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FOLLOW THE MONEY

Operators, governments and regulators face new challenges in coming to terms with Africa's emerging digital services sector, writes **RUSSELL SOUTHWOOD**

Mobile money transaction at an agent's office in Uganda

Africa's new digital services sector is creating commercial, legal and regulatory challenges. Mobile operators in Sub-Saharan Africa are recasting their traditional business models to take on the new competition. But African governments and regulators – like their global counterparts – seem to be responding in contrasting ways, as I describe in this article.

MARKET SIZE

The digital services sector in Sub-Saharan Africa is growing but is less visible than its telecoms and internet counterparts. For example, Jumia, an e-commerce player in 23 countries, has 4.2 million customers for its e-commerce business. MTN, the operator, has a mobile games business that turns over $100 million. In the mobile money field, there are an estimated 2 million plus mobile money agents.

While there is considerable excitement about some of the African start-ups involved in the new digital services sector, it tends not to be seen as a new and vital area of business activity. However, the companies involved in it – whether African or international – are beginning to attract investment into the continent. The sums may be smaller than those invested in telecoms infrastructure but they do bring investment and jobs. Mobile news platform Opera announced at the beginning of the year that it will invest $100 million to develop its African services.[1] Over $25 million has been invested in iROKOtv. A third of all venture capital invested in African start-ups in 2017 – $65 million – was invested in fintech services.[2]

There is even infrastructure investment from the over the top (OTT) providers: after creating two metronets (in Uganda and Ghana), Google and its partners have committed $100 million to develop infrastructure. Facebook has partnered with Airtel and BCS to lay 800 km of fibre in north west Uganda.

VOICE AND DATA UNDER THREAT

The foundations of the old mobile business model – voice revenues – are under threat and data produces low margins and requires higher levels of capital investment. Until recently, mobile operators in Africa have struggled to produce internally consistent business strategies that explain how they will dig themselves out of this hole.

It has also meant that the OTT players have been blamed by the mobile operators and many regulators for creating this set of circumstances by slowly bleeding away voice revenues through data voice apps like WhatsApp, Skype and Viber, as I wrote in Intermedia in 2017.[3]

However, voice is only part of the digital services economy and there are wider and more profound consequences. In a talk at the Apps Africa Innovation Awards in November last year, Herman Singh, MTN's chief digital officer, explained that users used to go on their phones and mostly use telecoms-provided services. Now they use only 20%

of services (and falling) that are telecoms-provided and are going elsewhere on their phone to get what they want. "Voice, data and text will decline. Do we just hand over to the OTTs? We need to become OTTs ourselves. The opportunities in the space are awesome."[4]

So at the heart of MTN's fight-back against OTT is copying the business strategy of the OTT players: "The trick is building a big community and keeping them on your platform as long as possible. That's the secret to making money in this space," said Singh. Through its investments in Jumia in Africa and Snapp in Iran, MTN wants to build a single app that will do all the digital things users want access to. In Africa, this is Jumia One: "There's everything on one app. You never need to leave the app."

Singh identified three key services that users can send each other in digital form: music, movies and games – hence MTN's gaming business, and its choice to build future new revenues by getting into digital services: "We're a telco talking about e-commerce. This is not our core business. We got into it because no-one else wanted to get into it."

Orange has a similar but slightly different strategy to build a new business model.[5] It plans to focus on mobile financial services, energy, content and developing its B2B services. Again there is a focus on building a platform that will gain user attention and revenues. Also, like Safaricom and the M-Pesa money platform, it wants to build the volume of financial transactions on its platform and in doing so build a significant revenue stream from servicing these transactions. Part of this will be done through building partnerships with digital content providers; TV services are a simple way to monetise networks, it says. It has also invested in Bizao, which facilitates easier access to application programming interfaces (APIs) for both mobile companies and digital services operators.[6]

On the increased capex for new data networks that is needed to achieve all this, Orange says: "Globally, Africa is the continent that needs most [infrastructure]. We are interested in both passive and active infrastructure sharing and will accelerate discussions with partners. We want to build a stronger agenda in this area."

