



NATIONAL FINTECH STRATEGY

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ACKNOWLEDGEMENT

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FOREWORD

The National Financial Inclusion Steering Committee, a committee of stakeholders from the public and private sector has been at the forefront of promoting inclusive growth and development through financial inclusion.

The committee recognizes the place of innovative models in achieving financial inclusion objectives, particularly; the committee believes FinTech has the potential to facilitate inclusive growth in the Nigerian economy. FinTech also has the potential to deepen the existing payment and financial system infrastructure to reach unserved areas and further stimulate growth.

In the light of this, the national financial inclusion stakeholders developed a strategy to leverage FinTechs for inclusive growth and development, while enabling the Nigerian FinTech ecosystem for global competitiveness. The strategy seeks to achieve these objectives through the implementation of some key initiatives to catalyze the FinTech ecosystem. It highlights demand and supply side imperatives for harnessing and retaining the talent pool in the FinTech space and the mainstreaming of FinTechs into the Financial Service sector. Furthermore, the document seeks to address issues that have militated against the growth of FinTechs in Nigeria and will serve as a collaborative tool to maximize the benefit of FinTechs while mitigating the risk.

The National FinTech Strategy is a major component of the Payment Systems Vision 2025 (PSV 2025). In addition, the strategy would enable the attainment of the objectives of the Nigerian Startup Bill, 2022, particularly in the Financial Services sector.

On behalf of all members of the Financial Inclusion Steering Committee in Nigeria, I am pleased to present the first National FinTech Strategy for Nigeria.

Thank you.

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Governor, Central Bank of Nigeria and Chairman, National Financial Inclusion Steering Committee



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ACRONYMS

ACRONYM	DESCRIPTION
4IR	Fourth Industrial Revolution
A2F	Access to Finance
AfCTA	African Continental Free Trade Agreement
AFI	Alliance for Financial Inclusion
AI	Artificial Intelligence
AML/CTF	Anti-money Laundering/Counter-terrorism Financing
API	Application Programming Interface
B2C	Business-to-Consumer
BACS	Bankers' Automated Clearing System
BoP	Bottom of the Pyramid
BVN	Bank Verification Number
CBDC	Central Bank Digital Currency
CBN	Central Bank of Nigeria
CCAF	Cambridge Centre for Alternative Finance
CHIPS	Clearing House Interbank Payments System
DFS	Digital Financial Services
DLT	Distributed Ledger Technology
EFinA	Enhancing Financial Innovation and Access
eKYC	Electronic Know-your-customer
FSP	Financial Services Provider
FSS	Financial Systems Strategy
GDP	Gross Domestic Product
GFIN	Global Financial Innovation Network
GVA	Gross Value Added
I-SIP	Inclusion, stability, integrity and protection
ICI	In-country implementation
ICT	Information and Communications Technology
IDE	Innovation driven enterprises



ACRONYMS

ACRONYM	DESCRIPTION
KYC	Know-your-Customer
M&E	Monitoring & Evaluation
ML	Machine Learning
MMO	Mobile Money Operator
MNO	Mobile Network Operator
NAICOM	National Insurance Commission
NDP	National Development Plan
NFIS	National Financial Inclusion Strategy
NFS	National Fintech Strategy
NIBSS	Nigeria Interbank Settlement System
NITDA	National Information Technology Development Agency
P2P	Person-to-Person
PE	Private Equity
PENCOM	Pension Commission of Nigeria
PESTEL	Political, economic, social, technology, environment and legal
PSB	Payment Services Bank
PSP	Payment Service Provider
PSV	Payments Systems Vision
RAMP	RIA African Mobile Pricing
RIA	Research ICT Africa
SDG	Sustainable Development Goal
SEC	Securities and Exchange Commission
SME	Small and medium enterprises
SMILE	Small and medium innovation leaning enterprises
SSA	Sub-Saharan Africa
SWIFT	Society for Worldwide Interbank Financial Telecommunication
USSD	Unstructured Supplementary Service Data
VC	Venture Capital
YC	Y Combinator

1.0

Executive

Summary





1.1 PREAMBLE

National Financial Inclusion stakeholders collaborated to develop a FinTech Strategy that seeks to enable the FinTech ecosystem in Nigeria for sustainable growth and global competitiveness.

The strategy seeks to position Nigeria's FinTech ecosystem as a global leader that contributes to inclusive growth and economic development.

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About 41 local and international institutions played a role in the development of this strategy

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The strategy seeks to achieve its objective by applying principle-based rules and 29 strategic initiatives, tailored to catalyze the FinTechs ecosystem in Nigeria

The influences of the fourth industrial revolution (4IR) and digital economy in Nigeria's financial technology (FinTech) ecosystem are growing because of the entrepreneurial drive of young Nigerians and access to foreign venture capital. Despite the organic growth of FinTechs, the impact of financial inclusion has been minimal. Hence, the National Financial Inclusion Technical Committee and Alliance for Financial Inclusion (AFI) convened a Roundtable to examine the extent to which an enabling regulatory environment and policies could support FinTechs and innovative businesses in accelerating financial inclusion in Nigeria. One outcome of the Roundtable was the need for a National FinTech Strategy. The strategy seeks to unlock innovation through FinTechs to drive inclusive growth and development, while facilitating global competitiveness.

1.2 STRATEGY DEVELOPMENT PROCESS

In developing this National FinTech Strategy, insights were gotten from desk research alongside the active participation of financial system regulators, operators and other ecosystem actors. Furthermore, through interviews and consultative workshops stakeholders jointly agreed on the definition of FinTech, the vision and mission, the guiding principles and strategic initiatives. Actors engaged in the process are categorized as follows:

- **Public sector institutions:** financial services regulators and related government agencies in the digital economy.
- **Private sector institutions:** comprising of representatives of incumbent actor groups like e-Banking Heads in Deposit Money Banks and other apex associations in the Digital Financial services space.
- **Ecosystem facilitators:** like switching companies and other infrastructure providers.

1.3 STRATEGY HIGHLIGHTS

The subsequent sections define the components of the National FinTechs Strategy illustrated in Figure 1. The directional beacons are:

- **Definition:** Nigeria defines FinTech as "technologically enabled financial innovations that extend the reach, usage and governance of financial services."



- **Vision:** To be the leading inclusive digital and FinTech ecosystem operating out of Africa.
- **Mission:** To develop a proportionate and

balanced environment that supports innovation and collaboration, promotes inclusive growth, harnesses and retains talent, attracts investments and develops digital infrastructure.

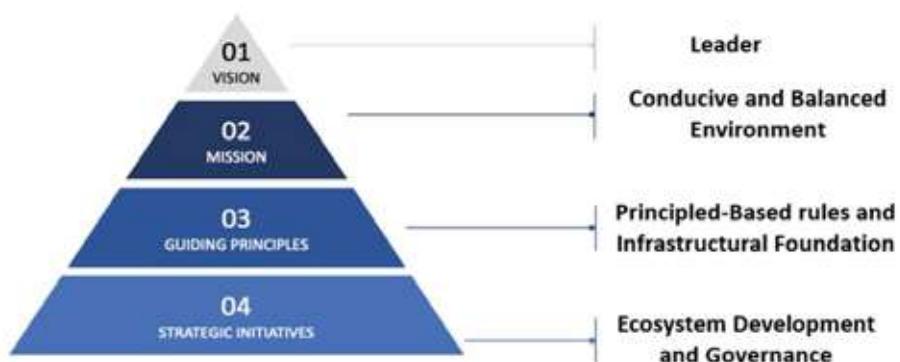


Figure 1: National FinTech strategy components

1.4 STRATEGIC OBJECTIVES

Two strategic objectives gird the vision and mission - ecosystem development and governance. Ecosystem development refers to systematically situating FinTechs in a financial services ecosystem that advances technological innovation and builds talented innovators/entrepreneurs and regulators. Governance focuses on the rules of play amongst stakeholders.

The strategic objectives that will result in the attainment of the vision and mission for FinTechs in Nigeria are:

1. Develop a well-functioning FinTech ecosystem that advances technological innovation, attracts investments, develops globally competitive FinTechs, creates private sector jobs and supports all ecosystem members with tools that will facilitate their growth and development

2. Design and implement policies that will promote investments in the FinTech ecosystem, engender fit-for-purpose products and protect consumers, investors and the financial system from risks associated with the use of FinTechs.

1.5 GUIDING PRINCIPLES

The guiding principles to achieving the vision and mission are:

The expected outcome of the implementation of the recommendations of this strategy include the growth of the FinTechs ecosystem, that is investment ready and regulations fit, facilitated by an enabling policy environment,



1. Deploy principle-based rules, regulations and infrastructure foundational to building a thriving FinTech ecosystem.
2. Build a FinTech ecosystem that supports acceleration, engagement and collaboration.

3. Create a multi-disciplinary talent pool and employability opportunities across the FinTech ecosystem.

Achieving the strategic objectives will require 29 initiatives across the guiding principles (see Figure 2).

1.6 STRATEGIC INITIATIVES

Achieving the strategic objectives will require 29 initiatives across the guiding principles (see Figure 2)

Guiding Principles	Ecosystem Development	Governance
Deploy principle-based rules, regulations and infrastructure foundational to building a thriving fintech ecosystem	ESTABLISH <ol style="list-style-type: none">1. Build industry standards across fintech sub-sectors2. Build fintech policy enablers3. Build fintech technical enablers4. Get fintech firms regulation fit ENABLE <ol style="list-style-type: none">1. Rollout universal telecommunications access2. Advocate/Promote universal access to energy	<ol style="list-style-type: none">1. Adopt smart policy design and implementation practices2. Design and implement balanced and proportionate policies and regulations3. Promote alternative regulatory instruments4. Digitise regulatory and supervisory processes5. Enhance institutional coordination structures and practices.6. License fintech players that can scale
Build a fintech ecosystem that supports acceleration, engagement and collaboration	ACCELERATE <ol style="list-style-type: none">1. Establish a regional financial centre/hub2. Build fintech clusters3. Develop scalable investment ready fintech firms4. Diversify funding landscape5. Track fintech ecosystem performance ENGAGE <ol style="list-style-type: none">1. Inform and build awareness2. Build industry linkages COLLABORATE <ol style="list-style-type: none">1. Host hackathons and other competitive events2. Build and maintain library of tools to support the ecosystem	ACCELERATE <ol style="list-style-type: none">1. Stimulate domestic investment landscape2. Incentivise Angel Investments COLLABORATE <ol style="list-style-type: none">1. Create regulatory-backed innovation spaces2. Promote multi-stakeholder collaboration3. Showcase Nigerian fintech's internationally
Create a multi-disciplinary talent pool and employability opportunities across fintech ecosystem.	<ol style="list-style-type: none">1. Build fintech talent2. Enhance employability opportunities	<ol style="list-style-type: none">1. Build "smart regulators"

Figure 2 : Strategic initiatives

1.7 DEVELOPMENT OUTCOME

As a public policy, the National FinTech Strategy (NFS) will drive Nigeria's inclusive digital growth through GDP contributions, job creation and productivity by building a healthy financial services ecosystem and financial centre with diverse and active stakeholders and fostering collaboration and cooperation.

