

DCByte

MARKET SPOTLIGHT

Africa's Key Data Centre Markets

SOUTH AFRICA, NIGERIA,
KENYA, EGYPT, AND
MOROCCO



Market Overview

Africa has received strong attention from the investors, operators, suppliers, and other stakeholders in the data centre industry.

The FLAP-D markets (Frankfurt, London, Amsterdam, Paris, and Dublin) are facing acute land and capacity constraints, with Amsterdam and Dublin introducing restrictive policies for data centres development. We are now seeing hyperscalers and operators demand expand into different regions, including Africa. In the continent, international operators are entering emerging markets and investors are seeking higher returns with fibre, submarine cables and data centre projects. The digital boom driven by the COVID-19 pandemic has grown the connectivity, mobile and internet usage for the entire continent.

Africa has 54 countries. However, the data centre development across the continent could be split into five main hubs: South Africa, Nigeria, Egypt, Morocco, and Kenya. With the onset of hyperscale activity, South Africa became a major destination for data centre development, boasting as the most established market across Africa. We continue to see a range of **economic growth, regulated framework, infrastructure, and technological standards** across the African countries, with the investors and operators looking to enter new emerging markets.



South Africa, Nigeria, Kenya, Egypt, and Morocco IT Supply from 2017 to Q1 2023

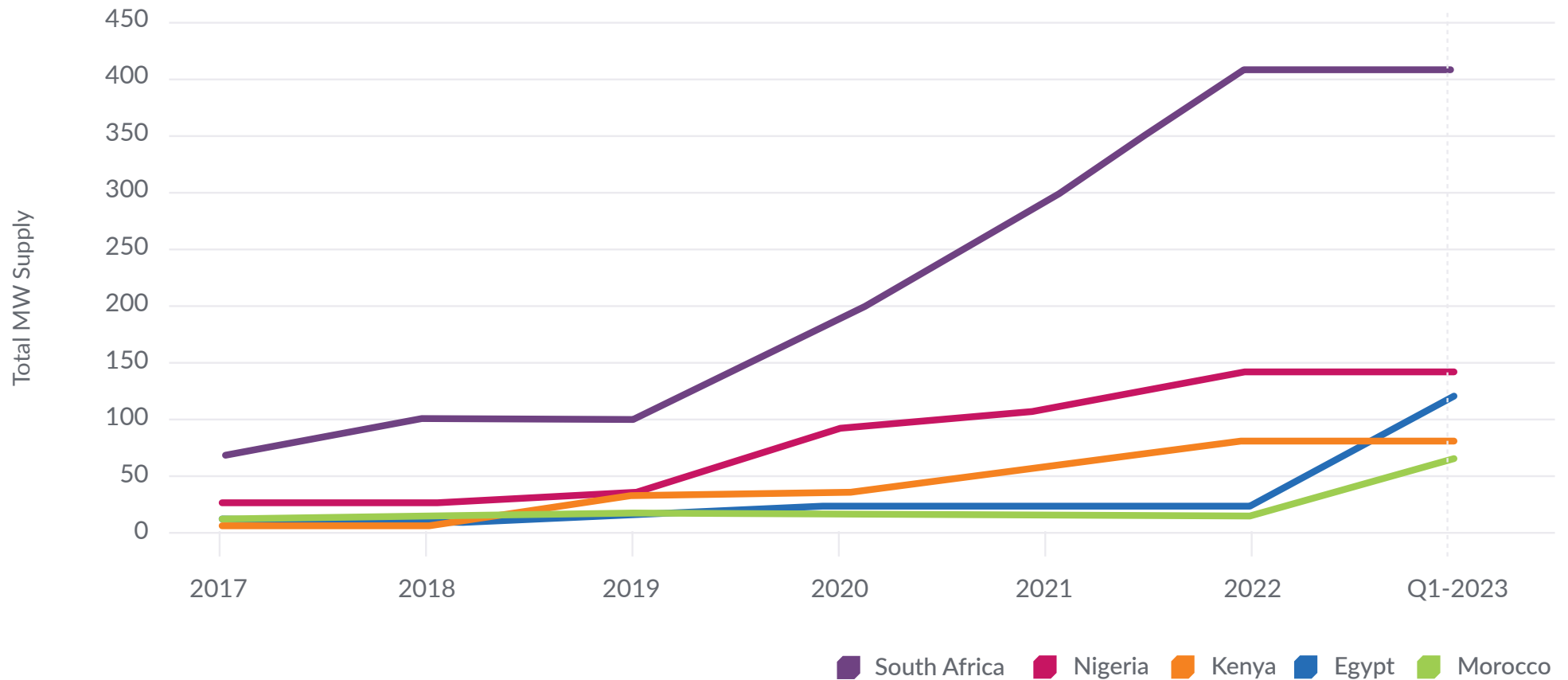
South Africa, Nigeria Kenya, Egypt, and Morocco have all recorded different levels of data centre activity over the last five years. **South Africa has notably experienced the largest growth between the five countries, with 100% of all the public cloud deployments being delivered through colocation.** Kenya is bidding to become the technology hub for East Africa and the country has seen a sustained level of political stability compared to other countries across the continent. Egypt is attracting significant investment from the Middle East, with Khazna, Damac and Etisalat all deploying or planning to deploy in the region and Morocco provides a gateway to Europe through submarine cables connecting to the Iberian Peninsula and Marseille. Finally, Nigeria boasts one of the largest economies and populations in Africa and is primed to see an increase in data centre activity.

