

Beyond Big Data: Understanding Progressive Mobile Consumers in Emerging Markets

Etisalat Nigeria and Xoanon Analytics create actionable insights from user data

In partnership with



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About the white paper

As key facilitators of their customers' digital and mobile lifestyles, telecoms operators generate a huge amount of valuable customer usage data which, if analyzed in the right way, can unlock valuable insights into consumer and market dynamics in the TMT sector. This is particularly important in emerging markets, such as Nigeria, where rapidly evolving digital consumer habits are driving change in the market.

Nigerian mobile operator Etisalat Nigeria, having recognized this opportunity to improve its understanding of the behavior and needs of its customer base, recently entered into a project with big data analytics company Xoanon Analytics. This project enabled Etisalat Nigeria to derive new, actionable insights into consumer behavior through lifestyle-driven segmentation analysis of its customer data. As a result, Etisalat Nigeria has been able to strengthen its competitive positioning by providing its customers with more appropriate products and services.

Ovum has analyzed the results and findings of this project to pick out four key consumer trends that are shaping the Nigerian mobile market and, through this analysis, has come up with a list of recommendations for players looking to succeed across the TMT sector in Nigeria and other comparable markets.

To understand and harness a customer base, a segment-specific approach is key

It is often tempting to generalize when examining consumer behavior, but merely segmenting by age and/or gender never tells the full story. On the contrary, each customer is unique, but adopting a customer-specific marketing and targeting strategy will often involve a huge amount of effort and expense. However, a defined, robust segmentation strategy has the potential to deliver highly valuable strategic insight when tagged to the big data generated by an operator's substantial customer base.

Psychographic profiling is one route towards deriving this kind of insight from an operator's customer base. Examining consumers' attitudes to life in general, alongside their telecoms spending and usage habits, will help draw valuable insights from the data to tell the story of how different types of customer are utilizing the operators' services, in turn helping to identify specific opportunities for targeted marketing and service provision.

Etisalat Nigeria drove marketing efficiencies and increased campaign performance through lifestyle-driven segmentation

Xoanon Analytics, a big data analytics company, recently provided a solution to Nigerian mobile operator Etisalat Nigeria with the aim of extracting insight from data relating to the operator's customer base. Xoanon's solution applied a customer segmentation model to Etisalat Nigeria's customer base through the use of bridging. During this bridging process, Xoanon predicted the segment to which each of Etisalat Nigeria's customers belonged, enabling the company to assign segment labels to Etisalat Nigeria's entire customer base.

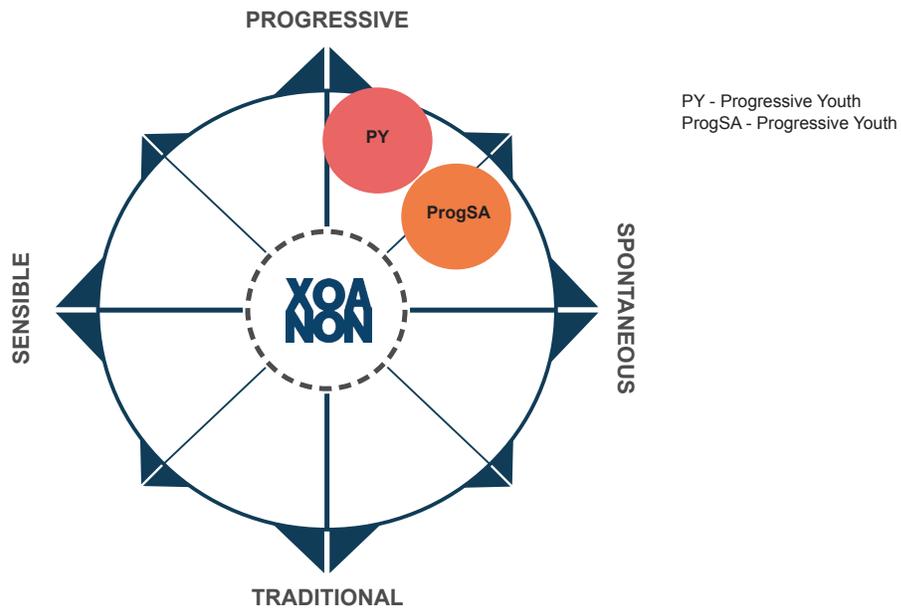
Analysis of the resulting tagged customer usage data was then used to explain how and why different types of customer are changing their usage of Etisalat Nigeria's network and services in response to their evolving, digitally driven lifestyles. In response to the analysis, Etisalat Nigeria was able to gain a better understanding of its customers, identify how their needs can be better met, and employ a more robust, lifestyle-driven marketing strategy.

