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# AFRICAN INTERCONNECTION REPORT

CONTINUED GROWTH OF THE  
REGION'S DATA CENTRE, CLOUD  
AND CONNECTIVITY LANDSCAPE

AFRICA'S FINANCE SECTOR  
AS THE CUTTING EDGE FOR  
DIGITAL CHANGES

2026





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# Introduction



2025 has seen both growth and consolidation among Sub-Saharan Africa's data centres. There is continued investment – particularly in the larger markets – but the pace of new country roll-outs has stalled. Oracle has announced the roll-out of its public in Kenya. The pace of growth in overall bandwidth use continues with a number of new international cable projects announced.

This year the WIOCC Group has commissioned this fifth edition of Africa Interconnection Report from the consultancy firm Balancing Act. As with previous editions, a wide range of data centre operators, carriers and cloud service providers have been spoken to.



## The report provides an update on:

- The number of carrier-neutral data centres and their geographic location
- An outline assessment of what Artificial Intelligence demand might look like and where it might come from
- A breakdown of Internet Exchange Points (IXPs) by traffic size and the number of peering partners at different emerging regional hubs

- A look at how hyperscalers have been growing outside of South Africa and the steady expansion of regional neo-cloud providers
- A summary of connectivity growth, the impact of the Red Sea cable cuts and announced new international cable projects

The second part of the report is based on a survey of the finance sector (banks, insurance companies and fintechs) that examines how and why it is at the cutting edge of digital change. It remains a key customer segment for carrier neutral data centres and the section looks at the interplay between policy and regulation and the technology choices the sector is making.

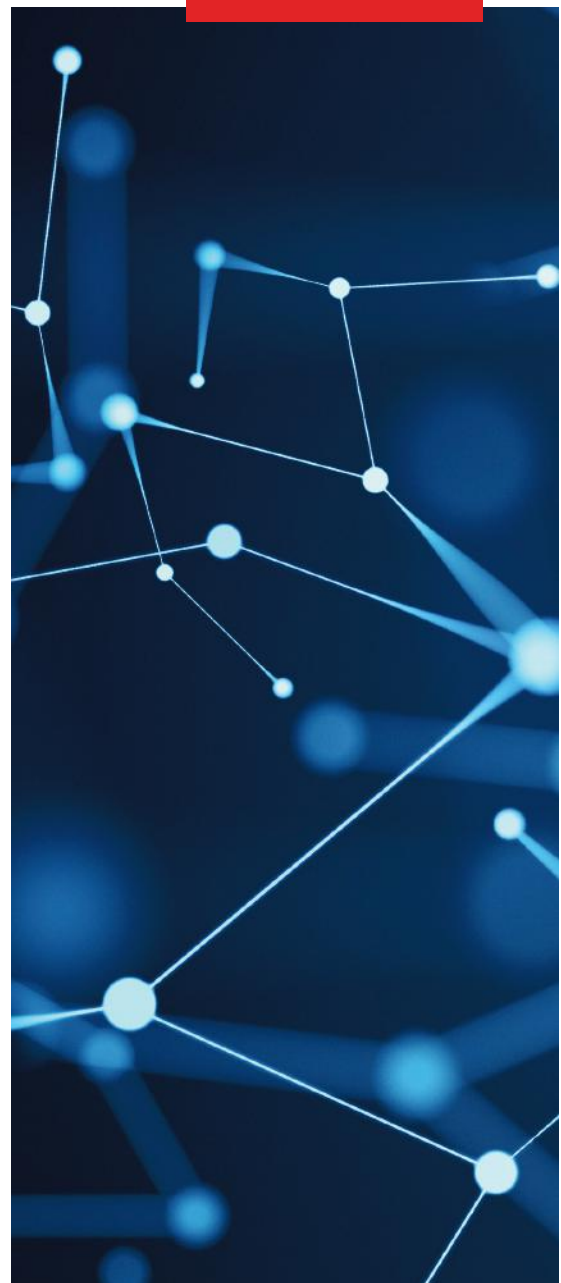
## Acknowledgements

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# Methodology and Glossary

During 2025, Balancing Act carried out independent research into Africa's data centre and cloud market to produce this fifth edition of the African Interconnection Report. The methodology for this report has two parts. Section 1 was based on updating data collected for earlier editions with a longer conversation to reveal qualitative insights. Those interviewed cover almost all data centre operators, both large and small-scale. Data sets and analysis were compared to previous editions of the Africa Interconnection Report.

Section 2 used a modified version of a survey questionnaire used with enterprise customers in an earlier edition but again involved asking qualitative follow-up questions to those interviewed. The respondents covered: banks; insurance companies; a retail investment company; fintechs; consultants and providers of specialist services and financial trade associations. The respondents were either responsible for multiple territories or individual countries. The single countries covered were: Cote d'Ivoire, DRC, Ghana, Kenya, Mozambique, Nigeria, Rwanda, South Africa, Tanzania, Zambia, and Zimbabwe.

## Some common industry terms used throughout the report include:

<b>Fintech</b>	At its core, fintech combines finance and technology to create new or improved financial products and services. These fintechs are sometimes broken down into sub-genres including: Insurtech, Regtech and Wealthtech.
<b>Generative AI</b>	Artificial intelligence designed to produce output, especially text or images, normally requiring human intelligence, typically by applying machine learning techniques to large collections of data.
<b>GPUs</b>	A Graphics Processing Unit, is a specialised electronic circuit that rapidly accelerates the creation of images for display and performs parallel calculations. While originally designed for graphics, its ability to handle many calculations at once makes it essential for other demanding tasks like gaming, video editing, scientific computing, and artificial intelligence.
<b>Inference AI</b>	The process of using a trained artificial intelligence model to make predictions, decisions, or generate new content when presented with new, unseen data. It is the "execution" or operational phase that follows the model's training phase.
<b>Large Language Models (LLMs)</b>	A large language model (LLM) is an AI program trained on vast amounts of text data to understand, generate, and translate human language. They are built using deep learning architectures and can perform a wide range of tasks like answering questions, summarizing text, and creating content.
<b>Neo banks</b>	A neobank is a digital-only bank that operates entirely online without physical branches, offering services through a mobile app or website. In Kenya, the regulator insists on a single physical branch so Choice Bank has one.
<b>Neo Cloud</b>	In the African context, these are a new breed of cloud providers offering competition regionally to hyperscalers.
<b>Third party APIs</b>	Third-party APIs in the finance sector are application programming interfaces that allow external organisations (third parties) to securely access banking services and customer data, with the customer's explicit consent. This capability is the cornerstone of the open banking and open finance movements, fostering innovation and competition in the financial industry.
<b>Training AI</b>	This is the process of teaching an artificial intelligence model to perform specific tasks by exposing it to large, high-quality datasets. During this iterative process, the model learns to identify patterns, make decisions, and refine its internal parameters (like weights and biases in neural networks) to produce accurate and relevant outputs.

# Executive Summary



01

There has been both capacity growth (in the larger markets) and consolidation (in the smaller markets) for carrier-neutral data centres. Expansion plans for new country openings have declined or are moving slowly. The number of countries with access to a carrier-neutral data centre has plateaued at 21. (See section 1.1)

02

Artificial Intelligence (AI) is the demand 'wild card' for Sub-Saharan Africa. It might be huge immediately or it might be a long slow slog through the foothills to get there. A great deal of the discussion about AI – both globally and regionally - is focused on investment announcements and supply-side discussion of facilities that might be built. Therefore, this report has focused on where demand will come from. (see section 1.2)

03

The biggest development in the cloud market has been the opening by Oracle of its public cloud in Kenya. A hyperscaler opening in Nigeria is likely to happen in the mid-term. In the absence of the hyperscalers, neo cloud providers are rolling out more widely regionally. Many local cloud providers have experienced difficult changes in how they operate. (See section 1.3)

04

Sub-Saharan Africa's bandwidth demand continues to grow rapidly, showing the fastest growth globally by region. International co-location and domestic online activity have also grown as evidenced by the traffic exchanged through Africa's top ten IXPs. (see section 1.4)

05

A new wave of both regional and international cables has been announced with both Google and Meta sharing plans. The impact of cuts in the Red Sea has encouraged a focus on avoiding this 'pinch point.' Four out of the ten new projects address this issue. (see section 1.5)

06

The second section of this report focuses on the finance sector (banks, insurers and fintechs) with a survey of 50 enterprises across 11 different countries. The Sub-Saharan African finance sector will need to have a robust digital infrastructure. For example, the increased use of third-party APIs to connect different partners is driving cloud use, whether public or private, 'on prem' or elsewhere. The co-location function is essential for bringing together what is otherwise a fragmented payments landscape.

07

Fundamental changes are taking place in the finance sector, both in terms of how consumers behave and the different channels they are using. A generational change appears to be taking place, with the young having different ways of doing things. Section 2.1 looks at the triangular 'tug-of-war' between traditional banks and insurers, the mobile companies and the fintechs. New opportunities are being opened up by Governments and regulators. Data sovereignty rules continue to provide challenges. (see section 2.2)

# Update data centre, cloud and connectivity landscape

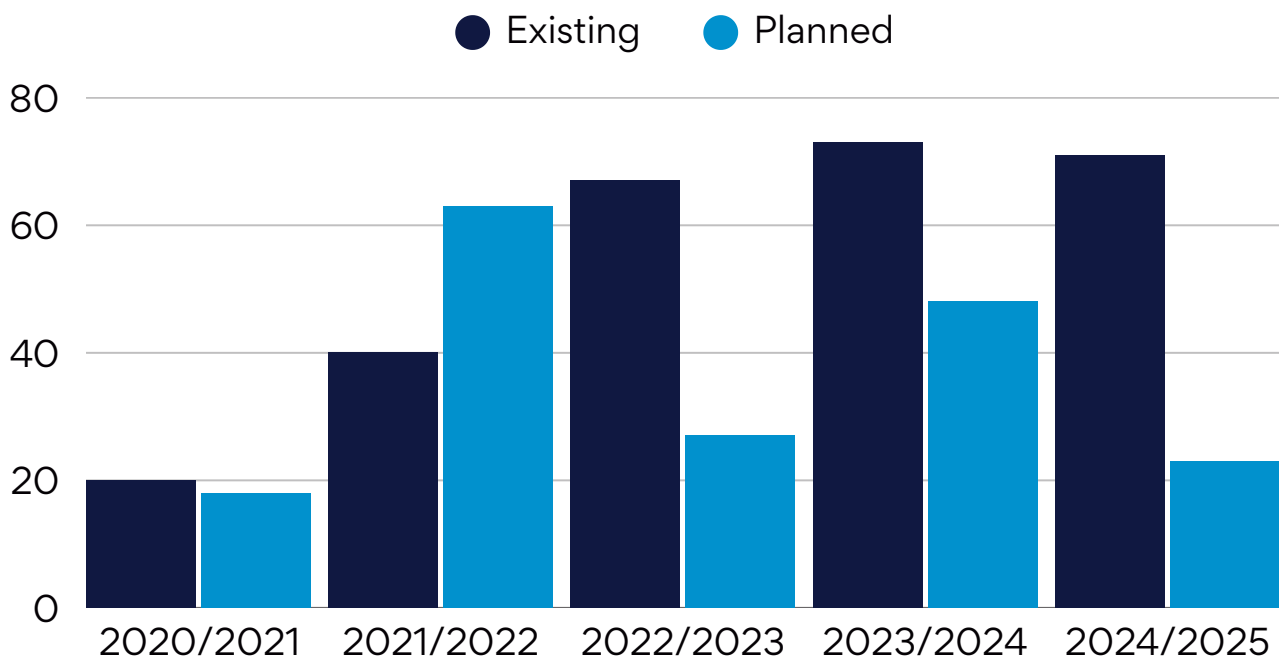
## 1.1 Data centres – growth and consolidation

The chart below shows that the number of existing, carrier-neutral data centres has both declined slightly by number in the last period but has grown in capacity. In terms of numbers, 75 data centres were identified in the last report but there were only 72 for this report. Data centres in some of the larger markets have continued to grow with new facilities, both coming on-stream and planned. However, a small number of more modest data centres have either merged or gone out of business.

The number of planned data centre roll-outs has declined significantly from 38 in the last report to 23 in this report. The heady optimism about rolling out sub-2MW facilities in smaller countries is now tempered by the realities of finding customers in these markets. Others had plans that have been delayed by Government tardiness, national elections and in one instance, a planning dispute. Also, in the case of one operator, its plans for roll-out in two countries are over two years old.

In terms of the number of countries with access to a carrier neutral data centre, it has plateaued at 21 countries, of which 6 of these countries have access to only one operator. The regional geographic distribution of data centres remains largely unchanged from the last report and reflects the economic scale of different regions in Sub-Saharan Africa.

### Existing and planned data centres chart



The longer data centres have been in existence, the more likely they are to have filled up. Those finding it harder to fill are the latecomers in markets with more than two data centres and those that are poorly located or built. In this context, decisions about build size are important. Operators have either built for large workloads in advance and waited for them to arrive or constructed in small, incremental phases, expanding only when full. The problem with the latter approach has been that when significant demand does come through, an operator might get caught with a full data centre when it needs larger capacity.

In Kenya, iXAfrica, which built with a larger capacity for hyperscalers, is beginning to see ‘breakthrough’ moments in a number of different directions: for example, its contract with mobile operator Safaricom (see 2.2 below). However, in Nigeria, some of the larger builds are not yet “translating into orders.” There is increasing ‘blue water’ between larger data centre operators in South Africa, Nigeria and Kenya and the sub-2 MW operators spread across much smaller countries. With the exception of Cote d’Ivoire, demand in francophone countries has been slow: “At the moment, (in one francophone country) people are only taking one rack.”



Outside of the communications industry’s own requirements, there are two solid drivers of growth: the hyperscalers and the finance sector (mainly banks and fintechs). In terms of data centre capacity, South Africa remains dominant and it has been estimated that up to 60% of that capacity has been deployed by hyperscalers. The only other two markets that will get this kind of bump in growth from hyperscalers are Kenya and Nigeria. Oracle has opened a public cloud in Kenya using iXAfrica. Nigeria may be next in line but more likely, in the mid-term.

What is most noticeable is that the ‘big bang’ approach, where a single hyperscaler opens a large capacity, geographic zone all in one go, may not apply. Particular hyperscalers have been building up local nodes through edge computing to deal with growing demand, both in Kenya and Nigeria. As one operator said, Sub-Saharan Africa’s tier one hyperscaler markets may be tier 2 or tier 3 in terms of size elsewhere globally. Indeed, some of the hyperscaler contracts being discussed are for small gateway deployments.

Demand from the finance sector is very much a function of the size and openness of different African economies and how regulation around data sovereignty affects their decisions about primary and secondary operations being either 'on prem' or outsourced. These decisions are examined across a range of countries in section 2. It's worth saying that a reasonably open country in market terms with only 5 banks has less demand than one with 20. In the first instance, demand for hyperscaler services is driven by the finance sector. In particular, a significant number of banks continue to move all or part of their operations to the cloud in Kenya, Nigeria and South Africa and multi-territory regional and international banks are driving cloud demand in smaller countries. With the Naira stabilised, these sorts of potential clients are now making future plans. 'On prem' data centres anywhere that are 5-10 years old are becoming increasingly costly with increased workloads that are being driven by digital products and payment platforms requiring third party 'plug-ins'.

The demand 'wild card' is Artificial Intelligence which has finally gone from being a conference topic to something approaching implementation. What this might mean is explored in section 1.2 below. One of the hyperscalers has been looking for 100 MW to secure its AI compute needs, including inference. Cassava Technologies will become a paying customer for its GPUs in Africa Data Centre facilities, now owned by STANLIB Asset Management.



The table below shows the public announcements made in 2024/2025 for investment in Sub-Saharan African data centres. These figures must be treated with caution for the reasons outlined below the table.