Intermediate outcomes towards these development outcomes include:

The roadmap will be implemented in 3 phases. It would focus on establishing relevant building blocks in the short term and the implementation of long-term



I. Social: improvements in the social environment like digital/financial literacy, improvements in financial access across the different NFIS segments and improved financial health across the banked segments.

II. Economics: in addition to contributions of the sector to GDP, the strategy will enable the creation and sustenance of direct and indirect private sector jobs to Nigerian youth that will be employed by the FinTechs and other sectors.

III. Digital/Infrastructure: in addition to the expansion of digital infrastructure and telecommunications access, building the digital maturity and rails encompasses expanding FinTechs across financial sub-sectors and the use of diverse fourth industrial revolution technologies (4IR).

IV. Policy/Environment: creating an enabling policy environment will require indicators and measurements of the policy environment and outcomes like the gross sector value, and activity in the sector segmented by start-ups, scale ups and exits. The existence of policy enablers like shared national identity and other tools and frameworks will support the environment.

V. Investment: the growth of the FinTechs sector requires capital from diverse sources – domestic and international to provide funding to FinTechs at their various stages of growth. Hence, the investment outcomes we anticipate include the growth and evolution of FinTechs and classification by universal labels – unicorn, gazelles, zebras and camels.

VI. Practice: mainstreaming FinTech as a practice that will support the enablement of the social and policy outcomes requires

capacity building and behavioural changes among operators and regulators.

1.8 ROADMAP

Following implementation planning, we envisage a 3-phased implementation approach that commences immediately upon approval of the plan and extends beyond the financial inclusion target date of 2024. This approach is aggressive because of the limited timeline to demonstrate the role of FinTechs in driving inclusive finance and growth.

The first stage of the implementation, which spans 9-months, will establish the building blocks both in the ecosystem and governance domains. The next 24 months will encompass the continued development of structures and enablers and will layer on the investment and capital raising structures for domestic and international investments. By the end of this phase, we anticipate improved DFS perceptions and adoption levels, clearer regulations, regulator-market relationships and regulatory instruments that support innovative products and services.

By 2024, Nigeria should have established FinTech innovations and be able to promote Nigerian FinTechs internationally.

Measurement,
collaboration and
coordination are essential in
attaining the strategy
objective



1.9 MONITORING AND EVALUATION

The success of the strategy is interlinked with the ability to measure and report on the

developmental outcomes and key indicators illustrated in Figure 3.

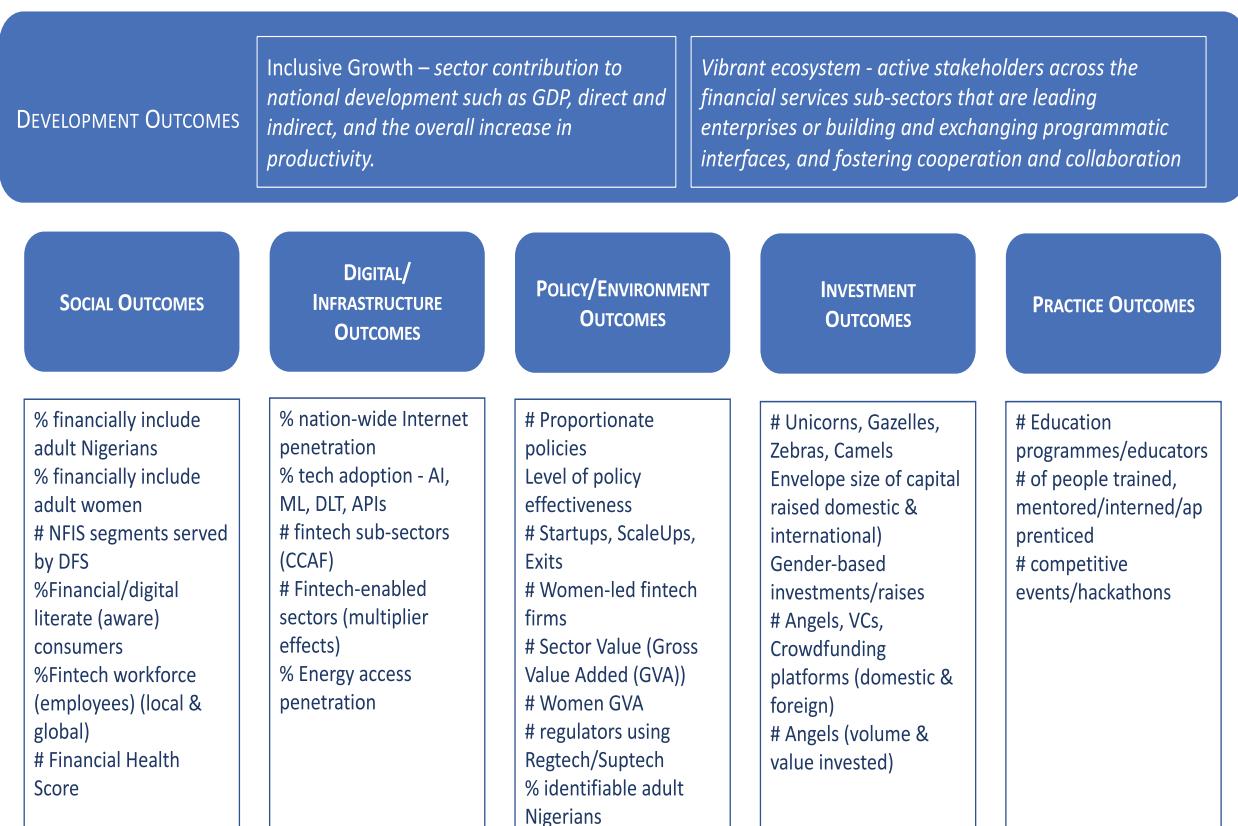


Figure 3: Summary of FinTech outcomes and indicators

1.10 RISK MANAGEMENT

The risks below, if not mitigated, can affect the attainment of the objectives of this strategy and produce unintended outcomes.

- Implementation:** the ownership and coordination of this National FinTechs Strategy and especially its implementation is a critical risk, especially regarding the participation of ecosystem actors and the allocation of resources.

While the strategy addresses FinTech development across the financial ecosystem, the different resources required to ensure the vision is achieved requires collaboration.

The risks posed by FinTechs to the stability of the Financial System would be mitigated in such a way that it would further boost confidence of stakeholders and customers in the ecosystem



- **Digital rails:** enabling the FinTech multiplier effects beyond urban locations and banked Nigerians requires digital infrastructure rollout.
- **Infrastructure:** inadequate provision and access to energy could impede digital technology solutions rollout.
- **Technological:** by virtue of the strategy's dependence on digital technology implementation and adoption, cybersecurity, technology failures (reliability, availability) would impact the strategic outcomes.
- **Strategic alliance frameworks:** this FinTech strategy hinges on building an inclusive ecosystem and collaborative work engagements and relationships between regulators and operators.
- **Regulatory clarity:** the direction of financial sector regulators towards an innovation friendly environment matched with minimal domestic funding will limit funding opportunities available to innovators and reduce products, enterprises, etc.
- **User adoption:** low trust of financial service providers resulting from negative direct and indirect experiences and low advocacy.



2. Introduction

The purpose of the National FinTech Strategy (NFS) for Nigeria is to set an agenda for inclusive FinTech that will enhance and deepen the access to and use of financial services by 2024.

The development of the strategy involved the review of ecosystem data and the engagement of stakeholders who took part in workshops, and brainstorming sessions. The initial brainstorming session where the definition for FinTech as well as the mission and vision of FinTech in Nigeria was agreed on had participants from:

- **Public Sector Institutions:** policymakers, Regulators, Federal agencies etc.
- **Private Sector Institutions:** financial service providers, Aggregators, Financial technology companies etc.
- **Development Partners:** national and International Development Agencies

The committee on presentation took all decisions in the strategy development process by the consulting team. These decisions were made following several iterative workshops. Regular briefing sessions were convened where progress was reviewed along the set timelines for the project and necessary approvals were obtained.

While Nigeria has a thriving FinTech ecosystem, the ecosystem needs to be further enabled for sustainable growth and global competitiveness. The strategy seeks

to address governance related concerns and enabling FinTech fits better into the larger Financial Services sector.

The strategy adopted a mixed approach in developing the implementation roadmap. The approach consists of principle-based and prescriptive recommendations, which provides a framework to address foundational issues while focused on growth and sustainability of the ecosystem.

The strategy did not provide a roadmap that seeks to develop the FinTech ecosystem in isolation but implement recommendations that makes the ecosystem an enabler of the Payment Systems Vision 2025 (PSV 2025), and the Nigerian Start-up Bill, 2022.

The rest of the document presents details of the strategy, which includes the strategy development approach, strategy recommendation and the Monitoring and Evaluation (M&E) framework of the strategy.



3. Project Background

The 2020 Enhancing Financial Innovation and Access (EFInA) access to financial (A2F) survey reported that there are 38.1 million of 106 million excluded adult Nigerians.

The report further revealed that 81% of this excluded population own a mobile phone.

In recognising high tele-density levels amongst the unbanked, the Central Bank of Nigeria (CBN) has issued over eight different policies aimed at facilitating the use of Digital Financial Services (DFS) for financial inclusion. However, the EFInA report showed that despite past efforts, mobile money awareness and adoption levels remain low at 22% and 4% respectively.