Xoanon Analytics tagged Etisalat Nigeria's customer base according to a lifestyle-driven segmentation model

Xoanon Analytics looked to analyze Etisalat Nigeria's usage data by splitting Etisalat Nigeria's customer base into at least 10 distinct psychographic segments. Each individual customer was plotted on Xoanon's market map, the axis of which runs from "Traditional" to "Progressive" and "Sensible" to "Spontaneous." The individual segments were then mapped onto the market map to which each of Etisalat Nigeria's customers were tagged during Xoanon's bridging process. Splitting and tagging the operator's customer base in this way enabled Etisalat Nigeria to gather customer lifestyle-focused, actionable insight from its big data.

Unsurprisingly, the more "progressive" and "spontaneous" segments – as marked on the market map in Figure 1 – are driving most of the changes and trends in the Nigerian TMT space. Gaining insight into the lifestyles, spending habits, and telecoms usage habits of such consumers should be high on the agenda for operators tasked with keeping up with rapidly evolving consumer trends in emerging markets, such as Nigeria.

Figure 1: Xoanon's market map can be used to split a customer base into distinct psychographic segments



Source: Xoanon Analytics, Etisalat Nigeria

Through the use of Xoanon's tagging process, Etisalat Nigeria was able to capture certain characteristics of these "progressive" and "spontaneous" customer segments.

Table 1: Etisalat Nigeria's customer segmentation offers a targeted view of a wide variety of consumer attitudes and behaviors, as exemplified below for the most "progressive" and "spontaneous" segments	
Segment	Key characteristics
Progressive Youth	Members of this segment tend to be spontaneous, active, young, technologically literate adults who act as trendsetters.
Progressive Spontaneous Adults	Members of this segment are highly active, technologically literate adults who are open to change.

Source: Xoanon Analytics, Etisalat Nigeria

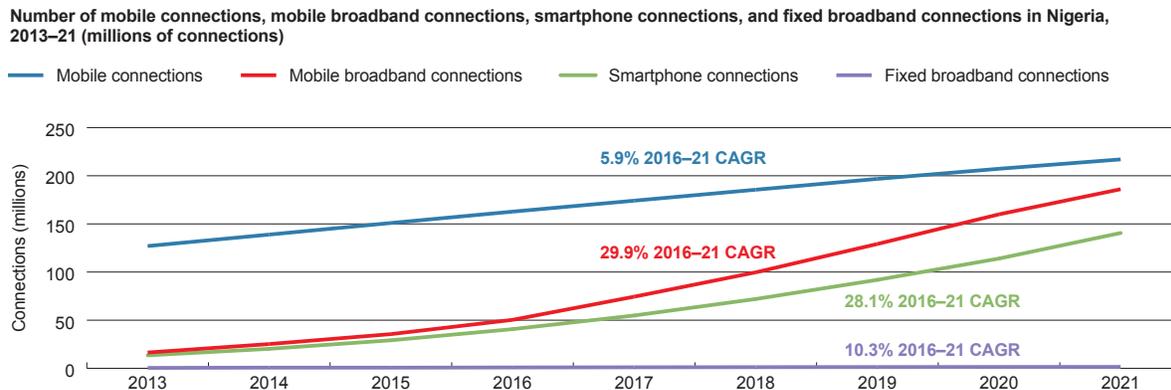
This more targeted, analysis-driven strategy led to immediate commercial benefits for Etisalat Nigeria, which has seen its media marketing spend become 20% more efficient since employing Xoanon's tools in its big data analysis.

Etisalat Nigeria also employed a two-week pilot marketing campaign during which the company marketed specific voice and data reload packages to both a control group and to members of selected segments, as tagged during Xoanon's bridging process. This pilot campaign validated the efficacy of Xoanon's approach to segmentation, with the segment-targeting marketing campaigns outperforming the control group-directed campaign by an average of 75%.

Nigeria is an exciting market for mobile communications and media services Nigeria has a growing digital audience, but monetization potential remains limited

The mobile market in Nigeria, like many emerging markets in Africa and other regions, is ripe with potential. Mobile penetration far outweighs fixed-line connections in the country and, with mobile broadband and smartphone uptake also set for significant growth over the next five years, a huge opportunity exists for mobile-focused communications and media services in the country.

Figure 2: Nigeria will see continued growth in mobile broadband and smartphone connections



Source: Ovum

But an adverse socioeconomic environment and depreciation of the national currency have contributed to tough trading conditions for Nigeria's network operators over the past few years. Mobile ARPU's continue to fall in the country as subscribers shift their attention away from traditional telco voice and messaging services towards mobile data consumption and seek out the most competitive deals. This issue is compounded by the fact that Nigeria already has extremely affordable entry-level mobile broadband price plans. Furthermore, 99.9% of mobile connections in Nigeria are prepaid, meaning that customers are free to jump from network to network in pursuit of the best deals.