## Investment announcements in data centres (2024/2025)

### Data Centres

Operator	Amount US\$	Notes
ADC	12 million	Expand South African data centre
Axian/Stellarix	800 million	Not specific to data centres
Colo West/Rack Centre	250 million	Actis
Digital Realty	112 million	Teraco and new facility in Ghana
Equinix	390 million	Over 5 years. Announced February 2024
iXAfrica	Multi-tranche, unspecified	RMB
OADC	240 million	Lagos data centre
Microsoft	1 billion	Delayed
N+1	90 million	Pan-African expansion
PAIX	30 million	Africa50. Expand Ghana to 1.2 MW
Paratus	31 million	Energy Africa Infrastructure Fund. Not specific to data centres
Raxio	100 million	IFC
ST Digital	11.52 million	Uhuru Investment Partner. 3 new data centres in Gabon, Cote d'Ivoire and Togo
Wingu	60 million	Expand Djibouti, Ethiopia and Tanzania

Artificial Intelligence		
Altron	18.6 million	Not entirely devoted to the launch and expansion of its AI factory
Cassava	Up to 720 million	

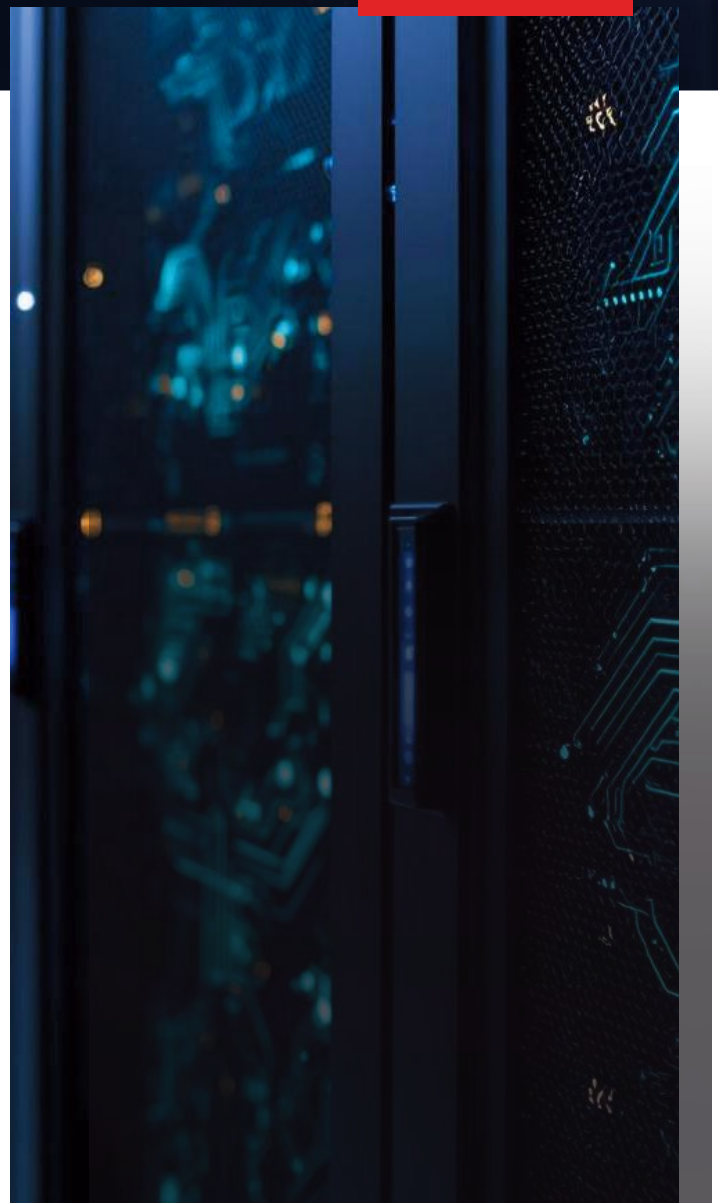
The largest single investment announcement by Microsoft and G42, a Dubai-based AI company, has been pushed back after site surveys found seismic issues with the original site. It may eventually be located in Nairobi. In some cases, operators have finance offers that are dependent on them hitting certain sales milestones. One operator said that this meant there was no reason to expand and they were “sweating their existing assets.” One of the major international data centre companies has pulled back from an investment in Kenya.

This consolidation shows that some of those in the sub-2 MW part of the industry may not be meeting investor expectations and it is noticeable that there has been a high turnover of key staff at a number of operators, both large and small. As one operator noted, it’s impossible to keep seeing high levels of investment if it does not produce commensurate revenues. Indeed, Africa Data Centres has been sold by Cassava Technologies to STANLIB Asset Management to help clear part of its debt burden.

Single data centre operators are perhaps the most exposed as the sector consolidates. The largest of these single facility operators is Colo West’s Rack Centre, which has been successful by any measure. Indeed, its key investor Actis has backed its expansion. Nevertheless, it will reach a point where it may sell some or all of its shareholding.

Helios has bought into iXAfrica and has announced it will purchase a majority share in Telecom Egypt’s regional data hub. The addition of Rack Centre would give it a strong hand across several of Africa’s larger markets. iXAfrica has signed a strategic partnership with South Africa’s Digital Parks Africa.

The AI announcements in the table above have yet to be tested in the marketplace and the sums involved may differ once this has happened



# Major MNO announcements affecting the market

There have been a number of announcements from mobile operators – Airtel, MTN and Safaricom - about the building of data centres that throw much needed light on their wider ambitions in the market. Airtel Nxtra is building two data centres, one in Eko Atlantic City in Lagos (to be completed Q1, 2026) and the other in Tatu City in Nairobi (to be completed Q1, 2027). The final capacities are 38 MW and 44 MW respectively and they are aimed at the hyperscalers and those needing AI-ready capacity. For example, the Lagos facility claims “high power density with up to 25kW per rack.”

MTN announced the start of Sifiso Dabengwa new data centre build in Lagos with the first phase valued at US\$120 million with a final capacity of 9MW. The first phase offers 4.5 MW. A local MTN representative said that local start-ups and companies need no longer rely on hyperscalers like AWS as MTN would be able to offer superior local cloud products priced in Naira.



MTN also announced that it was seeking to build AI data centres and will partly fund the roll-out with partners, including hyperscalers such as Microsoft (see section 1.2 below). It said that its new business unit, Genova, will lease AI computing capacity to companies and governments, forming part of MTN’s push to monetize infrastructure and grow new revenue streams. Meanwhile, MTN’s wholesale infrastructure company Bayobab has recruited a senior staffer from iXAfrica to head up its data centre operations.

In Kenya, Safaricom has entered into a strategic partnership with iXAfrica. The move was necessitated by the physical limitations of its Limuru site that when completed in January 2026 will provide capacity of 2.8 MW. The announcement with iXAfrica stated that: “The partnership will allow businesses and government who are the end users to benefit from scalable, cost-effective solutions for data storage, backup, and computing resources that meet their needs as they grow. Additionally, enterprise customers who have adopted Artificial Intelligence will be able to work with Safaricom to host their AI intensive workloads as Kenya leaps forward to be a player in this megatrend.”

At a less grand level, Botswana’s Bofinet announced its Digital Delta data centre, which will be 1,000 sq m facility in a 7,000 sq m site, built to a Tier-III design.



## 1.2 AI as Africa's demand wild card: GPU-as-a-Service and data centres

Artificial Intelligence (AI) is the demand 'wild card' for Sub-Saharan Africa. It might be huge immediately or it might be a long slow slog through the foothills to get there. A great deal of the discussion about AI – both globally and regionally - is focused on investment announcements and supply-side discussion of facilities that might be built. Some part of it involves 'circular deals' where a chip manufacturer invests in an organisation that then buys its chips. This section seeks to turn the investment announcement and supply-side approach on its head and ask: where will demand come from in Africa? The answer given below is in outline form but hopefully it creates a way of getting to grips with the clouds of hype that AI is generating.

In broad terms, there are two types of AI demand: training and inference. AI training is the process of teaching an AI model to perform a task by feeding it large datasets, from which it learns through repetition and feedback. Currently, these models are mainly but not exclusively Large Language Models (LLMs). These are advanced AI systems trained on massive amounts of text and data to understand, process, and generate human-like text. Inference AI is the process of using a trained machine learning model to make predictions or decisions on new, unseen data.

Broadly speaking, the potential users of AI will fall into two categories: firstly, individual consumers using it very much like an algorithmic search function; and secondly, companies, Government and academia using it for a wider range of more specialist tasks.

On the consumer front, according to Resourcera the top three generative AI chatbots globally are (in descending order) ChatGPT, Microsoft Copilot and Google Gemini. Data Reportal hit the headlines with its finding that 42% of internet users aged over 16 in Kenya used ChatGPT. There were also high levels of use in South Africa and Nigeria. Google has created LLMs in Swahili and Hausa, has programmes training people in digital and AI skills and research centres in Accra and Nairobi.

A Public Interest report looking at Africa commissioned by Google had a survey in which 53% of respondents running online businesses planned to invest in AI tools in the next few years. Microsoft Azure is developing LLMs in Swahili and English and Huawei has unveiled an Arabic LLM.

This kind of local inference demand will require a much higher capacity version of local caches. Industry sources point to the requirement for very low levels of latency and the need to deliver capacity as close to consumers as possible: "It will need to be in the same metro." In essence, some part of what are now search users will become consumer AI users from services provided by hyperscalers." This is demand that exists now and will continue to grow.

On the more specialist company, Government and academia front, the picture is only really just beginning to emerge. The demand for training AI models can be found amongst the largest mobile operators (Airtel, MTN Orange and Vodacom), a selection of banks and insurance companies and a number of Government and University projects. Donors and foundations will add funding that will increase demand at the margins.

The ambition of these projects can be indicated from currently existing examples. MTN has completed data migration to Azure for its Enterprise Value Analytics (EVA) platform. Built on Azure Databricks, EVA 3 now processes more than 20 billion records, supports 800 analytical workflows and integrates 1,700 data streams. The South African deployment will be the model for its other markets across the continent. In effect, MTN is of the scale and size that it could build for its own requirements and use its learnings to attract others. At a user level, the company has announced that it will offer Microsoft's Copilot to its 300 million customers beginning in early 2026.

Space42 and Esri have launched a five-year project with Microsoft to create the most comprehensive digital based map of Africa.

Google Cloud has partnered with Ecobank to enhance financial services across Africa with AI. Discovery (with its Vitality, A Personal Health Pathways platform) and Google Cloud have also partnered, combining the latter's AI and analytic capabilities with Vitality's extensive health datasets. It has 433,000 members and makes 460,000 health interventions. Google Cloud has also signed a strategic partnership with Nigeria's Jaiz Bank.

In addition, FirstRand has bought a minority stake in AI company Optasia.

The huge investments by both Google and Meta in global fibre networks is seen as needed for two reasons: firstly, to reach new markets but secondly, to link together their AI training nodes: "Training requires representative data of the community and that has to be acquired on the continent. Then it needs enormous bandwidth to synchronise the training nodes."

The issue is not whether organisations might want to create LLMs but whether they have the data and it is in any condition to be used. As Thabo Makenete, Head of Public Policy, Southern Africa, Meta told a session at AfricaCom 2025: "The issue is not about whether we have language models that can understand our languages and cultures. The issue is do we have access to the data that we can train these models on."

Beyond these ambitious projects to use LLMs is a wide range of organisations simply wanting to use pre-existing AI tools. These can range from the simple – customer service chatbots – to the more complex things like simplifying and speeding up Know Your Customer and loan processes. A much sharper example is Ghana's fintech Ladder, which uses AI tools to advise its customers on financial choices and buying products, describing itself as 'your AI-powered financial assistant.' There are, and will be more, fintechs trying to find innovative ways to make use of these tools.

As always happens at moments like these, there is considerable interest in using AI, a great deal of discussion about it but far less visible practical outcomes. However, if the number of people in the finance in the survey in section 2 of this report are any guide, it forms part of the plans of many banks, particularly the larger ones.

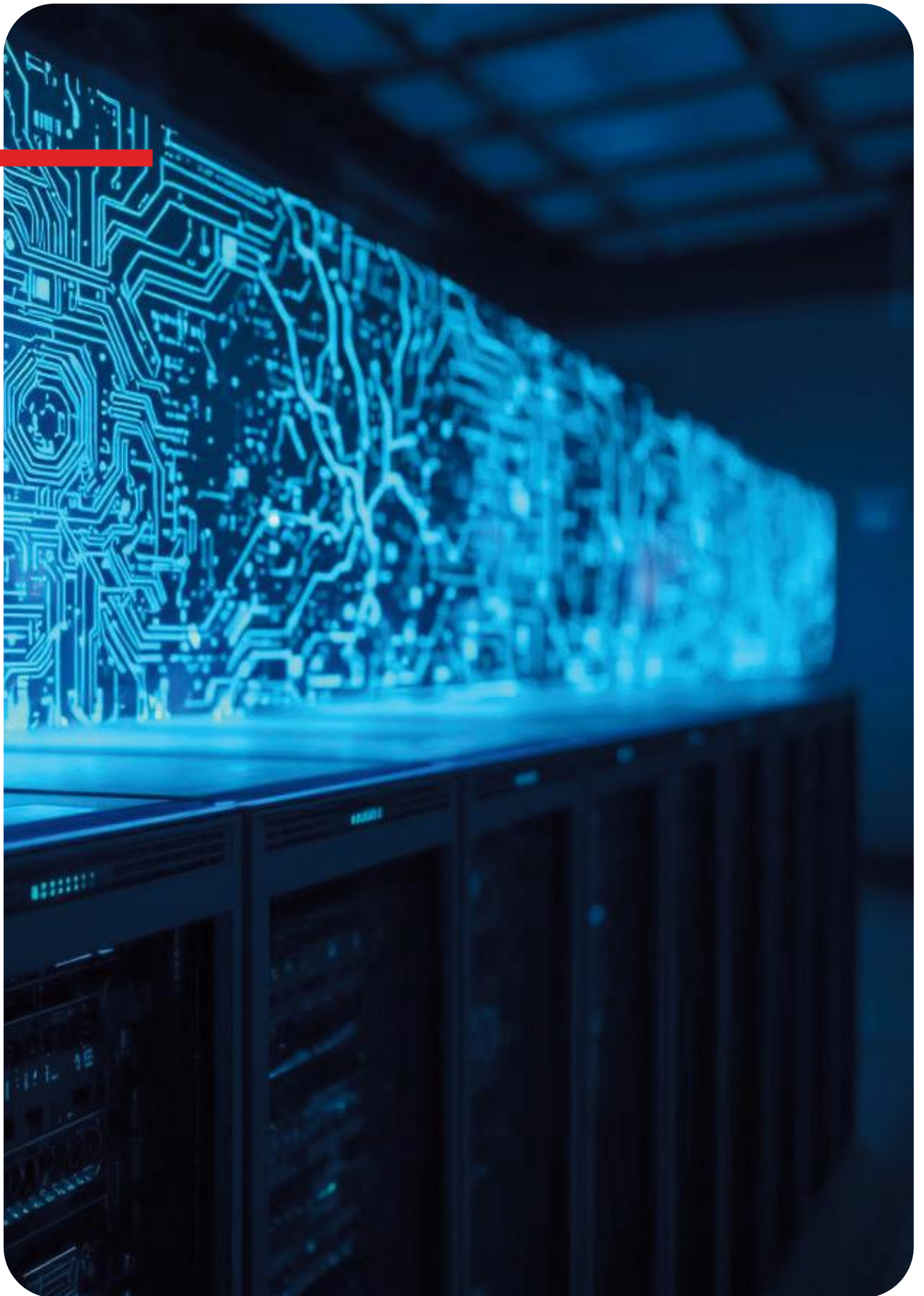
More detail of actually existing projects can be found in section 2. One operator said: "AI is slowly making an entry but it's very small-scale. It's mainly inference and not training at local level. It has a very high price tag and it needs a customer to have sold those services at capacity."

Governments and universities may well attract donor funding for AI Projects and individual Governments, like the Nigerian and South African governments, may consider it sufficiently emblematic to fund it themselves. The Nigerian Government has already blessed N-ATLAS a new open-source, multilingual Large Language Model (LLM), developed in a partnership between the Federal Ministry of Communications, Innovation & Digital Economy and local start-up Awarri, which supports Yoruba, Hausa, Igbo, and Nigerian-accented English, with plans to expand to more languages.

Both Governments and industry are supporting initiatives to increase AI skills. One example is Qubits Hub with Qhala. (<https://qbit.africa/>) in Kenya, among whose sponsors are Google, local cloud provider Angani and the African Development Bank. Apps are currently being developed but as one person observed: "There's not enough know-how yet. We're not yet seeing it used for business data. It's more like chatbots. There's no real products out there to apply to business data. More will consume it when there are projects like this. It's early days but there's traction with a couple of customers. AI infrastructure is expensive."

On the supply side, the headlines have been focused on the major deals (see investment table in previous section) struck to provide GPU-as-a-Service for those wanting to train AI models. A number of companies have struck deals with Nvidia including Altron (which will be hosted in Teraco), Cassava Technologies and Digital Realty's Teraco.