'South Africa has notably experienced the largest growth between the five countries, **with 100% of all the public cloud deployments being through colocation.**'



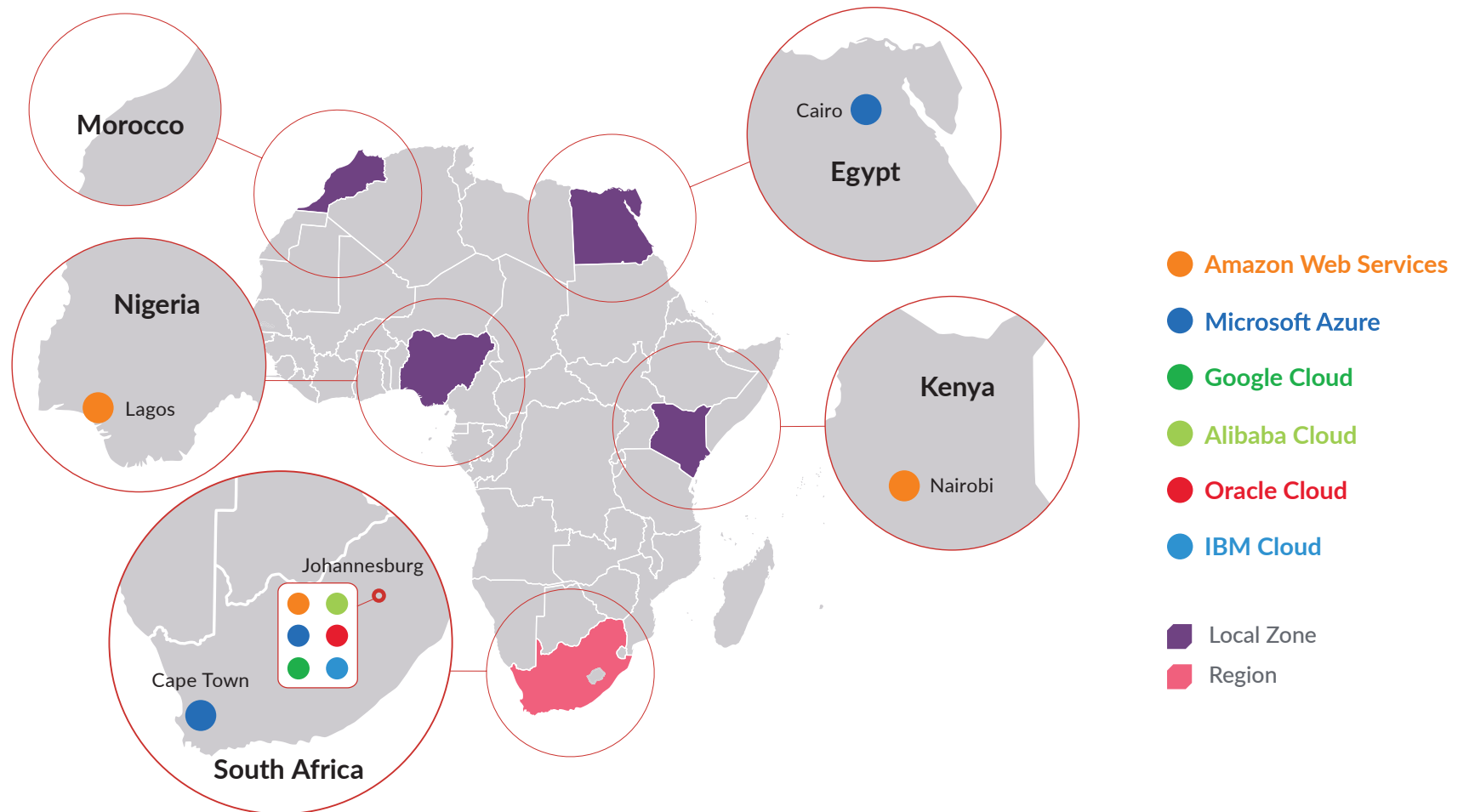
Total IT Supply from 2017 to Q1 2023

We can observe that there is a strong and continued growth from 2019 to Q1 2023.



Hyperscale Presence in Africa

South Africa is the only cloud region in Africa with all cloud operators that are in the continent.





Growth Trends in South Africa, Lagos, Kenya, Egypt, and Morocco

The COVID-19 pandemic, population sizes and the increasing business demands have contributed to the digital boom seen across Africa. Nigeria and Kenya, for example, have benefited from governmental policies and initiatives focusing on digital transformation that played a major role in the growth of their data centre industries.

From the below percentages, we can see how much the total IT capacities have grown over the last four years (2018 – 2022). Morocco has achieved an annual compound growth rate (CAGR) of 5.13%. Meanwhile, Egypt has achieved a CAGR of 17.33% and in South Africa, it was noted at 42.72%. Lastly, CAGR rates in Nigeria reached 50.58% while Kenya witnessed a CAGR of 84.45%.

The demand for digital services infrastructure in all five countries is clearly visible. Notably Morocco has the lowest and Kenya – the highest percentage of growth from these five countries. In addition, it shows how much progress was made to drive digital transformation and to promote the development of data centres.

In Q1 2023, the five markets mentioned comprised of over 800MW of total IT power. This includes live and operational power as well as the development pipeline. It is important to note that South Africa accounts for over 408MW of the total supply, with the majority of the western hyperscalers deploying in the market.