As a result, operators in Nigeria and other similar markets are faced with the challenge of competing with rivals for individual consumers' attention on an almost daily basis, rather than the typical annual or biennial time frame seen in more developed, predominantly postpaid markets. Keeping abreast of how, when, and how often subscribers are using – and paying for – their products and services in real time therefore has the potential to drive substantial competitive advantages and commercial gains for Nigerian operators. Big data analytics, when applied correctly, can serve as the key to unlock a goldmine of actionable insight from the swathes of data that operators are already sitting on.

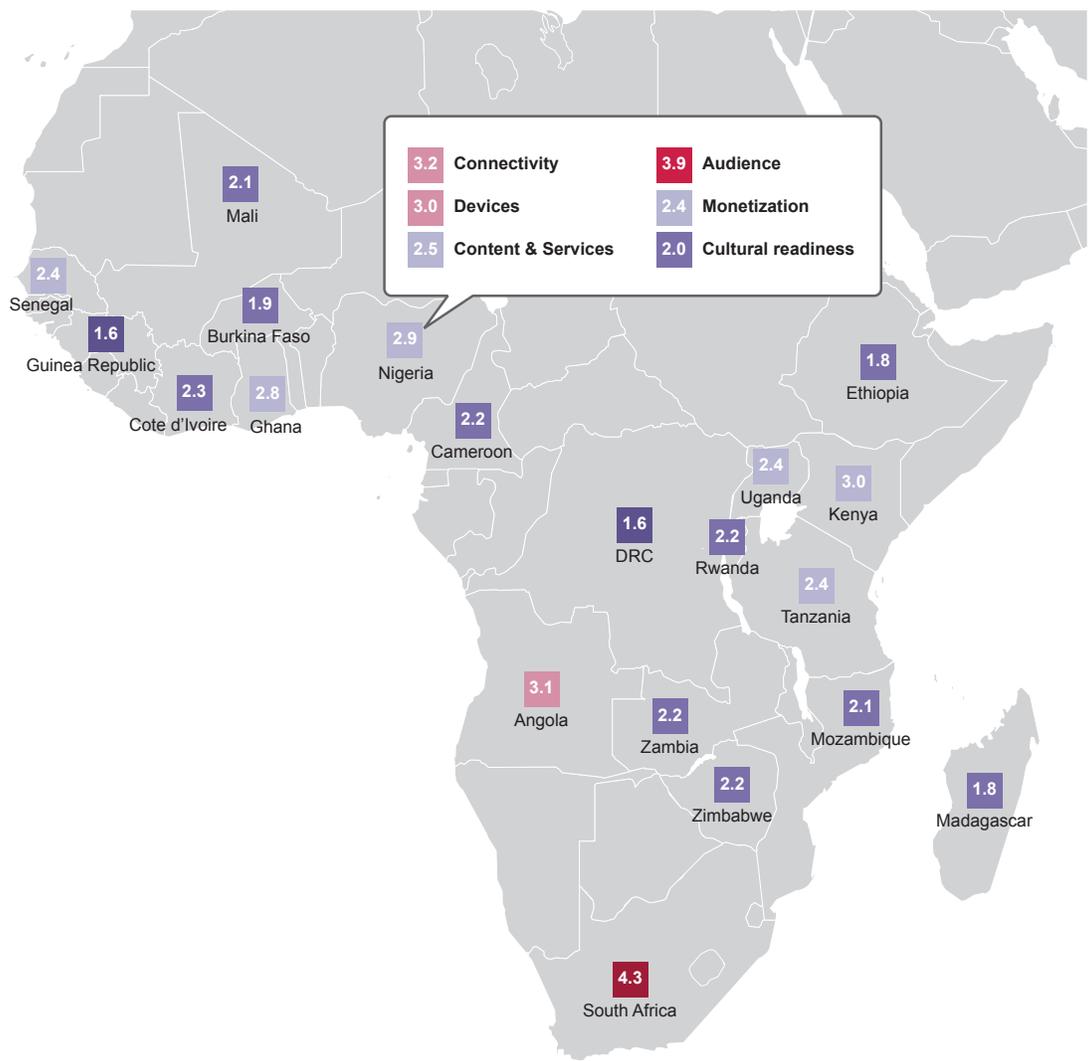
The potential for value-added digital media is high in Nigeria

Relatively high levels of connectivity and smart device penetration serve as two of the main factors driving the digital media opportunity in Nigeria. As such, Ovum ranks Nigeria fourth in its Digital Media Opportunity Index for Sub-Saharan Africa.