The Cassava partnership launched its first phase in June with the delivery of 3,000 Nvidia GPUs to a new facility in Cape Town. It is trumpeting an agreement with the Rockefeller Foundation that will be paying for its African grantees to use it. Initial organisations that will benefit are: Digital Green (farmers advice, Ethiopia and Kenya), Jacaranda Health (care for mothers and children, Kenya) and Rising Academies (improving outcomes for students in Ghana, Liberia, Rwanda, and Sierra Leone). It is in advanced discussions with customers, particularly the finance sector, education, healthcare and Government and public institutions.



It has announced the building of a new series of 'AI factories' over the next three to four years, with a further 12,000 GPUs to be deployed in new facilities across Egypt, Nigeria, Kenya and Morocco. Cassava Technologies has a sales team out in the market selling its proposed services. Thus far, it is the only Nvidia cloud partner, offering that company's library of applications.

In November 2025, iXAfrica announced that it had installed Africa's first GPU-powered infrastructure. Several sources in Kenya have reported that banks and research organisations are experimenting with the possibility of access to AI: "It's all starting to happen with baby steps."

BCN will launch a Zadara-powered multi-tenant Neutral AI factory in Nigeria. It is supported by the Digital Investment Facility.



## 1.3 Regional co-lo hubs – IXPs see fast traffic growth

Two key parts of Africa's connectivity architecture are the existence of regional hubs and Internet Exchange Points (IXPs). Carrier-neutral data centres and IXPs together provide powerful regional co-location hubs. By themselves, IXPs 'domesticate' traffic that used to travel out of a country to Europe, the USA and elsewhere: as much as possible, what's local, stays local.

The largest of the regional hubs are obvious (see table below): South Africa, Nigeria, Kenya and Ghana. However, a more objective assessment can be made by looking at the number of peering partners each country has. NapAfrica has 527 members and this compares favourably with the largest global regional hubs: Brazil's IX (the largest with 2,400 ASNs and largest traffic), London's LINX (950 ASNs from 80 countries), AMS-IX (889 ASNs) and NYIIX (200 members). NapAfrica is now the major gateway into large parts of Sub-Saharan Africa and its traffic reached 6 TB in November 2025. It started in 2012 with 300 mbps throughput and 23 connected members.

## State of customer base and growth factors

Ranking	Country	IXPs	Traffic exchanged	Total peers	Source
1	South Africa	NapAfrica, CINX, JINX, DINX, NMBINX	NAPAfrica: 5.5 TB INX 1.3 GB	NAPAfrica: 527 JINX: 184	IXP websites
2	Nigeria	5 active IXPs	IXPN 1.8-2 TB	IPNX: 104	Interview
3	Kenya	6 active IXPs	KIXP: 200-600 GB	KIXP: 154	IXP website
4	Ghana	2 active IXPs	GIXA: 740 GB	GIXA: 740 GB	Oct 2025, Internet Society Pulse
5	Uganda	1 active IXP	UIXP: 250 GB	UIXP: 250 GB	IXP website
6	Tanzania	1 active IXP	TIX: 157 GB	TIX: 157 GB	IXP website
7	Mozambique	1 active IXP	MOZIX: 140-150 GB	MOZIX: 140-150 GB	Oct 2025, Internet Society Pulse
8	Mauritius	1 active IXP	MIXP: 75 GB	MIXP: 75 GB	IXP websites and Oct 2025 Internet Society Pulse
9	Cote d'Ivoire	1 active IXP	CIVIX: 68 GB	CIVIX: 68 GB	XP websites and Oct 2025 Internet Society Pulse
10	Zambia	1 active IXP	LusakaIXP: 56 GB	LusakaIXP: 56 GB	Oct 2025, Internet Society Pulse



The table on the next page reinforces that point by looking at the number of international and regional co-location peers in each country, either in an IXP or a carrier-neutral data centre. Also, the countries with significant presence from international and regional co-location peers are the ones that have a wider range of international cable landing stations: South Africa (9), Nigeria (8), Kenya (7), Ghana (7), Tanzania (4), Mozambique (3), Mauritius (5), Cote d'Ivoire (5). Landlocked countries are at a disadvantage in this race.

## Sub-Saharan Countries ranked by co-location partners

Ranking	Country	Intl co-lo peers	Total	Regional co-lo peers	Total	I	Sources
1	South Africa	ACE, CDN, Aryaka Networks, Bharti Airtel, BICS, BT, Catchpoint, Cato Networks, China Mobile, China Telecom, China Unicom, Cisco, Epsilon, Hurricane Electric, IP Telecom, Orange Business Services, Outremar Telecom, PCCW Global, R G Silveira, Saudi Telecom, Space X Starlink, SFRC, Swisscom, T-Systems, Volptech	24	Abari, AFR-IX, Airtel RW, Aptus, Avanti, Bofinet, C&W Seychelles, CMC Networks, DFA Zimbabwe, Ecoband, Emtel, GVA, Liquid, Mahanagar Telecom, Mauritius Telecom, MT Namibia, Telecom Namibia, Telma, TelOne, Togocom, TTCL, Unitel, Vodacom Lesotho, WIIA Tanzania, WIOCC, Workline Communications, Yas	28	11	NAPAfrica
2	Nigeria	ACE, BICS, Fink Telecom, Hivelocity, Hurricane Electric, Orange Business Services, Orange, Orange CL, PCCW Global, Space X Starlink, Telecom Italia, Sparkle	11	AFR-IX, Angola Cables, CSquared, Dolphin, GITSE, GVA, IDS Africa, Liquid, Main One cable, Vodacom Business, WIOCC	11	-	IXPN, Rack Centre
3	Kenya	BICS, China Mobile International, Hurricane Electric	3	AFR-IX, Airtel RW, C&W Seychelles, Emtel, GVA, Liquid, MTN Business, MTN SA, Rogers Capital Technology Services, Somlinks Wireless, Seacom, Transfrica Communications, WIOCC, Workline Communications	14	4	KIXP, iColo Mbsa, PAIX
4	Ghana	One Web, Orange, PCCW	3	AFR-IX, Angola Cables, CSquared, CMC Networks, Dolphin, GITSE, Globacom, GVA, Isocel, MTN SA, TTCL, WIOCC, Workline Communications	13	1	PAIX
5	Uganda		0	Bandwidth and Cloud Services Group, CheetahNet Solutions, GVA	3	1	Raxio, UIXP
6	Tanzania	China Mobile International	1	Liquid, Seacom	2	1	Wingu, TIX
7	Mozambique	Voptech	1	AFR-IX, Jenny, Paratus	3	-	Raxio, Mozix
8	Mauritius	Outremar Telecom	1	CMC Networks, Vodacom	2	-	MIXIP
9	Cote d'Ivoire		0	GVA, Main One cable	2	-	CIVIX
10	Zambia		0	Jenny, Liquid, Paratus	3	-	Lusaka Internet Exchange Point



Ranking IXPs by traffic has its critics. One interviewee pointed out that the value of payment transactions (which take very small amounts of data) are probably more valuable than more data heavy transactions like watching TikTok: “You can go to Checkers and when you make a payment, that transaction goes over a secure tunnel but uses little bandwidth but the value of transactions to the economy is enormous compared to TikTok.”

Nevertheless, taken with co-location partners and availability of international cables, this gives a fairly clear emerging picture of regional hubs. Nigeria underperforms slightly within its region, not helped by political instability across the Sahel belt. Cote d’Ivoire is most likely to emerge as the francophone hub but is also underperforming relative to its opportunities.

A regional hub that may come into its own beyond its own borders is Djibouti, which up until this point has acted as a ‘roundabout’ for all the international cables that land there. Increasingly, the liberalisation of its connectivity market with new carriers may make a significant impact with lower available prices. Afrifiber is still reliant on Djibouti Telecom for its international connectivity but the more recently licensed T07 is preparing to host one of the new-generation of international cables. Opportunities exist for Djibouti to extend into Eritrea and grow its traffic with Ethiopia, Somalia and Somaliland. It may be more attractive for hyperscalers to host their services in Djibouti and deliver regionally to the horn of Africa countries.



Attitudes to liberalisation have a dampening impact on countries developing their regional potential. Two examples can be used to demonstrate the issue. The high prices charged by wholesale monopoly holder Camtel to neighbouring countries means that it will not reach its full potential as a regional hub for the Central African region. At a less dramatic level, Tanzania’s lack of a full liberalised national and international wholesale market means that it competes poorly as a regional hub for East Africa with Kenya.

IXPs as a model were a child of the internet community and those that have thrived have brought together all potential peers in their country, including the finance sector. This model now faces a number of different challenges. Indeed, as the gateway to Sub-Saharan Africa, NAPAfrica is now owned by Digital Realty and has eclipsed earlier IXPs like JINX. PAIX has launched its own IXP in Ghana and hosts LINX in Ghana and Kenya. There is also fibre connecting all Ghanaian data centres to these new exchanges. AMS-IX is also hosted in Wingu’s Djibouti data centre.

European IXPs are increasingly hosted within carrier-neutral data centres providing alternate 'meet' points. IXPN (which has a connection to Equinix Ghana) is competing with AMS-IX in Equinix and DICIX in Rack Centre but the respective traffic for each, 100 GB and 20 GB plus, is low. IXPN has the content providers and multiple IXP locations throughout the country. There are also proposals for regional 'meet' points to ensure that traffic within the continent stays within its boundaries.

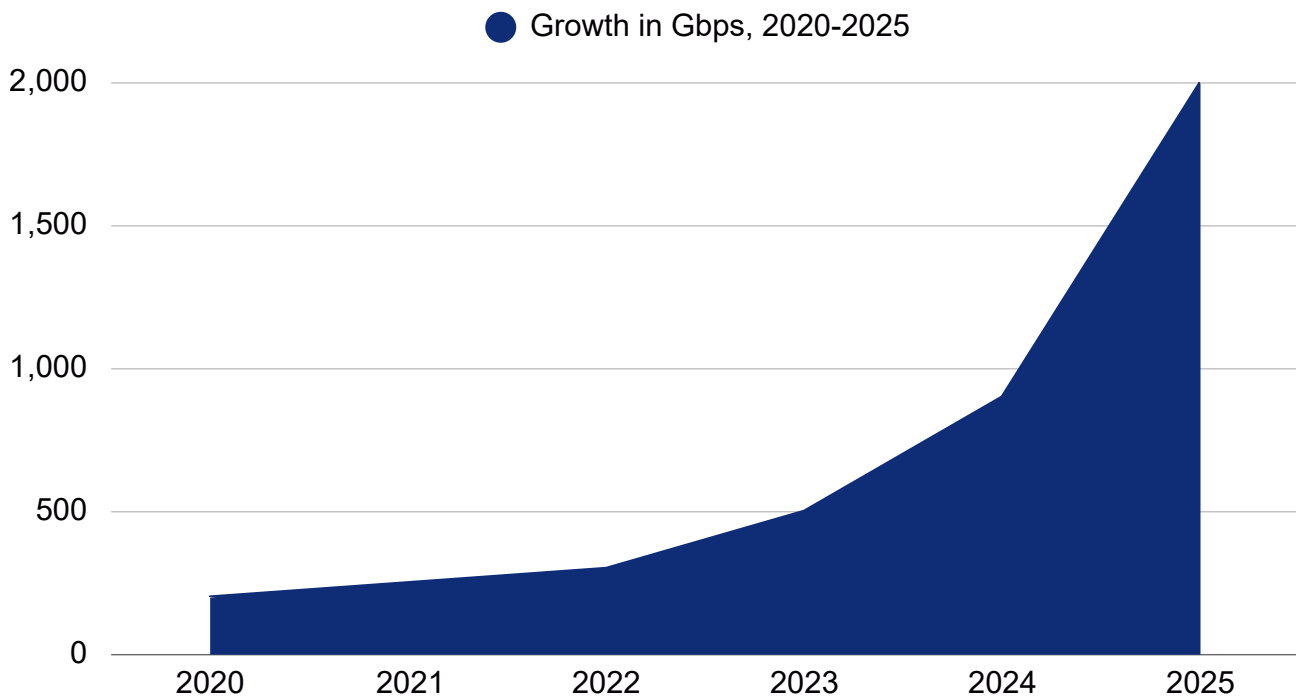
But a greater challenge to the community-led IXPs is the change in peering policy by one of the hyperscalers, Google. Previously a promoter of IXPs, it has introduced its Verified Peering Policy in order to meet strict technical requirements, including physically diverse and redundant connections to Google's network. This, it believes, helps ensure stable latency and consistent performance, even during maintenance or outages. The full implications of this change for African IXPs are not yet clear. One industry insider claimed: "It's no longer an open peering network."

A better piece of news has come from the election of a new board at AFRINIC, responsible for the allocation and management of Internet number resources, such as IP addresses and ASNs, for Africa and the Indian Ocean region. As one operator commented: "Growth of the ISP space was hindered by the trouble happening at AFRINIC. It was no longer allocating ASN numbers and IP resources. This led to a slower growth of numbers from Africa. Up until July 2025 we had added only one ASN number. Since neutral elections have been completed, it has allocated outstanding resources and there have been 13 new ASNs."

Outside of their co-location function, IXPs exchange domestic traffic and the increase in this element has been huge. The chart below shows the major increases between 2020 and 2025 in Nigeria. The 2 Tbps figure shown has been achieved but not consistently. According to IXPN's Mohammed Rudman, the majority of this growth is down to video streaming on YouTube, TikTok and Netflix: "More eyeball networks are connected with us and there's an increase in infrastructure for content providers.



Companies like Starlink are also driving it. Outside of MNOs, it is the second largest ISP in Nigeria with 33,000 subscribers and it's part of there being more connectivity to remote locations. We have all major content providers including Meta, Google, Amazon and Netflix. There is an extension of fibre to homes in major cities like Abuja, Port Harcourt and so on." The same trend can be seen in South Africa with the roll-out of both FWA and fibre to the home connections to lower-income households and townships.



## 1.4 Changes in the cloud market – hyperscalers, neo clouds and local providers

### Overall changes

The biggest development in the cloud market has been Oracle opening its public cloud in Kenya. As noted earlier, Microsoft’s big investment in a large data centre for AI has been delayed.

Hyperscalers continue to look at Nigeria but the timeframe may be anything between 2-3 years. Other hyperscalers are still waiting for enough demand in both countries. One operator has already made preparations: “We have prepared a big facility for a hyperscaler availability zone. We have the right capacity for them to make a decision. Hyperscalers are saying they will move in. They want availability zones for things like AI. They are exploring demand with edge nodes. The availability zone will require a different capacity, greater density and air-cooling.” Hyperscalers have also been in discussion with other countries like Angola but there have not yet been any concrete outcomes.

The main competitors to the hyper-scalers are the multi-country Neo Cloud providers like VPSie and Zadara. A number of data centres have partnered with these companies to offer these products as a way of growing their ecosystems. The Neo Cloud providers may well entrench themselves in uncovered markets before the hyperscalers provide. Their pitch is attractive for regional companies as payment is made in local currencies and overall, they seem to offer services that are cheaper than the hyperscalers. But selling cloud is not the same as selling bandwidth. As one data centre operator explained: “The telco and ISP partners don’t know how to sell cloud. This has led to a failure to sell effectively in (one country). Systems integrators are good at selling cloud.”

Data centre operator Wingu has launched a private cloud platform called Wingu Cloud Exchange in Tanzania and has plans to roll it out in Ethiopia and Djibouti. Service payments can be made in local currencies.

The Neo Cloud and local cloud providers have been quick to respond to the need for local processing of data in ways that meet emerging data sovereignty frameworks. As one operator said: “We’ve been co-marketing with them, targeting small companies in insurance hosting their data in Europe. Data sovereignty means they come to us and we work with cloud service providers who offer this.” Tata has announced what it describes as a ‘sovereign cloud’ in partnership with iXAfrica.

The challenge of after-sales support points to a wider trend in the Neo cloud and local provider end of the market. The simpler cloud products are like commodity software – as one local cloud company put it: “It’s Cloud365,” by which he meant that the product is sold and requires little training or after-care engagement. But for medium and large enterprises, the products need to be fitted to existing systems and ways of collecting data. Inevitably, this process raises fundamental questions about the differences between legacy systems and new cloud-based processes. These require higher level, consultancy and engineering skills from the sellers.

One local cloud seller in a West African country left the market for because customers needed continuous support: “The customers wanted daily attention and were not willing to pay for it.” His customers were enterprises with under 10 people and he was doing “a lot of hand-holding.” He closed down his local cloud company and is now offering cloud professional services to help companies set themselves up.