Johannesburg and Cape Town are currently the only cities in Africa to have fully established cloud regions. Cloud operators including IBM, Microsoft, Oracle, Amazon Web Services and Google have all deployed in South Africa. In Nairobi, Lagos, and Cairo hyperscalers have only installed local zones and Morocco is yet to record any public cloud activity to date.

Comparing Live Capacities in Five Countries

Nigeria, Kenya, Egypt, and Morocco are ranging between 10-20MW of live capacity, with retail and telco facilities accounting for a large percentage of the market share. Meanwhile, South Africa has over 100MW of live capacity, with wholesale facilities dominating the market share. South Africa currently comprises 165MW of live capacity, which is a lot higher than Nigeria at 21MW, Kenya at 15MW, and Egypt and Morocco both at 13MW based on Q1 2023 figures.

The five countries all vary in terms of population size and demographic landscapes. Nigeria has the highest population with over 231 million inhabitants. Egypt has a population over 114 million, while South Africa's population is over 61 million. Kenya follows with over 57 million inhabitants, and Morocco with over 45 million inhabitants.

Comparison of the IT capacity per million capita between five African countries, United Kingdom, the Netherlands and Germany.

IT capacity per million capita in South Africa:

6.69 MW



IT capacity per million capita in Morocco:

1.43 MW



IT capacity per million capita in Kenya:

1.38 MW



IT capacity per million capita in Egypt:

1.03 MW



IT capacity per million capita in Nigeria:

0.60 MW



IT capacity per million capita in Netherlands:

82.18 MW



IT capacity per million capita in United Kingdom:

47.21 MW



IT capacity per million capita in Germany:

31.83 MW



The above figures show that the IT capacity per million capita is generally higher in the European countries compared to the African countries. Europe is home to some of the most established markets in the EMEA region. Data centre development across Europe has long centred around what were later known as the FLAP markets: major global cities, each with deep business and financial sectors.

