

THE STATE OF THE AFRICAN DATA CENTER MARKET

The African data center investment case in the age of
cloud and at the onset of the AI era

Report Overview – Sample
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July 2024





We provide the data and strategic insights that underpin our clients' investments in digital infrastructure, from connectivity and data centers to cloud and AI

Investor resolve gets tested, but the opportunity to enable Africa's age of cloud and AI remains compelling



Rarely has the burgeoning African data center market been as challenged as it has over the past two years.

Data center capacity buildout lost momentum in 2022 and 2023. The number of new facilities coming to market declined nearly 40% in 2023, the second consecutive year of contraction for this indicator, against a challenging operating backdrop and persistent supply chain constraints. Annual growth of live commercial data center capacity decelerated, rising only 12%, well-below the 30% average of the previous two years.

African data centers have had to grapple with perhaps the toughest macro-economic environment of the past decade. Inflation has averaged as much as 30% in some of the region's top markets. Local currencies have depreciated precipitously against the USD; both the Nigerian Naira and the Egyptian Pound were devalued and lost more than half of their value against the dollar. In South Africa and Nigeria, the power grid has been buffeted by persistent blackouts or outright collapses. FDI is down 40% from 2021 levels, and many Western multinationals are cutting back or exiting some key markets.

Building what is essentially a new, capital-intensive, high tech infrastructure business in such a context is tough. And still, we find that the systemic fundamentals anchoring demand for data center capacity in Africa remain very much in play. The region's digital foundation is deeper, with ~700m broadband connections, more than 60% of which are now 4G, 5G or fiber. More submarine cables are coming onshore, data traffic growth remains explosive, and the region's network, content and cloud ecosystems continue to densify. Enterprise digital transformation is proceeding apace and cloud services are the fastest-growing segment in the ICT marketplace outside of mobile money. The region's demand potential remains considerable and is now boosted by the potential of gigantic requirements to support AI deployment.

There is much to build still. Africa accounts for only around 1% of global installed data center capacity, well short of the region's contribution to global GDP or population. By our estimates, Africa's share of global data center capacity actually *declined* in the past year. The market now looks primed for a rebound. African markets have entered a new phase of buildout – boosted by some spillover from delayed projects, a push to meet demand in next tier markets and expanded build in smaller secondary markets. New facility construction over the next three years (2024, 2025, 2026) is set to surpass all previous buildout surges, and much of this growth will take place outside of South Africa.

Over the course of our work and research for this report, we have found investor mood to be more sobered up; macro challenges and tighter sales ramp-up have tested investor patience and sowed some seeds of doubt in the narrative of the African data center investor case. There are plenty of questions around the evolving African commercial model – what's going on with demand ramp-up? What are the hyperscalers doing outside of South Africa? What's going on with colo pricing? Can African facilities support AI deployments? As is now established tradition, this report, our latest opus on this market explores them all and more. We do it the Xalam way, with a deep-dive into the data and unvarnished insights into the commercial opportunity in building Africa's hosting capacity.

Our conviction in the long-term upside of this market remains steadfast - but this, we say, is a slog of a journey. Buckle up.

Malaikum Xalam.

They are transforming the African data center market



Research scope, structure and sample pages

What exactly is in this report?

How this report is structured



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The state of the African data center market

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Egypt: a supply-constrained market is now racing to catch up in the face of tough macro headwinds

Kenya: Africa's next hyperscaler destination gears up for accelerated growth

Nigeria: West Africa's largest economy races to catch up in the face of considerable macro-headwinds

Morocco: macro stability underpins solid upside potential, despite persistent constraints



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- On the market's competitive structure and a strong growth outlook – with caveats
- On the African power challenge and infrastructure readiness for AI

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- Africa commercial data center construction: ready to rise again, after some lost momentum
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- The African data center market: a cluster view
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- On power, sustainability and readiness for AI
- On capacity absorption and colo pricing movements
- On African data center CapEx and build cycles

SOUTH AFRICA: AT THE HEIGHT OF CLOUD, NOW BUILDING TO SUPPORT AI

- Africa's largest and most mature economy - amid a tough macro operating context
- Despite the tough macro, SA still has Africa's best mix of colo fundamentals
- Africa's deepest demand potential: 500MW+ over the next decade, with some AI upside
- South African commercial capacity growth is still on the upswing
- Johannesburg and Cape Town – economic, connectivity and cloud hubs
- Data center competition: an increasingly crowded, and specialist-dominated marketplace
- South Africa commercial colo strategic mapping: a market with two distinct ends
- South Africa pipeline: still building
- South Africa's supply slated to double, mostly through new builds
- Market economics: Strong demand is propelling the South African market to the billion-dollar mark

EGYPT: A SUPPLY-CONSTRAINED MARKET IS NOW RACING TO CATCH UP IN THE FACE OF TOUGH HEADWINDS

- Egypt is Africa's second largest economy, and a crucial corridor for global trade
- Egypt is the third largest data center market in Africa – and supply-constrained
- Egypt commercial colo strategic mapping: a widening split between wholesale and retail
- The Egyptian capacity build pipeline is ambitious
- We are projecting Egypt's available supply to expand 5x – with some capacity to spare
- The economics: prices under pressure, market size set to expand 4x