A similar issue occurred with a local cloud provider in South Africa driven by changes in how Microsoft was choosing to sell its Azure product, wanting resellers to focus on particular verticals: “The South African market is not big enough. There are 600 insurance companies in the UK versus 7 in South Africa. We’re mid-market. Most customers employ between 3-500 people. We’re across a range of sectors including manufacturing and education.” It switched to focusing on those customers where it could provide professional services: “Two years ago we had 2,000 customers, 1,800 of which we only had one transaction with. We want less customers providing better margins.”

Another driver is the slow move from ‘on prem’ product support to cloud-only that will again emphasise this shift: “Microsoft is stopping support on Exchange, forcing companies to migrate to the cloud. Realistically there is no other product. We tried Linux as an alternative but it was horrific. We had two customers who were early migrators and had problems, for which they blamed the cloud. There was a built-in fear but now they’re coming back to the cloud again.”

Another change has been the long-run impact of the modifications made to licensing arrangements by VMWare after its purchase by Broadcom. Of two local cloud providers who previously used VMWare to offer local cloud products, one is considering his options and the other is making a transition out of the business. The second is in Kenya where, depending on whose estimate you accept, there are between 25-50 local cloud players. The realisation that local cloud is not the 'next big thing' may see many exit: "There are too many of them and there's still new players coming in. It's a red ocean with companies fighting over tiny amounts of money." Without access to a VMWare licence, his service revenues – that were in the hundreds of thousands of dollars - dropped by 80%.

Access to affordable bandwidth remains a barrier to cloud use in several African countries. As one industry insider pointed out: "With the commercial (wholesale) monopoly of Camtel in, it's very hard to commercialise cloud. It's hard to supply local cloud as it's too expensive as a result." Likewise, another industry insider pointed to Tanzania having more competitive power pricing than Kenya: "Tanzania is a big opportunity on the basis of power costs but the TTCL (wholesale monopoly) is an issue."



## Battle of the brands – A despatch on perceptions?

In South Africa, Analytico's Business Technology survey, with its 1057 respondents, found that Google was the most trusted cloud provider (47%), followed by Microsoft Azure (27%) and AWS (21%).

In a continent beginning to become less familiar with bandwidth outages, the shock of the impact of the Red Sea failures (see section 1.5) has left a mark on cloud prospects. Government is anxious to ensure that international cable outages do not stop the life of the country, particularly its financial system. Companies in the finance sector do not want to be in a position where they cannot offer their customers service. As one operator emphasised: "Cloud services highlight the risk of outages on the cable. It impacted those with data in the cloud. We should be able to handle it."

# A summary of recent cloud activities in Sub-Saharan Africa:

## Hyperscalers



AWS has pledged to invest US\$1.7 billion in South Africa by 2029. It has opened its first Wavelength zone in Senegal in partnership with Sonatel. An AWS Wavelength Zone is an extension of an AWS region that embeds AWS compute and storage services within the data centers of a telecommunication provider's 5G network. This deployment strategy brings AWS infrastructure to the network edge, dramatically reducing latency for mobile devices and enabling developers to build applications that require low latency for 5G use cases.

The company also says it has had “significant uptake” of its AWS Bedrock platform in Sub-Saharan Africa. It enables developers to build and scale generative AI applications without managing infrastructure. In addition, Snowflake, an AI data cloud is now available through AWS in South Africa.

AWS is expanding its collaboration with ABSA across Africa focusing on cloud technology, AI solutions and skills development.



Microsoft has pledged to spend US\$296 million by the end of 2027 to expand cloud and AI infrastructure in South Africa. Its US\$1 billion data centre project with G42 is currently delayed. It has offered in-country processing in 11 countries globally, one of which is South Africa. It has a major AI project with MTN that will be used by the MNO as the model for its other markets across the continent.



It opened its cloud region in South Africa at the beginning of 2024. It has partnered with Ecobank to enhance financial services across Africa with AI. Discovery (with its Vitality A Personal Health Pathways platform) and Google Cloud have also partnered, combining the latter's AI and analytic capabilities with Vitality's extensive health datasets.

Vodacom has signed an agreement with Google Cloud to use its advanced data analytics and artificial intelligence (AI) product portfolio.



In February 2025, it announced a new availability zone in Nigeria, “improving service reliability, reduced latency and supporting data sovereignty.”



Alibaba has a local presence in two data centres in South Africa through its distribution partnership with BCX. In February 2025 it launched a new Edge Node service in South Africa through which it “deploys computing, storage and networking capabilities inside ISP data centres, close to end users



It opened South Africa as an Oracle Cloud region in 2022 and announced it would open a region in Kenya in 2024, which has now come to fruition. It has two public cloud regions, one in Kenya and the other in Morocco.

## Neo cloud providers



It has 11 private and public clouds in its Africa region. It works with data centres and ISPs to provide its services and has a presence through Wingu in Djibouti and Ethiopia delivered through Console Connect. The local partners decide where to provide coverage and have administration control, with a focus on self-service. It will support edge compute and services can be provided more or less anywhere, with a POP that can be as small as a quarter of a rack. According to George Ezzat, Chief Commercial Officer: “It’s very light on hardware and this makes it very cost-effective. You don’t need expensive engineering, just something cupboard-sized.” It has a link with an aggregated payment company and all payments are made in local currency. Overall, it has presence in eight countries, including Botswana, Egypt, Ethiopia, Ghana, Mozambique, Nigeria and Zambia.



It is seeking to operate across the continent with local partners in a wide range of countries, making it easier for African businesses to operate across the continent. Once it opens the service in a country, a local banking partner allows users to pay in local currency.

Countries already operating include: Ghana, Kenya (iXAfrica, soon with Zadara's AI Sovereign Cloud), Mali, Nigeria (Africa Data Centres), South Africa (Digital Parks Africa) and Zambia (Paratus). The next tranche of countries include Angola, Mozambique and Senegal. In the mid-term, it will offer coverage in Benin, Botswana, Congo-Brazzaville, Mauritius, Seychelles and Uganda.

One of Zadara's partners is Nigeria's pan-African cloud operator, Unicloud, which argues that it "offers a robust, world-class, and fully compliant alternative to expensive, high-latency offshore cloud providers." It will be available in six countries: Nigeria, Ghana, South Africa, Zambia, Senegal, and Mozambique. The platform is designed to eliminate the financial uncertainty and hidden costs that typically hinder growth. Firstly, it guarantees Zero Data Egress Fees, a critical cost differentiator that ensures predictable monthly billing and allows businesses to retrieve their own data freely. Secondly, with Local Currency Billing, enterprises pay for cloud services in their local currency, eliminating the burden of foreign exchange (FX) volatility and unpredictable costs. Finally, the platform is delivered on a Flexible OpEx Model—a pay-per-use structure—helping businesses conserve capital by removing the need for significant CapEx on IT infrastructure.



## 1.5 Connectivity, the Red Sea issue and the addition of new capacity and routes

According to Telegeography, Africa's total international, inbound bandwidth grew by 38% between 2021-2025, showing the fastest growth globally by region. Domestic online activity has also grown, witness the traffic exchanged through Africa's top ten IXPs (see section 1.3) As one wholesale company observed: "Clients who two years ago (smallish ISPs) were asking for 1GB are now asking for 10 GB. Those who used to want 10GB are now asking for 100 GB or even hundreds of GB." Almost everyone is agreed that at a retail level, streaming (particularly video) has been the main driver, a trend that will accelerate as ISPs in some markets begin to concentrate on lower income households.

In 2025, there were several cable cuts in the Red Sea, possibly caused by a ship's anchor from a vessel that had been attacked by Yemen's Houthi Government. The incident caused cuts in several cables (including the PEACE cable) and had knock-on effects across Sub-Saharan Africa. This followed a couple of different incidents in 2024 that affected both West and East Africa. These incidents shone a spotlight on Sub-Saharan Africa's vulnerability because of the Red Sea pinch point, a weakness heightened by the Houthi Government announcement that it would target these cables, something it later moved back from. Seacom's revenues declined by nearly 80% in the year ending June 2025 as a result of the earlier outages. The same threat from the Houthis looks set to emerge in 2026 as part of the fallout from the USA-Israel-Iran war.

These outages have had a clear impact in two ways. Firstly, there is a need for far greater diversity of routes, especially avoiding the Red Sea. The following section shows the ten new international fibre projects and not surprisingly, four of these enable carriers to avoid the Red Sea if required. Secondly, it has made enterprises, carriers and Governments far more aware of the need to have contingency plans in the event of future cuts.

As one carrier put it: “The Hyperscalers are trying to reroute away from Red Sea.” Indeed, the plans from both Google’s Umoja and Meta’s Waterworth cables seem to take very different routings to avoid the area, as well as the proposed Seacom 2 cable. Taken together, all three cables would enormously enhance the connectivity capacity of South Africa.

At a more modest level, there are vulnerabilities like DRC’s reliance on the WACS connection through Muanda, a victim of previous cuts. Likewise, Angola suffered significant disruption in July 2025 put down to road works. Highway works on Nigeria’s coastal road (Lagos-Calabar) has been wreaking similar havoc on domestic connectivity. Regional carriers like Liquid and Paratus have been building cross-border links to provide greater diversity.

Cable	Cost	Capacity	Investors
<b>Daraja</b>	US\$23 million	24 fibre pairs	Meta, Safaricom
<b>DARE1</b>	US\$86 million	36 Tbps	Djibouti Telecom, Hormuud Telecom, Somtel, Telkom Kenya
<b>Du/PEACE link</b>	Not disclosed	Not announced	Du, PEACE
<b>Gulf to Africa</b>	Not disclosed	20 Tbps	Golis Telecom, Telesom, Zain Omatel International
<b>Kilimanjaro One</b>	Not disclosed	Not announced	TTCL
<b>Medusa</b>	US\$395 million	24 fibre pairs	AFR-IX Telecom, EIB, European Union, Orange
<b>Medusa extension</b>	US\$15.6 million	24 fibre pairs	European Union, Orange
<b>Seacom 2</b>	In planning	48 fibre pairs/2 Tbps	Industrial Promotion Services (IPS), Remgro, Convergence Partners, and Sanlam
<b>Umoja</b>	Part of global route	Not available	Google
<b>Waterworth</b>	Part of global route	24 fibre pairs	Meta

## Below are short descriptions of these key international cable projects:

### Daraja

The Daraja cable is a subsea fibre optic cable that will have a direct route connecting Salalah, Oman and Mombasa, Kenya. The 4,108-kilometer cable is a partnership between Safaricom (on the landing station) and Meta (through its subsidiary, Edge Network Services), with a potential optional branch to Southern Africa. It is intended to support Safaricom’s 4G and 5G services and provide diversity. There has been public discussion of an extension of the route to Durban.

## DARE1

The DARE cable has four main landing stations: Djibouti City, Djibouti; Bosaso, Somalia; Mogadishu, Somalia and Mombasa, Kenya.

## Du/PEACE link

In October 2025 UAE telco du and the PEACE cable announced a newly launched UAE-Kenya link. In addition, the Gulf Bridge International cable, which goes east to Asia and West to Europe, lands in Djibouti.

## Gulf to Africa link

There is a proposed Gulf to Africa link between Somalia (Bosaso and Berbera) and Oman (Salalah), meeting the terrestrial fibre link to Ethiopia.

## Kilimanjaro One

Kilimanjaro One Submarine Cable System (KO-SCS), a 1,900-kilometer undersea cable that will link Dar es Salaam to Mauritius, with additional branches to Unguja and Mafia Islands, and potential expansion to Madagascar. The KO-SCS is part of a broader series of high-impact digital initiatives outlined by TTCL at the cable's launch, including a Pan-African Green AI and Robotics Data Centre, a smart device manufacturing facility, and a "Connectivity for All" program offering free public Wi-Fi in universities, markets, and hospitals.

## Medusa

The Medusa cable system is a 8,760 km network connecting 16 landing points across the Mediterranean and Atlantic coasts of Europe and North Africa. It links Portugal, Spain, France, Italy, Greece, and Cyprus with Morocco, Algeria, Tunisia, and Egypt. An expansion adds a branch to West Africa, with funding secured from the European Commission to land in Gabon (with ACE Gabon as the landing party) and for a branching unit to DRC.

## Seacom 2

The new Seacom 2.0 cable, which is in the planning phase, will connect the Indian Ocean Basin, the Middle East, Mediterranean, and Southern Europe, with extensions to Asia and West Africa. The total route length is planned to be approximately 25,000 km. The current principal shareholders of Seacom Ltd include Industrial Promotion Services (IPS), Remgro, Convergence Partners, and Sanlam.





The funding for the Seacom 2.0 project is expected to be a balance of new equity, internally generated cash flow, and potential debt from other sources, including a Loan of up to USD 100 million from the International Finance Corporation (IFC).

## Umoja

The Umoja cable is designed to expand network capabilities with a route that connects Kenya to Australia. From Kenya, the cable will run through Uganda, Rwanda, the Democratic Republic of the Congo, Zambia, and Zimbabwe, before reaching South Africa. From South Africa, the cable travels across the Indian Ocean to Perth, Australia.

## Waterworth

The Waterworth cable is a global ring of 50,000 kms, from the west coast of the USA to India and on to South Africa before heading across the Atlantic to the east coast of the United States. The route is designed to create new, more direct pathways and avoid geopolitical risks, providing a more secure and stable channel for data.

Finally, on a more long-term basis, there is talk of a power cable link between Ethiopia's Grand Ethiopian Renaissance Dam and Saudi Arabia, which might allow fibre capacity between the two countries.

SAT3/SAFE is due to be retired from use in 2027, the year its 25-year lifespan expires.

Somewhere in all of the above is a shifting dynamic in the industry. The key global cables are now being built by the hyperscalers. They are buying their own bandwidth directly and therefore the majority of their future requirements will no longer form the major part of wholesale carrier demand. With Daraja, Meta buys the cable and Safaricom the landing station. The next logical step is that a carrier-neutral data centre might provide the landing station funding. The larger carriers, with their own demand, will survive but the smaller players will be at a significant disadvantage. Wholesale bandwidth is a volume game with all the best competitive advantages still to be found the further upstream a company can invest.

At a terrestrial level, the largest single project is Nigeria's Project Bridge, an ambitious attempt to address the country's underperforming fibre network. It envisages a Special Purpose Vehicle (SPV) between the Government and private sector carriers to build and operate 90,000 kms of new national fibre routes, creating a coherent national fibre network.

## 2. Finance as the cockpit for Africa's digital transformation

Reliable payment systems and financial products that are available to all are one of the foundations of a successful economy. To achieve this, the Sub-Saharan African finance sector will need to have a robust digital infrastructure. For example, the increased use of third-party APIs to connect different partners is driving cloud use, whether public or private, 'on prem' or elsewhere. The co-location function is essential for bringing together what is otherwise a fragmented payments landscape.

This second part of the report opens with a short contextual summary of the digital transformation the finance sector in Sub-Saharan Africa is experiencing before looking in detail at the results of a survey carried out in this service sector. The final part summarises key issues - for both the finance sector and the communications industry it relies on – if they are to make a success of digital transformation.



The African finance sector is triangular, consisting of the traditional finance institutions (banks, insurers and others), mobile operators with mobile money platforms and fintechs, often bringing together the other two together. The survey in this report focuses on retail banking and insurance, excluding investment banking and other finance products like pensions. In relation to retail banking, insurance is the 'cinderella' of the sector, although things like car insurance are legally mandated. For example, one insurer claimed that less than 3% of people in East Africa used insurance products. This section excludes detailed discussion of crypto currency, which was only mentioned unprompted by five respondents out of 50.

This section is not about regulation but it touches on some of the newly available opportunities opened up by Governments and regulators, as well as some of the 'pain points.' The largest of these is data sovereignty (see 2.2) and the issues it raises.