In Europe, the public cloud demand has been overwhelmingly led by US providers, whereas in Africa, the Chinese providers are more evident. This opens a wider range of possible end customers for colocation facilities in the region.

There are various factors, other than just population size, influencing the development of Africa's data centre sector. The structure of a country, its economy, the established legal system for its telecom industry, and the technological advancement play an important role.

Kenya, Nigeria and South Africa boast vibrant economies with some level of infrastructure, deregulated telecoms and a population that is reliant on technology. These vibrant differences created the push for the development of the data centre industry. On the other hand, Egypt currently lacks deregulated telecoms which effects the growth of its data centre industry.

The different clientele profiles have driven the data centre industry growth in each country. Despite having comparable volumes of fitted-out capacity, the industries will have different factors fuelling its growth which varies from country to country.



South Africa while being the oldest data centre hub in Africa attracts a diverse range of clients. Its growth has increased through a mix of domestic and international clients, that include financial institutions, technology companies, multinational corporations, cloud service providers, and media organizations.

Nigeria, Africa's most populous country, drives data centre growth through its evolving telecommunications sector and digital services. Current clientele includes telecom operators, ISPs, financial institutions, government agencies, e-commerce platforms and content providers. With the introduction of a local zone by a cloud provider, more cloud providers are expected to enter the market.

Kenya's data centre growth is fueled by factors like the increase of mobile banking, fintech services, and its position as an East African technology hub. The clientele includes financial institutions, telecom operators, government agencies, tech companies, e-commerce platforms, and start-ups. More cloud providers are expected with local zone introduction.

Egypt's growth has been fuelled by a mix of government initiatives, infrastructure development, and increasing digital adoption. The clientele profile includes financial institutions, government agencies, telecom operators, technology companies, and multinational corporations.

Morocco has emerged as a growing market for data centers, attracting both domestic and international clients. This growth has been pushed by industries such as banking and finance, e-commerce, telecommunications, and government services.

Contrasting the Total Market Capacities of South Africa, Lagos, Kenya, Egypt, and Morocco

In terms of the total supply, South Africa is the largest market comprising of 408MW. Nigeria and Egypt are second and third, with 140MW and 118MW respectively. Kenya is close behind with 79MW followed by Morocco with 65MW of supply.

In South Africa, only 41% of the total market capacity has been fully developed and fitted out, indicating significant future growth and expansion potential. For example, in Nigeria, Kenya, Morocco, and Egypt the live IT capacity accounts for a small segment of the total market capacity. Nigeria has 21% of the market capacity fully developed and fitted out, while in Kenya and Morocco, both have 19% each. Egypt on the other hand has the lowest proportion, with only 11% of the market capacity observed as live.

The more development projects are completed and brought online, the more live IT capacity in these countries is expected to increase which will support their digital infrastructure and services.