In spite of this, operator-run digital media services are by no means a recipe for success in the market. Even where opportunities exist, over-the-top (OTT)-natives, such as Netflix, and established media companies tend to carve out an early, unassailable dominance in the field, positioning themselves as ideal partners for telcos looking to integrate digital media services into their offering.

Furthermore, the way that operators' customers are consuming and interacting with new types of digital media content and services – crucially, over their networks – is providing new opportunities for operators to differentiate and mold their service proposition, tariffs, and bundles to cater to their increasingly data-driven, mobile, digital lifestyles.

Figure 3: Nigeria ranks fourth in Ovum's Digital Media Opportunity Index: Sub-Saharan Africa, with connectivity, devices, and audience driving the opportunity



Source: Ovum

Ovum's four key TMT trends in Nigeria

From this research and in partnership with Xoanon Analytics and Etisalat Nigeria, Ovum has looked at the behavior of the most progressive segments identified in Etisalat Nigeria's analysis to examine how they are driving change through four key trends in the Nigerian TMT space. In Ovum's opinion, these four areas stand out as core aspects of the market that TMT players must understand if they are to successfully differentiate their offering, or launch new products and services in Nigeria and other comparable emerging markets.

Mobile is at the heart of digital services

While mobile services dominate the Nigerian telecoms industry, the mobile phone no longer exists as a pure communications device. Instead, the mobile phone is now the center point – and facilitator – of the vast majority of Nigerians' digital lives.

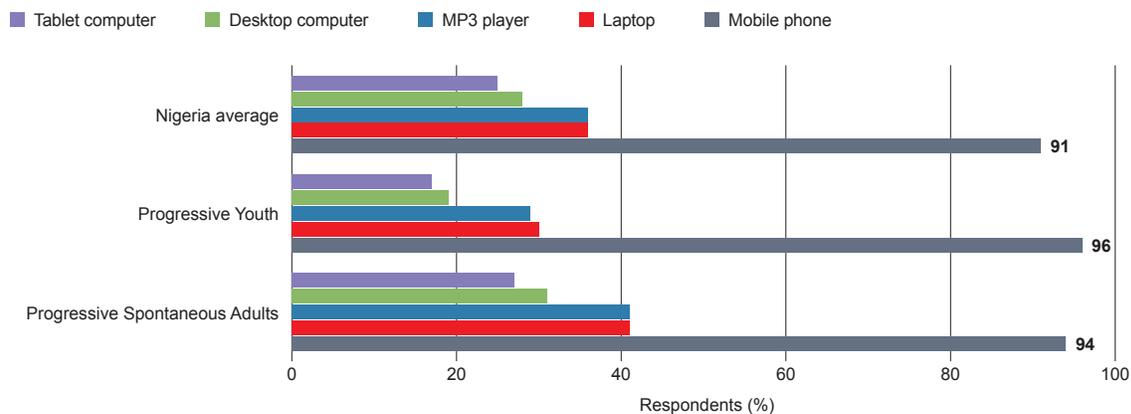
Etisalat Nigeria and Xoanon's study of Nigerian consumers showed that the mobile phone is by far the most used device for Internet access in the country for all customer segments, far ahead of the laptop computer. Unsurprisingly, it is the "progressive" and "spontaneous" segments that are both the most active Internet users – far more so than their more traditional peers – and most likely to use a mobile phone to access the Internet.

Table 2: Progressive, spontaneous customer segments are the most active Internet users in Nigeria	
Segment	% monthly Internet users
Nigerian average	35%
Progressive Spontaneous Adults	67%
Progressive Youth	71%

