

The Drive for Cloud Computing Gives Rise to a New Generation of Hyperscalers

AFRICA ON THE CUSP OF A CLOUD COMPUTING REVOLUTION



Prepared by

Rack Centre info@rack-centre.com

Introduction

According to Xalam Analytics new report '<u>The African Data Center Gold Rush</u>', data centres are one of the few winners to emerge in Africa in the immediate aftermath of COVID-19. With broadband connectivity and cloud services, data centre colocation is riding a wave of deep-seated, pandemic-boosted structural transformation of the digital workplace and enterprise IT architectures. Behind this gold rush is one noteworthy influencer, cloud computing, a trend playing an increasingly crucial role in both the innovation and efficiency of businesses.

The Rise of Cloud as Digital Transformation Dominates Business Strategy

In an ever-changing digital era, where data traffic continues to grow exponentially, the phenomenon of cloud is placing significant pressure on businesses to store, manage and retrieve a growing amount of data. In response to this escalating business need, companies are not only looking to cloud computing, but more specifically hyperscale computing for a sensible and sustainable solution.

In West Africa, carrier neutral data centre provider <u>Rack Centre</u> recently expanded its Lagos campus to 1.5 MW, further serving cloud providers, content providers, and enterprise customers with additional 600 square metres of data centre white space. With a 100% uptime track record since inception, the expansion is the first stage of a trajectory that is in progress to add an additional 13MW of IT load capacity ready for service in 2022 at the same campus in Lagos, Nigeria, to cater for the increasing demand for hyperscale data centre space. Providing reliable, secure, and scalable infrastructure to global cloud companies, Rack Centre wants to assist these companies to grow their footprint as the cloud continues to grow unabatedly.

Further exacerbating the pressures of the current business environment, factors such as the Internet of Things (IoT) and Artificial Intelligence (AI) are also influencing the growth of cloud computing. As a result, businesses are now under continuous pressure to distribute content and information without any noticeable disruption to the services they offer. For this reason, data centre facilities have evolved to embrace hyperscale as a business norm, not only as a way of maximising their capacity to address digital businesses and the growing appetite for data traffic but also as a way of maintaining sufficient adaptability as the cloud inevitably grows.

With over 40 carriers, ISPs and Content Delivery Networks, Rack Centre offers a comprehensive and unrestricted choice of services for its customers. Fibre access to the facility is through three diverse entry routes into the facility and an open access mast for connectivity providers. All five active undersea cables on the Atlantic coast of Africa (WACS, Glo, ACE, Mainone and SAT3) are directly connected, so every country on the Atlantic coast of Africa are directly connected.

Hyperscale computing architectures are understandably agile as they address the changing needs of clients. In addition to offering clients a highly responsive and cost-effective IT infrastructure along with distributed systems to reduce complexities and improve business operations, hyperscalers also offer scalability to address changing demand, agility, and security continuously. With reduced costs and improved throughput, hyperscale data centres are a vital infrastructure solution for managing increasing demands thanks to cloud computing.

The Need for Infrastructure to Enable Cloud Computing and Its Growing Role in the ICT Ecosystem

Cloud computing relies on data centre infrastructure first and foremost, after which broadband internet connectivity matters. The latter has been impeded, and as a result, broadband infrastructure development across the African continent is disparate. Conversely, there has been significant growth in international bandwidth capacity and a resultant decline in costs. Thanks to hyperscale data centres, industries such as financial services, oil and gas, and next-generation telco networks and operators are leading the rapid move into the cloud. This emergence is viewed as a natural extension of the deployment of advanced IT technologies by high-end users in both the consumer and enterprise services markets. In addition, cloud computing offers economies of scale that can dramatically reduce the cost to end-users. In Nigeria, the cloud market consists of global and local IT companies providing IaaS, SaaS and PaaS solutions. Almost all of this sits within carrier neutral and vendor neutral data centres such as Rack Centre.

Bolstering Economic Growth in Africa

Cloud computing has the potential to significantly bolster economic growth throughout the continent with the provision of cost savings and efficiencies. Although dominated by global US-based organisations, the cloud space has the potential to open African companies to new markets and help to contribute to economic development and competitiveness. Under these circumstances it is much easier for African businesses to aggregate international cloud services to meet local needs.

Even though the African cloud was initially playing catch-up, the impact of cloud services is already farreaching. African banks are making investments to improve the customer experience and credit risk; and new digital banks are emerging, that are mostly cloud based. Growing at pace, Africa's cloud will prove to be one of the most disruptive technology developments in decades. Especially noteworthy is that the African ICT segment is expected to generate an incremental \$2bn in top line revenue over the next five years.

Why Latency Matters in Cloud Computing

As the demand for digital services continues to increase, the technology industry is forced to find new solutions that will satisfy Africa's hunger for the cloud. More sophisticated network architecture is required so that ISPs can find more innovative ways to manage and orchestrate traffic between data centres and end-users. To achieve this, connectivity needs to be that of a developed country so that businesses are

empowered to utilise the cloud and tap into the benefits cloud computing unlocks. A cloud-connected Africa will boost the economy and aid in job creation while also addressing poverty and unemployment. Up to now, latency issues, the time it takes for data to be transferred have adversely impacted cloud roll-out. The proximity of cloud servers to locations where requests are coming from is fast becoming a major consideration for businesses. Cloud consumption is poised for significant growth, as the success of mobile telephony has illustrated that with the right business model that taps into spending patterns of pay as you need.

Rack Centre's carrier neutrality allows customers to manage traffic to get better value, lower latency and higher resilience and creates an open market for partnerships between customers, networks, cloud and content providers, the Internet Exchange Point of Nigeria and managed service providers. Rack Centre clients include over 40 telecommunication carriers, Internet Service Providers (ISPs), global Tier 1 networks and pan Africa international carriers, including direct connection to all 5 undersea cables serving the South Atlantic Coast of Africa and every country on the Atlantic coast of Africa.

The closer these cloud services are to customers, the lower the latency, which improves the quality of services and sets the stage for Africa's cloud revolution.