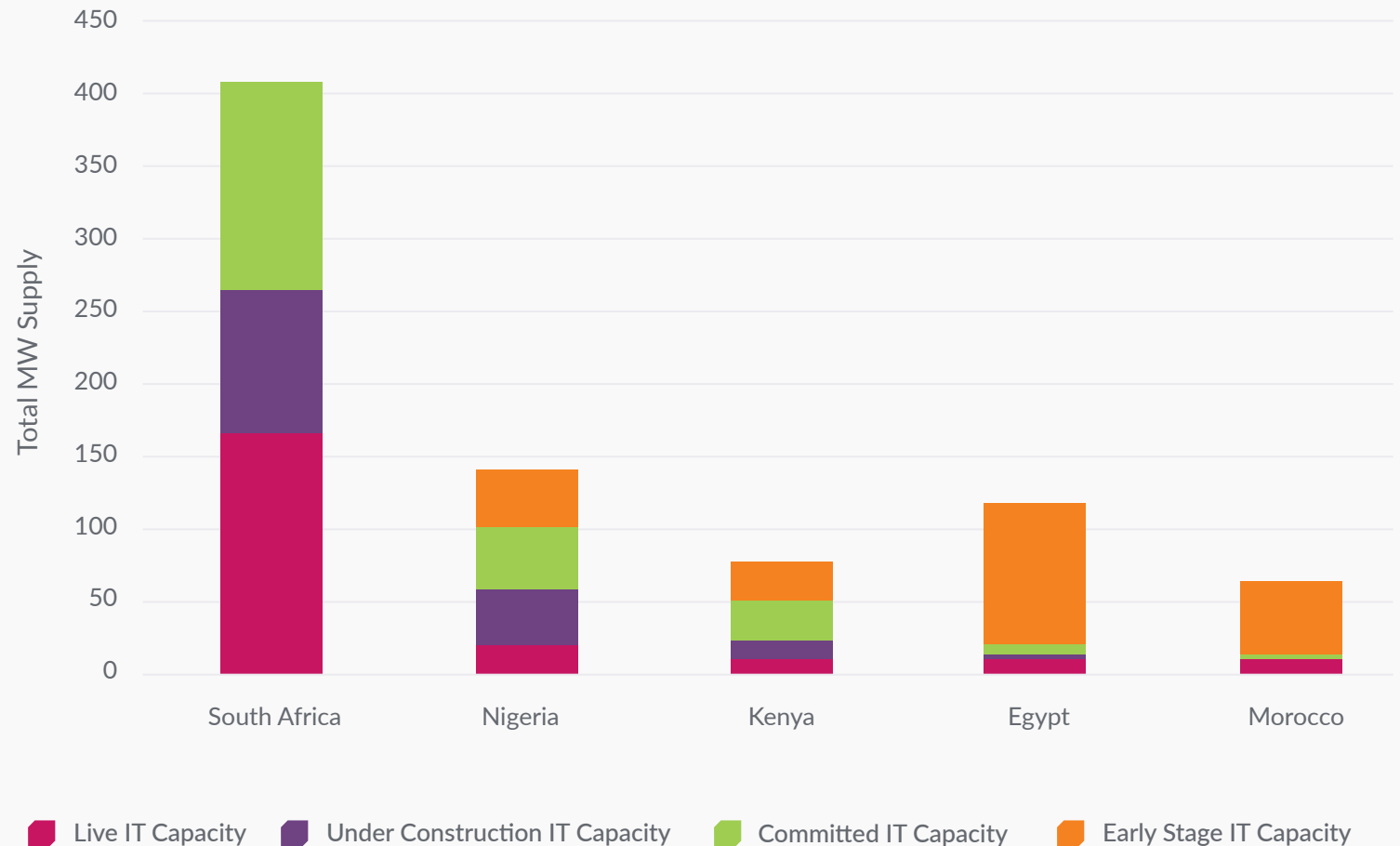
Breakdown of IT Capacity in the Five Countries

Nigeria, Kenya, Egypt, and Morocco all have similar levels of live IT capacity.

However, the differences become more apparent when considering their pipeline capacity, which represents the planned and upcoming developments. South Africa stands out in terms of live IT capacity, under construction IT capacity and committed IT capacity among the four countries.

IT Capacity Breakdown by Country

South Africa is by far the leading data centre market in Africa. Nigeria, Kenya, Egypt and Morocco have similar live capacity, but the four countries differ widely in terms of their supply in the pipeline.





The Changing Landscape of Africa's Data Centre Scene

Public cloud can be deployed either through a third-party colocation provider or by self-builds. Snapshots of the market compositions by live IT capacity for all five countries show the dominance of colocation.

South Africa is dominated by colocation which comprises over 92% of the market composition. Public cloud is driving the demand in wholesale facilities, with Teraco and Africa Data Centres maintaining 57% and 18% of the live IT power.

Colocation facilities account for 76% of total IT capacity in Nigeria, with Kasi Cloud and 21st Century developing the first wholesale facilities in the market. The current transition from retail to wholesale colocation will continue to attract more large-scale infrastructure investments, such as what we have seen with Kasi Cloud.

Kenya's colocation capacity contributes to 85% of the total IT capacity. Just like Nigeria, Kenya is also developing its first wholesale facilities that can house hyperscale demand. Once these facilities are fully established, the narrative of the market will change from retail to a wholesale-oriented market.

Even though in Egypt there are currently more self-build (Network & Telco, Financial/Institutional, Systems Integrator/Managed Service Providers) facilities in comparison to retail facilities, colocation capacity plays an important role contributing to 71% of the total IT power. We expect Egypt to follow similar trends seen in Nigeria and Kenya, with wholesale developments announced.