Source: Xoanon Analytics, Etisalat Nigeria

Figure 4: Mobile phones are by far the most popular Internet device

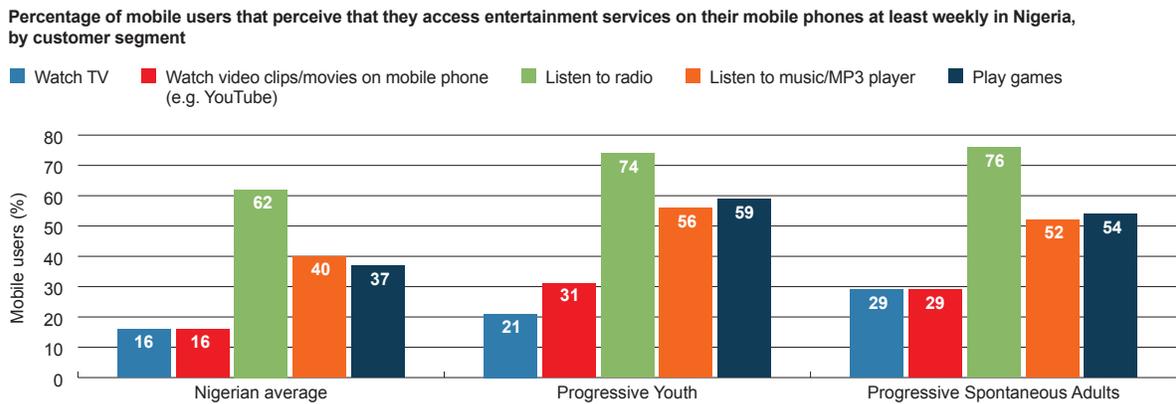
Devices used to access the Internet at least monthly as perceived by Nigerian Internet users, proportion of respondents, by segment



Source: Xoanon Analytics, Etisalat Nigeria

Furthermore, the mobile phone is also becoming a key entertainment device for many Nigerians – according to Etisalat Nigeria and Xoanon's study, all customer segments are more likely to use the Internet for entertainment purposes than they are for practical applications. In fact, the most progressive segment – Progressive Youth – perceives that they access entertainment on their mobile phones more frequently each day than they do communication services.

Figure 5: Radio, games, and music are the most popular mobile entertainment services in Nigeria



Source: Xoanon, Etisalat Nigeria

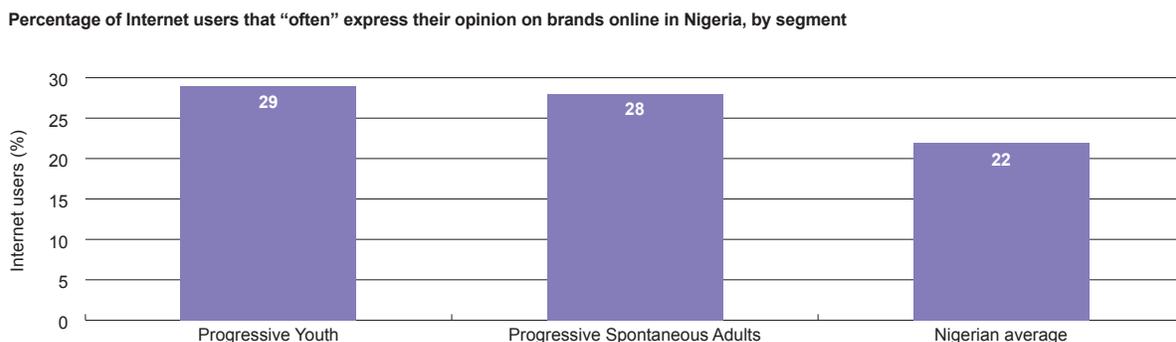
And, although video is often touted as the future of digital media – a view that Ovum shares, on a global level – Etisalat Nigeria and Xoanon’s study suggests that mobile audio services and games also present a decent short-term opportunity in Nigeria. While mobile video is more popular with the more progressive segments than the Nigerian average, a greater proportion of Nigerian consumers listen to the radio and music or play mobile games on at least a weekly basis.

Social media is a key facilitator of communications, media, and marketing

The most progressive segments, Progressive Youth and Progressive Spontaneous Adults, are the most likely to use social media, with 73% and 69%, respectively, of respondents in those segments accessing such services. Accessing social media is an important aspect of their digital, mobile lifestyle, with the majority accessing social media via the mobile phone.

Young, progressive Nigerians are not just turning to social media for personal communication services, but also to express their opinions – and read other users’ opinions – on brands, products, and other services. With influencer marketing taking off across the globe, and across a number of platforms, social media platforms are now important marketing channels for brands to target with dedicated, native campaigns. Furthermore, with the major players, such as Facebook, looking to further integrate payments and commerce, such platforms will become more important to not only reach, but also monetize, digital and mobile consumers over the coming years.