Vodacom – the third of the large African operators – is also taking a leaf out of the OTT operators' playbook. According to Zunaid Mahomed, digital and fixed services officer: "We have embraced a version of our digital service operating model where we are able to provide services, not just to traditional Vodacom telco service customers, but to all customers. Most of our Vodacom-branded digital service portfolio is available to all digital audiences. While the service is telco agnostic, there will be instances where Vodacom SIM users get a better experience."[7] This same "anyone-can-use-it", platform agnostic approach is also echoed in the music streaming platform of Safaricom, Songa, which is Vodafone-owned.

It is focusing on Vodacom branded services (like Vodacom Soccer, All Out Rugby) and in some instances working with existing brands like Deezer: "This is dependent on where we are able to scale, where partners have a real advantage as well as our ability to link our network, which creates the unique ability to reach new audiences (e.g. our VideoPlay service provides a network award download feature to download videos when there is spare capacity). It's a partner model that means we don't necessarily want to own content or services."

Again there is a strong emphasis on video ("with users and usage growing significantly on a monthly basis"); music (growing but hard to get paying subscribers); and games (a dedicated portal and free data promotions). Also, like MTN, it is investing in harvesting more advertising revenues from having large numbers of users on its platforms.

So, the growth of digital services is upending previously solid industry sectors. In early 2017, Senegalese mobile money transaction company Wari announced it wanted to buy the Senegalese subsidiary of Millicom, branded as Tigo. The matter is currently in arbitration, but as CEO Kabirou Mbodje told me at the Afrobytes meeting in Paris: "It could be another telco (if we don't get Tigo). We've acquired a bank already and financial institutions in the US and Europe."

The changes in African mobile operator business strategy are summarised in the table.

These business strategies mean that some operators have shifted from being strategically opposed to the OTT players to a much more tactical opposition. In the past some of them seemed to believe that if they could only resist the incursion of data-enabled services (particularly for voice), things would return to the way they were before. But you can hardly claim that you want OTT voice services completely closed down in a particular country if you are seeking to use OTT approaches in other business areas to develop your own revenues. Indeed, in the case of Orange, its venture capital company Orange Digital Ventures has announced that it will partner with

NEW MODEL AFRICAN OPERATOR PLAYBOOK

SERVICE	NOTES
Digital voice and messaging services	Selling data to support use of Facebook, Skype, WhatsApp, Viber and Telegraph
Becoming a financial transactions platform	Seeking to become the way most transactions are made, becoming almost bank-like. But there are regulatory restrictions in Kenya and Nigeria, for example
Growing e-commerce	From a very low base, growing B2C and B2B financial transactions
Offering multi-operator APIs	Orange's start-up Bizao
Running services across operators	Vodacom services; Safaricom's Songa
Building content platform revenues	MTN's games platform
Cutting capex by sharing active and passive infrastructure	Orange: "We want to build a stronger agenda in this area"
Selling advertising to users on your platform	Both MTN and Vodacom are focusing more on this source of revenue
Opening new businesses	MTN (e-commerce); Orange (energy)

Google on investment. The futures of mobile and OTT operators are increasingly becoming intertwined and co-dependent.

While it must be reassuring to those who run these mobile operators to have a digital strategy, the central regulatory problem raised by OTT operators remains. The major OTT platforms have benefited from network effects: the more people are on Facebook, the more people will want to join, which in turn attracts more people to the platform. There is a tendency common to several of the major digital platforms where size leads to monopoly. So, what happens in regulatory terms if in the long term Jumia One becomes the equivalent of Facebook for Sub-Saharan Africa? However, in the short-term the more pressing regulatory issue is the collapse of telecoms and internet competition in many African markets: there is a steady shrinkage in the number of mobile operators with only the larger operators in a number one or two market position continuing to make profits.