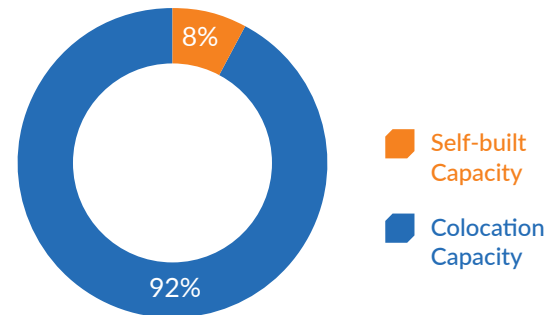
The Moroccan colocation capacity contributes to 37% of the total IT power, with a higher number of self-build than retail facilities. Morocco is still early in its development cycle, but if it was to follow similar trends seen across more established markets in the region, we would expect to see more wholesale colocation developments. When we consider under construction and committed power, we expect the colocation capacity to increase from 37% to 81%.

Market Composition by Live and Total IT Capacity for South Africa, Nigeria, Kenya, Egypt, and Morocco

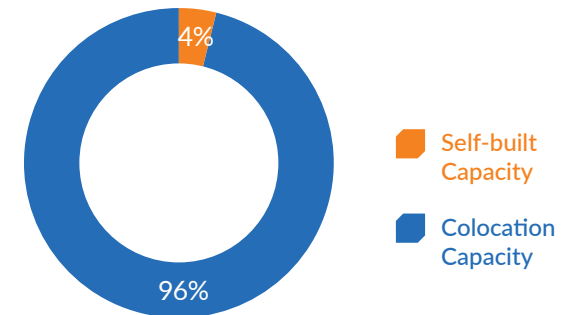
South Africa

Colocation capacity accounts for **92% of South Africa's live IT capacity**. However, this is set to **rise to 96% of total capacity** as pipeline developments inflate the share of self-build capacity.

South Africa Live Capacity



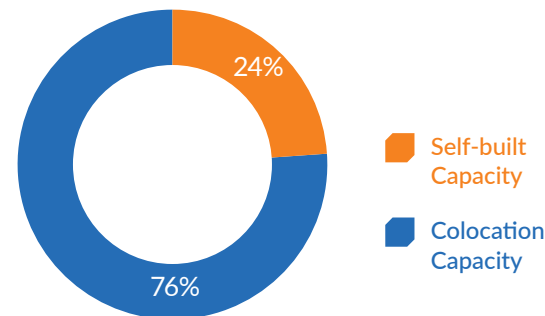
South Africa Total Capacity



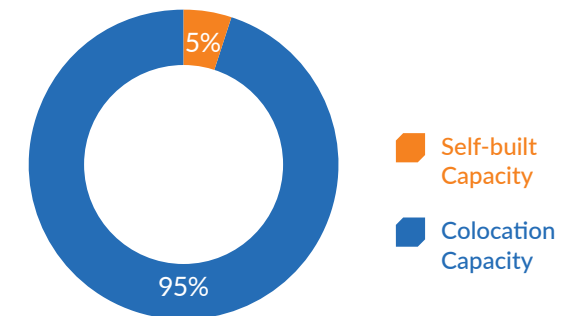
Nigeria

Colocation capacity accounts for **76% of Nigeria's live IT capacity**. However, this is set to **rise to 95% of total capacity** as pipeline developments inflate the share of self-build capacity.

Nigeria Live Capacity



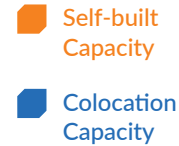
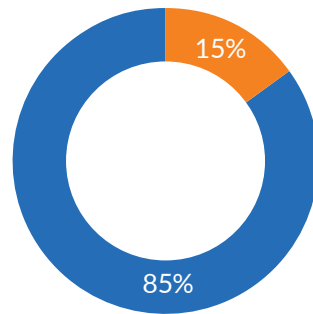
Nigeria Total Capacity



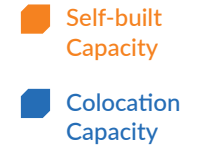
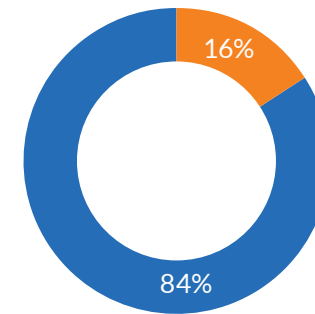
Kenya

Colocation capacity accounts for **85% of Kenya's live IT capacity**. However, this is set to **drop to 84% of total capacity** as pipeline developments inflate the share of self-build capacity.