In January 2019, the Central Bank revised the National Financial Inclusion Strategy (NFIS), seeking to leverage innovation as an enabler of financial inclusion. Similarly the launch of the Alliance for Financial Inclusion (AFI) Sochi Accord, aimed at leveraging FinTechs to drive financial inclusion, further aligns with the central NFIS theme of leveraging DFS and innovative approaches to achieving Nigeria's financial inclusion goals.

The National Financial Inclusion Technical Committee convened the FinTechs for Financial Inclusion Roundtable with all financial services regulators and representatives of other stakeholder organisations like AFI and EFInA. At this Roundtable, delegates examined the extent to which an enabling regulatory environment and policies could support FinTechs and innovative businesses in accelerating financial inclusion in Nigeria.

The Roundtable produced seventeen resolutions, the top four priorities being to:

1. Leverage technology to create digital identity management system for the unbanked.
2. Develop and implement appropriate regulation for FinTech practices in Nigeria.
3. Understudy the highly excluded geopolitical zones (North West and North East) with a view of developing business opportunities for FinTechs to tap into.
4. Adopt a test and learn approach to regulating FinTechs through the implementation of a Regtech Sandbox.

It is in this light that AFI, the facilitator of the Roundtable, proposed to support the development of a National FinTech Strategy for Nigeria through an In-Country Implementation (ICI) support program.

3.1. DEFINITION

FinTech is defined as technologically enabled financial innovations that extend the reach, usage and governance of financial services.

Financial innovations are the outputs such as business models, products and services, use cases and processes enabled by technologies across diverse financial services like payments, savings, credit, insurance and pensions. In Nigeria's context, FinTechs should aim to extend reach or access through distribution and other means; increase usage of (DFS); and develop governance mechanisms, including but not limited to using internal controls and



regulatory and supervisory tools.

3.2. THE RATIONALE FOR A FINTECH STRATEGY

The National FinTech Strategy is a public policy document that frames in the national context, the core problem, the goal of the strategy and vision for the FinTech ecosystem, it sets the scope for policies, regulations and reforms that are in alignment with other financial (and non-financial) policy objectives concerning integrity, stability, inclusion, protection and competition.

By identifying specific drivers and inhibitors for FinTechs and the ecosystem, the strategy coordinates stakeholders across public-private domains to focus resources on addressing primary challenges for the FinTech ecosystem and establishing the building blocks for digital financial transformation.

In setting forth the phasing of policies, reforms, and investments across different time horizons, the strategy:

- Clarifies the strategic initiatives and investment opportunities across the FinTech ecosystem.
- Provides data for the private sector, to speed up FinTech ecosystem development.
- Builds the foundation for planning actions, monitoring progress, and evaluating the impact of policies, reforms, and investments

3.3. STRATEGIC OBJECTIVES

The strategic objectives of the National FinTech Strategy are to:

- Provide guidelines for enabling

appropriate and proportionate regulations and policies that allow responsible innovation.

- Facilitate relevant DFS that expand meaningful access, enable responsible usage, and assures the quality of financial services.
- Establish clear proportional and balanced regulatory, supervision and oversight requirements for FinTechs to thrive while minimising potential risks to the financial system and consumers.
- Co-operate with other regulators and market actors to address barriers and build an inclusive financial sector for women, rural communities, youths, underserved and unserved market segments.



4. Nigeria's FinTech Environment

The use of financial technologies (FinTechs) in the Nigeria's financial ecosystem is synonymous with the evolution of new generation banks in the late 1980s and early 1990s and multi-branch banking services. Transformational technology developments extended the provision of diverse branchless banking services. Nonetheless, frictions like financial inclusion expose the market gaps.

We introduce Nigeria's FinTech environment using the political, economic, social, technology, environment and legal (PESTEL) framework.

4.1. PESTEL ANALYSIS

4.1.1. Political

There is broad political support for developing the technology sector in Nigeria, meaning that there is potential for significant governmental support for FinTech projects. For example, Nigeria's National Development Plan (NDP) 2021 to 2025, focuses on unlocking the potentials across economic sectors for sustainable, holistic and inclusive national development.

The four strategic thrusts of the plan are:

1. Establishing a strong foundation for a concentric diversified economy;
2. Investment in critical physical, financial, science and innovation infrastructure;
3. Building a solid framework and enhance capacities to strengthen security and ensure good governance; and
4. Enabling a vibrant, educated and healthy populace. The plan recognises the importance of the ICT sector as a key enabler in building Nigeria's emerging

digital economy, enhancing productivity while reducing costs and time to produce goods and services.

However, Public funding for proposed initiatives is scarce, however the geographic coverage of existing programs is limited and non-inclusive. More so, there are no incentives for angel investment, which limits high-net-worth individuals' inclination to invest in riskier options such as technology entrepreneurship. These factors place significant constraints on companies seeking to develop FinTechs products as they increasingly depend on external funding.

4.1.2. Economic

The Nigerian economy presents a mixed picture of opportunity for FinTechs. While Nigeria is the largest economy and the most populous country in Africa, its per capita GDP is relatively low at USD 2,229.9 (as of 2019)¹

1. Reliable, continuous power supply is also an ongoing concern, and the overall ICT Infrastructure has needs stability upgrades and wider distribution. This has meant that the country has continued to grapple with fundamental infrastructure problems that overshadow most of the initiatives undertaken to foster tech entrepreneurship.

This infrastructure deficit has also meant that digital businesses must have complementary offline services to exploit the Nigerian market potential. Nigeria has an informal market environment with a base of over 35 million micro-enterprises. This base is driven by a vibrant entrepreneurial culture, which despite infrastructure challenges, have developed innovation ecosystems mainly in Lagos and

¹ <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=NG>



Abuja. Many FinTech businesses are focused on Lagos because of the size of the market; Lagos is the commercial capital of Nigeria with over 20 million inhabitants and a higher GDP/capita of USD 6,238 [1]. However, this has slowed FinTech development in the hinterland.

Given the scarcity of smart money in the Nigerian ecosystem, entrepreneurs with international education and work experience seek access to international programs that provide funding and mentorship and networking opportunities. US accelerator programs such as those offered by Y Combinator (YC) and 500 Start-ups are the most cited examples to follow this route. Graduates of these programs feel that they increased the value of their start-ups while

increasing their chances of securing later-stage investment from international sources. The tech start-up ecosystem has produced four exits over USD 100 million: namely Andela, Konga, Jumia, and more recently Paystack. The Jumia Group became the continent's first "unicorn" with a 1 billion USD+ valuation in 2016.

While there have been recent developments designed to improve the ease of doing business in the country, the Nigerian tax system remains hard to navigate for entrepreneurs and not designed to include incentives or reliefs for small enterprises. The country ranks 131 in the World Bank's ease of doing business ratings; Figure 4 illustrates the country's performance across different dimensions. 4.1.3. Legal & Regulatory



Figure 4 : Nigeria's Doing Business Rankings 2020

4.1.3. Legal & Regulatory

Nigeria's legal framework in some instances does not address the development needs of the country's modernization. Problems around access to justice, timelines, outdated statutory frameworks and enforcement of rights are a major concern. However, regulations dealing with e-finance and e-commerce are generally up to date.

In this regard, Nigeria has a pro-innovation stance on the provision of payment services and FinTechs services and products targeted

at its unbanked and underserved population – which is among the highest in the world.

Measures to control foreign currency trade have impeded tech entrepreneurs accessing online services and reaching out to international markets. For example, in 2016, the CBN changed its policy to money transfer operators, allowing only those that have operations in Nigeria to conduct services. This has limited the options for receiving online foreign currency payments and has excluded some global payments operators such as PayPal from conducting online transactions as well.



Across board, while there have been ongoing policy strategies to improve the market, the lack of coordination between stakeholders hampered the implementation efforts given that the policy space in the country is quite fragmented. The unclear regulatory environment has impeded FinTech adoption in Nigeria, as FinTechs are generally confused about which law or regulation is applicable to which FinTech solutions, and by which regulatory authority.

4.1.4. Environmental

Nigeria continues to grapple with a myriad of economic, social and infrastructure challenges on the back of a growing rural-urban migration. This is coupled with lack of pipe borne water, growing housing deficit, deteriorating environmental conditions that are heightening security challenges and creating increased social tension, and inaccessible health and education centres. All of this signalling an annual estimated sustainable finance investment need of up to US\$92 billion [2].

These environmental issues limit the pace of growth of FinTech companies.

Religion, culture, gender and economic status illustrate Nigeria's diversity. Nigeria recorded 0.881 points in the 2019 Gender Development Index (GDI), an increase from 0.874 in the previous year², evidencing widening gender inequality in health, knowledge and living standards. On the other hand, the IMF reports that Nigeria closed 63.5% of its gender gap, offering comparable economic opportunities to both men and women and reporting a score of 0.738 on the Economic Participation and opportunity sub-index thereby making the country most improved globally [3].

In the FinTechs ecosystem, over 50% of the FinTechs under review have only male founders, while only 16% have all female founders [4].

This gender gap is attributable to a lack of inclusion in the talent pool, workforce and will inevitably by extension affect products.

Hofstede insights³ revealed Nigeria's culture as quite normative and at the same time collectivist. This is indicative of a society that prefers to maintain time-honoured traditions and norms while viewing societal change with suspicion and at the same time fosters strong relationships where everyone takes responsibility for fellow members of their group.

A mapping exercise by the Sustainable Digital Finance Alliance has found that sustainable digital finance innovations can deliver 13 of the 17 SDGs. While it requires further analysis to understand the most promising domestic applications, Nigeria clearly has potential in areas including mobile payments, where Nigeria is already Africa's largest mobile market, with 162 million subscribers and a penetration rate of 84%. Digital innovations could unlock a myriad opportunities, including increasing energy access to the Bottom of the Pyramid (BoP).

4.1.5. Technology

Since the mid-1990s, Nigeria's digital landscape has significantly expanded, enabled by the rapid adoption and ubiquity of the Internet. This shift has invariably impacted how businesses and customers engage in the execution of transactions. The scale of digital transformation in Nigeria was catalysed with the liberalization and commercialization of the Telecommunications sector in 2001,

² <https://www.hdr.undp.org/en/indicators/137906>

³ <https://www.hofstede-insights.com/country-comparison/nigeria/>



under the regulation of the Nigerian Communications Commission (NCC). The country's telecommunications sector has since championed the provision of telecommunications services, and other ICT capabilities for enabling the economic transformation for all other sectors of the Nigerian economy. Currently, the active mobile network in the country is about 195 million lines, with Internet Penetration in Nigeria estimated at 40.88% (as of December 2021, NCC).

