Growing the Nigerian Technology Ecosystem through the Capital Markets

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Introduction

The future of countries, businesses, and individuals will be more dependent than ever on their adoption of technology Economic vibrancy and wealth creation in developed countries have been associated with technological advancements and digital innovation transformation. Technology firms have played an important role in the development of countries such as South Korea, which has become an economic powerhouse with a technological edge, particularly through large conglomerates manufacturing software and hardware[1]. The United States, Denmark, Switzerland, and Sweden are other famous nations that have had phenomenal economic growth as a result of the development of their technology ecosystems.

Today, most of the companies with the world's largest market capitalizations are tech companies that generate much of their revenue from the digital ecosystems they created. This is a significant change from the early 2000s to this current time.

In the early 2000s, Exxon Mobil, in the oil and gas industry was the company with the largest market capitalisation globally. However, since 2009 tech based companies have dominated the global markets based on market capitalization. Ten years ago, these companies accounted for 15 of the global top 100 companies with a combined market capitalisation of $2.0 Trillion. This has improved over the years to 21% in 2017 (a 40% growth) and 34% in 2022 (a 62% growth) representing a combined market capitalisation of $3.6 trillion and $12 Trillion respectively[2].

Top 5 global companies by market capitalisation in 2009

ExxonMobil, Walmart (Save money. Live better.), PetroChina, ICBC 中国工商银行, 中国移动 China Mobile

Top 5 global companies by market capitalisation in 2009

Alphabet, Microsoft, Apple, أرامكو السعودية saudi aramco, amazon

Source: PwC Global Top 100 Companies by market capitalisation, 2022, PwC Analysis Data is as at 31 March

The gap between technology and other sectors continues to widen each year. Markets such as the New York Stock Exchange (NYSE), NASDAQ, Euronext, Hong Kong Stock exchange (HKEX) etc have attracted IPOs and listings of tech giants through implementation of initiatives that support growth of companies and cost efficiency for stakeholders in addition to global visibility and access to a larger pool of international capital offered by their platforms.

In the US, three (3) tech-based companies accounted for 63% of funds raised in the top 5 largest US IPOs to date.

Top 5 largest US IPOs as at 2022

Alibaba Group 阿里巴巴集团	$21.77 billion
VISA	$17.86 billion
enel	$16.45 billion
facebook	$16.01 billion
gm general motors	$15.77 billion

Source: Statistica

Would African capital markets follow the same path to advancement through tech ecosystem[3] development?

The Nigerian Exchange Limited (NGX) is set to launch a Technology Board. The Technology Board is a specialized platform for technology based companies to list and raise capital on the NGX.

Consequently, in December 2022 the Securities and Exchange Commission (SEC) approved the NGX Rules for listing on the Technology Board (The Rules). The Rules aims to attract technology companies to the capital market with less stringent listing requirements (compared to other listings boards) and provide Issuers, sponsors, investors and advisors with important information about admissions, listings standards, disclosure and notification requirements for the Technology Board

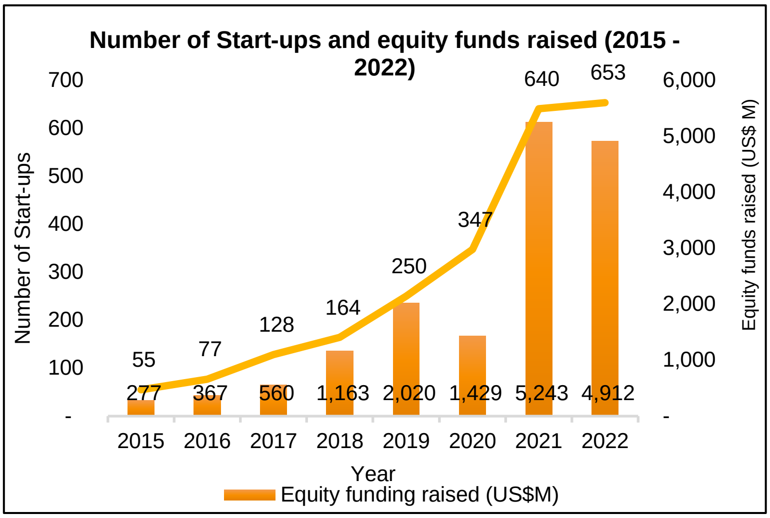
[1] World Economic Forum
[2] PwC Global Top 100 companies by market capitalisation, 2022