Kenya Live Capacity



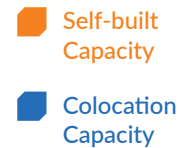
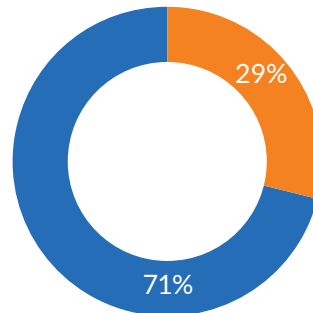
Kenya Total Capacity



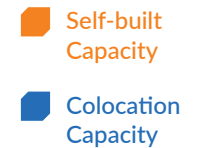
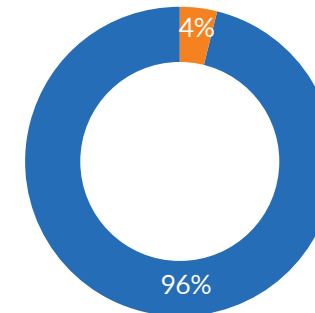
Egypt

Colocation capacity accounts for **71% of Egypt's live IT capacity**. However, this is set to **rise to 96% of total capacity** as pipeline developments inflate the share of self-build capacity.

Egypt Live Capacity



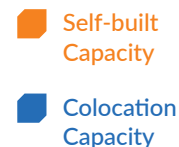
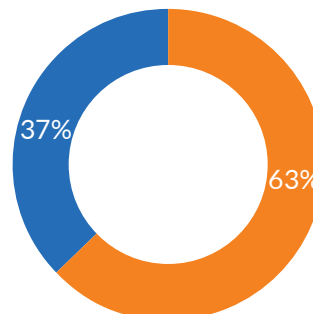
Egypt Total Capacity



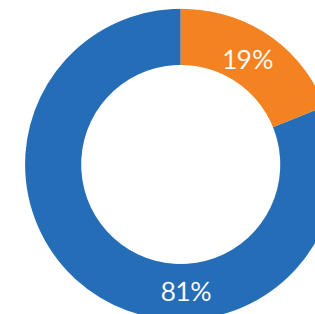
Morocco

Colocation capacity accounts for **37% of Morocco's live IT capacity**. However, this is set to **rise to 81% of total capacity** as pipeline developments inflate the share of self-build capacity.