In recent times, the emergence and adoption of innovative technologies such as application programming interfaces (APIs), artificial intelligence (AI), distributed ledger technology, unstructured supplementary service data (USSD) and biometrics are driving the development of the FinTech industry. These market entrants are leveraging technology capabilities of automation, digitisation and simplification to increase efficiencies, reduce transaction costs, build client relationships and facilitate regulatory compliance in addressing unmet needs in the traditional banking sector, seizing market share and democratising financial services within the country's digital financial industry.

Nevertheless, the adoption of these new technologies has the potential to increase cyber-risk and expose large volumes of sensitive data to potential breaches if not well managed. If these emerging cybersecurity threats are left unchecked, information technology risks could ultimately lead to financial instability [5].

4.2. FINANCIAL SYSTEM

Nigeria's financial system comprises all financial intermediaries that operate in the financial sector. The system provides an enabling environment for economic growth and development, productive activity,

financial intermediation, capital formation and management of the payments system. The belief is that economic agents of surplus and deficit spending units that facilitate savings and investment and expand financial intermediaries and markets anchor the financial system [6].

In all, the financial system comprises financial markets, financial institutions and financial instruments.

- Financial markets are trading marketplaces like capital markets, for long-term financing; money markets, for small-term investments; foreign exchange markets for multi-currency exchanges; and credit markets to provide loans to individuals and firms.
- Financial institutions are banking or depository institutions like banks and development finance institutions, non-banking and non-depository institutions like insurance, pension and mutual fund companies.
- Financial instruments represent the products traded in financial markets to meet the needs of the credit seeker in exchange for differing securities requirements. Such assets include treasury bills, commercial papers, term/call/notice money and certificate of deposits.

4.3. FINTECH ECOSYSTEM

Unlike the traditional financial services ecosystem, the FinTech ecosystem comprises the major actors with the common goal of advancing the financial services industry through technological innovation. These include government (policy makers and regulators), financial institutions, investors, entrepreneurs, innovators and FinTechs (start-ups and scale-ups). The critical components of a FinTechs ecosystem are illustrated in Figure 5 [7].

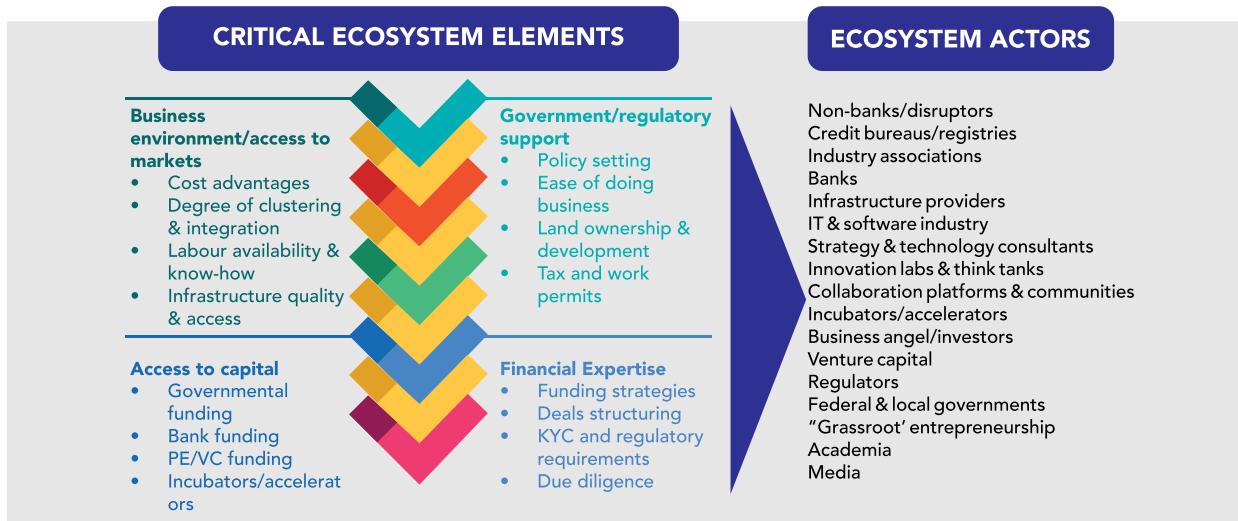


Figure 5: Fintech ecosystem functions and actors

4.4. STAKEHOLDER MAPPING

Stakeholder mapping is essential for ensuring the success of any ecosystem initiative, it helps in identifying stakeholders and understanding their potential stakes enables an inclusive ecosystem strategy because it highlights who is present and why. In this case, it is therefore important to understand the extent to which FinTechs serve and affect the different actors in the financial services ecosystem.

Advances in technology propels FinTechs, affecting financial institutions, regulators, customers and retailers in a wide range of industries. These technologies include the availability and affordability of infrastructure (e.g., Internet, mobile technology, sensors), the maturing technological applications (e.g., digital platforms, big data analytics), and business operations (e.g., sharing economy), among others [8].

Nigeria's FinTech landscape comprises of stakeholders across the private and public sectors, including operators, private enterprises, providers of capital, regulators, infrastructure providers, and other enablers [9].

Figure 6 illustrates the power/interest matrix of Nigeria's FinTech ecosystem. The four quadrants of the matrix are:

- High power, Low interest:** wield significant influence but maintain a low level of scrutiny of the FinTech ecosystem. They include the executive and legislative arms of government.
- High power, High interest:** critical ecosystem stakeholders and decision makers. These include financial regulators and payments services and infrastructure (telco) enablers
- Low power, High interest:** actors with varying degrees of interest in the FinTech ecosystem. Some may be advanced in knowledge but have limited power to instigate change amongst other ecosystem members. These are typically market actors like incumbent financial institutions and the new wave of disruptors.
- Low power, Low interest:** necessary stakeholders with minimal influence. Educators and learning institutions, industry groups and associations fit in this category.



5. Current State of FinTechs

5.1. FINTECH EVOLUTION

It is important to note that FinTechs, in a form recognizable to us today, has been a part of financial services since the 19th century, with introducing the telegraph in 1838 and the launch of the transatlantic

cable in 1866. However, from the launch of the first automated teller machine (ATM) in 1967 to the global financial crisis in 2008, banks led financial technology (FinTech) innovations [10].

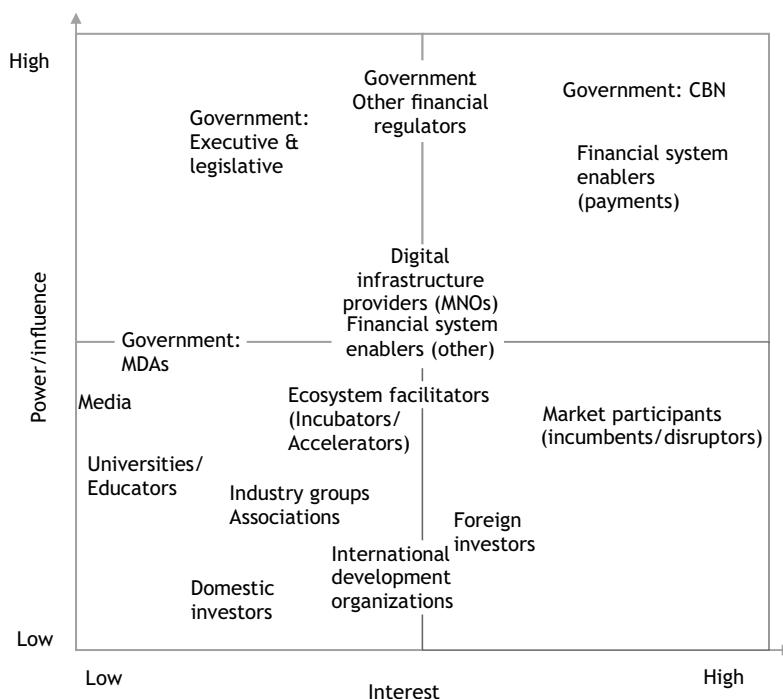


Figure 6: Stakeholder matrix

Between 1968 to 1973, interbank systems such as the Bankers' Automated Clearing System (BACS), the Clearing House Interbank Payments System (CHIPS) and the Society for Worldwide Interbank Financial Telecommunication (SWIFT) offered for electronic fund transfer services. Banks launched their card schemes in the 1950s and 1960s. By the 1980s, banks used mainframe computers, with ancient forms of online banking emerging in the US and Europe in the early part of the decade. By the first decade of the 21st-century banks controlled the pace of technology innovation, with technology companies

acting as technical partners.

However, the financial crisis resulted in growing public mistrust of formal financial institutions and a search for alternatives, coinciding with emerging technologies that powered these new entrants. An emerging class of non-traditional financial service providers - some new players alongside companies that acted as vendors to licensed financial service institutions may characterise our current phase in FinTechs, since 2008.

A focus on payments marked the start of



this phase. The cost of entry for payments companies are lower than other financial service segments, and from the data harnessed by these payment companies, FinTechs use advanced analytics to develop new saving and investment models and leverage technology to make them attractive. In the developing world, there was recognition by stakeholders that these global innovations could assist with meeting regulatory objectives of increased inclusion and economic development. We have seen the growth of mobile and branchless financial service provision as one solution to bringing financial services closer to excluded groups has also been observed.

Nigeria has also witnessed evolving markets with technological advances and new payment systems, spearheaded in part by government strategic objectives and a wider global context. FinTech companies attract about 25% of start-up investment capital [11]. Over the last 15 years, spearheaded in part by policy initiatives like the Cashless Policy and the Bank Verification Numbering (BVN) system, the rapid expansion of the country's telecommunications capabilities, and the demographic advantages of our large youth population, Nigeria has created a thriving FinTech ecosystem.

