Africa's opportunity to bridge the digital divide



The African data centre market offers many opportunities for investors but regional and country-specific differences must be recognised first, says Africa 50's Raza Hasnani

There are many nuances that exist between regions and countries on the African continent that can have a significant bearing on investment strategies. This is particularly apparent across the African data centre market, where a wealth of opportunities and challenges reside.

Raza Hasnani, managing director of infrastructure investment platform Africa50, outlines the various market dynamics across Africa for a data centre market that boasts huge growth potential continent-wide. To unlock this potential, investors should ensure that

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they work with credible partners who are willing to roll their sleeves up and explore the economic and regulatory complexities of a data centre market still in its evolution.

What is your main investment rationale when targeting the African data centre sector?

At our organisation, one of our core

theses is connectivity in Africa. So, driving connectivity is hugely important and investing in data centres is synonymous with this, as is enabling more efficient access to data. Data localisation also features heavily within our thesis, which is not only a regulatory imperative but also makes sense for the economies of individual nations. It allows for lower latencies, creates downstream job opportunities, and ensures data sovereignty. It often makes more sense to have your data stored within national borders rather than outside them.

From an investment perspective, there is incredible untapped market potential. There is lots of room for growth, supported by latent demand - demand that does not yet exist because the supply simply isn't there. The business model of data centres is also very robust, supported by both technological development and broad-based investment trends.

Once you have an operational data centre, which is quite challenging to do, the margins can be very attractive and there are substantial barriers to entry. Revenue streams are stable, and contracts are often hard currency-linked there are also very high switching costs.

If a company has its data at a particular location, it is very unlikely to want to switch somewhere else to save a few dollars. It is much more important to have secure, accessible, reliable data.

What are some of the market dynamics to be aware of when investing in Africa?

As far as market dynamics are concerned, there is a huge capacity for data centres in sub-Saharan Africa, which makes the region primed for fast-paced growth. The IT load in sub-Saharan Africa stands at a fraction of that seen in individual European cities, so the room for growth is huge.

South Africa, which is by far the most developed market in the region, was expected to post a CAGR of approximately 16 percent between 2017 and 2029 according to the latest data. Other data centre markets, including Nigeria, Kenya, Morocco and Egypt, are forecast to grow at even higher rates. When you consider peripheral markets, such as Uganda, Ethiopia or Mozambique, the rates are higher still because you are starting from a lower baseline.

If you took the rest of sub-Saharan Africa and aimed to have even the same data centre density as Kenya, you would need 30MW of additional capacity. It is estimated that between 10

How should investors approach the African data centre

I think the most important thing for investors is to find credible partners. They must conduct robust due diligence regarding estimates and projections. If you are looking to work with a company, ensure that management have a proven track record of delivering and it has sufficient resources.

The collaboration we have with our investee company PAIX Data Centres is a good example of a successful partnership in motion. PAIX is a Pan-African provider of cloud- and carrier-neutral colocation data centre services in Africa with operating data centers in Ghana and Kenya. The company also has projects in advanced stages of development in multiple countries, including Rwanda, Senegal and Côte d'Ivoire.

Investors must do their homework. There are a lot of different markets in Africa, and they all have their nuances. Hyperscaler contracts will not appear overnight. Focus on under-penetrated markets and offer a unique solution; remember that the market is growing but it is a gradual evolution. Our approach is always to crawl before you walk and walk before you run.



PAIX Data Centres: the Pan-African provider has operating data centres in Ghana and Kenya and has ongoing projects across the region

and 30 percent of effective data centre demand in sub-Saharan Africa is being served today. Therefore, many enterprise and hyperscale customers do not have access to the types of digital infrastructure they need.

However, it is important to recognise that each country on the African continent is different, so any investment strategy needs to be extremely nuanced. Take more advanced nations in this space, such as South Africa, Nigeria or Kenya, for example. South Africa already has several hyperscaler data centres in operation. The others are primed to follow suit, with flourishing digital economies. Then there are small countries like Mauritius that provide favourable conditions for data centre investment from ISPs and other customers.

