

BUSINESS

Still Loading: How Slow Internet Speed Under-develops Nigeria's Economy, Stifle SMEs Growth

Nigeria's leapfrogging of some technology evolution, migration and upgrade of internet facilities have not been a blessing as the curse of slow internet speed undermines investments and developments, **Bayo Akinloye** reports

Michel Avbenagha paced up and down his living room. He leaned forward to look at the laptop on the table. He sighed in frustration. He took a second look at the 10-inch tablet in his hand and shook his head in resignation. He had been going back and forth in the room since 6:00 am.

By 7:30 am., the files he tried to email were still loading. He ran downstairs and knocked on his neighbour's door.

"By that time I was shaking with fury. My neighbour's mobile device didn't have any internet signal," Avbenagha recollected.

He ran back to his flat to put on a top and then dashed across the street to a cyber cafe. It had not opened. He rushed to the next street the cafe there too had not opened. He sped to yet another one until the fifth one.

"I forgot it was a Thursday – Lagos shops and small businesses wouldn't open until 10:00 am," he said. "I had lost out. I was just trying to apply for a grant of \$30,000. The files I was trying to upload were three – each not more than 240kb. If I didn't experience that, I wouldn't believe if someone else had told me this story."

Sola Nwafor lost a contract that could have taken care of her family for two months also because of the slow internet speed in Nigeria.

"I was naive. I felt I had time on my hand. I was contacted by a client to do a structural drawing for his new building. The file kept loading until the following day. But the client wanted the drawing ASAP. By the next day, with my laptop switched on all night, the file was still loading. I live in the outskirts of Lagos – precisely, Shimawa (in Ogun State) – and I was contemplating going to Lagos to use a cyber cafe. But the dread of the Lagos-Ibadan Expressway made me think the file would eventually load and the file would be sent," she narrated.

Eventually, Nwafor was able to upload the file.

"I heaved a sigh of relief. But as I tried to click the send button the internet signal went off! To cut the long story short, I lost that deal. Internet connectivity or penetration in this country is just another fraud," the anguished woman pointed out.

Avbenagha and Nwafor's stories illustrate the painful cost Nigeria's internet users bear more often than not.

"What you pay for is not what you get," Ade Adejuyigbe said. "The service providers promise you a load of data that you can't use. It's what it is: empty promise. They should all be jailed – their CEOs; from MTN, Glo, 9Mobile, Airtel and the rest!"

Counting the cost

Slow internet speed is said to have a direct impact on productivity and revenue. For example, in 2015, research commissioned by the business communications firm, Daisy Group, found that unreliable connections cost the United Kingdom economy £11 billion a year in lost productivity. In addition to that, a study by TRAC Research found that \$4,100 is the average revenue loss for an hour of slowdowns.

In Nigeria, as you may know, statistics (accurate or inaccurate) are difficult to come by. Yet, there have been accounts by various Nigerians lamenting opportunities lost because of poor internet connectivity that did not allow a money transfer to sail through thus ending a business deal, among other issues.

If the GSMA Head of Sub-Saharan Africa, Akinwale Goodluck, is to be believed a lot is at stake in the economy with the country's slow internet speed.

According to him, the mobile industry contributed \$21 billion to GDP in 2017, representing 5.5 percent of Nigeria's total GDP. In addition, the growth of Nigeria's



Vector linear blue round concept of Internet Service Provider. Red sign ISP and internet thin line icons, secure connection, transfer files and server data center

digital economy resulted in the creation of nearly 500,000 direct and indirect jobs.

If anything, slow internet speed is endangering such opportunities as the country slides further down "in the Internet of things."

According to the 2018 global ranking report for worldwide broadband speed released by Cable (one of the world's leading broadband magazines), Nigeria is currently ranked 152nd among 200 countries.

The rankings are based on about 163 million broadband speed tests conducted in 200 countries over a 12-month period (May 30, 2017, to May 29, 2018). It examined the mean average download speed of the countries by taking note of how long it would take to download a 5GB HD movie, and thus placed them on a league based on the results.

Nigeria dropped 57 places from its previous 95th position in 2017. With an average download speed of 1.86Mbps, it took an average of six hours, seven minutes and 38 seconds to complete the download of a 5GB file compared to the 3.15Mbps recorded in 2017. At such slow speed, Nigeria's Internet is drawing the angst and anger of businesses and individuals.

"If policies don't keep pace with the needs of society and technological innovation, there is a risk that citizens will be left behind and productivity and competitiveness will suffer," said Goodluck.

Why Nigeria's slow internet speed

With a large landmass, population and the slow acceptance of a digital economy, Nigeria's snail-pace Internet speed trails the world in terms of broadband penetration and speed. The success of the highest ranked African country, Madagascar (22nd) with an average speed of 24.87Mbps is as a result of its underwater cables that supply the island with fibre broadband speeds.