## 2.1 Finance sector as the cutting edge for digital changes

### Context - The roots of change

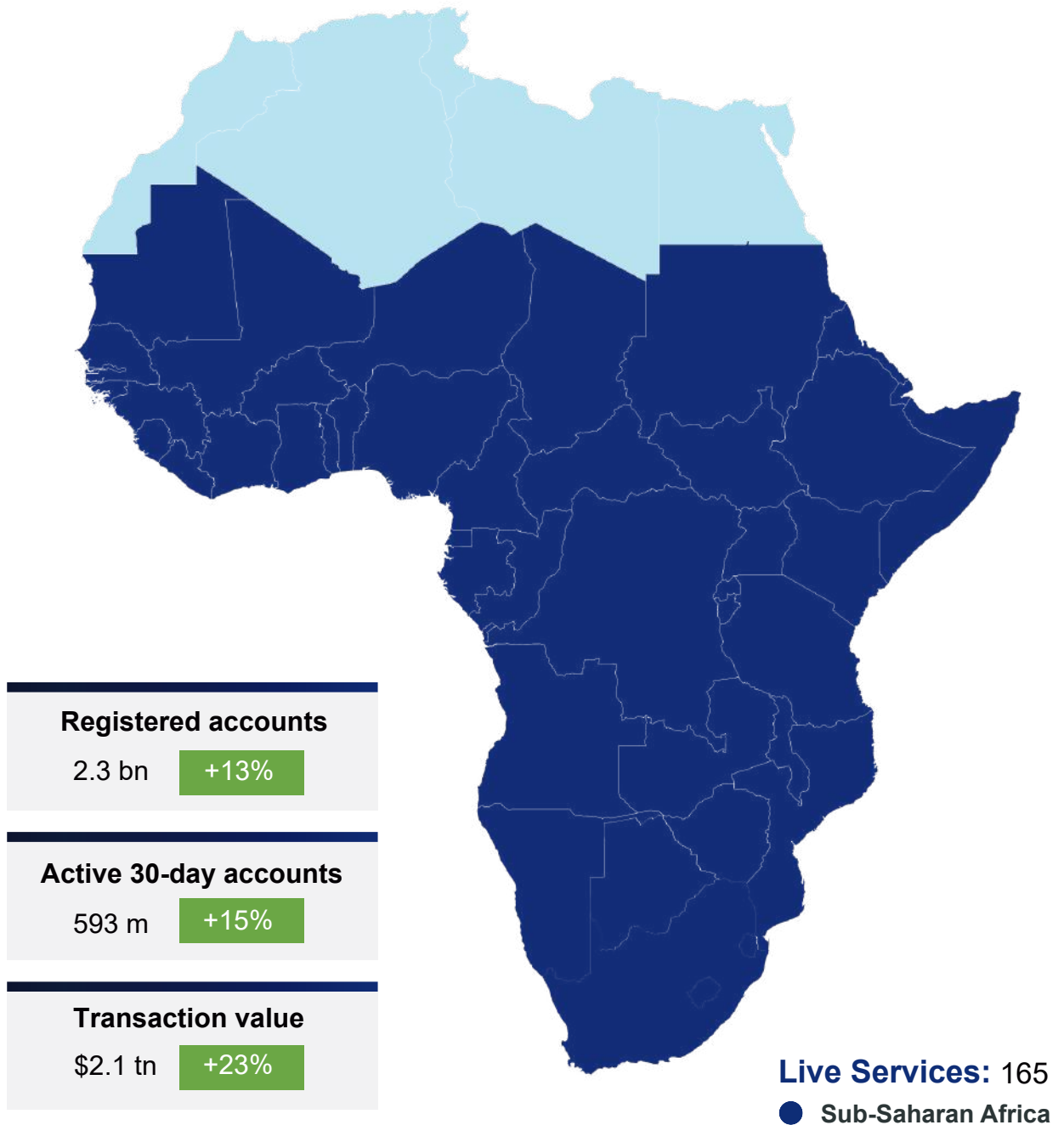
Innovation in Africa's financial sector did not begin with M-Pesa in Kenya. Equity Bank in Kenya started out in 1984 as a building society with a business model aimed at unbanked customers, before becoming a successful commercial bank in 2004. Celpay launched Celpay in 2000, as one of several unsuccessful initiatives in the early 2000s. But one executive of the company put his finger on the barriers to success and these still ring true today: "...there has to be an element of trust. There has to be a change in people's mindsets. People were reluctant to be charged 1-2% of their payment when it cost nothing to pay in cash."



Originally, M-Pesa was aimed at making microfinance loans easier but during its pilot, users worked out how to send money to each other. It launched in 2007 and as its agent network became more geographically dense, it began to take off. Its success was that both the more well-off and the poorer wanted to use it. But success in Kenya was not immediately followed by success in other countries. Culturally, particularly in West Africa, people were reluctant to trust mobile money and pay the commission. Also, at an institutional level in some countries there was some reluctance to let mobile operators take over any part of the traditional fiefdom of banking. For example, in Nigeria, MTN was only able to start MoMo in 2019, seven years after the launch of Paga.

In the years that have elapsed since mobile money services were first launched, they have grown into a major part of the payments landscape with 165 live services and 283 million active users over the last 30 days.

## Mobile money in Sub-Saharan Africa, 2025



The income from these services forms a key part of the revenues and continuing success of Africa's mobile operators. Their contribution to total revenues varies between 11-30%, depending on the operator.

Understanding that their world was being transformed in these decades, banks themselves began to innovate. For example, Standard Chartered launched what it described as 'digital only' banks in three African countries in 2017. Equity launched its MVNO Equitel in 2015 and Standard Bank its MVNO Standard Connect in South Africa in 2018. At what now seems like a more mundane level, almost all banks started offering apps and online presence. Fintechs began to appear as a category of start-up but most were clustered in (by order of numbers): South Africa, Nigeria and Kenya. A report in 2017 found that only \$100 million had gone into these start-ups over the previous two years.

## Number of banks in selected countries in survey sample and GDP per head (PPP)

NB: Six of the survey respondents had multi-territory responsibilities covering a wider range of African countries than those shown below.

Countries (Total: 11)	GDP per head (PPP) US\$	Number of banks
Cote d'Ivoire	8,060	28
DRC	1,970	15
Ghana	8,410	23
Kenya	7,556	38
Mozambique	1,773	15
Nigeria	9,488	27
Rwanda	4,100	9
South Africa	16,050	21
Tanzania	4,371	34
Zambia	4,503	17
Zimbabwe	7,840	27

### Where things are now

The success of these developments masks a pattern of much slower, fundamental change in relation to the transition from cash to mobile money, or indeed to digital transactions. For the countries covered in this report (see table above), mobile money accounts are held by between 30-90% of the adult population. Using the data available, most of these selected countries have between 20-30% of their population using bank accounts. The exceptions are: South Africa (84%), Nigeria (52%) and Kenya (50.6%). In almost all countries except South Africa, cash remains dominant.

However, quite a lot of Africa's economic activity is 'below-the-radar'. Based on IMF work with mid-2010s data, between 25-65% of GDP by country comes from the informal economy. On the basis of this work, Nigeria had the largest informal economy. Those in the informal economy often use cash to avoid being taxed. Many African governments have initiatives to shrink the size of the informal economy and digital payment is often central to them.

The success of this transition varies enormously. A World Bank study found in 2021 highlighted four countries (Kenya, Mali, Senegal and South Africa) where just below or over 50% of private sector wage payments were made into bank accounts. Indeed, current banking growth in DRC is focused on getting employers to put their payroll into employee bank accounts.

Mobile money was for many years, and still is depending on the country under discussion, a 'cash-in, cash-out' system. Users are not less inclined to use cash but merely use mobile money services to make its use more convenient. But the medium-term impact of these services is that users' financial literacy increases. Once trust is established in them, users are more inclined to use other products like loans, savings and insurance. Furthermore, a hybrid pattern of account use emerges: for example, an individual may have a bank account into which their salary is paid, a mobile money account to pay for a range of things, and an app-based account for savings.

The same hybrid pattern is reflected in what companies do. A 2025 World Bank Enterprise Survey in DRC found 26.8% used bank transfers (online or mobile) and 65.3% other (e-money, e-wallet and mobile money). What money goes through which account is a function of trust, cost and ease of use.

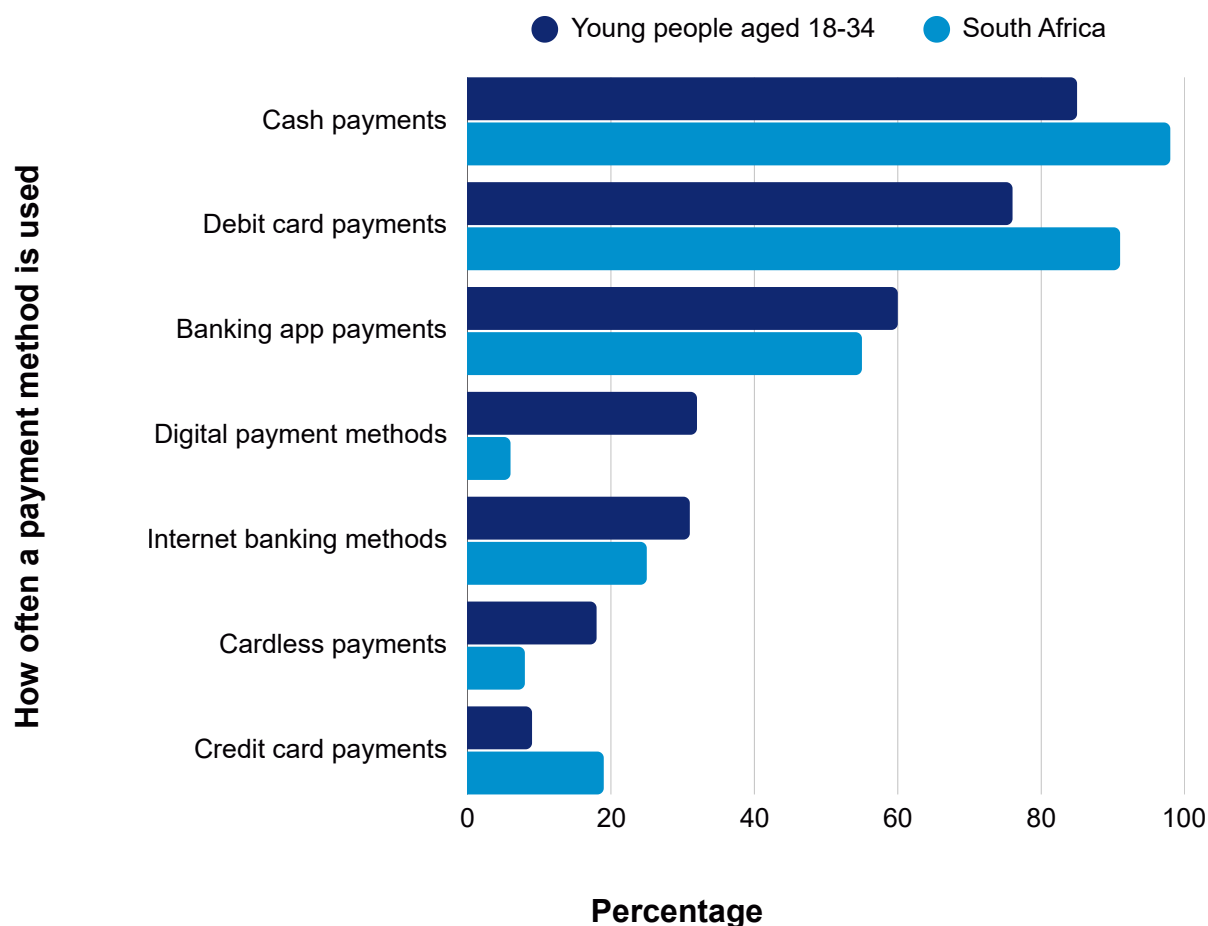
This hybrid approach by the user is mirrored in the main mobile distribution channels, with a split emerging amongst phone users. For example, just over 50% of phones in Nigeria have 4G and increased volumes of data are being used. 3G will be phased out, more or less quickly. That leaves half of potential mobile money users in Nigeria accessing their accounts using USSD. One fintech in Ghana said that its customers were split unequally between smartphones (40%) and USSD (60%). The question of who can do what with their accounts and how easily, flows from this divide, and any future approach will obviously again be a hybrid of online and USSD.



Digital transactions have been growing quickly over the last five years as the payment landscape changes. The most dramatic example is Africa's most developed economy, South Africa, where digital transactions doubled from 5 billion in 2020 to an estimated 10 billion by the end of 2025. Some of this growth is driven by improved payment systems with wider membership. For example, Tanzania Instant Payment System (TIPS) had 454 million transactions up from 236 million from the year before because of a drive to increase its financial partnerships, currently standing at 46.

Most of Sub-Saharan Africa is undergoing a behaviour shift associated with increasing numbers of young people using digital devices, particularly smartphones. Around a quarter of the 50 respondents in 2.2 below mentioned the impact of youth on the changing finance sector. At its simplest, youth are less likely to visit physical banks, are comfortable transacting on apps and in the main, trust digital products often launched by fintechs started by people of their own generation. The graphic below again shows South Africa where this impact is currently significant but not yet decisive.

## Youth embrace digital payments in South Africa



Source: Reserve Bank Payments Study Report 2023. Used results from DCPC survey for overall population

This transition has widely affected banks, who have often used fintechs to reach out to new customer segments, like youth, informal traders and SMEs. Some of those interviewed for the survey were willing to identify the proportion of customers using branches versus those mainly digital only customers. Those results are shown in the table below:

### ‘Bricks and Mortar’ vs digital

Category	Country	Using physical branches	Digital
Bank	Nigeria	20%	80%
Bank	Mozambique	40%	60%
Bank	Ghana	60%	40%
Bank	Ghana	65%	35%
Bank	DRC	70%*	30%*
Insurer	Tanzania	80%	20%

Source: Balancing Act \* Less than 20-30% using both channels

The important question, is not if but how fast the digital transition takes place? One survey respondent in Tanzania noted how buying electricity from the local utility had changed from going to their branches to pay to for it to becoming a largely mobile money purchase. The time scale for that transition? Six years ago, Tanesco launched mobile money payment and has closed almost all of its physical branches. The insurer survey respondent noted: “Insurance is not a necessity. It’s not as important as electricity. That made it quicker for electricity.”

The other transition affecting the finance sector is what constitutes a physical banking branch. With a small number of exceptions, African banks are not opening new branches. The cost per transaction to acquire and run customers through physical bank branches is just too expensive. However, that physical banking function – where people can take out and deposit cash – is increasingly being played by agents.

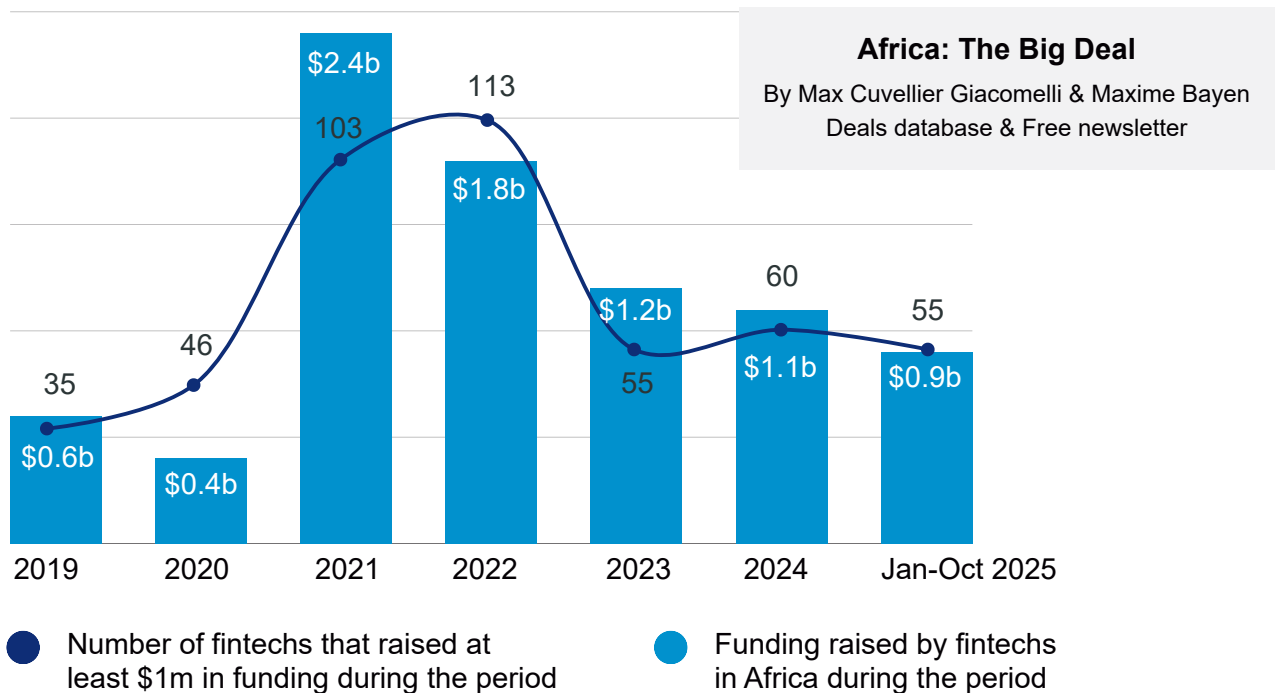
In one East African country, a bank runs its operation with 9 branches but has an arrangement with a fintech to give it access to a network of over 5,000 agents throughout the country. These agents have a much lighter regulatory burden and operate more cheaply. The impact of all these changes will be examined below but as research organisation CGAP commented: “(There is a) risk of exacerbating the digital divide and leaving others behind.”