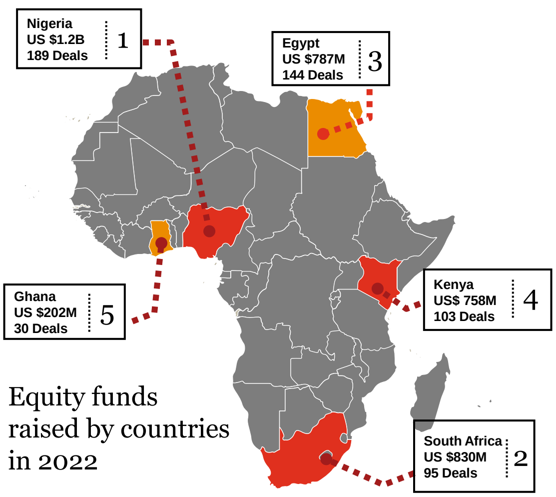
[3] A network of diverse entities that come together to stimulate innovation in the digital sector with respect to goods and services

In Africa, the tech-ecosystem has experienced impressive growth and is evolving rapidly. There is a high level of optimism about the potential that the continent has to offer by harnessing the strength of its largely young, rapidly growing and technology savvy population. The number of tech start-ups securing funding in Africa has grown by 1087% from 55 in 2015 to 653 in 2022, while total equity funding raised annually increased by 1673% from US$277 Million to US$4.9 Billion in the same period (Partech,2022).

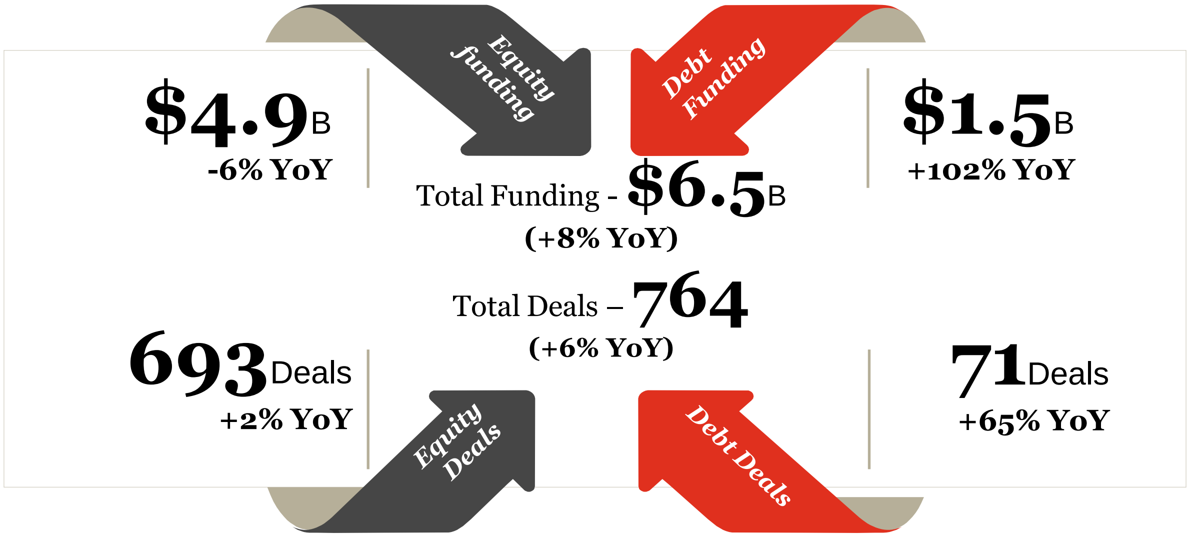
To accelerate the growth of the tech ecosystem, it is worth noting that the governments in some African countries have created initiatives such as; Program 12J in South Africa that provides tax deductions for investors, the Finance Act 2020 in Nigeria that reduces taxes for start ups, the Nigerian Startup Act 2022 providing a framework for the development of the Nigerian technology and innovation ecosystem, the State Mandated technology training in Ivory Coast, Rwanda's Private Public partnership with Carnegie Mellon, Egypt's creation of the largest Fintech accelerator, among others.

Nigeria, South Africa, Kenya, and Egypt are currently the central focus of the African tech-ecosystem. These four nations, referred to as the "big four" markets, have received about 73% of the financing in Africa. Over the years, half of these financing have been in Nigerian start-ups, many of which operate within the fintech sub-sector in a bid to take advantage of the inadequate banking services in the country. Despite this, many other countries like Tunisia and Ghana, are experiencing increased activity and acquisitions are becoming more common.