However, despite the rapid expansion of the sector, it's sector accounted for only ~1.25% of retail banking revenues in 2019. The growth of new digital platforms pose additional risks for regulators in terms of market stability, risk management and consumer protection. It is therefore important to prioritize stakeholder coordination that addresses structural challenges to capture a greater share of Nigeria's \$50bn DFS opportunity, and mitigate emerging risks as the sector evolves, with the potential net benefit of

increased inclusion.

5.2. TRENDS

5.2.1. Supply

Commercial banks dominate DFS in Nigeria[12], limiting its accessibility to a wider variety of users. The typical customer base of commercial banks is salaried employees of corporations, civil servants, and business owners. While there are no statutory barriers to others accessing banking services, financial exclusion persists because of telecommunication gaps, as well as a host of other factors ranging from branch locations to a lack of adequate banking products.

Most non-bank FinTech firms are yet to reach the unbanked and position themselves as complementary to commercial banks rather than substitutes. FinTech firms are also playing a key role in providing critical infrastructure to assisting traditional financial institutions' digital transformation initiatives, from providing platforms for interoperability to providing enterprise banking solutions. Following global trends, we are also seeing B2B models, although the B2C market will continue to expand in the developing world. The growth of telecommunications has perhaps been the biggest driving factor for the rapid development of FinTechs. Wholesale submarine bandwidth capacity has increased by 2,705% since 2010. Internet data tariffs have decreased because of Nigeria's connection to undersea international links and increased competition in the market. In Nigeria, the most popular form of internet access is via mobile broadband, with 54% having 3G coverage [13]. Notwithstanding these lapses, the current National Broadband Plan

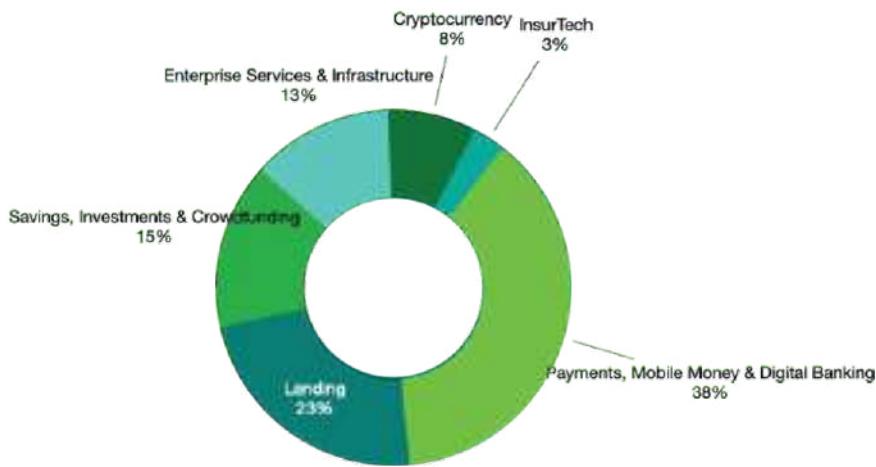


(2020 - 2025) [14], through the licensing of infrastructure companies (infracos) and deployment of 5G technologies, targets urban and rural speeds of 25Mbps and 10Mbps respectively. Besides these national efforts, Lagos State is building its unified internet fibre infrastructure laying kilometres of fibre optic cable across the state.

National fixed-line infrastructure connecting the last mile is poor, meaning that most business traffic is reliant on mobile phones. However, quality of services and incomplete coverage mean at least half of mobile

subscribers own over one SIM card. Nigeria's lack of a national backbone network for high-speed data transmission is at the heart of the prevalent poor quality of voice and data. Thus, agent networks remain a key infrastructure in financial services delivery.

There has been an increasing focus of Big Tech players on the financial service industries, seeking to leverage name recognition, access to capital and their large customer bases as a foundation for making bold moves into the sector. In addition, we



Segment	Size	Key Sub-segments
• Payments, Mobile Money & Digital Banking	38%	<ul style="list-style-type: none">• Digital Payments• Mobile Payments• Payments processing & switching• Digital banks & accounts• Global transfers & remittances• Terminal & infrastructure providers
Lending	23%	<ul style="list-style-type: none">• Retail lending• SME lending• Credit data analytics & loan assessments
• Savings, Investments & Crowdfunding	15%	<ul style="list-style-type: none">• Digital wealth & asset management• Automatic savings platforms• Alternate investments• International investment platforms• Crowdfunding



Segment	Size	Key Sub-segments
Enterprise Services & Infrastructure	13%	<ul style="list-style-type: none"> • Financial services solutions • Credit infrastructure • APIs and connectors
Cryptocurrency	8%	<ul style="list-style-type: none"> • Cryptocurrency exchanges & wallets
InsurTech	3%	<ul style="list-style-type: none"> • Digital insurers • Insurance comparison services • Digital agents & distribution platforms • Insurance system providers

Figure 7: Nigeria's FinTech clusters

5.2.2. Demand

have seen technology giants like Facebook and Google moving into emerging markets. These companies perhaps pose the greatest challenge to both traditional and emerging FinTech financial institutions.

Nigeria is currently home to about 210-250 FinTech companies, with over ~60% constituting payments and lending clusters (see Figure 7) [15]

The 2020 Enhancing Financial Innovation and Access (EFInA) access to finance (A2F) survey reports 38.1 million of 106 million adult Nigerians lack financial access (financially excluded), with 81% of this excluded population owning a mobile phone. In recognising high tele-density levels amongst the unbanked, CBN policies aimed at enhancing inclusive DFS are yet to scale as the awareness and use of one of

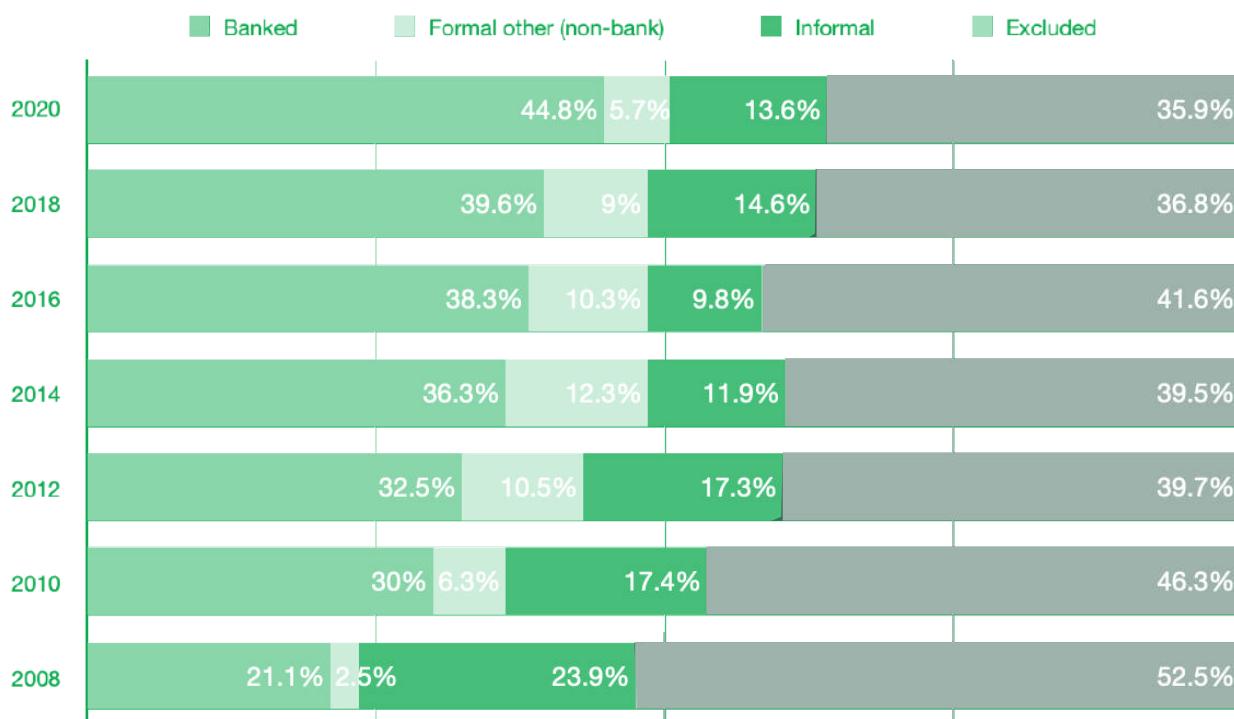


Figure 8: Access to finance strands (2008 - 2020)



the main DFS', mobile money, remains low at 22% and 4%.

Figure 8 illustrates Nigeria's financial inclusion progress since measurements began in 2008. With growing population numbers, while the direction of the excluded populations is significant, the increasing absolute numbers is indicative of the ever-increasing challenge.

Advancing a cashless society has increased using digital platforms, most notably in the payments sector. By Q1 2020, the Nigeria Interbank Settlement System (NIBSS) reported 366 million e-payment transactions, an increase of 57% since Q1 2019. Also, transaction value of N31.2 trillion, up 28%⁴. The growth of FinTechs has facilitated easy access to online payment means by e-commerce merchants, enabling the growth of the e-commerce sector.

Demographic factors are key to understanding FinTech's demand. Financial literacy and a youthful population, coupled with increased smartphone penetration, has led to the rapid adoption of FinTech services in Nigeria. The growth in customer base is promising with 68% of FinTechs having over 10,000 customers, with 80% comprising retail customers. These factors were further catalysed by the COVID pandemic and subsequent shutdown, which increased the popularity of no-contact and digital solutions.

Mobile phone ownership among Nigerians is just over 20% for smartphones, 44.84% for feature phones, and 32.16% basic phones, with more significant gender imbalance in smartphone ownership. Nigeria ranks 6th on Research ICT Africa (RIA)'s African Mobile Pricing (RAMP) Index, and 10th on the 1GB pre-paid mobile data

index. However, these rankings need to be weighed against the accompanying increased penetration and quality of service on which the country fares less favourably.

In urban areas, consumers are conducting business via digital means, increasing interest in personal financial management, taking advantage of digital lending, savings and micro-investing. FinTechs are merging products and services; buying microfinance bank licenses to expand their service offerings. Platforms evidence suggest there remains unmet demand for customer finance in Nigeria and consumers are likewise interested in the digital token space.