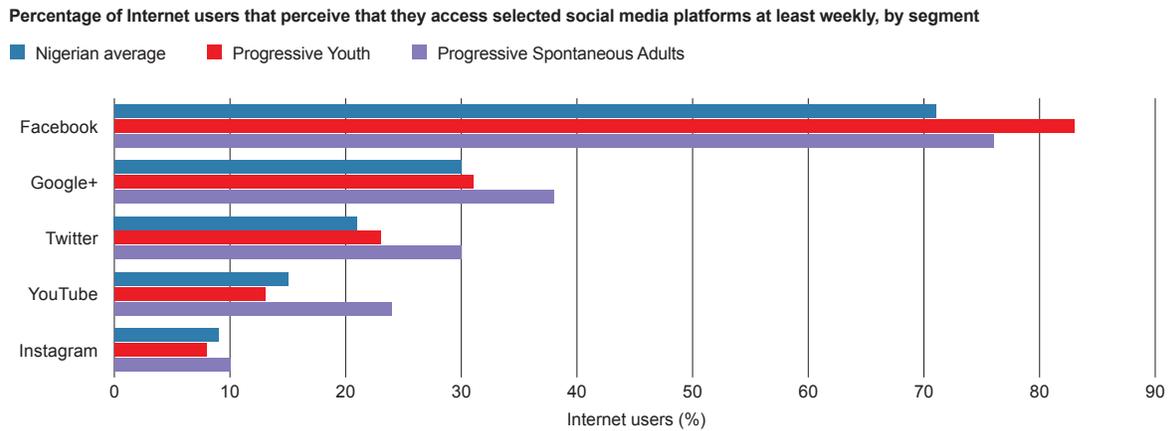
Figure 6: The progressive, spontaneous youth and adult segments are most likely to express their opinions on brands online



Source: Xoanon, Etisalat Nigeria

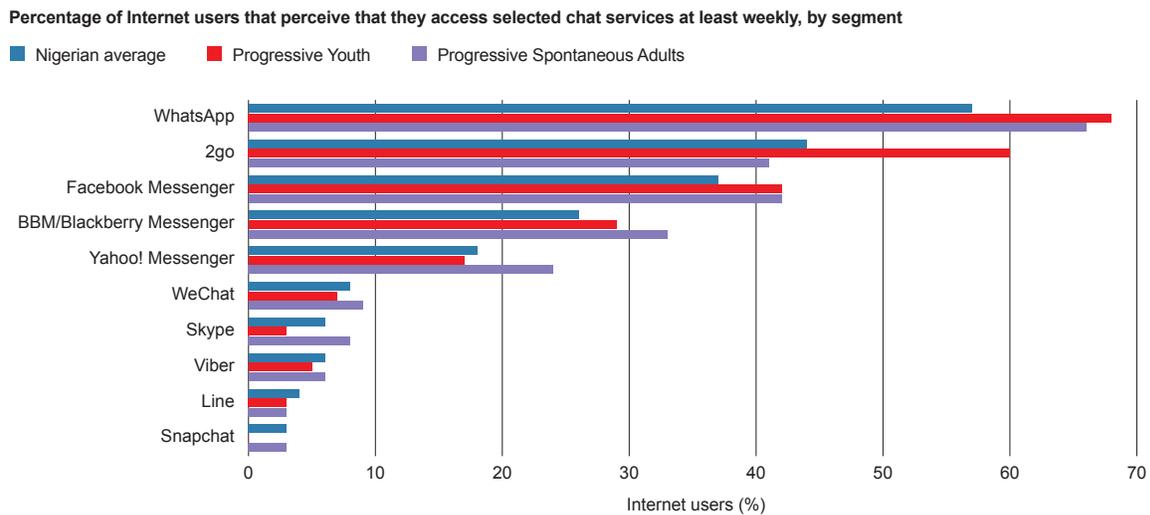
Facebook is by far the most popular social media platform in Nigeria for all customer segments, and is especially popular with the Progressive Youth segment, with weekly usage rates far exceeding the Nigerian average. However, members of the Progressive Spontaneous Adults segment are more likely to use a wider range of social media platforms.

Figure 7: Facebook dominates social media usage in Nigeria, but adults are more likely to use a wider range of platforms and services



A similar trend is evident when looking at Nigerian consumers' usage of OTT communications services, with the Progressive Youth segment mainly concentrating on two or three main platforms. Members of the Progressive Spontaneous Adults segment are more likely to use a greater number of messaging services. On average, the chat service with the biggest weekly usage in Nigeria is WhatsApp, followed by 2go and Facebook Messenger. Notably, these services (2go in particular) are all available on the kinds of feature phones that are still popular in the Nigerian market. Smartphone-only apps, such as Snapchat, are yet to see significant uptake in Nigeria, which is symptomatic of the still relatively low penetration of smartphone connections in Nigeria, which Ovum puts at just under 22% in 2016. And, while OTT chat services are proving popular with certain segments, it is also worth noting that traditional telecommunications services – such as voice calls and SMS – are still used by a greater proportion of Nigerian consumers on a weekly basis.

