# Covid-19 and the Consumption of Telecom Products in Nigeria

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Abstract: On January 30 2020 the World Health Organization (2020) declared the novel coronavirus outbreak (COVID-19) a global public health emergency of international concern. This paper examines the effect of COVID-19 pandemic on consumption of telecom products in Nigeria. Secondary data from the financials of MTN Nigeria Communications Plc and telecommunication (Telecom) industry reports the National Bureau of Statistics (NBS) were analyzed. From the review of available data, the author establishes that the consumption of telecom services in Nigeria increased during the period of the first quarter of 2020 which was the period which coincided with the lockdown of the economy. The paper recommends that a similar study is carried out for the period up to June 2020 to determine if the consumption pattern observed for the earlier part of the years persists.

Keywords: COVID-19,data service, telecommunication, telecom, voice service, SMS, subscribers.

### I. INTRODUCTION

In January 30, the World Health Organization (2020) declared the novel coronavirus outbreak (COVID-19) a global public health emergency of international concern. Over the next four months COVID-19 has spread to virtually all nations and territories on the globe. According to Worldometer (2020), as at 9 June 2020, the total global case stands at 7,303,229 with 412,766 and 3,592,208 deaths and recoveries. In Nigeria, the number of active cases stands at 14,554 with 387 deaths as at 12 June 2020 (NCDC, 2020). To curb the spread of the COVID-19 the Federal Government in concert with the various state government implemented lockdown in Lagos, Abuja and Ogun and later extended same to other parts of the Country. This lockdown has led to disruption of the economy with almost all the sectors of the economy impacted- movement of people and goods were curtailed, schools were closed, social and religious gatherings banned, and offices closed (with exception of essential services).

The telecommunications (telecom) market is a part of the information and communication technology industry. The market is primarily engaged in operating and providing access to facilities for the transmission of voice, data, text and video (Businesswire, 2016). According to the International Telecommunications Union (ITU), 97 per cent of the world population now live within reach of a mobile cellular signal and 93 per cent within reach of a 3G (or higher) network. In the Americas, the Asia-Pacific region and Europe, over 95 per cent of the population is covered by a 3G or higher mobile

broadband network. In the Arab States the figure stands at 91 per cent; the Commonwealth of Independent States, 88 per cent; and Africa, 79 per cent. Of the 85 countries that provided data on mobile phone ownership, 61 have a higher proportion of men with mobile phones than women (ITU, 2019, p.4).

Nigeria's telecoms sector experienced a revolution in 2000 following the deregulation of the telecoms sector by the then Obasanjo led administration. Before the introduction of the Global system for mobile communication (GSM) Nigeria's telecoms sector was monopolized and centrally managed by the government under the auspices of Nigeria Telecommunications Limited (NITEL).

The telecoms sector was in a dearth state, fraught with inefficiencies ranging from management, capacity, policy shortage, corruption and low telephony in relation to its population, only a selected few could afford the luxury of having a fixed phone at home or in offices-most telephone connection were found in government offices, multinational corporations and official residences.

Since the introduction of GSM to Nigeria, there has however been a significant improvement as total active subscriptions. According to the Nigeria Communication Commission (2020), telecoms data for Q4 2019 reflected that a total of 184,699,409 subscribers were active on voice as against 179,176,930 in Q3 2019 and 172,824,239 in Q4 2018. This represented 3.08% increase in voice subscriptions Quarter-on-Quarter and 6.87% Year-on -Year. Similarly, a total of 126,078,999 subscribers were active on internet as against 123,163,027 in Q3 2019 and 112,065,740 in Q4 2018. This represented 2.37% growth in internet subscriptions Quarter-on-Quarter and 12.50% Year -on -Year.

One of the interesting feature of the current COVID-19 pandemic is the speed at which most sectors of the economy switched from the usual physical nature of business interaction to the virtual business mode. Working from home, remote working and virtual meeting has now become the buzzwords among workers globally and in Nigeria. Schools from Nursery to University switched to e-learning platforms in other to keeping learning going with minimal disruption.

Objective of the Study

The key objective of this study is to examine the effect of COVID-19 pandemic on consumption of telecom products in

Nigeria

The specific objectives are to;

- access the impact of COVID-19 on consumption of data services;
- 2. examine the trend in the consumption of voice calls during COVID-19 outbreak

## Research Questions

- 1. What is the impact of COVID-19 on consumption of data services?
- 2. What is the trend in the consumption of voice calls during COVID-19?