## A sort of big bang – Investment in finance sector and impact so far

In the five years between 2021 and the end of 2025, investors have put over US\$7 billion into African fintechs (see chart below). For investors, fintech was an obvious choice, as it was foundational: without the ability to pay and receive money efficiently, it was much harder for other things to happen. Hence parallel investment in energy, logistics and transport. Furthermore, African fintechs have found it easier to operate across multiple territories if there were no physical goods involved.

## Funding raised by fintechs in Africa (2019-Nov 2025)

Total raised (exc. exits) & Number of start-ups raising at least \$1m



Source: Proprietary database available at thebigdeal.gumroad.com | Equity, debt, grant deals (exc. exits) | \$1m+ (2019), \$500k+ (2020 & \$100k+ (2021-) deals

The majority of fintechs are involved in payments and remittances, with a significant number seeking to offer faster and more cost-effective cross-border payments. Other areas tackled include: digital lending, 'buy-now, pay later', Insurtech, financial advice (including product comparisons), virtual assets and wealthtech. With the exception of the last two, a common thread is offering low-income customers fractional payments for things like savings, investment and insurance.

Some of these fintechs set out consciously to be disruptive and to replace existing finance companies. These ambitions include acquiring either an existing bank or a banking licence. But the majority have relied upon both the mobile company distribution channels and the licensed payment systems of the banks.

Based on the survey in 2.2 below, banks offered a trusted payment infrastructure used by most fintechs, the skills to operate it and were used even by the most successful mobile money operators. Insurers had the skills to devise and cost products and underwrite them. Fintechs were innovative, agile, could acquire target new users at much lower cost than banks and were more attractive to the increasing number of young digital natives.



The number of fintechs varies, with most concentrated in Sub-Saharan Africa's larger and more developed markets. For example, the Ghana Fintech and Payments Association has 125 members, 60 of which are licensed start-ups. The Tanzania Fintech Association has 100 members, half of which are fintechs. However, numbers by themselves, do not always mean much. For example, in DRC, there are an estimated 26 fintechs but only 5 have any significant scale.

There are over 10 neo-banks in Sub-Saharan Africa including: Affinity (Ghana), Choice Bank (Kenya) and TymeBank (South Africa). Choice Bank is offering Banking-as-a-Service and has signed a partnership deal with Safaricom to improve last-mile payment for international remittances. The table below shows how a number of banks have invested directly in fintechs to "buy into" a range of different kinds of expertise and in the case of Kenya's KCB employing a fintech founder and buying into his former company. A number of banks have set up their own 'in-house' fintechs to explore what can be done by working with a more tech-oriented, entrepreneurial mindset. Others have gone the partnership route or created separately branded, digital products. Two moves illustrate how the old boundaries may change. Axian Investments, part of the group that owns the pan-Africa telco company Axian, has acquired an Insurtech company. At a larger scale, Pepkor, a South African retail chain with operations across southern Africa, has announced its intention to set up a bank.

## Significant investments and partnerships in fintech

Company	Country	Fintech/other	Fintech/other focus
<b>Acquisitions/share</b>			
Axian Investment	Cote d'Ivoire	WiASSUR	Insurtech
BAS Group	Nigeria	Zury	Invoice financing
FirstRand Bank	South Africa	Optasia	Artificial intelligence
FNB	South Africa	Selpal	Township customers
KCB	Kenya	Pesapal	Payment processing
KCB	Kenya	Riverbank Solutions	Payment solutions
Lasaka Technologies	South Africa	Bank Zero	Lending
Nedbank	South Africa	iKhokha	SME solutions
<b>Banks' fintech arms /fintech subsidiary</b>			
Access Bank	Nigeria	Hydrogen	Switching and payment processing
GT Bank	Nigeria	Habari Pay	E-commerce and POS
Stanbic IBTC	Nigeria	Zest	Multi-rail payment platform
Old Mutual	Zimbabwe	Omar'i	Various, inc mobile wallet
<b>Partnerships</b>			
Old Mutual	South Africa	10X Investments	Digital wealth management
Old Mutual	South Africa	10X Banking	Underbanked customers
Old Mutual	South Africa	CoverGo	Digital insurance
Old Mutual	South Africa	One Connect	Digital life insurance
Old Mutual	South Africa	Bridge Taxi Finance	Insurance marketing insights
Sanlam	South Africa	TymeBank	Personal loans and credit cover
<b>Others launching banks</b>			
PEP Stores (Pepkor)	South Africa and 9 other African countries	Also acquired Cloudbadger	Banking software fintech

The digital transformation in the finance sector has the support of several countries' regulators and governments. **Four** developments are worth highlighting:



01

The adoption of open banking principles. (see box below) Five countries – Ghana, Kenya, Nigeria, Rwanda and South Africa – have either implemented or are about to implement open banking guidelines. Among other things, these enable fintechs to use Banking-as-a-Service more widely. Several of the larger banks interviewed for our survey have a commitment to open banking principles in their corporate strategy.

02

There is now a climate in the regulatory space for encouraging innovation. There are 25 'sandbox' projects in 15 African countries. 'Sandbox' projects are effectively pilots where full regulation may not apply and where all involved can learn lessons before full roll-out.

03

The Bank of Ghana and the National Bank of Rwanda signed a Memorandum of Understanding (MoU) to create a fintech passporting framework. This will allow fintech companies licensed in one country to operate in the other without needing to obtain a separate license. It is believed that other countries will follow, making similar agreements.

04

A small number of African countries have passed legislation (or intend to) covering crypto-currency, including Ghana, Kenya, Mauritius, Nigeria and South Africa. However, there are many more African countries that have banned crypto-currency outright.

## Open Banking

Open banking guidelines are rules and standards that regulate how banks securely share customer financial data with authorised third-party providers (TPPs) through APIs, with the customer's explicit consent.

They aim to increase competition and innovation in financial services, giving consumers more control over their data and access to new tools and services, while ensuring security and privacy. These guidelines define API standards, security requirements, and the rights and responsibilities of all parties involved.

The sharing of access increases competition, lowers barriers for new players, and enables new business models like banking-as-a-service and embedded finance. By fostering a more dynamic ecosystem, open banking drives better customer experiences through more choice, greater personalisation, and streamlined processes.

# Triangular ‘tug-of-war’ over who gets ‘the prizes’ - forces that will determine who the winners and losers are

The starting point for the digital transformation of the African finance sector is the fragmented payments landscape. NijaPay CEO Jonatan Allback has described it as “the black hole” of African payments: “We are all at the mercy of the underlying infrastructure that payments is being run on across the continent.” He has highlighted the resulting high failure rate of digital payments.

Mobile money systems only connect between operators in a handful of countries and the Mowali interconnection agreement between MTN and Orange launched in 2018, to connect all their mobile money subscribers, has not lived up to its original promise. The same might also be said of Mojaloop, an open standard for interoperability of mobile payments. Individual banks have set up interconnecting payment structures between themselves, the mobile money services and those needing to get paid. But these arrangements are a patchwork quilt of different systems, often only between two players and rarely across borders. The very low use of credit cards means that its underlying system does not provide the sort of backbone found elsewhere. It is very complicated as below the simple act of payment are a number of different players including ‘gateways’ and third-party payments processors.

The largest initiative aimed at addressing the trade part of this landscape is PAPSS, the Pan-African Payment and Settlement System, developed by the African Export-Import Bank (Afreximbank) in collaboration with the African Union and the African Continental Free Trade Area (AfCFTA) Secretariat. It aims to enable instant, cross-border payments in local currencies across Africa. It connects African central banks' real-time gross settlement (RTGS) systems to facilitate trade and economic integration.

By themselves, neither the banks, nor the mobile operators or the fintechs have the power or the market muscle to change the payments landscape for the better. Each will need to find a way of collaborating with the other to provide ways of improving how everything works. Those who imagine that they can use the leverage they already possess to impose their will, are likely to discover that they are much mistaken. What will drive these changes is a force that is already in existence: the requirement to lower the cost of transactions in order to make financial services available to the widest number of Africans possible. In other words, to create high-volume, low margin transactions. As one fintech pointed out, it handled millions of customers with just sixteen people compared to a bank with physical branch assets and far more staff.





The mobile operators have created a system that reaches out across many countries to offer cash-transfer. As a distribution platform, with existing customers, they can and are adding other products like insurance and loans. But mobile operators are not banks, with their higher standard of regulation and wider range of functions. Even Orange Bank's modest progress in Africa is based on partnerships with local banks.

Mobile operators could become banks but it is a much tougher business to run than simply being a distributor of products. The challenge for them is that they need to protect the margins they are currently getting from their customers in order to retain (and even increase) the mobile money contribution to total revenues.

Since this is already a high volume, low margin business, it will be difficult for them to change the terms of their business model to make it work for an even wider number of people. Nevertheless, competition from operators like Wave in francophone Africa, which offers a 1% flat fee for transfers and free 'banking' services on an app shows how they might be challenged. But for now, as one fintech pointed out, they have a strong hand: "MNOs want 80% of the revenue. Fintechs have the speed but they have to go to MNOs for distribution. MNOs make most of their margins from money movement."

Since they already 'own the customers' (to use a rather dated phrase), they often feel the power in whatever happens lies with them. But in a multi-channel world, that includes payment through social apps like Facebook and WhatsApp, this is by no means guaranteed. The banks, with or without fintech partners, have the ability to have direct online relationships with a growing number of customers. Not everyone has to be a full account customer to do business with a bank. The split between smartphone and USSD customers opens up an opportunity for the banks to go direct to a wider customer base. The differences between Sub-Saharan Africa's more developed countries and the less developed ones will produce very different negotiating dynamics and contributions from the three parties involved. Some countries have no fintechs and only very small amounts of banking customers.

The quality of the platforms that connect the different parts of the payment systems matter. The mobile money platforms of Africa's operators have much improved from their early days but were not really designed to sit at the core of an interconnected payments system. Therefore, not surprisingly, all the major mobile operators have made moves to transition their systems to the cloud: Airtel (AWS and Comviva), MTN, Orange (using TenCent to enrich its systems) and Vodacom's M-Pesa. At the launch of the latter, Safaricom said it wanted to create a comprehensive digital ecosystem, promising among other things, faster API responsiveness. It wants to become "a central hub for everyday digital transactions in Kenya and beyond." However, this transition is the beginning of a journey and it will take some time, as other enterprise users of cloud will attest.

One way of ‘threading the needle’ for a more unified payments landscape is the creation of platforms that bring together all those involved. These platforms will take all different shapes and sizes. For example, with regulatory changes in 2018, Tanzania’s insurance companies came together with agents and brokers to operate on a common online B2B platform called Smart Policy. One logical extension is to offer an insurance platform for consumers.

Banks might work with both fintechs and other financial product providers to create platforms that allow customers to buy these things on a common platform, creating B2C opportunities. Several fintechs have already created platforms of this kind but many have yet to reach critical mass. Sometimes these platforms bring together a range of partners - from fintechs to mobile operators and banks - that are invisible to the user. These platforms might be focused on a single task (payment for goods) or offer groups of services (financial products). For example, a platform might bring together informal traders and their buyers.

To be successful, platforms of these kinds require ‘networks effects’ to make them essential for the user. Mobile money already demonstrates how this works. The next stage is a combination of complicated ‘back-room’ work on connecting underlying payment systems and creating new user platforms that take the hassles out of doing financial things for different groups of people, both individuals and organisations.



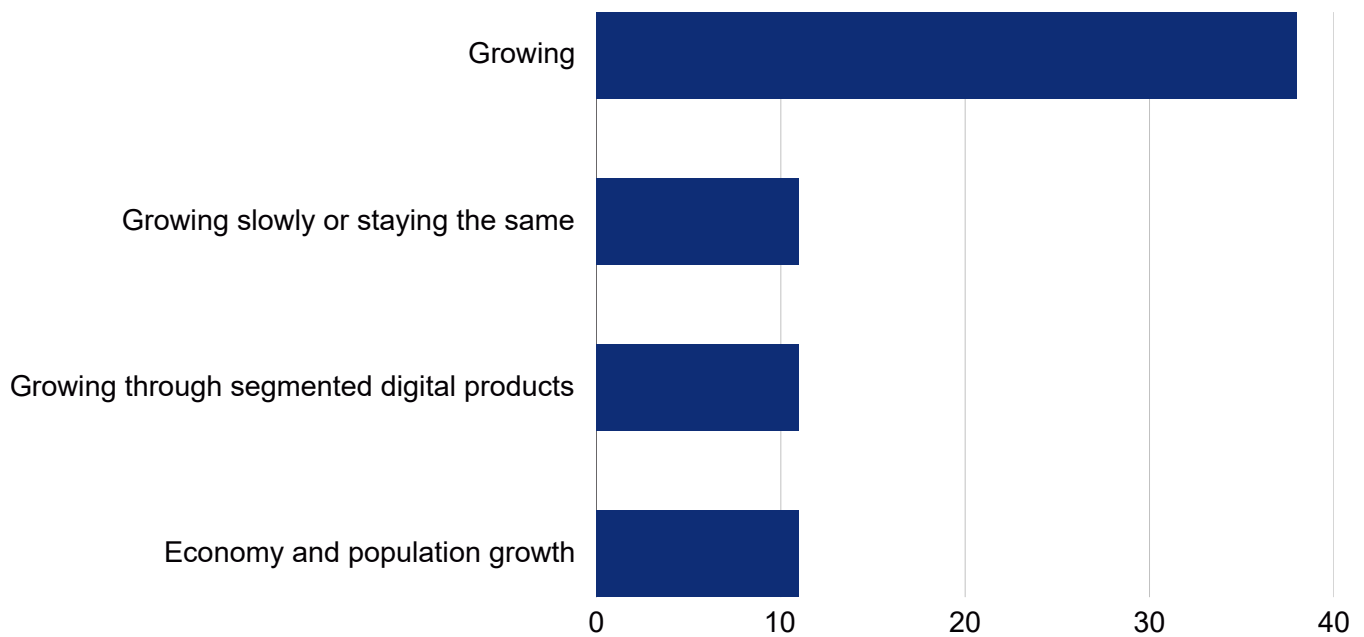
Nothing prevents certain types of fintechs from continuing to play a disruptive role, shaking up established practices. For example, Flutterwave bought Mono Bank in January 2026. Companies like PiggyVest have pioneered micro-savings with its 5 million registered users and disruptive fintechs like it are another route through which change will happen. Companies like Flutterwave, that operates across 34 African markets and supports cards, mobile wallets, bank transfers, and Google Pay, show that the orchestration of a more unified payments system may not entirely be in the hands of the traditional players.

As with all online behaviour, African finance customers have tended to adopt a hybrid approach, using different services to do different things. Nevertheless, these customers are at the start of a journey and the more they use different services and products, the greater the level of financial literacy they will acquire. In almost all respects, Sub-Saharan Africa is a cost-driven market and with increasing levels of financial knowledge, customers will look for lower costs for moving their money, the best interest rates for loans and better returns on their savings.

## 2.2 Finance sector users' survey (banks, insurance and fintechs)

Survey respondents were asked whether their company's customer base was growing, standing still or shrinking. The majority (39 out of the 50 respondents) said they were growing but four of those (banks) said they were only growing slowly. 11 said they were remaining more or less the same, of which three were banks. This needs to be qualified in several ways. Almost all bank growth is either through digital or mobile money platform products, particularly aimed at segments like SMEs, the informal sector and youth. Insurers are experiencing growth from a very low base and for many of the same reasons. Fintechs are experiencing growth from partnerships with banks and insurers. Some banks have plans to open new branches but these are very much the exception. Others have expanded their geographic coverage through agency banking. Several referenced increased financial literacy because of the use of mobile money products.