This is not the case for Nigeria as it relies on Wireless (WiMAX, 3G, and 4G) connectivity rather than broadband

cables to cover vast area and population. Madagascar is the fastest African nation, clocking in at an average speed of 24.87Mbps, placing it 22nd globally. This is thanks to the underwater EASSy cable that supplies the island's urban centres with respectable fibre broadband speeds. Nigeria is not so fortunate.

"While there has been some development in terms of the rollout and uptake of the latest technology in some countries like Nigeria and Kenya, more still needs to be done regarding infrastructure to bolster broadband penetration and speed," the Cable report noted.

Slow internet speed equals slow economic growth

The World Bank identified broadband internet connectivity as a vital means for economic growth with every 10 percent increase in connectivity enabling a 1.38 percent growth in GDP.

"Over the past three years," said President of the Association of Telecommunications Companies of Nigeria (ATCON), Olusola Teniola, "the country has stagnated on the GDP growth and seen a drastic drop in GDP per capita ratio that reflects a mono-product economy overly dependent on oil receipts. This effectively means that any growth in broadband penetration has not been sufficient to create an ecosystem large enough to diversify the economy and have a massive impact on the citizens."

Reflecting on the country's internet speed, he admitted: "We simply haven't been able to generate those speeds to fuel an e-digital economy that drives massive efficiencies across all value chains and drives innovation which translates into a highly productive society."

The International Telecommunication Union estimated that at the end of 2018, 1.2 percent of the global population, or 3.9 billion people would be using the Internet, noting that 51 percent of the world's population is online. The strongest growth was reported in Africa, where the percentage of people using the Internet increased from 2.1 percent in 2005 to 24.4 percent in 2018.

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Among the Internet users, a significant number of individuals regularly use the web for financial transactions, such as paying bills and money transfers (3.4 percent of them at least once a day and an additional 3.0 percent at least once a week) or to purchase a product or service (2.3 percent of them at least once a day and 3.0 percent at least once a week).

Despite the total estimated worldwide contribution of the Internet being \$1,672 billion (2.9 per cent of global gross domestic product, GDP), Internet connectivity is still in its early stages in Africa – the Internet's contribution to overall GDP is approximately 1.1 per cent in 2013. Especially in Nigeria and other Sub-Saharan countries, there is a large room for expansion.

The McKinsey Global Institute estimated that, by 2025, Internet-related productivity and efficiency gains (including cost savings, consolidated supply chains and digitised payment collections) in the African retail sector will be between \$16 billion and \$23 billion.

Despite the tremendous potential and impact of the Internet in Nigeria, many people claim that has come at a cost and with a curse.

Marta Guerriero, an international internet expert noted: "In 13 countries in Sub-Saharan Africa, the cost of the Internet is greater than 50 percent of GNI (Gross National Income) per capita. In Togo, Madagascar, Nigeria, Burundi, Malawi and Rwanda, the cost of fixed-broadband is also more than 100 percent of GNI per capita four years ago. Despite mobile-broadband penetration in Africa is higher than fixed-broadband, a similar story can be told in relation to its prices."

Guerriero added that the average prices for a computer-based mobile-broadband service with 1GB monthly data allowance and a handset-based plan with 500MB monthly allowance are more than 22 percent and 15 percent of GNI per capita in Africa, respectively. In the rest of the world, average prices for mobile-broadband are less than 10 percent of GNI per capita.

What other IT experts say

Scott Nnaghor, an expert in information and communication technology, also worries about the quantum of investments that will be lost to slow internet speed.

"It would greatly reduce not only the investment opportunities in the IT sector as well as other sectors, but also the development and progress of IT infrastructure in Nigeria. Top IT companies like Apple, Microsoft or IBM would not like to set up servers or facilities since the data transfer nowadays are mostly done on the Cloud servers. Transfer of data can be small or large and time which is the most important attribute in business or IT development can make it unbearable for the company or the developers as well," he said.

Nnaghor further stated that developers might progress slowly since the Internet speed would make it difficult to "quickly stream or download valuable resources from the Internet to improve their skills or applications of the company."

Weighing in on the potential economic crisis of the country's internet speed, Paradigm Initiative's Programme Manager, Digital Rights, Adebayo Adegoke explained that the issue affects the banking, healthcare and other key sectors of the nation.

"When transactions are delayed because of poor connectivity, time and money is lost – and talking about financial inclusion, the success or otherwise if deepening this rest largely on fast internet services. Ability to host remote meetings relies on the quality of the internet. In healthcare as well, prospects of remote access depend on the quality of internet service. Education and knowledge acquisition in the 21st century thrives on reliable internet services," said Adegoke.