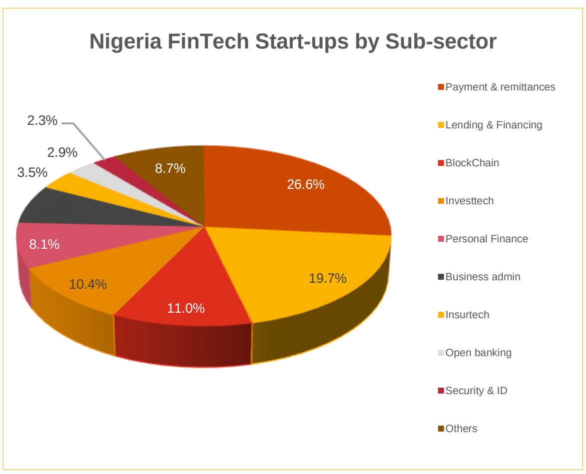
2022 Deals and Volumes

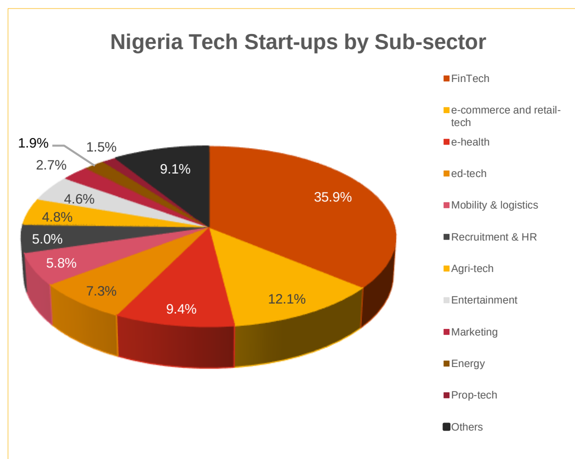


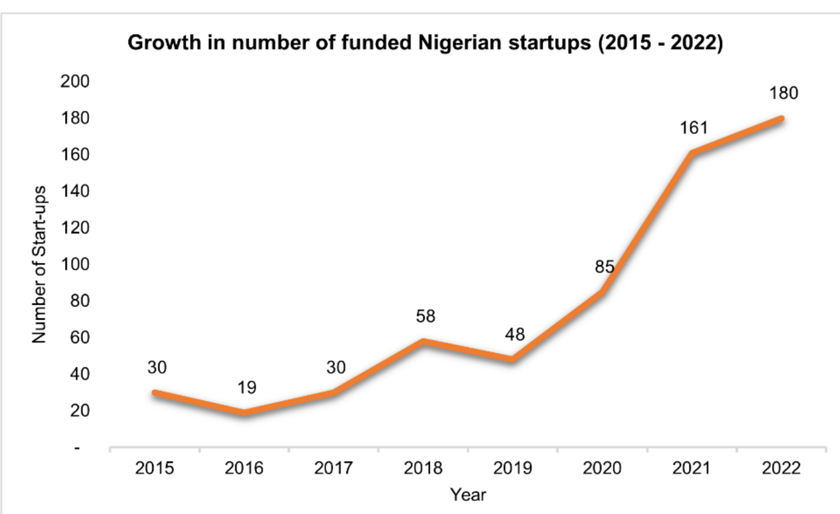
Tech-ecosystem and Fintechs in Nigeria

Nigeria is one of the continent's more established startup ecosystems, with firms like Interswitch dating as far back as 2002. The country has produced five out of seven unicorns in Africa which are; Interswitch, Flutterwave, Opay, Andela, and Esusu[4]. It is interesting to note that aside from Andela, all other unicorns are in the fintech space.

The fintech sub-sector has the biggest share of the number of Nigerian tech start-ups at 36%, with payments and consumer lending being the focus of almost half of the sub-sector[5]. Insufficient banking services (particularly in rural areas), a young population, increasing smartphone usage and regulatory efforts to increase financial inclusion, created advantageous openings for fintechs. Fintechs have jumped at the chance to provide improved propositions across the value chain to address problems with affordable payments, quick loans, and flexible savings and investments, among others.







[4] Techcrunch 2023

[5] The African Tech Startups Funding Report, 2022

Benefits of tech- ecosystem to the Nigerian economy

1. **Job-creation and talent development:** The tech ecosystem creates jobs as people are still at the center of innovative ideas. The top five companies according to Forbes' World's Best Employers Report for 2022, were all technology companies with over a million employees in total. By 2025, the number of technology based employment created is predicted to expand by almost five times, from 41 million in 2020 to 190 million (Microsoft Stories Asia, 2020). Technology companies can help bridge the unemployment gap in Nigeria by recruiting and developing talents. This increases the quality of the Nigerian working population in terms of being marketable at the global level, contribution to the national economy and also attracting further investments to the country.