### State of customer base and growth factors

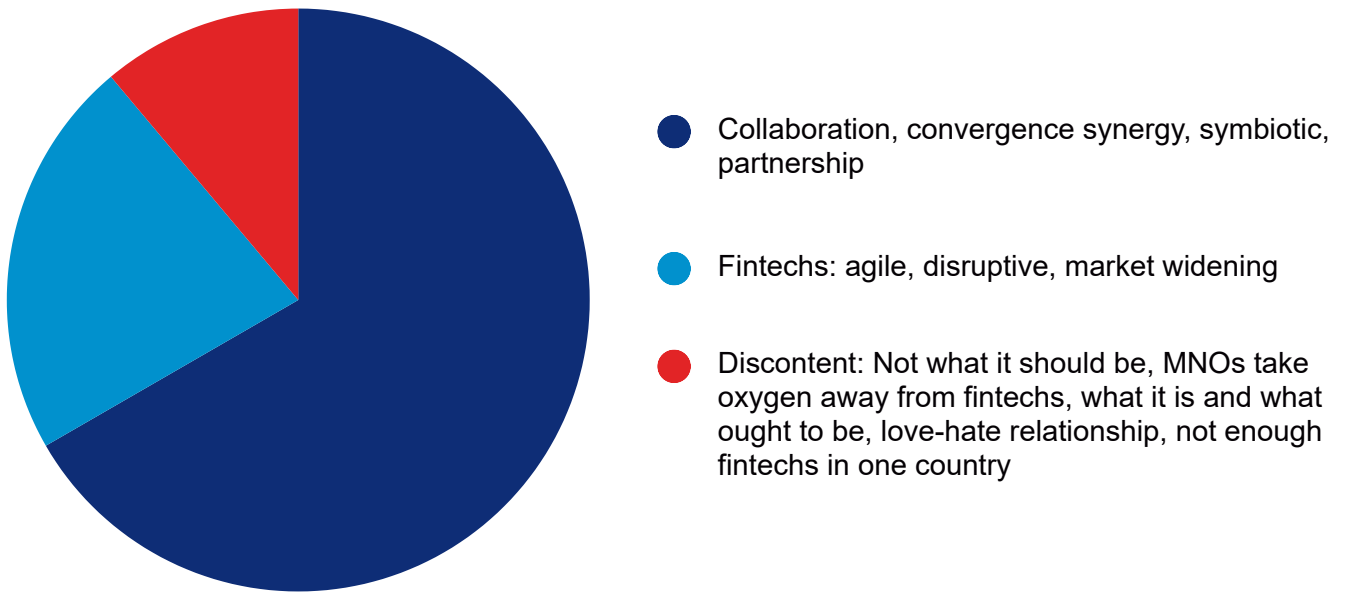


When asked what the relationship was between 'traditional' banks and insurers, over two thirds of respondents said they should be partners. Only 2 fintechs claimed to be disruptive, one wanting to get its own banking licence to further this aim. Two 'neo banks' offered nearly digital only services, one in Ghana and the other in Kenya. There was a great deal of clarity from both sides as to what the other offered. Often, respondents answered with the practical details of their own partnerships.

Several comments reflected on the bargaining position of each of the three parts of the finance sector: banks were looking to fintechs for growth and innovation, MNOs were looking to banks and insurers to add more products to their platforms, and one fintech remarked, echoing wider sentiments heard elsewhere, that banks were easier to deal with than MNOs.



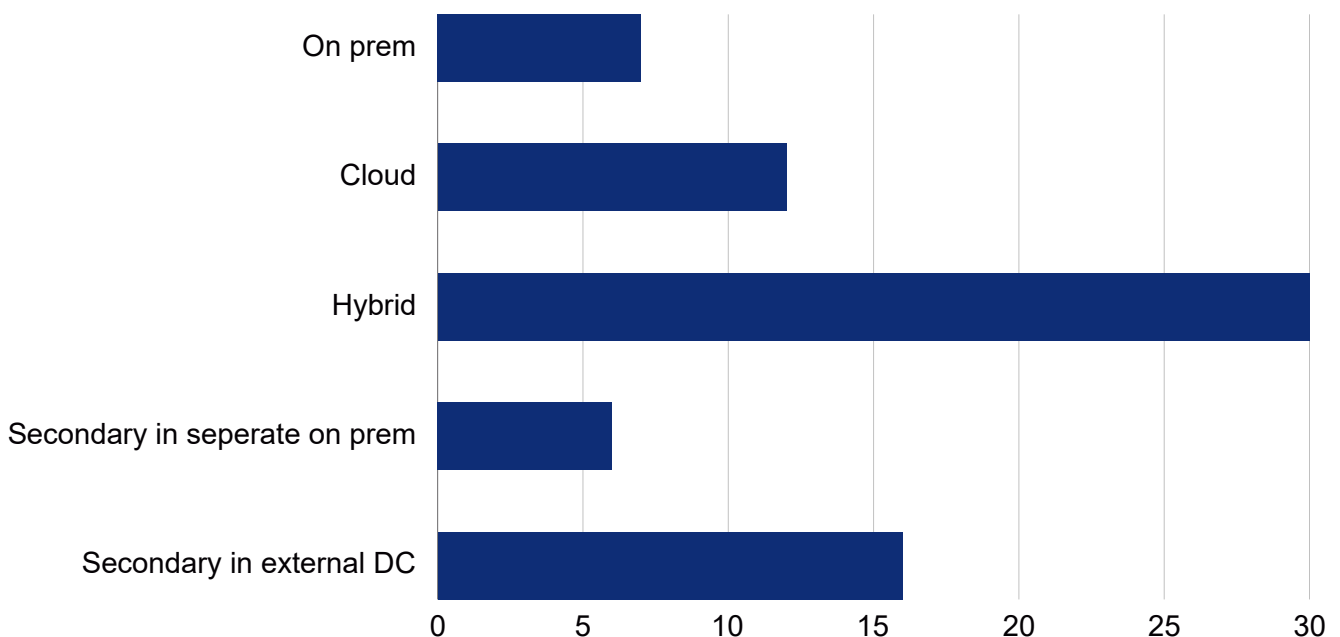
## Relationship between 'trad' finance and fintechs



The majority of respondents (30) used a hybrid approach to their core operations, although about a quarter (12) had moved to the cloud with an external provider and only 8 were solely 'on prem'. However, four of those who were hybrid, were mostly 'on prem'. As one Nigerian respondent said: "Most Nigerian banks prefer apps in a private cloud 'on prem'." But as a bank in Ghana explained: "Once public cloud comes here, we will move to it." Banks tended to use cloud to deploy 3<sup>rd</sup> party APIs and acknowledged its ability to provide quick scaling. Fintechs and neo banks started on the cloud, although some might operate part of their data 'on prem' for compliance reasons.

Not everyone was able to answer questions about where their secondary data was stored but of those who could, 16 had it in an external data centre and 7 in a secondary premises.

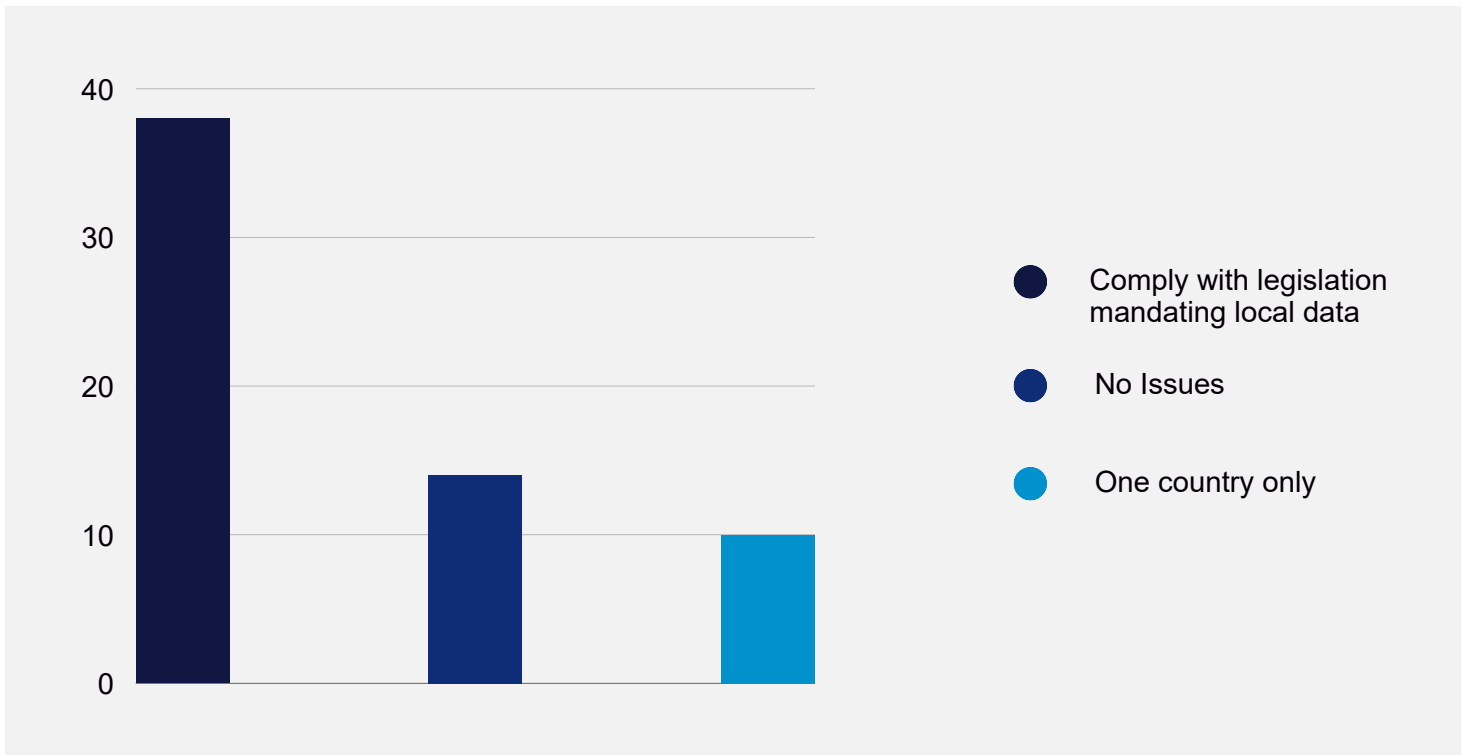
## Core operations - primary and secondary



Issues around data sovereignty continue to affect how those in the sector look at cloud -based core operations. There is still a degree of uncertainty in some countries and the attitude is to continue to operate 'as is' unless specifically directed otherwise. All of the 11 countries surveyed have clear data sovereignty laws, but they were not all as closely supervised. Some countries had annual audits and in Ghana approval has to be sought for cloud applications. Concerns were expressed about a set of bills going through the country's parliament that will make everything a great deal more 'top-down' and would discourage cloud use.

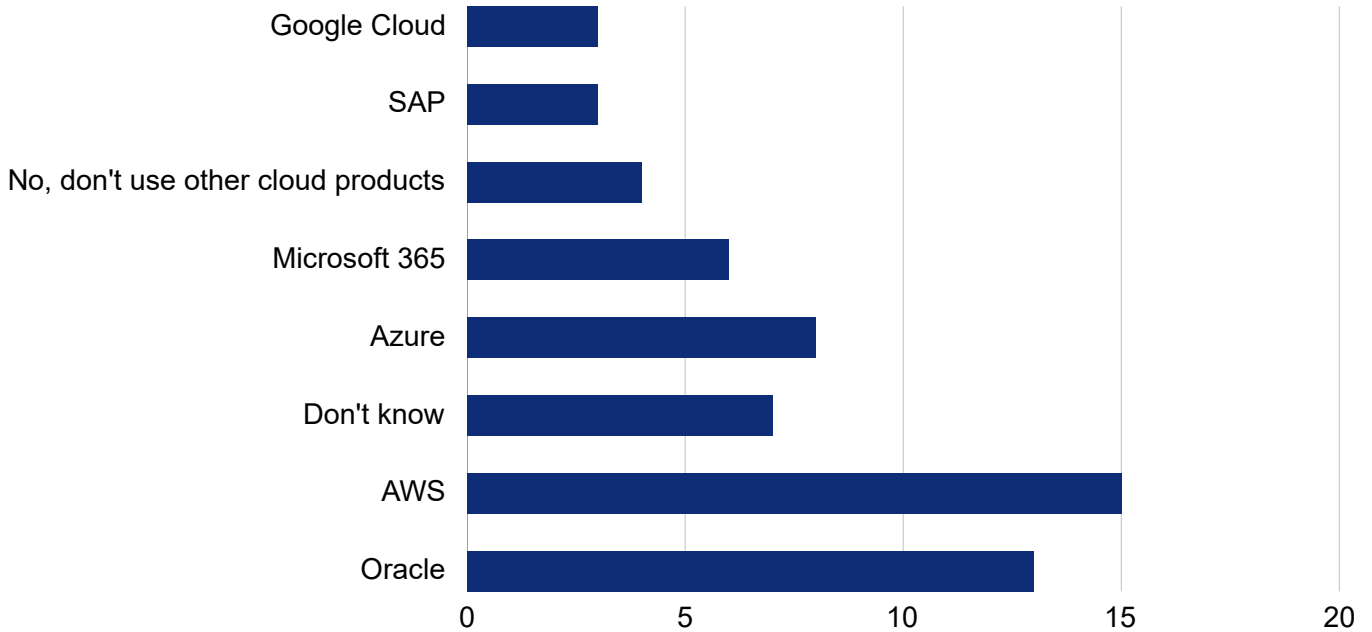
South Africa has hyperscaler operations operating locally. Nevertheless, even where there were clear laws, there was still challenges. As one bank said: "We can't keep 100% of data in (East African) country." As a smaller country, Rwanda, has a clear mandate for local data staying in the country but an absence of local capacity and cloud providers often makes this difficult. Everyone in the industry sees data sovereignty as a driver of external data centre use but there is currently a 'chicken-and-egg' dilemma in those countries unable to access local, 'sovereign clouds.' In the first instance, they may be too small to attract hyperscaler zones but it is likely that neo cloud providers can meet both the demand and regulatory requirements. This will work well for local, one country only banks but will pose greater problems for multi-territory banks, whether regional or international.

## Data sovereignty - laws and compliance



The chart on the next page does not represent market share but are the responses to what cloud products are being used by respondents. Single respondents mentioned the following products: Zадara, Nutanix, Huawei Cloud, Asana, Redmine and Zoho. Only one respondent (a multi-territory bank) specifically mentioned having a multi-cloud strategy. There were a small number of respondents who would have liked to use hyperscaler products but were unable to so because of the lack of local 'zones'.

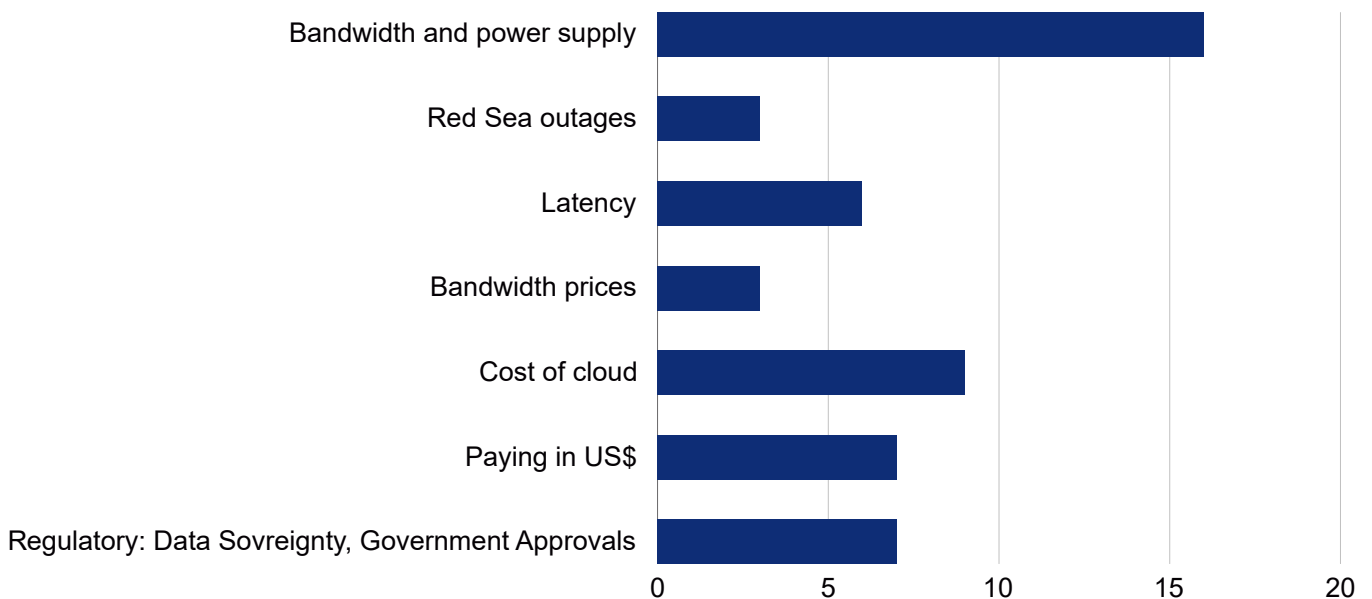
## Cloud products used by respondents



Respondents were asked whether there were any barriers to cloud use in their country or across the territories they operated in. Just under half said they had no issues (24) or minor issues (4). The balance reported a variety of different issues that are summarised in the graphic below.

