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Roundtable: data centres – buy or build?

Data centre capacity demands are booming across the African continent, leading to one all-important question: should MNOs buy or build?

As continent wide-digitalisation ramps up across Africa, in-house data management is becoming an increasingly challenging concern for MNOs. IT professionals are facing numerous issues, and organisations of all sizes and across all sectors are considering outsourcing the hosting of their data and looking at colocation as part of their ongoing IT strategy.

According to Mordor Intelligence, the African data centre market is expected to register a compound annual growth rate of 15.41% over 2023-2029, with growth rates peaking in Nigeria (23.24%) and South Africa (15.68%).

For MNOs amidst the uptick in mobile adoption throughout the African populace, data management is a key priority; many are now facing the choice of building or buying, in-house or colocation. For some of the larger players, building may seem like a no-brainer to manage networks across the entire continent. However, for smaller operators with a presence in a handful of countries or less, the answer is less clear.

What should MNOs consider when deciding whether to collocate or build their own data centre?

Paul-Francois Cattier, managing director, Africa Data Centres Association: The advantages for MNOs in renting space from a colocation provider include reducing capital and operational expenses by leveraging economies of scale and sharing infrastructure costs with other tenants.

Network performance and reliability is also improved by accessing diverse connectivity options and redundant power sources. Security and compliance are enhanced by relying on the provider's expertise and certifications, while scaling up or down is easily achieved by adding or removing equipment as needed without long-term commitments. Interconnectivity, easier connection to partner services that are hosted in the collocated data centre such as financial services or access to other cloud exchanges, brings content closer to their customers. With colocation, MNOs do not have to search for skills, competencies, experience, and critical infrastructure mindset in building a data centres team. Additionally, MNOs are not carrier neutral, so you lock out cloud and CDN.

However, disadvantages include not being able to offer a bundled offer of connectivity and colocation to their customers; and not being able to develop a colocation business strategy - but do they even want it, and do they have access to the capital to do it?

Jocelyn Karakula, CTO, Orange MEA: For MNOs in Middle East and Africa, data centres have been built first to host all strategic technical assets, including network core elements, IT, and platforms. Therefore, in several cases, MNOs such as Orange have already invested in strong, resilient and in some cases, evolutive data centres, targeting Tier 3 or 3+ technical environment levels.

These investments comply with regulatory contexts (data sovereignty), driving to a per-country or per-cluster of countries data centre approach. On top of this, in many cases, these structures benefit from secured and resilient connectivity to international capacities and internet exchange points.

So obviously, the first rationale for an MNO is to take advantage of such structures, as soon as they can host additional capabilities and services (cloud services, data management assets, etc., …) tailored to the needs of internal and external customers.

But at the same time, the digitalization of the African industry requires more and more infrastructure and data centre capacities that the existing MNO structures cannot handle. As fast time to market is a key driver for the success of digital businesses, an easy way for them to address the necessary needs for quick growth and flexibility can be to rely on external hosts as soon as those are available within the country. This is also a way for MNOs to adapt hosting costs to the business fluctuations, which is more

a challenge when they build their own additional structures (occupation ratio being sometimes below the expected value for years).

Ayotunde Coker, CEO, Open Access Data Centres (OADC): To colo or not to colo, that is the question!

Colocation enables MNOs to realise the following benefits:

- Redundancy and uptime: no need to budget for and implement contingencies (for power, cooling, connectivity, etc.) to ensure continuation of service.
- Opex vs capex: outsourcing to a third-party is more cost-effective and tax-efficient than operating an in-house data management facility. Colocation becomes an opex cost rather than a capital expense. Also, a data centre facility provider continually invests in the latest technology and efficiency solutions, so MNO clients would always have access to the latest technology and expertise to help them manage their data and expand their business.
- Professional expertise 24/7/365: a data centre has the advantage of dedicated, fully trained staff monitoring the network and facility 24/7/365.
- Compliance: MNOs can be confident that the data centre will remain compliant with all current and future standards - such as PCI, HIPAA, SSAE-16 and HIGHTECH.
- Minimising environmental impact: colocation providers design facilities with energy efficiency in mind and are continually investing in the most efficient green energy sources available.
- Scalability: colocation offers MNOs the flexibility to grow without consideration of current in-house IT restrictions, or to easily scale down if necessary.

Do these factors vary across the continent?

Ayotunde Coker: Yes - the importance of each pro and con does vary. If the region where the MNO wants to use a data centre facility does not have one already then self-build is the only option - unless of course they can persuade a data centre operator to build a suitably sized new facility there, for it to be operational when the MNO needs it.

As for the size of the MNO, the key factor here is the size of the rack space the MNO would need and what expertise they have in-house to potentially run their own data centre facility.

Jocelyn Karakula: The context is different according to region and/or countries. First, because the hosting market does not expand at the same pace in all places, this sometimes offers very poor alternatives to MNO-owned capabilities.

There are at least two reasons for this: the position of governments and regulators in boosting digital business and technology within each country – both have a major influence on the hosting industry dynamics. Consequently, it impacts on the attractivity of the hosting offers.

Second, the strategy of major digital players is also a differentiator among countries, as their presence in a country creates a real boost for the digital ecosystem and creates attractive hosting possibilities.

Paul-Francois Cattier: In most African countries - mid and large sized - the colocation offering is sufficient and mature enough to provide a competitive offering from different colocation companies. In smaller countries, however, the offering could be limited to few actors, not enabling a competitive purchase.

In terms of both MNO and country size, the bigger the data centre, the more efficient - and the scaling effect has a huge impact on hiring resources and costs. So, building data centres in small countries is riskier.

How important are the economies of scale offered by colocation data centres to MNOs?

Ayotunde Coker: Not just one factor needs to be considered when deciding whether to colo or not. For each situation there would be a different threshold above which it might be more economically viable for an MNO to build their own DC - but this is just one factor within the overall decision-making matrix.

Paul-Francois Cattier: The advantage of the colocation offering is flexibility and scalability. Without touching capex, you can follow customer demand, increasing your space or scaling down if you lose a customer. It is a pay as you grow model.

It is not a question of economies of scale, buy or build; it is a question of business strategy based on MNO customer demand. Indeed, the data centre design and build and operations are so specific that this will require a strategic vision to enable the full effort of each of the MNOs departure towards this ambitious goal. A colocation company in Africa is building one data centre every two years and operates several data centres, learning constantly with experience and being immersed in the data centre business and tech community.

Is there adequate native talent and expertise for MNOs to man their own data centres 24/7?

Paul-Francois Cattier: The mission critical buildings that are data centres are facing critical resource shortages in every part of the world, not only in Africa.

In Africa, we do have excellent technical expertise, but we are lacking experience, mindset, and attitude in mission critical services.

The choice for MNOs to develop their own data centres should be a strategic choice to become a co-location provider to their customers, supported by a strong business strategy. If this choice is just a procurement choice, this will have little chance to succeed.

Ayotunde Coker: MNOs may have the appropriate expertise in-house, while specialist data centre operators will definitely have the required expertise, experience, and resources. However, expertise is just one factor. Others include management time; human resources; available funding - the capex vs opex argument; and economies of scale.

Jocelyn Karakula: MNOs in Africa can operate their own data centres, sometimes relying on additional external expertise, and sometimes relying on their own experts and technicians. For Orange MEA, one key driver is to anchor all operations and expertise on the African continent, and to manage the up skilling of technical teams accordingly. For large operations – we are present in 18 countries in MEA, for example), 24x7 operations can be mutualized at a regional, or at least multi-country scale, to optimize the operation cost structure and secure the appropriate competencies. ∎