5.2.3. Policy

Nigeria does not have a national policy for the development of the FinTechs ecosystem. Notwithstanding, Pillar 5 (Digital Services Development and Promotion) of the National Digital Economy Policy & Strategy (2020 - 2030) recognises the role and impact of innovation Driven Enterprises (IDE) and an emerging sector of Small and Medium Innovation Leaning Enterprises (SMILE).

The origins of FinTech regulation in Nigeria dates back to the Mobile Money Operator (MMO) licensing scheme, allowing non-bank financial institutions in the ecosystem. Through this action, CBN sought to enhance innovation and competition, provide a stable and sound financial ecosystem and protect consumers. The payments systems strategic plan, Payments Systems Vision (PSV 2020), drafted in 2007 and revised in 2013 (PSV Release 2.0) to benchmark the Nigerian Payments System in line with global best practice is the prevalent policy.



The PSV 2020 initiative is an integral component of the national financial systems vision, Financial Systems Strategy (FSS) 2020. The vision of the strategy is to create an electronic payments infrastructure that is nationally utilised — by all sectors of the economy and all regions of the country — and internationally recognised as being world class. The strategy specifically identifies initiatives to enhance national usage and end-user adoption and infrastructure recommendations to improve resilience and increase international recognition.

The Securities and Exchange Commission (SEC) acknowledges the dynamic evolution of financial innovation and the cardinal principles guiding FinTech evolution are providing safe financial instruments and promoting problem-oriented solutions. The Commission acknowledges an agile and iterative FinTech evolution process. Crypto currencies that trade as assets are one such use cases. Through the Operations Directorate, the Operations Commission monitors and regulates asset classes and any other financial instrument with security-like characteristics.

The SEC has also introduced a FinTech roadmap addressing changes required for the future of FinTech in the capital markets ecosystem. The roadmap proposes initiatives that promote:

- I. Deepening market penetration;
- ii. Consumer protection, security and data privacy;
- iii. FinTech friendly regulations/policies and compliance.

5.2.4. Regulatory

The defining regulatory trend extends the regulatory perimeter to non-traditional

providers of financial services, with regulators dealing with emerging disruptive technology. Despite the protest of FinTechs and financial institutions, regulators have adopted international best practices in rulemaking.

Market surveys suggest that policy and regulations inhibit growth, or at the very least poses, a challenge compared with other markets. We recognise efforts to create a supportive environment such as new license categories, tiered requirements, incubation programs and sandboxes; however, there is room to improve policy and regulations. We are also witnessing a shift from institution- to activity-based regulation, to recognise the greater number of market participants.

On the 25th of October 2021, the Central Bank launched its Central Bank Digital Currency (CBDC), termed "eNaira". eNaira policy goals include financial inclusion, payments systems efficiency improvements covering remittances and social intervention, and revenue and tax collections. With the eNaira, the CBN expects to further expand the payments space - actors, innovative DFS and possibilities.

The SEC released a statement on its treatment of digital assets and their classification. It also released its Regulatory Incubation Guidelines which provide basic requirements that allow potential operators (FinTech Firms) to operate under some prescribed basic but limited provisions for a specified period. The Regulatory Incubation program is yet to commence.

5.3. CURRENT STATE SUMMARY

Nigeria's FinTech ecosystem has grown



organically through payments innovation and financial services regulations, despite the infrastructural constraints.

Notwithstanding these advancements, the sectors inability to close the financial inclusion gaps highlights limited regulatory innovation capabilities in a fragile consumer protection environment. However, Covid-19 catalysed digital transformation and the

levels of unmet demand highlight the opportunities for FinTechs across the financial services ecosystem.

Figure 9 highlights the strengths, weaknesses, opportunities and threats (SWOT) within Nigeria's FinTech's ecosystem that are enabled by or limited by the factors in Figure 10.

S	<ul style="list-style-type: none">■ Growing markets■ Accelerators & incubators■ Payments' innovation■ Growing pool of software engineers■ Financial & digital Regulations<ul style="list-style-type: none">■ AML/CFT, Cybersecurity, Consumer Protection	<ul style="list-style-type: none">■ Inadequate physical infrastructure (power, roads)■ Unreliable payments/financial infrastructure■ Unmet demand (underserved Northern regions)■ Insufficient talent (business/management)■ Antiquated regulations■ Consumer protection■ Ecosystem Collaboration & Coordination	W
O	<ul style="list-style-type: none">■ Nascent, unsaturated market<ul style="list-style-type: none">■ Government payments■ Gender/Women's financial inclusion■ Financial exclusion■ COVID-driven digital acceleration■ Digital economic transition & 4IR Technologies■ Growing population of digital natives■ Foreign direct investment (FDIs) inflows	<ul style="list-style-type: none">■ Fintech (interconnection) risks■ Regulatory uncertainty■ Cybersecurity/cybercrime■ Big Tech encroachment (displacement risk)■ Fragmented identity systems■ Socio-economic uncertainty resulting in talent exodus	T

Figure 9: FinTech ecosystem SWOT

Enablers	Inhibitors
<ul style="list-style-type: none">■ Access to Venture Capital & Private Equity■ Covid-19 enabled digital transformation■ Talent - availability, retention■ Unmet demand (financial inclusion)■ Institutional frameworks (collaboration between regulators, MDAs)■ Agent networks (distribution)■ Consumer trust■ Open data■ G2P payments■ Ecosystem orchestrators (hubs, accelerators)■ Regulator-market engagement	<ul style="list-style-type: none">■ Digital infrastructure - wholesale & retail■ Payments' infrastructure - reliability■ Insecurity - harassment of tech workers, agents■ Talent - brain drain■ Cyber crime■ Legal/regulatory uncertainty■ Last mile access■ IP protections hindering originality/innovation■ Capital & liquidity■ Consumer protection■ Digital financial literacy■ Fragmented identity systems■ Business resilience in economic downturns

Figure 10: FinTech enablers and inhibitors



6. Global Benchmarks

Because of interconnected financial systems, this section presents the global FinTechs trends and benchmarks for

comparison. Four key segments and nine clusters explain the global FinTechs market (see Figure 11). 6.1. Trends

Digital Banking	Corporate & SME Payments	InsurTech	Digital Wealth Management
Digital retail payments Payment ¹ infrastructure Lending	SME Payments Corporate payments	Life and Personal Insurance Claims and Benefits handling	Digital investment management Retail trading platforms

Figure 11: Global FinTechs segments and clusters

6.1 TRENDS

6.1.1. Supply

The digital banking segment dominates the \$100B global FinTechs investment market, controlling about ~50% since the payments clusters have the lowest cost of market entry and remain the most attractive to new entrants. There is a growing emergence of big tech companies (also known as TechFins) focusing on providing one stop solutions to customers by developing ecosystems, in partnership with banks. Across Western markets, the threat of TechFins and challenging B2C economics in developed markets are contributing to a gradual shift to B2B models, while the B2C model remains attractive for emerging market players. FinTechs buying banking licenses is an early indicator that the business model is shifting in developed markets [16].

The FinTechs sector across emerging markets has boomed over the past five years. Since 2017, a growing number of both global and local venture capital firms have invested an estimated \$23 billion in

FinTechs companies across Africa, Latin America and Asia. Although investment flows are growing, the total volume of FinTechs investments in emerging markets still pales compared to that of FinTech investment in the US or Europe.

Out of the total global investment of \$105 billion for FinTechs companies in 2020, the US made \$76 billion.

With increasing pre-seed and seed deals in Africa, the average deal size remains lower than other regions; seed rounds in Africa average around \$1 million, while in Latin America and India they average around \$3 million. Although the FinTechs market is growing in Africa, investments remain concentrated in a few key markets - including Nigeria, Kenya and South Africa.

African markets are becoming more mature and seeing the first few \$100 million+ deals and M&A activity (mergers, consolidation and acquisitions), in the payments space – including growth-stage start-ups, like MFS Africa (Beyonic), Flutterwave and World Remit (Paystack).



Parameter/Indices	UK	China	Singapore	Nigeria
Country Ranking (Findexable 2020/65)	2	21	3	52
Market Size (Revenue/USD)	15B	2B	11B	500M
% of Global Market	12%	1.5%	8.5%	0.4%
Market Growth				
Revenue Growth (CAGR)	8%	18%	30%	24%
Funding/Investment (2020/USD)				
Venture capital and private equity	4B	1.6B	650M	450M
Market Access				
Number of ATMs per 100,000 adults	110.3	58.8	95.6	16.9
Technology Infrastructure				
Broadband Coverage	95%	80%	99%	45%
Mobile penetration	99%	111%	148%	80%
Advanced Tech				
API (Open Banking)	☒	☒	☒	☒
Platforms	☒	☒	☒	☒
Talent availability	High	High	High	Inadequate
Accelerators and Incubators (quantity)	400+	172+	535+	580+

Figure 12: Supply benchmarks

6.1.2. Demand

Sub-Saharan Africa (SSA) remains a global leader in mobile money with significant gains in financial inclusion. The FinTech market however is yet to realise its full potential, for creating solutions that are tailored for women, poor, and otherwise underserved customers across emerging markets, as the core customer base for most FinTechs remains focused on corporates, merchants, and more mainstream users [17].

Amidst the COVID-19 pandemic, declining funding flows and start-up growth was expected, but the opposite was true in emerging markets, where cash-based economies adjusted to more digital transactions, increasing the demand for DFS. Notwithstanding, the volume of funding deals and the number of FinTech users reached continue to grow around the world, this growth is uneven and dominated by growth-stage payments companies that serve mainstream customers.

Parameter/Indices	UK	China	Singapore	Nigeria
Fintech Adoption	71%	87%	67%	63%
Digital Transactions				
Mobile/cashless payments	77%	59%	61%	45%
Electronic transactions growth rate	12%	54%	5%	40%
Financial Inclusion				
Unbanked Population	4%	20%	2%	50%
GDP per capita:Financial Inclusion ratio	464.2	236.6	610.4	44.6
Mobile penetration:Financial inclusion ratio	1.03	1.4	1.5	0.02
Gender gap	8%	20%	10%	21%

Figure 13 : Demand benchmarks



6.1.3. Regulatory

Most new FinTech firms are non-banks, outside the conventional regulatory frameworks, blurring the lines between software, settlement and financial intermediation. The regulatory responses in many countries have been more reactive to the FinTech evolution, and much work remains to be done regarding adapting their legislation, as needed, in the key areas of market development and risks - including

competition, anti-money Laundering/Combating the financing of terrorism (AML/CFT), cybersecurity, consumer protection and data privacy issues [18].