Whilst complaints about bandwidth and power supply, both in terms of cost and quality, have gone down for many countries, there are still persistent issues in terms of latency and prices. These are very specific to particular countries. For example, one respondent reported having no issues in Tanzania but having more significant challenges in Rwanda. Another respondent providing payment services to banks said in one case a client had 4 lines in case of outages to ensure continuity.

## Barriers to cloud use



Several fintech respondents noted that the costs of cloud grew rapidly as operations expanded. As in the last survey of enterprise customers, several respondents mentioned the issue of finding it more difficult to control cloud costs. For Zimbabwe, using US hyperscalers was a challenge with US sanctions and difficulties accessing the US dollar.

The next two questions in the survey asked respondents what existing digital innovations their company had made and, on the basis of what they could talk about publicly, what they had planned for the future. The responses are quite difficult to present in table form because the idea of a digital innovation varies a great deal by country.

The survey focuses largely on countries outside South Africa as the last enterprise survey in the third edition of Africa Interconnection covered major banks in South Africa. As can be seen from 2.1, both banks and insurers in South Africa are among the most advanced in terms of overall digital transformation. Of the 11 countries covered, they go from the more developed – like Ghana, Kenya and Tanzania – to the much less developed, like DRC, Zambia and Zimbabwe. Furthermore, 6 of the respondents had operations covering multiple territories across Africa.

The degree of innovation depends a lot on the triangular relationship between banks and insurers, mobile money platforms and fintechs. For example, the prevalence of bank accounts in both Nigeria and South Africa has meant that mobile money platforms have until recently played a much less decisive role. The reverse is true for both Kenya and Tanzania, where the dynamic for innovation produces different competitive relationships. As one Tanzanian fintech said: “With the MNOs, it feels like you’re trying to take their customers. They also want the majority of the revenues. With banks, it feels like you’re bringing them customers.”

Innovation is more or less possible, depending the ‘push-and-pull’ between the percentage of digital users and the effectiveness of the infrastructure that supports them. Based on the comments of respondents from countries involved, these could be categorised as follows:

**Good connectivity, minor issues most of the time:**

Cote d’Ivoire, Ghana, Kenya, Tanzania, South Africa

**Mixed, with some challenges:**

Mozambique, Nigeria, Rwanda and Zambia

**Very mixed, particularly outside major cities:**

DRC, Zimbabwe



Finally, outside of Ghana, Kenya, Tanzania and South Africa, insurers lag behind banks in their implementation of digital transformation.

With caveats above in mind, the table below seeks to show how the respondents viewed their existing and future innovations under a number of different headings. The items in red are things that were not mentioned that might be necessary for other parts to be implemented. Both banks and insurers can name the headings for where AI might be deployed but are much less articulate about implementation. For example, no-one mentioned directly getting company data sorted out so that it could be used for AI learning.

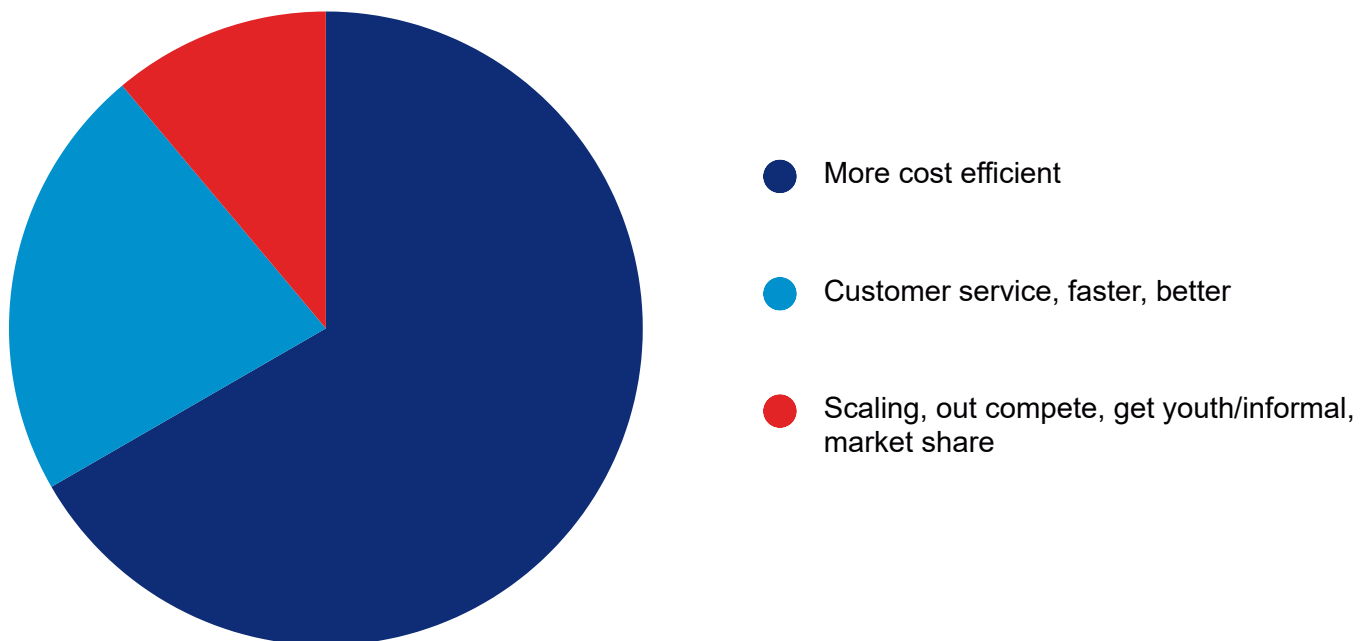
## Digital innovations – User roadmap from perception of respondents

Standard					
Core	New core products (examples)	Add-on products (examples)	Segment products (examples)	Customer service	Thinking about
Mobile wallets and web apps	Salaries loans	Savings (including-microsavings) and insurance	Quick digital loans to SMEs	Chatbots	Cloud transition (data sovereignty)
3 <sup>rd</sup> party APIs	Micro-loans	Insurance via MNOs (eg. Voda Buma)	Products targeted at informal sector	IVR	Artificial Intelligence – but not highly focused or in metrics. AI as a managed service
On prem, secondary on prem or in DC			Products targeted at youth	Branches and legacy and core paper/manual processes	Agency banking
Mobile distribution with MNOs				Social engagement	Faster processes (eg On-boarding, loans)
				Free customer line	Automating claims management
Becoming standard					
Increasingly cloud-based	Payments across bank, mobile and other	Neo banks in more developed markets	Branded platforms (informal traders, youth)	Self-service (eg Bima Pap)	ID check online (where national DBs exist)
Data updated in realtime in the cloud		Pay, small, small. Micro -payments for different services (eg car maintenance)	Soft POS for SMEs		Faster on-boarding
Branches and agency banking	Super-app to allow non-customers to bank with you	Cloud-based pension product for informal sector	Easing payments for SMEs (eg real-time electronic bank transfers, tokenisation)		Multi-channel support (web, mobile, WhatsApp, phone, short code)

Early versions of open banking, clearing regulatory hurdles	Auto-accepting insurance	Subscription payment services			Cross-selling and segmentation patterns
	Comparison sites/products	Association/TU banking/payment systems			Interoperability between cards and mobile accounts
					Sorting out data to train AI on
					Thinking about crypto applications
<b>Tomorrow's standard</b>					
Banks and insurers as platforms	Digital products mainstream for 30-50% of adult population	Neo banks	Comparison sites	AI helping and reducing human operators	ID check online (where national DBs exist)
Open banking APIs and Banking as a Service (BaaS)	Access to FX marketplace	Local versions of card payment systems as alternative to Mastercard and Visa	Tokens as assets	AI answering financial queries, helping with budgeting	
Practically everything on a cloud of some form	Virtualised card payments	Insurance verticals: travel, health	Stable coin for cross border payment	AI chatbot as a licensed financial advisor	
Less, more apps with shorter customer journeys	Regtech: Trusted, third party compliance software		Tokenising asset	AI automating processes	
Data ready for AI analytics	Larger banks helping smaller banks and MFIs digitalise		Embedded payment – APIs for SMEs	AI fraud monitoring	
Less payment network fragmentation				AI digital marketing and sales	
Mobile account same as some form of bank account				AI data analytics	
Some interest in stable coins				Buyer ratings	
				Financial literacy campaigns	

In naming the main motivation for doing digital transformation, respondents were split between efficiencies (29) and variants of better customer service (29). In strategic terms, both banks and insurers (17) were looking to remain competitive and add new segments of customers, particularly youth. Only one respondent said it was not doing digital transformation.

## Reasons for doing digital transformation



One curiosity of this and the previous question was that many respondents would name making the onboarding of customers a key part of their digital innovation. It seemed always to be the key example for something Artificial Intelligence (AI) could address. One East African service supplier said that AI was not in any of the banks' internal metrics.

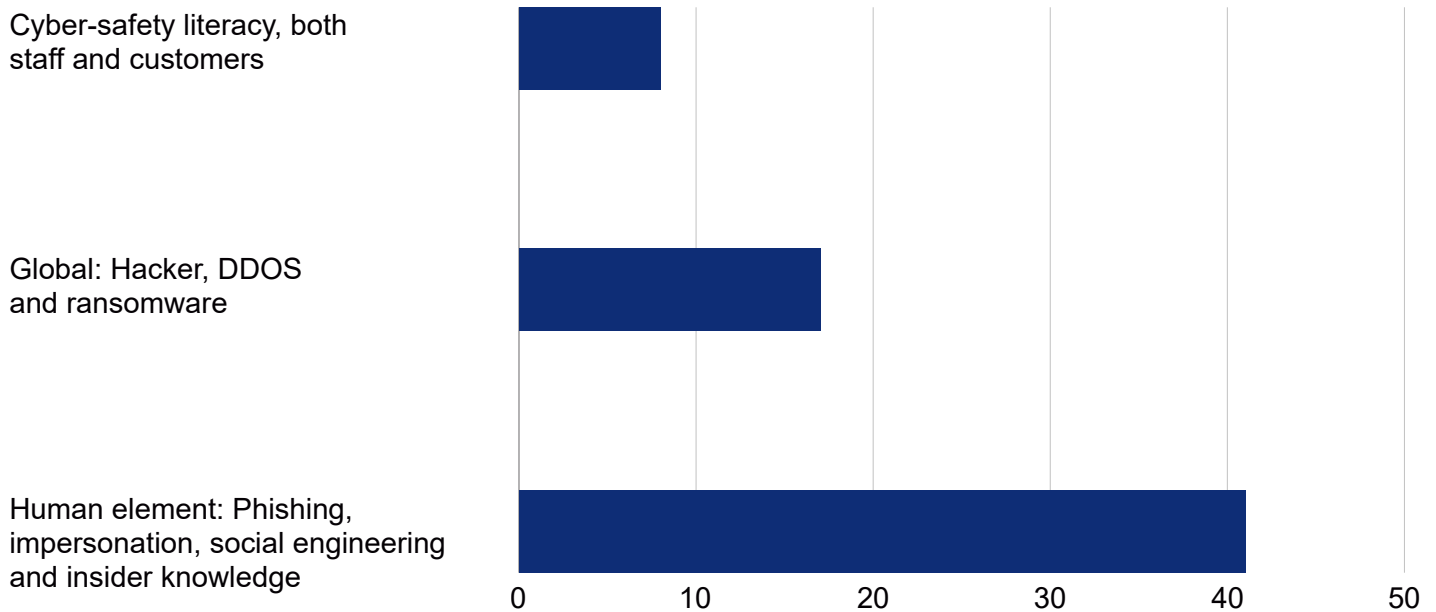
Only a few respondents mentioned the following: data gathering (1), making it easier to use banking agents (1), and meeting regulatory obligations (4).

The main perceived cyber-threats to their organisations were overwhelmingly from various version of the human element (41). However, respondents (18) said global threats from hacks with both DDOS attacks and ransomware attempts were becoming more significant. At least two respondents referenced an attack on Jubilee Insurance in Kenya and one other had had a ransomware attack where they had to pay out and another mentioned a day in which it experienced 8,000 hits from hackers.

6 respondents believed these threats would be greatly increased by AI and both its ability to search for system weaknesses, as well its capacity to fake both video and audio of individual people. One person criticised the regulatory authorities for not talking more about the threats reported and the experience of major incidents, on the basis of not wanting to undermine trust in "the system." Perhaps a better balance has to be struck between using confidentiality to keep ahead of hackers and educating both the industry and public about changing threats.

Although all respondents were committed and enthusiastic about third party APIs, several respondents pointed out that they created an area of future risk for cyber-threats.

## Main cyber-threats to company



A third of respondents felt that there needed to be a greater emphasis on cyber-security campaigns and training, both aimed at staff and customer. In this context, the absence of two-factor authentication was mentioned by several respondents. Although several countries now have centralised online ID databases (for example, Ghana, Nigeria and Rwanda), those in countries without them pointed to the need for them. Identity management is key to creating trusted digital financial processes. Indeed, several insurers in one country pointed to the need a centralised industry database of fraudulent customers.

## 2.3 Implications for the finance and communications sector

- Fintechs have and continue to provide a great deal of innovation in the financial sector, to the extent that some banks have invested in their own in-house 'fintechs'. Banks and insurers understand that they are agile, more comfortable with cloud development and better attuned to how Africa's young, digital natives think.
- Africa's biggest weakness can ironically become its greatest strength. Innovation in the finance is being positively encouraged by many Governments and regulators. Just under a third of African countries have 'sandbox' projects. More should join the party as investment in a seamless digital finance sector can spur economic growth.
- A transition to the cloud is underway in the finance sector but in some countries, local data sovereignty law is slowing down its use. The presence of local hyper-scalers or neo cloud local 'sovereign' is urgently required to support easy cloud compliance. Although hyperscalers appear to have become somewhat more flexible on payment in US dollars, it remains a barrier, along with their overall charging structures. Unless, they solve these issues, the neo clouds will turn their problems into an opportunity and entrench themselves.

- AI seems to have become the answer to a number of pressing issues in the finance sector, particularly process costs. It is not yet widely understood or yet in many company's metrics, for something that may be so widely relied upon. The experimental 'baby steps' reported need to be extended to test the gap between realisable promise and hype. Overall, there needs to be programmes for AI-upskilling among bank and insurance staff. One bank has chosen to buy a company with AI and finance as its speciality. Others have chosen to sponsor AI initiatives like Kenya's Qubits for much the same reason.
- There is an overwhelming need for cyber-safety awareness campaigns and training for both company staff and their users. Financial literacy has increased a great deal as a result of mobile money over the last decade but the understanding of digital safety has yet to catch up. If banks and insurers believe that the human element is one of their biggest cyber-threats, then this kind of basic activity has become urgent. Global bad actors are beginning to target Africa's financial sector, with incidents happening more regularly outside South Africa. The right balance has yet to be found by the regulatory authorities between keeping these attacks quiet so as not to undermine trust and the pressing need to make all financial institutions address their institutional cyber-safety.



## Bank of quotes

"We pay significantly higher interest rates than other institutions." Fintech

"The young population prefer not to come to a bank. It's 'old school' people who prefer to come to a branch and talk to people. 80-90% of our banking activities are done online." Bank, East Africa

"Once public cloud comes, we'll move to it." Bank, West Africa

"It's popular to store money in electronic wallets and we're trying to reach those customers." Insurance company, Southern Africa

"We tend to have a larger surface for attacks as we operate with APIs and third parties." Neo bank

"The younger generation are driving the change. I've heard a kid of 16 saying I've just bought insurance for my father. The young and educated will be the catalyst for change." Insurance company, East Africa

"Countries like Tanzania are not on the radar of cyber-hacking groups. So we don't have as much vigilance."





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WIOCC is Africa's leading provider of interconnected, carrier-scale digital infrastructure and managed network services, trusted by hyperscalers, cloud operators, content providers and telcos.

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