# II. LITERATURE REVIEW

The Nigeria telecommunication sector witnessed a major revolution in 2001 with the granting of the global system for mobile telecommunication (GSM) license to providers. As at the end of Quarter 1 2019, the country's telecommunication industry contributed 10.11% to the total GDP of Nigeria (Statista, 2020). The telecommunication industry in Nigeria in recent times has recorded unprecedented growth and development with tremendous improvement in the qualities and quantities in different types of services provided to customers. The deregulation of the industry led to the increase in the number of providers of the telecommunication services and of the numbers of subscribers or customers (Akingbade, 2014)

According to the National Bureau of Statistics (2020), telecoms data for Q1 2020 reflected that a total of 189,282,796 subscribers were active on voice as against 184,699,409 in O4 2019 and 173,713,842 in O1 2019. This represented 2.48% increase in voice subscriptions Quarter on- Quarter and 8.96% Year -on- Year. Similarly, a total of 136,203,231 subscribers were active on internet as against 126,078,999 in Q4 2019 and 116,310,154 in Q1 2019. This represented 8.03% growth in internet subscriptions Quarteron- Quarter and 17.10% Year -on -Year. Lagos State has the highest number of subscribers in terms of active voice per State in Q1 2020 and closely followed by Ogun and Kano States respectively while Bayelsa and Ekiti States have the least number of subscribers. Similarly, Lagos State has the highest number of subscribers in terms of active internet per State in Q1 2020 and closely followed by Kano and Ogun States respectively while Bayelsa and Ebonyi States have the least number of subscribers (NBS, 2020).

Agwu (2020) opined that the Nigerian COVID-19 lockdown which is considered one of the strictest in Africa started in February 2020 following the discovery of the index case in Lagos. The lockdown includes indefinite bans on domestic and international travels, prohibition of large gatherings, and closure of open market businesses and schools. Considering the fact that the COVID-19 pandemic is still unfolding and it has been barely 6 months since it became national and international crises, there has been a dearth of relevant

research on the impact of the pandemic on the telecom industry both in Nigeria and abroad. However, there has been a few research and reports on the impact of the pandemic on the telecoms and associate sector.

According to the IFC (2020) the COVID-19 pandemic has demonstrated the critical importance that telecommunications infrastructure plays in keeping businesses, governments, and societies connected and running. Because of the economic and social disruption caused by the pandemic, people across the globe rely on technology for information, for social distancing, and working from home. The telecommunications sector has seen tremendous technological advances over the past few decades, with mobility, broadband, and internet services growing in capability and reach across the globe. The IFC further observed that many telecom players have benefitted from a surge in the traffic of data and voice. As a result, the telecom sector is performing well compared to other infrastructure sub-sectors.

In sharp contrast to many other industries, the telecommunication sector has been generally exempted from major COVID-19-related restrictions, such as stay-at-home orders and quarantine requirements, as it is recognized as an essential service. Some telecom companies have been strengthened by the short-term spike in data traffic and increased use of broadband services, as more people are working from home and rely on video conferencing to hold meetings. Traffic growth has, in fact, demonstrated increased reliance on connectivity and digital services.

Further, there has never been a period of traffic growth like what was observed in the first quarter of 2020, with traffic growth of 30-60% during this period. For instance, Netflix traffic is up 58%; YouTube 13%; WhatsApp 609%; Skype 304%; and Zoom traffic is up 800% (Handa and Bergin, 2020).

### III. METHODOLOGY

This research is based on secondary data analysis from the Nigerian telecom industry data and reports obtained from the National Bureau of Statistics and the Q1, 2020 unaudited financial statements of MTN Nigeria. The dearth of data and publicly available information on the telecom sector in Nigeria has limited the author's sources of secondary data to those highlighted above.

# **IV. FINDINGS**

This research reviews the trend in the consumption of voice and data services as it relates to the Telecom sector in Nigeria.

Review of voice subscribers' growth rate

Table 1a

	Analysis of Active Voice subscription (Q1 2020 vs Q4 2019)		
Telecom Companies	Active Voice Q1, 2020	Active Voice Q4, 2019	Growth rate
	(Jan - Mar 2020)	Oct - Dec 2019	(%)
MTN	73,573,788	68,762,634	7.00
GLO	51,856,114	51,700,052	0.30
AIRTEL	51,298,878	50,186,988	2.22
9MOBILE	12,123,185	13,641,995	(11.13)
Others	430,831	407,740	5.66
Total	189,282,796	184,699,409	2.48

Source: NBS (2020)

From Table 1a above it is observed that all the major telecom companies recorded percentage rise in the number of active subscribers for voice services with the exception of Glo that was flat and 9Mobile that recorded a negative growth for the Quarter-on-Quarter comparison between Q1 2020 and Q4 2019. Overall there was a modest growth rate of 2.48% in the number of active subscribers across the industry between the last quarter of 2019 and the first quarter of 2020.

Table 1b

Table 10				
	Analysis of Active Voice subscription by Network (Q1 2020 vs Q1 2019)			
Telecom Companies	Active Voice Q1, 2020	Active Voice Q1, 2019	Growth rate	
	Jan - Mar 2020	Jan - Mar 2019	(%)	
MTN	73,573,788	65,034,615	13.13	
GLO	51,856,114	46,203,703	12.23	
AIRTEL	51,298,878	45,238,335	13.40	
9MOBILE	12,123,185	16,838,403	(28.00)	
Others	430,831	398,786	8.04	
Total	189,282,796	173,713,842	8.96	

Source : NBS (2020)

Similarly, when a comparison of the number of voice subscribers across the industry is carried between first quarter of 2020 and 2019, significant growth rate of 8% to 13% were observed except for 9Mobile that recorded a significant dip of – 28%. Overall, the industry experienced a growth rate of 8.96% year-on-year for corresponding Q1 of 2020 and 2019.