Impact on SMEs growth

Small- and medium-sized enterprises (SMEs) are important drivers of economic development in Nigeria, where it is estimated that they account for about 90 percent of all businesses. They are, for example, 91 percent of formal businesses in South Africa, 92 percent in Ghana and 98 percent in Mozambique. Some studies have suggested that Internet usage contributes to profitability, productivity, competitiveness and survival of SMEs.



Minister of Science and Technology, Dr. Ogbonnaya Onu

In Nigeria, the initiative 'Get Nigerian Businesses Online' has helped small businesses gain an online presence, bringing more than 25,000 businesses onto the web since 2011, driving marketing and awareness, and consequently business growth in the Nigerian SMEs sector.

In 2011, the Central Bank of Nigeria pushed for the implementation of Cashless Initiative Nigeria, which aimed at encouraging the use of Internet banking, the point of sale terminals and mobile money payment systems. As a consequence, the number of Internet banking transactions increased to over 1.5 million in 2011, with a total value of over N2 billion, the number of POS terminals rose to 103,000, and the apex bank experienced savings of about N1.2 billion.

However, there are indications that the excitement for "everything Internet" is waning in the country as subscribers, both corporate and individuals lament the sorry internet speed.

Changing times

On the African continent, 38 percent of online page views are from mobile devices, and mobile continues to grow as a source of Internet traffic with mobile Internet usage in Africa increasing by at least 18 percent, between May 2013 and May 2014; and Smartphone penetration is 31 percent in Kenya, 29 percent in Nigeria and 47 percent in South Africa. Despite double-digit growth over the last few years, fixed-broadband penetration in Nigeria and other African countries remains slow.

An important issue regarding internet connectivity in Nigeria is related to the reliability of the Internet connection. In the country, there are cross-country and cross-city differences in broadband speed. Even African countries with the fastest connectivity are far from the world averages.

According to a survey of over 1,300 businesses across Ghana, Kenya, Nigeria and Senegal, more than 80 percent of SME owners believe that their businesses benefit from the Internet, and 70 percent of them expect this would lead them to hire new employees as a result of such a business expansion.

The Head, Software Engineering of Fabnisis Int'l Nigeria, Olaoluwa Fabuyi, compared what Nigeria is losing to the grim possibility facing Amazon. Fabuyi said: "Slow internet speed has a direct impact on productivity. It was recently determined that Amazon would lose £1.6 billion in sales from a one-second delay in loading time of pages. A slow connection leads to an unhappy economy, a decrease in profits and slow applications. Having slow and unreliable broadband affects the local economy and has really deep implications."

Getting things moving... faster

"First, our total ICT ecosystem challenge is more or less an epidemic! We must not be carried away with the current state of ICT deliverables which serves the

minority of our people – leaving the majority in digital poverty. However, there are sustainable solutions," Chris Uwaje, an IT expert stated.

While acknowledging that Nigeria's ICT infrastructure has come a long way, "jumping from one inconclusive road-map" to another, power is its albatross.

"In my opinion, uninterrupted power supply and alternate power, mandatory nationwide optic fibre infrastructure deployment and software development and engineering capacity building should be our topmost priority. I insist that our nation's core competence is software."

"Therefore, there is the need to create a National Software Commission and Software Engineering Academy. Also, there is an urgent need for the crafting of a National ICT Framework Bill/Legislation and Establishment of the Office of The ICT General of the Federation – all of which are fundamental to resolving our long-term ICT challenges," Uwaje stated.

The GSMA said it has identified support for and release of a harmonised spectrum and a modernised licensing framework as fundamental building blocks for Nigeria's digital future.

"The harmonisation of 1427-1518 MHz and 3.3-3.6 GHz makes them critically important bands for mobile operators seeking to offer new mobile services to consumers and businesses," said Goodluck. "A future-fit licensing regime will help promote market growth, boost investor confidence and enable increased connectivity."

That is not all. Some IT experts want all stakeholders on the supply side to collaborate and ensure the building of a homogeneous fibre backbone network that is "built on the true principles of open-access and interoperates" to allow digital channels of local content information to co-exist with locally hosted digital content and "a demand side that is driven by a workforce that has skills based on science, technology, engineering and mathematics (STEM) educational foundation".

Teniola said: "We also require the government to create and harness an enabling environment that will support the creation of many local businesses to be the employers of the future. More spectrums should be made available at affordable costs to the service providers that will translate to higher broadband speeds at cheaper prices to the consumer."

The federal government may well have its sight set on that future as the Executive Vice-Chairman of the Nigeria Communications Commission (NCC), Umar Danbatta, said: "We're looking at 2020. One trial is taking place in the Atlantic City Lagos. We are working towards ensuring productivity and efficiency. We are putting in place infrastructure that would support 3G, 4G LTE and 5G. (The year) 2020 is the D-day of 5G in Nigeria."

"The mobile industry is not only a significant contributor to the economic activities of Nigeria but also towards the growth of other sectors of the economy."

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