Countries such as Senegal have a very strategic location, while other regions all have their own strengths, too. We do not think of an African data centre opportunity - we go in and look at each individual market at ground level.

What are some of the growth catalysts in the

African data centres space?

There is increasing data usage on the continent. Ordinary customers are using an increasing amount of data and are no longer content with just using data on their phones. They want to work from home, watch Netflix and study online. The amount of data coming in is rising, so it is important that content providers can house this data locally. In many African markets, there are local app and gig economies. Businesses that once kept their servers in-house are now fully onboard with outsourcing trends. The hyperscaler movement is another growth catalyst that cannot be ignored.

In terms of projections, we are excited about the future of the African data centre space. The commercial colocation market alone exceeded the half-billion dollar mark in 2022. This is significant but represents just 3 percent of a \$20 billion African enterprise ICT opportunity. Data centre capacity is predicted to skyrocket, IT loads will ramp up significantly and revenues will surge. These projections all point towards exciting new opportunities for investors.

On the other hand, could you describe some of the challenges?

Sustainability is, of course, is something that data centre operators must be mindful of. It is extremely important to have green data centres. However, many of Africa's markets are currently at a stage of evolution where it is not always possible. The reason for this is that they have a lot of enterprise customers who do not want to travel a half day out of town to see their servers. So, for that important customer segment it is very important for data centres to be accessible in city centre locations.

You cannot easily build a solar plant or wind farm in the middle of the city, so accessibility is currently restricting renewables. We need local policies to encourage wheeling of power so that green electrons generated elsewhere

"We do not think of an African data centre opportunity as a whole-we go in and look at each individual market at ground level"

can be used at city located DCs, but those regulations are not there yet in many markets.

Other challenges include the fact that it takes much longer to set up a data centre in Africa than in many other regions. You must partner with people that know what they are doing. There is a lot of misinformation and posturing in the market with aspirational announcements of large capacity additions and timelines, which means customers prefer to wait for operating DCs rather than sign up for future capacity.

While it is not always easy to find the right management talent, it is very worthwhile. Local management is usually the best management, so efforts must be taken to cultivate talent.

There are marked differences in the infrastructure ecosystems in the various countries and these also be considered.

Finally, it is imperative that we improve the interconnections on the continent (whether through fibre networks, ISPs, or subsea cables) - this is not so much a challenge but an opportunity. Enhanced regional connectivity, allowing data to flow seamlessly through borders is great, especially for land-locked countries. This will drive down costs, improve reliability and serve as a catalyst for economic growth.

What are the main differences between open markets and state-controlled markets for investors?

Open markets offer ease of entry and expansion. They provide, generally, a predictable process concerning business formation, but there is quite a lot of competition. You are free to innovate, and pricing is very dynamic though so there are opportunities for tighter ownership and greater control.

Ideally, a data centre operator wants to be present in an open market with ample choice of fibre network providers, as there is more room for growth, but that does not mean completely rejecting markets with more state intervention. It may be that a market at an early stage of development requires the stability provided by state involvement.

Data centre investment requires a lot of capex. So, knowing that a country has a policy that supports tech investments is important. From our point of view, we would not invest in a market if the investment only made sense due to state subsidies. However, we fully understand that different markets are at different stages of their evolutionary journey.

One way to compare markets and, indeed, individual data centres is by looking at relevant metrics. In Africa, much of the infrastructure around data centre assets does not exist - we must build it first; so there is a significant greenfield component to the investment.

A lot of the value is crystalised from building a data centre in the first place. As such, the metrics we look at are a mixture of both growth metrics and operating metrics; the capex per megawatt, the expected utilisation rate, the monthly revenue per rack, the length of contract, the power usage efficiency and ancillary sources of revenue.

Raza Hasnani is managing director, head of infrastructure investments at Africa50 and chairman of the board of PAIX Data Centre