The example of Uganda's bankrupt former incumbent UTL illustrates the depth of the problem. Formerly owned by Libyan investment vehicle Lap Green, the ministry of finance has a cabinet-approved package of incentives for potential buyers that include a 20 year licence extension (against network investment); being the preferred provider of internet services to all ministries, departments and agencies of government (at lower than current prices); giving it more spectrum (against coverage targets); and unlimited access to and use of the national backbone infrastructure (and to increase government's shareholding to between 32-45%).

The requirement for this kind of package of anti-competitive incentives to sell UTL illustrates how the market is undergoing some fundamental changes that are not encouraging competition. Even some of the more ambitious internet service provider (ISP) challengers (like Afrimax) have faltered and fallen in this changing business climate.

REGULATORY RESPONSE

Faced with these dual pressures of rising digital platform monopolies and collapsing competition, African regulators have been slow to respond but the first wave of policy development is now becoming visible. Some of these policy or regulatory initiatives seem to be chasing the wrong issues, while others seem to have grasped that the loss of voice revenues might be outweighed by the growth of the new digital services sector in the longer-term.

The Council of African Regulators (CAR) which has been working on these issues under the Smart Africa initiative, has outlined three broad approaches to tackling issues raised by OTTs:[8]

- Blocking international OTT services, as China has done
- Bundling and partnering (e.g. Free Basics with Facebook where the operator gets data revenues)
- Operators developing their own OTT services, exemplified by the mobile operator digital strategies described above.

CAR notes the following issues that have not been addressed in regulatory terms in relation to OTT:

- Lack of protection of personal data
- Lack of ability to identify the entity responsible for quality of service
- Impossibility for states to identify users without referring to OTT players that may or may not communicate the requested information
- Lack of knowledge of personal data use rules
- Lack of a protection framework for vulnerable people (children, disabled, women, etc.)
- Inability to make emergency calls
- Difficulty in enforcing security injunctions, especially for listening (tapping) and traceability
- Impossibility of determining a tax base or levying royalties.

A presentation of the report earlier in 2018 said CAR should recommend the way forward on the best approach for Africa to reduce the negative impact of OTT and increase revenues of the telecoms sector. But some African (and indeed global) telecoms regulators seem obsessed with chasing voice revenues for an industry that has fundamentally changed and show no awareness of how to encourage the nascent African digital services industry that will grow and replace some of those lost revenues.

Unlike the more progressive regulators at the beginning of the mobile revolution that encouraged investment and competition, some of Africa's regulators and governments seem not to have realised that the digital services sector will be a big growth area over the next 5–10 years. The result is that the former emphasis on a "level playing field" means the incentive to invest and ensure competition seems to be missing. Whatever its formal rhetoric, some policy and regulation seems more concerned with controlling and taxing than in providing incentives for this burgeoning new sector. This is particularly true of efforts to tax incoming calls to the continent through single gateways. A number of African countries have implemented taxes on incoming international calls, which has driven the transition to digital voice services such as Skype, Viber and WhatsApp.

> **"Some seem not to have realised that the digital services sector will be a big growth area."**

RETROGRESSIVE STEPS

Two examples of this more retrogressive regulation come from Uganda and Tanzania and illustrate the kind of regulation that will hold back the digital sector. The Ugandan parliament has imposed a 200 Ugandan Shilling (0.5 US cents) daily tax on people using social media platforms such as Facebook, WhatsApp, Viber and Twitter. The law was meant to come into effect on 1 July 2018 but it is unclear how it will be implemented. In addition the new Excise Duty (Amendment) Bill will impose among other things a 1% tax on the total value of mobile money transactions.

Access to social media platforms was shut during the presidential election in 2016 and President Museveni said it was done to "stop spreading lies".

According to a BBC report, Museveni pushed for the social media law in March 2018. He wrote a letter to finance minister Matia Kasaija insisting that the revenue collected by the social media tax would help the country "cope with consequences of olugambo [gossiping]".[9]

A second explanation came from state minister for finance, David Bahati, who told parliament that the tax increases were needed to help Uganda pay off its growing national debt. A third explanation was offered by minister of ICT and national guidance, Frank Tumwebaze, who said it is a measure aimed at discouraging consumption of external content and promoting local content. He said that contrary to what was being said, the president's proposal was long overdue and would not affect the internet or information access as insinuated by some.