As FinTechs grow in importance, regulation needs to better cover these risks, without stifling innovation. This could entail a shift from looking at the type of financial institution providing financial services, to the underlying risks associated with the financial activity [19].

Parameter/Indices	UK	China	Singapore	Nigeria
Fintech Licensing Regimes				
Payments	☒	☒	☒	☒
P2P		☒		
Crowdfunding		☒		
Cryptoassets				
Virtual Bank				
AML/CFT	☒	☒	☒	☒
Data Protection and Privacy Legislation	2018 Act/GDPR	In Draft	PDPA	NDPR (non-statute)
Cybersecurity	☒	☒	☒	☒
Consumer Protection	☒	☒	☒	☒
IP Regulation	☒	☒	☒	☒
Rights Index Score (/129)	18	49	3	123
Regulatory Innovation				
Dedicated Fintech Unit	☒		☒	
Fintech Innovation Hubs	☒		☒	
Regulatory Sandbox	☒	☒	☒	☒
Collaboration and Coordination	Strong	Strong	Strong	Weak

Figure 14: Regulatory benchmarks

6.2. COUNTRY BENCHMARKS

The continuous evolution of FinTechs and their disruption of the financial services industry is raising regulatory concerns beyond traditional prudential supervision – which focuses on the safety, integrity, soundness and stability of the financial system – to financial innovation. Both ends of the policy spectrum are reinforcing for enabling greater financial inclusion and sustainable development of the financial industry. Defining the appropriate regulatory position causes trade-offs and the balancing of the opportunities and risks

within the unique country context. This policy process will require a shift from the static regulatory focus on specific financial entities towards adaptive regulation of financial activities in a technology-neutral manner.

Three categories of regulatory responses by national authorities are taking shape:

a) Regulating FinTech activities with the existing frameworks: Regulators leaning towards the cautionary end of financial safety and stability within the emerging



regulatory policy spectrum champion this approach. This practice does not prevent the incorporation of regulatory guidelines for specific FinTech products or activities, such as electronic payments, peer-to-peer financing and crowdfunding. A key advantage of this regulatory position is to avoid regulatory gaps and ambiguities created by introducing new regulatory frameworks, which could be harmful to financial services users and traditional financial players.

b) Banning FinTech products and activities: This regulatory response is a direct consequence of regulating FinTech activities with the existing frameworks. Most FinTech products and activities do not fit traditional regulatory regimes, and may thus violate the law. However, among this type of regulatory ban are three FinTech products and activities – crypto assets (most common), direct distribution of binary options and contracts for differences, and screen, web or data scraping. A key risk for this regulatory position is the adverse impact on market investments, as national authorities discourage consumers from using such products. Examples of this approach include New York, USA, Ecuador, Bolivia, China, and South Korea.

c) Financial authorities as promoters of FinTechs: This regulatory response is more open to FinTechs, promoting FinTech activity as a national policy. This option leans on the innovation end of the regulatory policy spectrum in promoting inclusion and market competition, which includes traditional financial institutions, non-financial players and start-ups. Critical regulatory actions national authorities have taken include setting up a dedicated FinTech unit, creating FinTech innovation hubs and incubators and creating FinTech regulatory licenses and sandboxes.

Exemplifiers of this approach include United Kingdom (UK), Spain and Australia.

6.3. GLOBAL BEST PRACTICES IN NATIONAL FINTECHS STRATEGY DEVELOPMENT

6.3.1. (High Income): United Kingdom

The United Kingdom (UK) a leading FinTech hub. The UK's FinTech Sector Strategy aligns with the country's Industrial Strategy and the UK Digital Strategy, with the view to maintain and extend the country's FinTech leadership.

Data from the 2017 UK FinTech census informed the strategy development process:

Meeting the needs of the FinTech sector: this section of the document looks at strategic initiatives to remove barriers to entry and growth faced by FinTech firms in the UK. The initiatives include:

- RegTech adoption by the UK regulators, to reduce regulatory compliance costs using machine-readable rules.
- Launching the Connect with Work Programme to support FinTechs in accessing appropriate talent.
- Developing shared platforms to facilitate industry and government collaboration on ways to reduce market entry barriers for FinTechs, encouraging competition.
- Setting up industry standards to enable partnerships between FinTechs and incumbent financial players.
- Establishing the FinTech Bridge Agreement Model, starting with Australia, to open new markets for UK FinTechs.
- New opportunities offered by UK FinTechs: this section identifies areas of emerging opportunity offered by UK FinTechs, including new technologies



and ensuring that everyone across the UK feels the benefits of FinTechs, including the excluded. Strategic initiatives covered under this section include:

- Appointing three National FinTech Envoys and establishing a National FinTech Programme, to ensure FinTechs benefits are inclusive across the UK.
- Establishing a crypto assets Task Force comprising the Treasury, the Bank of England and the Financial Conduct Authority to further explore the risks and benefits of the technology underlying crypto assets.

6.3.2. (Lower middle income): Egypt

In 2018, the Central Bank of Egypt (CBE) developed a FinTech and Innovation Strategy in alignment with the country's National Vision for 2030, to support the modernisation and innovation of Egypt's financial sector. The vision of this strategy is to become the leader in financial services for the MENA and Africa region. Five key pillars of the ecosystem assessment form the core of the strategy. These are:

- I. Demand
- II. Funding
- III. Regulation
- IV. Talent
- V. Governance

The ecosystem assessments incorporated consumer focus groups, stakeholder interviews and global benchmarking. Key strategic initiatives to be completed within three years (Quarter 1, 2021) include:

- a) Establishing a \$50 to \$100 million innovation fund dedicated to fuel ecosystem growth, encourage FinTech start-ups, invest

in youth talent and fund the infrastructure to spur new FinTech trends.

- b) Setting up the FinTech and Innovation Committee to ensure collaboration between the national regulators and enable access to a unified FinTech license coordination.
- c) Establishing a FinTech and Innovation Department to orchestrate all FinTech related activities across the market, overlook Egypt's FinTech strategy and handle the overall operationalisation of the FinTech strategy initiatives
- d) Starting the CBE Regulatory Sandbox to enable testing of innovative solutions in a live but controlled environment.
- e) Forming a FinTech Hub to act as the flag bearer, facilitating collaboration between ecosystem participants.

6.4. INTERNATIONAL BENCHMARKING

We benchmarked the Nigerian FinTech ecosystem against international FinTech ecosystems, selected from the three categories of regulatory responses by national authorities introduced earlier. The select countries include the United Kingdom, China and Singapore; with benchmark parameters covering supply, demand and the regulatory framework. We used the benchmark to verify the strengths and weaknesses of the Nigerian ecosystem in relation to the international benchmark countries.



Enablers	Inhibitors
<ul style="list-style-type: none">▪ Enabling regulatory environment that fosters innovation<ul style="list-style-type: none">▪ Ease of access to APIs and data (open banking)▪ Fintech model testing▪ Proportionate regulatory licensing▪ Global connections and learning with other financial ecosystems▪ Partnerships between banks and Fintechs▪ Long term funding pools▪ Digital infrastructure relying on emerging technologies▪ Ecosystem orchestrators catering to unmet customer needs▪ Sustainable talent pipelines	<ul style="list-style-type: none">▪ Weak Corporate Governance<ul style="list-style-type: none">▪ Lack of anti-misconduct policy▪ CEO duality▪ Overboarded directors▪ Inability of audit firms to detect fraud (mostly due to fintech supervisory structures)

Figure 15: Global FinTech enablers and inhibitors

Enablers	Inhibitors
<ul style="list-style-type: none">▪ Growing population<ul style="list-style-type: none">▪ 1.2 billion people▪ digitally savvy young segment▪ Rising smartphone ownership▪ Mobile money adoption▪ Reducing internet cost▪ Market opportunity<ul style="list-style-type: none">▪ 350 million unbanked adults (60% of the total population in sub-Saharan Africa and 17% of the global unbanked population)	<ul style="list-style-type: none">▪ Digital Infrastructure (internet penetration)▪ Enabling regulatory environment▪ High operational costs▪ Non-indigenous innovation▪ Identity poverty<ul style="list-style-type: none">▪ Digital ID penetration▪ Low ecosystem trust

Figure 16: Regional FinTech enablers and inhibitors



7. FinTech Strategy

7.1. VISION

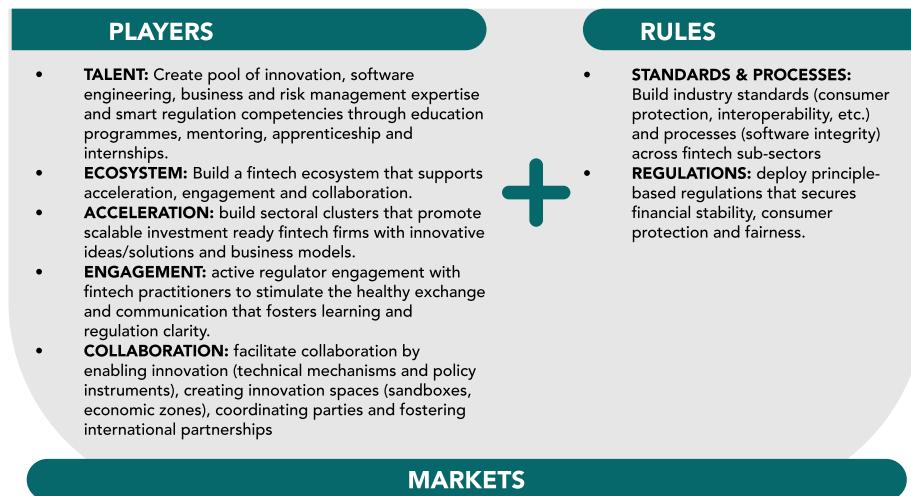
By 2024, Nigeria envisions to be the leading inclusive digital and FinTech ecosystem operating out of Africa.

7.2. MISSION

The guiding mission of this strategy is to develop a proportionate and balanced environment that supports innovation and collaboration, promotes inclusive growth, harnesses and retains talent, attracts investments and develops digital infrastructure.