Review of internet subscribers' growth rate

Table 2a

	Analysis of Active Internet subscription by Network (Q1 2020 vs Q4 2019)			
Telecom Companies	Active Internet Q1, 2020	Active Internet Q4, 2019	Growth rate (%)	
	(Jan - Mar 2020)	Oct - Dec 2019		
MTN	57,282,123	54,113,148	5.86	
GLO	33,871,456	28,934,439	17.06	

AIRTEL	36,827,677	34,522,392	6.68
9MOBILE	7,762,068	8,068,175	(3.79)
Others	459,907	440,845	4.32
Total	136,203,231	126,078,999	8.03

Source : NBS (2020)

Table 2a above reveals that all the major telecom companies recorded percentage rise in the number of active data subscribers except for 9Mobile that recorded a negative growth for the Quarter-on-Quarter comparison between Q1 2020 and Q4 2019. Overall the industry recorded a modest growth rate of 8.03% in the number of active subscribers across the industry between the last quarter of 2019 and the first quarter of 2020.

Table 2b

	Analysis of Active Voice subscription by Network (Q1 2020 vs Q1 2019)			
Telecom Companies	Active Internet Q1, 2020	Active Internet Q1, 2019	Growth rate	
	Jan - Mar 2020	Jan - Mar 2019	(%)	
MTN	57,282,123	46,552,185	23.05	
GLO	33,871,456	28,436,386	19.11	
AIRTEL	36,827,677	31,243,185	17.87	
9MOBILE	7,762,068	9,642,393	(19.50)	
Others	459,907	436,005	5.48	
Total	136,203,231	116,310,154	17.10	

Source: NBS (2020)

Similarly, when a comparison of the number of data subscribers across the industry is carried between first quarter of 2020 and 2019, significant growth rate of about 5% to 23% was observed except for 9Mobile that recorded a significant dip of about -20%. Overall, the industry experienced a very strong active internet subscriber growth rate of about 17% year-on-year for corresponding Q1 of 2020 and 2019.

Review of MTN Nigeria Plc's Q1 2020 sales performance

The review of growth rate in the active subscribers of telecom products reveals only part of the trend. This matric do not provide insight into the volume of consumption of the various telecom products. To deal with this deficiency, MTN Nigeria was selected for further review. The company was recently listed on the Nigeria Stock Exchange (NSE) and a review of the company's recently published unaudited Q1 financial statements provides deeper insights into the consumption of data and voice services during the COVID19 crisis (i.e January – March 2020). Presented in Table 3 below is the revenue profile and growth for MTN Nigeria for Q1 2020.

Table 3

Revenue per Segment/Product	Q1 2020	Q1 2019	Growth Rate %	
	N'000	N'000		
Voice	194,038,017	182,440,616	6.36	
Data	74,009,105	46,406,516	59.48	
SMS	3,337,005	3,659,147	(8.80)	
Interconnect and Roaming	33,600,384	28,856,078	16.44	
Handset and Accessories	631,792	560,862	12.65	
Digital	9,294,799	8,287,920	12.15	
Value Added Service	11,381,195	8,497,679	33.93	
Other Revenues	2,871,378	2,861,205	0.36	
	329,163,675	281,570,023	16.90	

Source: MTN (O1 2020 Unaudited Accounts)

From Table 3 above, it is very glaring that MTN enjoyed higher sales and revenue across all its data and voice call segment for the three months coinciding with the COVID-19 pandemic and the lockdown of the economy. Voice service, interconnect and roaming services & data services recorded an increase in revenue of about 6%, 16% and 60% respectively. It should be noted that that the dip in the growth in the SMS segment can be traced to the 10 free daily SMS program of MTN. As at 15 May 2020, MTN has granted 2 billion free SMS to over 40 million of its subscribers (MTN, 2020). The monetary value of this COVID-19 palliative is in excess of N8billion. If a fraction of the free SMS were to be paid for by subscribers, the SMS segment would have experienced double digits growth rate like the other segments. Overall, MTN Nigeria posted an impressive revenue growth of 17% for the period coinciding with the lockdown.

### V. CONCLUSION AND RECOMMENDATION

From the review of available data, it is established that the consumption of telecom products in Nigeria increased during the first quarter of 2020. This period which coincided with the lockdown of the economy witnessed a surge in the demand for telecom products and MTN been a major telecom company benefitted from this as evidenced in the double digit revenue growth.

It is recommended that a similar study is carried out for Q2 2020 with a view to determining if the consumption pattern

documented in Q1 2020 persists.

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