"WhatsApp and Facebook are external products. Ugandans who are gladly using it are only consumers and are indirectly making the developers of these applications very rich. These applications are more of a luxury than a need, so we are going to be taxing your consumption of the application," Tumwebaze said.[10] He clearly does not understand that these products are now in everyday use and not luxury products: 2.6 million people use Facebook in Uganda.

He dismissed concerns it could limit people's use of the internet. "We're looking for money to maintain the security of the country and extend electricity so that you people can enjoy more of social media, more often, more frequently," he said. It is unclear how taxing people's use of social media will increase their use as placing a charge on a previously "free at the point of delivery" service will almost inevitably lead to a decline. *(There was more confusion about Uganda's position as we went to press – Ed.)*

Meanwhile in Tanzania, the Electronic and Postal Communications (Online Content) Regulations 2017, were published by the Tanzania Communications Regulatory Authority (TCRA) and came into effect during March 2018.

Against a wide range of objections, Harrison Mwakyembe, Tanzania's minister for information, culture, arts and sports, has signed the regulations into law. The government has said that the regulation will help to put a stop to the "moral decadence" caused by social media and the internet in the country. It has also said that it sees social media as a threat to the country's national security.

Online content publishers (blogs, podcasts, videos) will apply for a licence at a fee of 100,000 Tanzanian shillings, and pay an initial and annual licence fee of 1 million shillings. This means to run something as simple as a personal blog if you live in Tanzania, you'd have to spend an initial (approximately) $900 in licence fees. Again, payment of this level of taxes is an attempt to curb free speech that will fundamentally damage the development of Africa's digital services sector.

PROGRESSIVE MOVES

By contrast, the government of Benin has published a progressive piece of legislation known as Code Numérique.[11] Included are:

- Article 13: Open access to the internet – "Users have the right to access and disseminate the information and legal content of their choice, and to use and provide the applications, services and terminal equipment of their choice..."
- Article 15: Equality of treatment and non-discrimination – "Operators providing access to the internet treat all traffic equally and without discrimination, restriction or interference..."
- Article 19: Technology neutrality – "The principle of technological neutrality is understood as the general obligation of legal, regulatory, institutional or other non-discrimination of technologies with regard to the services provided."
- Consumer rights are defined in Article 25: User rights, as follows – "No operator may limit the right of the user to choose a content service provider; connect to the network any radio apparatus or electronic communications terminal equipment approved for that purpose; and to connect to an electronic communications network open to the public any internal communications network that meets the relevant standards and requirements."
- Chapter IV tackles in some detail the personal data of users, including Article 33: "Operators and providers of online public communication services shall delete or anonymise traffic data, subject to Articles 34 to 37..." The balance of the chapter lays out the terms and conditions under which personal data may be held.

Another country with a more finely tuned sense of the future shape of the market is Nigeria. In 2016 the NCC, the regulator, published a report, "An overview of provision of over the top (OTT) services".[12] Using material drawn from reports by US and European consultancy firms, it argued that mobile operators need to innovate to meet the challenge of OTT. In terms of recommendations, it calls for a stakeholder forum "to determine if regulation is required for such services and its impact on the growth of the Nigerian telecoms industry", including a review of guidelines on the provision of international gateway and voice over IP services and also an appropriate framework to regulate OTT players. It notes that the NCC "must ensure that it does not stifle innovation since internet penetration is still evolving, access speeds are still low and there is limited coverage of high speed broadband".

CONCLUSION

The African digital services sector has the potential to make the lives of citizens easier; make services more accessible; allow people to take part in a conversation about what they want; increase efficiencies in the public, private and development sectors; and generate new jobs and investment. So whatever happens in regulatory terms has to ensure that these positive social and economic impacts are maximised.

African governments and regulators have a clear choice: they can either attempt to hold back the future by taxing new digital services or they can craft a response that encourages the digital services sector to play a central role in the social and economic transformation of their countries.

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