KENYA: AFRICA'S NEXT HYPERSCALER DESTINATION GEARS UP FOR ACCELERATED GROWTH

- East Africa's largest economy is rebounding
- Kenya has one of Africa's most attractive operating environments for commercial colocation
- Moderate growth to date – but on the cusp of true ramp-up
- Kenyan commercial supply has tripled over the past five years, despite a moderate build rate
- Kenya commercial colo strategic mapping: a market slanting towards wholesale
- Kenya's supply slated to grow 6x, mostly through greenfield builds
- A strong outlook: excellent underlying fundamentals to propel market past the \$100m mark

NIGERIA: WEST AFRICA'S LARGEST ECONOMY RACES TO CATCH UP

- West Africa's largest economy, seeking a path to recovery
- Nigeria has deep underlying potential for commercial colocation
- Nigerian commercial supply has tripled over the past five years, despite a modest build rate
- Nigeria commercial colo strategic mapping: gradually shifting towards wholesale and hyperscale
- Nigeria is in the midst of a considerable build phase
- Nigeria's supply is slated to grow 4x, with a balanced mix of expansions and new builds
- A strong outlook: robust demand to propel market past the \$150m mark

MOROCCO: MACRO STABILITY UNDERPINS SOLID UPSIDE POTENTIAL, DESPITE PERSISTENT CONSTRAINTS

- A promising but constrained market at the intersection of four continents
- A moderately attractive operating environment for commercial colocation
- Morocco has a strong foundation for expanded adoption of data center services
- Morocco commercial supply: flat growth, with moderate upside
- Morocco colo strategic mapping: mostly retail and enterprise-focused, but wholesale is catching up
- Morocco's outlook: long on potential, short on actual build
- Morocco's supply slated to double, with a balanced mix of expansions and new builds

A SUMMARY VIEW OF THE NEXT COLO OPPORTUNITY:

- Angola
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- Africa median megawatt capacity absorption - Months
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- Africa colo price outlook by market type
- Evolution of Africa commercial colocation CapEx – US\$ million
- Data center average construction time in sample regions
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FOR EACH COUNTRY PROFILE

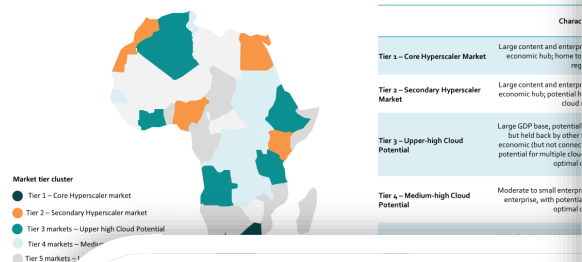
- South Africa commercial data center greenfield builds – 2018-25
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Sample pages

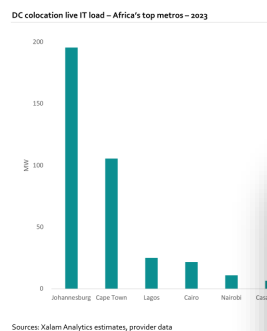


Defining African colocation market clusters

African data center markets are highly diverse. To facilitate analysis, we categorize markets into five main clusters, as illustrated below.

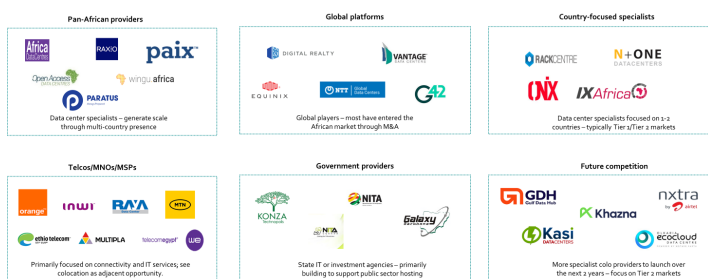


A metro view of African colo supply – from Ekurhuleni to Lekki, Mombasa Road

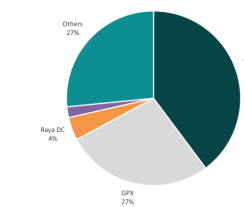


Sources: Xalam Analytics estimates, provider data

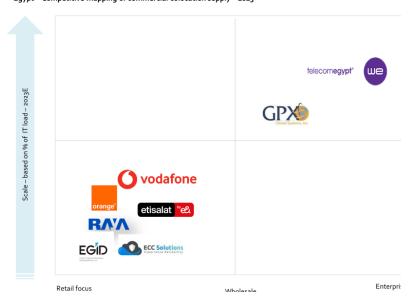
The African data center landscape is increasingly competitive



Egypt commercial colo strategic mapping: a widening split between wholesale and retail