Morocco Live Capacity

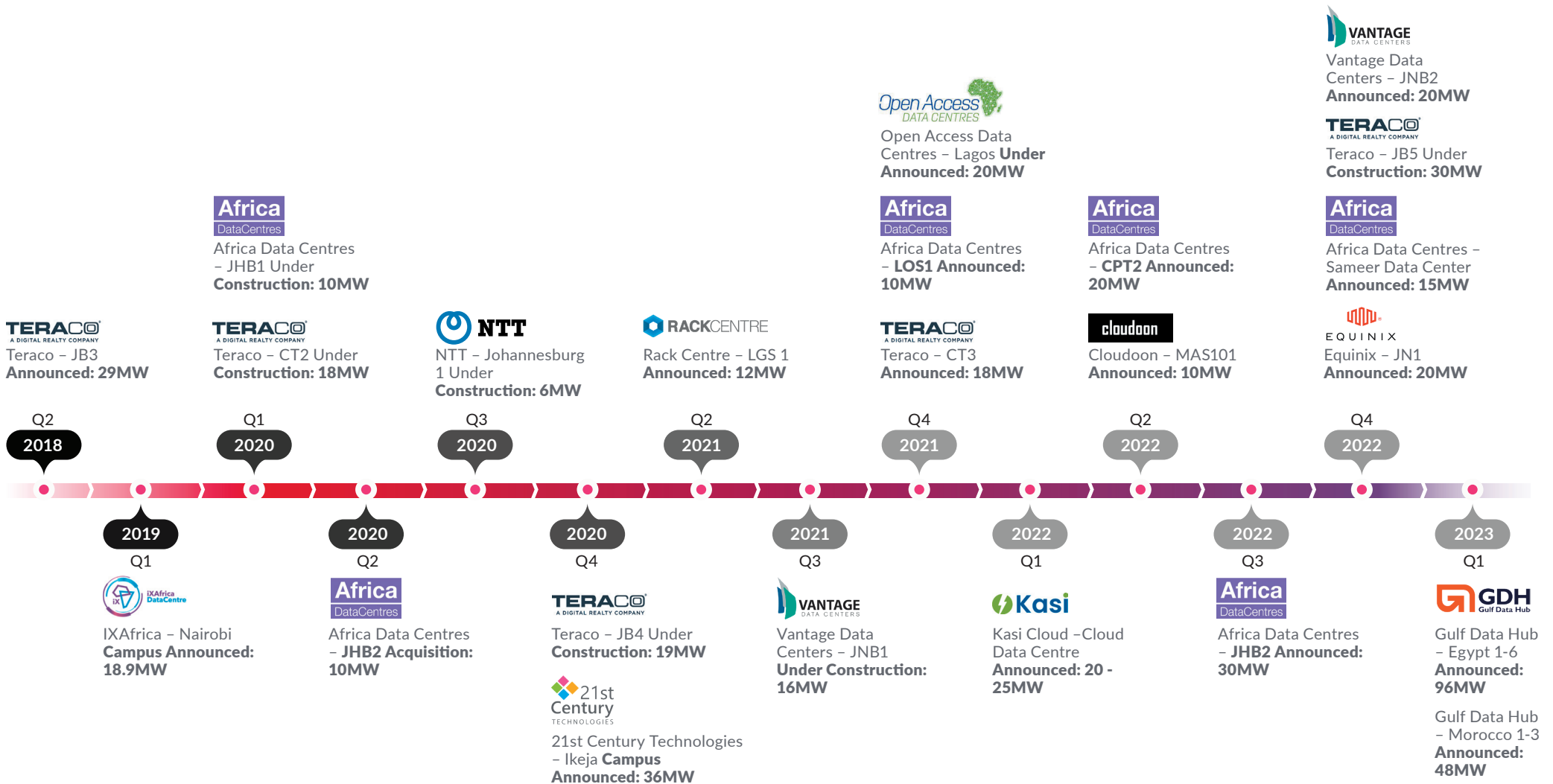


Morocco Total Capacity



Key Developments Across Africa's Data Centre Markets

South Africa, Nigeria, Kenya, Egypt, and Morocco



Conclusion

The data centre markets in South Africa, Nigeria, Kenya, Egypt, and Morocco have all seen **varied growth during the last five years. Public Cloud deployments in South Africa have led to significant data centre developments, with wholesale colocation facilities dominating the market share.** Nigeria, Kenya, Egypt, and Morocco are all in the early stages of their development cycles, either dominated by retail colocation or self-build facilities.

As the most established data centre hub in the region, South Africa comprises the largest live IT capacity and development pipeline capacity, with a strong presence of wholesale facilities serving hyperscale demands. On the other hand, Nigeria and Kenya have experienced recent growth in their data centre markets, with plans to develop wholesale facilities alongside their existing colocation capacities.

Egypt and Morocco are both still in early stages of their development cycles, with either retail colocation or self-build facilities accounting for large segments of the market share. However, recent announcements of wholesale developments in both countries indicates confidence of future demand from operators.

There are various factors which have influenced the increase in demand such as business, population demands and government decisions. With the start of the Covid-19 pandemic, there has been a push towards digital transformation which created a boom for the entire continent, with countries like Nigeria, Kenya, Egypt, and Morocco now shifting their focus towards larger deployments to house cloud operators' demands.

The shift in strategy reflects the recognition of the growing demand for data centre infrastructure in these countries. By investing in colocation and wholesale facilities, they aim to meet the needs of businesses and organizations requiring reliable and scalable data centre services. These developments indicate a positive outlook for the data centre industry as they work towards enhancing their capacity and infrastructure to support the evolving digital landscape.





Leading the way in data
centre market intelligence

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