Figure 8: WhatsApp is by far the most popular OTT messenger app in Nigeria, while feature-phone-friendly 2go is also popular with younger consumers

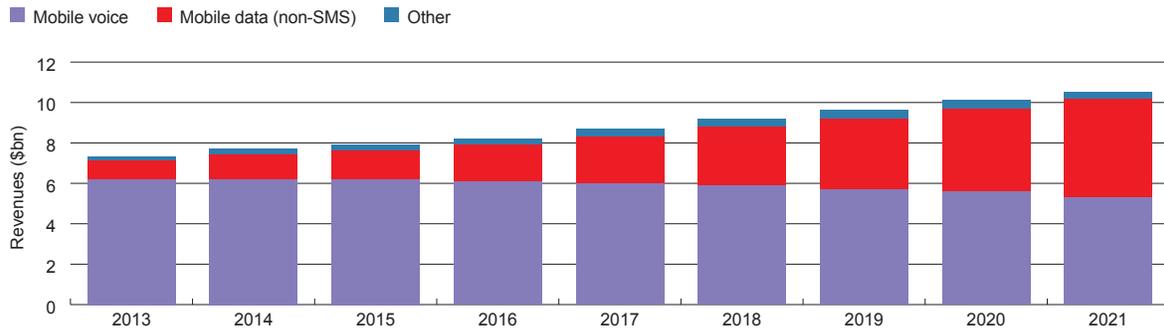


Voice services still dominate mobile telecoms spending

Despite the fact that mobile data is becoming more important as the enabler of Nigerian consumers' lifestyles, it is worth noting that the vast majority of telecoms spending still goes towards voice services in the country. Ovum estimates that almost three-quarters of the \$8bn spent on mobile services in Nigeria in 2016 will be on voice services, as heavy data usage remains a niche activity in the country.

Figure 9: Voice services continue to dominate telecoms spending in Nigeria

Nigerian mobile service revenues by type of service, 2013–21 (\$bn)



Source: Ovum

But, while voice services currently dominate telecoms revenues in Nigeria, Ovum expects data services' proportion of spending to continue to rise in Nigeria between now and 2021, when mobile data revenues are expected to account for almost half of total mobile service revenues.

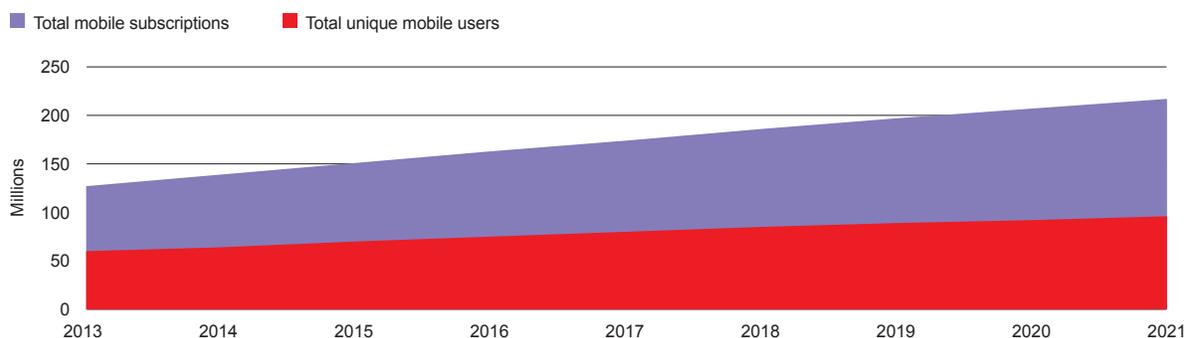
Multi-SIM behavior drives mobile market competition

In emerging markets, such as Nigeria, where mobile coverage can be patchy and prepaid subscriptions dominate the market, it is common for cost-conscious mobile users to own, and use, multiple SIM cards from a variety of operators. And, while this helps operators grow their subscriber bases, it also significantly heightens the level of competition within the market.

On average, 28% of Nigerian mobile phone users surveyed by Xoanon Analytics and Etisalat Nigeria have two or more SIM cards. And, as increasing mobile broadband uptake leads to the use of more data-only devices – such as tablets, routers, and modems – the trend towards multi-SIM usage looks set to accelerate to 2021. As such, Ovum expects total mobile subscriptions to outnumber unique mobile users by a ratio of more than two to one in Nigeria by 2021. The ease of switching also leads to an especially high rate of churn. A significant amount of effort is therefore required to maintain – let alone win – a customer's loyalty.

Figure 10: Total mobile subscriptions will continue to far exceed total unique mobile users in Nigeria

Total mobile subscriptions vs. total unique mobile users in Nigeria, 2013–21 (millions)



Source: Ovum

While it is common for operators in emerging markets such as Nigeria to have customers who also use competitor services, it is important for those operators to ensure that they continue to be the primary service provider, with whom customers are likely to spend more.