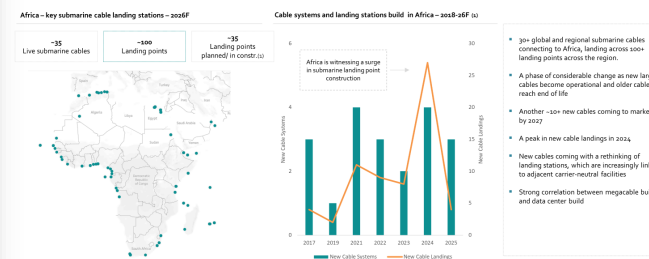
(s)Based on live IT load
Sources: Regulator and company data; Xalam Analytics estimates



Methodology

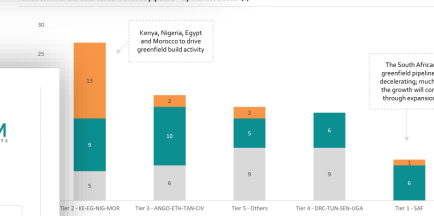
Enterprise

Expanding submarine cable build is spawning new connectivity hubs



(1) As per announced RFS; geopolitical uncertainty and supply chain delays may impact the timing of several projects
Sources: Xalam Analytics estimates, provider data

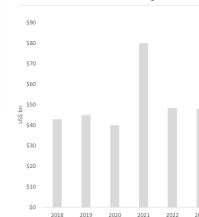
to drive most of Africa's facility construction



¹For 2023, please see page X for market grouping detail
²und; under active construction, expected to go live by 2026
³anned or announced, but not yet in construction
⁴announced, but which we expect to come to market over the next five years.
⁵nalytics estimates, provider data

- ➔ **80 to 90 facilities are projected to come to market** over the next five years across the region – nearly half of which are largely firm, effective commitments
- ➔ **Tier 1 hyperscaler markets have the biggest greenfield facility pipeline.** About a third of new projected facilities will come from these four markets.
- ➔ **Tier 3 markets** look similarly promising: ~20% of African new build will take place in Angola, Ethiopia, Tanzania and Côte d'Ivoire.
- ➔ **Tier 4 and Tier 5 market projections** are more speculative in nature. More than half of anticipated deployments in these markets may occur – or they may not.
- ➔ **The South African new build pipeline is decelerating**, in terms of new facilities. Capacity growth (still the largest in the region) will take place through large facilities and larger scale expansions.

Evolution of Africa FDI inflows – 2018-23



Source: UNCTAD.

FDI in Africa has declined –40% from 2021 levels, more somber sentiment from Western multinationals – Nestle, Bayer, BNP Paribas, Societe Generale, Guinness, Unilever are cutting back or outright exiting. African, Global South firms aiming to fill the void

Packages and pricing

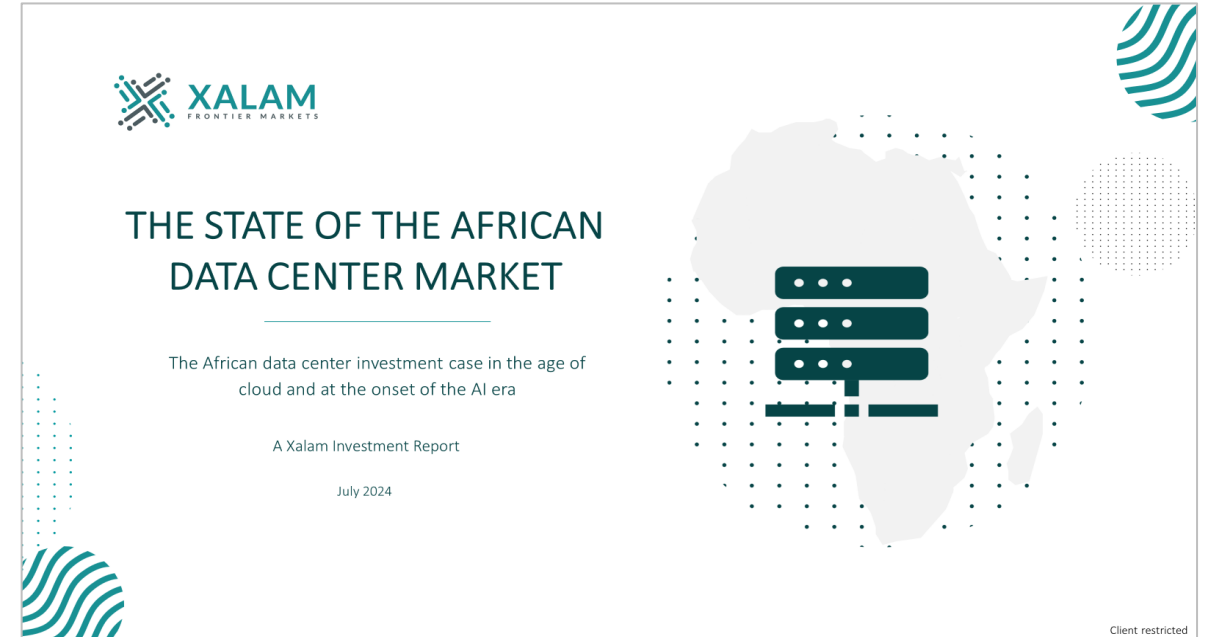
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