2. **Stimulation of economic activity and development of more efficient markets:** The technology industry has the potential to make a substantial impact, both through the creation of its own economic value and through the development of fresh, creative business models for other sectors. For instance, online payments in the past were quite difficult and this limited the growth of eCommerce in Nigeria. Fintechs have helped to address business needs for frictionless online payments which have improved payment services. According to the World Economic Forum, conclusions from numerous nations support the favorable impact of technology on economic growth. In emerging nations, for instance, a 10% increase in broadband penetration is linked to a 1.4% boost in GDP growth.

   Furthermore, technology increases economic output by enhancing the operating capabilities of organisations, allowing more people to work and use resources more efficiently, thereby optimising the capacity of the economy most of the time. As a result, productivity rises, allowing for larger markets and better organisational decision making.

3. **Innovation, new products and services:** Technology is making it easier to develop new products and services. It promotes innovation by giving users a greater say in shaping it through collaborative approaches with inventors. The Nigerian economy can benefit from innovative solutions ranging from investing opportunities offered by asset management fintech companies, to remote working abilities to hedge susceptibility to risks such as pandemics, to the creation of smart cities and smart factories through AI for carbon footprint reduction, to data analytics for conservation of resources, the use of blockchain technology for business processes, to the electrification of transportation systems. The benefits to the local economy are boundless.

4. **Improved security and enhancement of financial inclusion**: Technology companies can help businesses implement better ways to secure business/financial transactions without sacrificing transparency or security. Also, tech-companies like fintechs, can increase access to financial services for people who do not have access to banking services, particularly in rural areas.

Albeit the growing tech-sector in the Nigerian economy and significant private funding secured by African tech start-ups over the years the tech sector is grossly underrepresented in the Nigerian capital market. Out of the 157 companies listed on the Nigerian Exchange (NGX), only 9 companies with a combined market capitalization of circa N11 trillion are technology based companies (excluding traditional banks which have incorporated technology into their operations).

As at 31 December 2022, the top 10 companies by market capitalisation on the NGX were dominated by ICT and Industrial goods companies accounting for c. 70% of the total market capitalisation.

Top 10 most capitalised companies on NGX as at 31 December 2022

Companies	Market Cap (N)	Sector
Airtel Africa Plc	6,144 Billion	ICT
Dangote Cement Plc	4,447 Billion	Industrial Goods
MTN Nigeria Telecommunications Plc	4,376 Billion	ICT
BUA Cement Plc	3,310 Billion	Industrial Goods
BUA Foods Plc	1,170 Billion	Consumer Goods
Nestle Nigeria Plc	872 Billion	Consumer Goods
Zenith Bank Plc	782 Billion	Financial Services
Guaranty Trust Holding Company Plc	677 Billion	Financial Services
Seplat Energy Plc	647 Billion	Oil and Gas
Stanbic IBTC Holdings Plc	433 Billion	Financial Services

Source: Nigerian Exchange

A new era for technology companies in Nigeria's capital market

Over the years, there have been several initiatives in the Nigerian capital market geared towards promoting innovation, growth as well as a technology driven capital market.

In January 2021 the Securities and Exchange Commission (SEC) released Rules on Crowdfunding which provided guidelines for the registration and operation of crowdfunding platforms and intermediaries. It also introduced Rules on Robo Advisory Services in August 2021 for the regulation of persons or entities seeking to provide digital advisory services in the Nigerian capital market. Also, in 2021 the SEC announced the introduction of a Regulatory Incubation (RI) program (the SEC's regulatory sandbox) alongside Regulatory Incubation guideline.

The RI program was designed to accommodate innovation by fintechs within limits that ensure investor protection whilst also promoting market integrity

Similarly, in May 2022, the SEC, issued Rules on the Issuance, Offering Platforms, and Custody of Digital Assets covering

1. **Issuance of Digital Assets as Securities;**
2. **Registration Requirements for Digital Assets Offering Platforms;**
3. **Registration Requirements for Digital Asset Custodians;**
4. **Virtual Assets Service Providers; and**
5. **Digital Assets Exchange respectively.**

The introduction of these rules are an indication of SEC efforts to encourage and develop innovation in the Nigerian capital market.

In December 2022, the SEC approved the NGX Rules for the Listing on the Technology Board (the Rules). The Rules were approved as the NGX is set to launch a technology board a specialised platform for the listing of technology based companies providing these companies with access to finance and visibility.

