an increase in connections and partly by the way we use the internet.

Urbanisation and population growth paired with a continuous expansion of 3G, 4G and – more recently – 5G networks allows more and more Africans to connect to the internet.

Their consumer behaviour already mirrors a global move towards people spending more of their lives online; connected South Africans are now the world's most online people, and Nigerians and Kenyans are among the top 5 nations for time spent using social media.

The smartphone is how most Africans connect to the internet.

At the same time, Sub-Saharan Africa's 64% smartphone adoption rate in 2021 was the lowest of any global region. It is expected that by 2025 the rate for Sub-Saharan Africa will increase to 75% while other global regions will be at above 80%.

This suggests there is still tremendous potential for growth in internet usage. But the expected growth in data transfer and storage is also driven by the way the internet is accessed and used across the continent.

As mobile customers shift from GSM to 3G and 4G and from feature phones to smart phones, there is an exponential increase in data traffic.





For example, a low-resolution picture takes up about 0.3MB, whereas a video will take up a staggering 10 to 50MB per minute, depending on the resolution.

Beyond personal usage, digital-enabled businesses and corporations drive data generation and consumption in Africa. 2021 was record-breaking for Africa's technology sector, with more tech start-ups completing \$100 million investment rounds than ever before.

Digital technologies are also transforming every sector of the economy, from manufacturing and sales to communications and talent management. According to the World Economic Forum, 60% of global GDP is expected to be digitised by 2022.

Digitisation has become not just an enabler, but a necessity for economic activity. And just like for personal usage, change in technology is a key driver for data growth. For example, video conferencing, cloud computing, data mining and artificial intelligence, as well as the internet of things, are all producing and using vast amounts of data.

Identifying infra gap / opportunity for data centres

Despite the importance of a growing digital economy to Africa's growth aspirations, there is still a lack of digital infrastructure across the continent.

Investment in new submarine fibre-optic cables continues to boost intra-continental connectivity, but further investment is needed to extend this connectivity inland.

Broadband cellular network technology – from 3G to 5G – is expected to connect most of Africa's devices to the internet, but this technology requires telecommunication and data centre infrastructure to operate.

AllM has therefore identified the digital infrastructure sector as a key focus area, including fibre connectivity, telecommunication towers, and data centres.

The potential rewards for providing the infrastructure necessary to enable the continued growth of the digital economy are substantial. The IFC has identified that increased online activity will add an extra \$180 billion to Africa's economy by 2025.

The vast amount of data produced and consumed on the continent will support data centre investments in the region.

Consumers expect – and modern applications require – faster connectivity, greater stability and lower latency. These trends, paired with new data sovereignty laws and higher security requirements, will further promote the onshoring of data.

There is 250MW of installed data centre capacity across Africa, forcing people to rely on data centres thousands of miles away, in South Africa or outside Africa.

Demand for data centres across Africa is expected to exceed supply by 300% in the coming years.

A rapid increase in capacity to 1,200MW by 2030 is needed to support the growth potential of the continent's digital economy.

Meeting this demand for modern data centre capacity presents an attractive investment opportunity for AIIM.

Recent acquisitions of African data centre providers by the world's major data centre operators show that this view is recognised beyond the continent's borders.

But despite these significant investments, with a market experiencing an annual compound growth rate of 12%, ample opportunities remain across Africa to develop and expand data centre capacity.

A digital, impact-driven investment approach

New data centre infrastructure should be state-of-the-art, high-capacity, power-efficient and climate-resilient.

The Onix Accra 1 data centre, acquired through African Infrastructure Investment Managers' (AIIM) <u>AIIF3 Fund</u> is Ghana's only Tier IV-accredited facility and the most advanced data centre in the country, and has been designed to serve international and local enterprise demand and has its own captive solar PV facility on site.

Aspects like design, efficiency and energy sources should be top priorities for investors to consider when planning a digital infrastructure investment strategy capable of capitalising on Africa's emerging digital economy.



Greenfield locations and expansions across Sub-Saharan Africa provide significant opportunities for returns on data centre projects.

Strategies that focus on building platforms to foster organic growth and that pursue economies of scale, thereby offering competitive solutions for customers, also align strongly with impact investment models.

The Onix Accra 1 data centre investment is a flagship example of a sustainable and climate-conscious investment in digital infrastructure.

Impact-driven strategies also have the added benefit of supporting the UN's Sustainable Development Goals, particularly economic growth and climate action.

By supporting the development of critical digital infrastructure, including data centres, there is an opportunity for investors to encourage job creation and new growth opportunities across the continent while achieving attractive investment returns.

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