In order to maintain their position as a customer's primary service provider, operators must understand the underlying reasons behind multi-SIM activity. According to Etisalat Nigeria and Xoanon's study, getting a better deal on voice services is a strong driver of multi-SIM usage in Nigeria. Concerns over coverage also influence multi-SIM usage, especially for adult consumers, while younger consumers tend to be more concerned about maximizing the value of their mobile data access through the use of multiple SIMs.

Recommendations

- **Operators in emerging markets such as Nigeria should maximize the value of their customer usage data by employing a segmented analytical approach.** Big data analysis providers, such as Xoanon Analytics, can unlock new insights that can drive real competitive advantage in markets where the telecoms market, and associated consumer trends, are evolving rapidly. However, such initiatives – which could be seen as an invasion of privacy by both consumers and regulators – must be handled sensitively, and operators must be aware of, and make allowances for, local regulation and cultural sensitivities.
- **Operators must not forget about their core voice communications offerings.** Although it is tempting to chase increasingly data-driven consumers in a bid to maximize revenues and maintain customer loyalty with new data products and services, voice services continue to dominate the Nigerian market in terms of spending. Furthermore, heavy mobile data usage continues to be a niche consumer behavior, and maximization of the value of voice services is a significant driver behind consumer usage of a secondary SIM in Nigeria.
- **Digital service providers should look to offer mobile-targeted products and services.** The Nigerian TMT sector is a mobile-driven space, meaning that digital products and services that specifically cater to a mobile audience stand the biggest chance of success in the country. However, while smartphone penetration is set to grow significantly over the coming years, such devices continue to be in the minority in Nigeria and other emerging markets. As such, integrating feature-phone compatibility should be high on the agenda, wherever possible.
- **Media companies should think beyond video in the short term.** Although mobile video consumption is expected to grow significantly over the coming years, digital video is not yet a mass-market proposition in Nigeria. With data still relatively expensive, those looking to offer video services in Nigeria and other similar markets must ease the friction of uptake and acknowledge the cost of data for consumers. They should seek to bolster their marketing efforts by partnering with operators, who will be keen to encourage their customers to increase their data consumption.
- **Device manufacturers must continue to cater to multi-SIM users.** Despite operators' best efforts to encourage customer loyalty, the trend towards multi-SIM usage in Nigeria looks set to continue. Device manufacturers can cater to practical multi-SIM consumers by continuing to push multi-SIM-enabled mobile phones in the country. Image-conscious consumers should be targeted with premium-looking, yet affordable, devices.
- **Vendors should look to support operators' bids to improve their networks with network infrastructure products and services.** Anxiety over losing network coverage is another key driver of multi-SIM usage in Nigeria, and poor levels of coverage need to be addressed by operators if they are to offer tomorrow's consumers the always-on, digitally connected lifestyles that they are looking for.

Appendix

Methodology

Ovum has produced this report having analyzed the results and findings of Etisalat Nigeria's analysis of its customer base and Nigerian mobile customers, which was supported by employing Xoanon's big data analysis tools. The analysis in this report also draws on Ovum's existing databases, forecasts, and analyst knowledge. All analysis and commentary contained in this report has been created independently by Ovum.

Further reading

- *Nigeria Update, May 2016*, TE0015-000378 (July 2016)
- *Africa Market Outlook, 4Q16*, TE0015-000410 (October 2016)
- *SVOD Service Provider Market Share Forecast: Middle East & Africa, 2016–22*, ME0003-000728 (October 2016)
- *Digital Media Opportunity Index: Sub-Saharan Africa*, ME0002-000587 (July 2015)



ABOUT OVUM

Part of the international Informa Group, Ovum is a market-leading research and consulting business focused on converging IT, telecoms, and media markets. Ovum creates business advantage for its customers by providing actionable insight to support their decisions.



ABOUT ETISALAT NIGERIA

Trading as Etisalat Nigeria, Emerging Markets Telecommunication Services (EMTS) is a private Nigerian company in partnership with Mubadala Development Company and Etisalat Group of the United Arab Emirates. The company provides mobile telecommunication services to a customer base of more than 21 million in Nigeria following its entry into the country's telecommunications market in 2008.



ABOUT XOANON ANALYTICS

Xoanon Analytics optimizes segmentation models by bridging market research and behavior data through cloud-based big data technology. Equipped with Xoanon's unique tools, which go beyond reactive business reporting, companies are able to fully monetize and operationalize their data through precise offerings and communication, as well as optimizing ROI on commercial investments.