The Rules provides for less stringent listing conditions (compared to other boards) and takes into consideration the peculiarities of tech based companies

Extract from the Rules for listing on the technology board of the NGX

The technology board is set to have two (2) segments namely Start-Up Tech Segment and Big Tech Segment.

Item	Requirements	
	Start-Up Tech	Big Tech
Market capitalisation	Between N420 million and ₦42 billion	Above N42 billion
Minimum free float requirement[6]	5% (or a value of N20 million)	10% (or a value of N2 billion)
Number of shareholders	Minimum number of two (2) shareholders	Minimum number of five (5) shareholders
Methods of listing	Direct Listing, Initial Public Offer, Memorandum Listing, Accelerated Book Building, Dual Listing, Reverse Acquisition/Merger/Takeover, Depositary Receipts, Special Purpose Acquisition Companies, etc.	
Dual class share arrangements[7]	Where a listed company has a dual class share arrangement in place, the company must disclose their implementation of the arrangement and any changes made in its periodic report including the implementation of measures put in place to protect investors' rights and interests.	
Lock-up period[8]	Promoters or directors are to retain a minimum of 50% of their shares for a lock-up period of six (6) consecutive calendar months from the date of listing.	
Operating track record	Minimum of one (1) year	
Core investor or technical partner	Have a core investor or strong technical partner that has a minimum of one (1) year operating track record	

Companies listed on the Start-Up segment of the Technology Board can migrate to the Big-Tech segment upon request and meeting the requirements of the Big-Tech segment.

[6] If raising capital at the point of listing

[7] A dual class share arrangement is an arrangement that gives a company's founder(s) voting rights disproportionate to their percentage holding of the company's shares which ensures that they retain control regardless that their ownership is greatly diluted on the issue of new shares

[8] Lock-up period is the period during which a company, its directors and promoters shall not directly or indirectly sell or offer to sell their shares to the public.

Conclusion

Nigeria has a fast growing tech sector mainly driven by the financial services and the telcos However, a holistic and inclusive approach must be adopted for the entire tech ecosystem.

Home to over 400 tech start ups and ranked 61st out of 100 countries worldwide in the start up ecosystem index[9], Nigeria also ranks number 1 in Africa in terms of venture capital investment destination, leading in both funding and number of equity rounds. It accounted for 23% of all equity funding and 27% of the total deal count of US$1.2B raised in 2022[10], portraying the country as the preferred investment destination in Africa. Despite these impressive performances, the Nigerian capital market does not optimally reflect the activities of the sector.

A healthy ecosystem that creates a balance for all subsectors of the technology ecosystem and ensures the optimal flow of required funding to innovate and grow while strengthening governance for long term sustainability is fundamental to enhancing economic growth. Agri-tech, clean-tech, ed-tech, e-health, recruitment & HR, prop-tech, mobility & logistics etc are equally important and require adequate investments to enhance their capacity to contribute to national and regional development.

The proposed creation of a technology board by the NGX is a laudable initiative and once launched is expected to promote more listings from African technology companies, create an inclusive environment that would serve as a catalyst for further economic advancements whilst deepening the Nigerian capital market. This is also expected to increase the attractiveness of the Nigerian capital market to tech based companies and position the NGX as a preferred exchange hub in Africa In addition, the tech ecosystem would benefit from improved governance, transparency, talent retention, funding and long term sustainability amongst others by listing on the Nigerian Exchange whilst addressing concerns of these start ups about likely pricing/ risk premiums and ongoing regulatory commitments that would follow.

[9] Nigeria: Startup Ecosystem Index 2022
[10] 2022 Africa Tech Venture Capital Report.

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PwC's Capital Market practice and how we can support tech companies

PwC Capital Markets

Capital markets transaction services

- Due diligence
- Reporting accountants
- Comfort letters
- Listing and IPO readiness (including cross border IPO support)

Capital markets advisory services

- Structuring
- Regulatory and governance matters
- Risk management
- Capital market research
- Frameworks, guidelines and strategy review and development

Equity Advisory

- Strategic analysis and advice on financing and exit options
- Support in advisers selection
- Transaction project management

- Dedicated team of equity and debt capital markets specialists who provide a broad range of advisory and execution services to companies and investment banks in connection with domestic and overseas capital market transactions
- We increasingly focus on emerging markets transactions and cross border listings
- We offer an integrated approach in delivery and leverage the PwC support package strategic advice, corporate finance and capital markets advice, due diligence services, valuations, shareholder and corporate taxation
- We work closely with IPO candidates globally through the IPO Centre and connecting with our global network

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