7.3. STRATEGIC OBJECTIVES

Two strategic objectives gird the vision and



Build fintech markets by actively advocating, communicating and protecting consumers/users.

Figure 17 : Strategic objectives analysis

7.4. STRATEGIC PRIORITIES

The guiding principles to achieving the vision and mission are:

1. Deploy principle-based rules, regulations and infrastructure foundational to building a

mission - ecosystem development and governance, symbolising the systematic build-up of the players and the rules of play. Developing a FinTech ecosystem with the common goal of advancing the financial services industry through technological innovation requires structures to promote and coordinate FinTech activities and build talented innovators/entrepreneurs and regulators. The thrust of the governance objective is to set the rules of play and ensure fair play among the players. This includes the standards and processes defining quality and fairness. Figure 17 highlights these objectives.

thriving FinTech ecosystem. 2. Build a FinTech ecosystem that supports acceleration, engagement and collaboration 3. Create multi-disciplinary talent pool and employability opportunities across FinTech ecosystem.



Figure 11 shows a mapping of the strategic objectives and priority areas.

PRIORITY AREA	ECOSYSTEM DEVELOPMENT	GOVERNANCE
<ul style="list-style-type: none">• Deploy principle-based rules, regulations and infrastructure foundational to building a thriving FinTech ecosystem	<ul style="list-style-type: none">• Build industry standards (consumer protection, interoperability, etc.) and processes (software integrity) across FinTech sub-sectors• Facilitate FinTech policy enablers like identity systems (eKYC) that support data sharing and coordinate institutional relationships• Facilitate/support the development of technical enablers of FinTechs including digital infrastructure and application programming interfaces (APIs)• Inform and educate FinTech practitioner community, enhancing regulatory clarity (reducing uncertainty) and promoting know-how of regulatory principles, frameworks and rules• With the telecommunications regulator, facilitate the rollout of universal telecommunications access• Advocate and promote the need for universal access to energy	<ul style="list-style-type: none">• . Design and implement balanced and proportionate policies and regulations covering domains like consumer protection, interoperability, etc. to level the playing field among FinTech firms• . Build and implement FinTech policy evaluation (M&E) system• . Promote alternative regulatory instruments appropriate and “fit for purpose” (market-based, self-regulation or co-regulation)• . Digitise regulatory and supervisory processes and increase efficiency and productivity• . Enhance institutional coordination structures and practices to warrant financial inclusion, financial system stability, integrity and protection (l-SIP).• License FinTech players that can scale and stimulate inclusion
<ul style="list-style-type: none">• 2. Build a FinTech ecosystem that supports acceleration, engagement and collaboration	<ul style="list-style-type: none">• ACCELERATE• Create agency to promote & coordinate FinTechs & FinTechs companies• Expand and structure the acceleration/incubation space	<ul style="list-style-type: none">• ACCELERATE• Establish a regional financial centre• Develop a FinTechs ecosystem performance management system



PRIORITY AREA	ECOSYSTEM DEVELOPMENT	GOVERNANCE
	<ul style="list-style-type: none"> promoting FinTech clusters Develop scalable investment ready FinTech firms with innovative ideas/solutions and business models. Building a diverse funding landscape comprising of PE/VC, banks, Government and development organisations and incubators/accelerators <p>ENGAGE</p> <ul style="list-style-type: none"> Active engagements of FinTech market through publicity and market advocacy campaigns that inform and build awareness Active engagement fora with regulators and FinTech practitioners Develop a business case for underserved that serves as an ecosystem engagement tool <p>COLLABORATE</p> <ul style="list-style-type: none"> Promote hackathons and other competitive events to stimulate innovations to social and developmental problems and generate multiplier effects across industries Build and maintain library of open-source products library that FSPs can select from and adapt (public goods) 	<ul style="list-style-type: none"> Build local funding structures & instruments that stimulate domestic investors, especially for seed stage and grassroot FinTech firms Government and regulators implement policies and enact legislations that promote local angel investments <p>COLLABORATE</p> <ul style="list-style-type: none"> Promote collaboration through regulatory-backed innovation spaces like regulatory sandboxes and economic zones Promote multi-stakeholder collaboration through facilitated industry fora like accelerator spaces Facilitate international collaboration opportunities by showcasing Nigerian FinTechs through networks such as the Alliance for Financial Inclusion (AFI) and Global Financial Innovation Network (GFIN)
<ul style="list-style-type: none"> 3. Create pool of innovation, software engineering, business and risk management expertise and smart regulation 	<ul style="list-style-type: none"> Develop FinTech-related competencies amongst innovators/entrepreneurs, software engineers, media Build FinTech competency framework/curriculum Engage FinTech ecosystem knowledge partners 	<ul style="list-style-type: none"> Close knowledge gaps by developing regulators conversant with smart policy design and digital capabilities



PRIORITY AREA	ECOSYSTEM DEVELOPMENT	GOVERNANCE
competencies through education programmes,	<ul style="list-style-type: none">Build & implement apprenticeship/mentoring/internship system/marketplace	

Table 1: Mapping of the strategic objectives and priority areas.

7.4.1. Principle 1

Deploy principle-based rules, regulations and infrastructure foundational to building a thriving FinTech ecosystem.

Governance: set the “rules of play” and ensure fair play among the players.

A stable policy and regulatory environment with the requisite digital rails is critical to the sustainable development and growth of FinTechs and their multiplier effect on other industries. Achieving this requires collaboration and coordination among government agencies that warrant financial system stability, integrity, protection and inclusion (I-SIP) and fostering, designing and implementing balanced and proportionate policies and regulations covering domains like consumer protection, interoperability, etc. to level the playing field among FinTech firms.

The dynamic nature of the technology space introduces many unknown elements and thus may limit innovation. While seeking to maintain financial systems stability and integrity, regulators should seek to promote alternative regulatory instruments appropriate and “fit for purpose” (market-based, self-regulation or co-regulation).

In complement of alternative regulations is the need for periodic analysis and evaluation

of the effectiveness of the policy environment, to highlight intended and unintended consequences and provide feedback for policy review. Thus, building and implementing a policy evaluation system into the FinTech framework is necessary.

As the FinTech ecosystem evolves, more functional entities will emerge and require more regulatory interactions and engagements. To facilitate productivity, efficiency and transparency, digitalising regulatory and supervisory processes using relevant technologies will be valuable.

The thrust for inclusive FinTech or FinTech for financial inclusion requires licensing players that can scale and stimulate inclusion in the most underserved regions highlighted in the revised National Financial Inclusion Strategy.

Players: with the common goal of advancing the financial services industry through technological innovation.

The activities driving the policy and regulatory environment span the ecosystem. First, the ecosystem needs standards across FinTech sub-sectors that will enhance trust and reduce risks in areas like consumer protection, interoperability, etc. software integrity.



FinTech development and growth is stunted by policy and digital constraints, but these can be overturned with the deployment of policy and technical enablers. Policy enablers are complementary legislations and policies relevant to enhancing financial inclusion and the financial ecosystem. These include access to identity systems that provide eKYC, support data sharing and coordinate institutional relationships. Digital infrastructure and application programming interfaces (APIs) are essential technical enablers. These technical enablers include a marketplace or platform of digital artefacts that enhance FinTech innovation and speed to market.

Access to power is a requisite to the digital economy and the growth and stability of FinTech demand. Hence, advocating and promoting the need for universal access to power is an imperative. Developing the digital rails to rollout universal telecommunications access requires the intervention of the telecommunications regulator and institutional relationships. An important element of a thriving FinTech ecosystem is regulator-practitioner engagements that inform and educate the FinTech practitioner community, to enhance regulatory clarity (and reduce uncertainty) while promoting know-how of regulatory principles, frameworks and rules.

7.4.2. Principle 2

Build a FinTech ecosystem that supports acceleration, engagement and collaboration. Accelerate: build sectoral clusters that promote scalable investment ready FinTech firms with innovative ideas/solutions and business models.

Engage: active engagement with FinTech practitioners to stimulate healthy exchange and communication that fosters learning and regulation clarity.

Collaborate: facilitate collaboration by enabling innovation (technical mechanisms and policy instruments), creating innovation

spaces (sandboxes, economic zones), coordinating parties and fostering international partnerships.

Governance: set the “rules of play” and ensure fair play among the players.

ACCELERATE

Unlike the traditional financial services ecosystem, the FinTech ecosystem comprises the major actors with the common goal of advancing the financial services industry through technological innovation. These include government (policy makers and regulators), financial institutions, investors, entrepreneurs and innovators and FinTechs (start-ups and scale-ups). Establishing the Nigeria's FinTech ecosystem as a regional financial centre aligns with the vision “to be the leading inclusive FinTech ecosystem operating out of Africa.” Building out such an ecosystem will require an effective performance management system that ensures outcomes are met.

Foreign investors play a significant role in Nigeria's FinTech ecosystem, nonetheless it is imperative to build local funding structures and instruments that stimulate domestic investors, especially for FinTech firms at inception and grassroot innovations. One particular investment group to target is angel investors through government-backed incentives.

COLLABORATE

Working with others and building collaborative ecosystem that seeks to solve societal problems requires institutional and private sector initiatives. Regulators can promote collaboration through innovation spaces like regulatory sandboxes and economic zones. Governments and regulators may support and promote national multi-stakeholder networks through industry fora like accelerator spaces. Finally,



the Government and regulators can also promote international and regional collaboration opportunities by showcasing Nigerian FinTechs through networks like the Alliance for Financial Inclusion (AFI) and Global Financial Innovation Network (GFIN). Players: with the common goal of advancing the financial services industry through technological innovation.

ACCELERATE

The quest to accelerate FinTechs by building a financial centre requires an entity with the mandate to galvanise public and private sectors. This agency will promote and coordinate FinTechs and Nigerian FinTechs companies locally and internationally. In addition, the entity will expand and structure the acceleration and incubation space, promoting FinTech clusters nationwide. This regional financial centre would be responsible for structuring the ecosystem activities to develop scalable investment ready FinTech firms with innovative ideas/solutions and business models as well as actively building a diverse funding landscape comprising of private equity (PE) and venture capital (VC), banks, Government, development organisations and incubators/accelerators.

ENGAGE

Market engagement is an imperative for building a thriving FinTech ecosystem. Hence, the need for active engagements of the FinTech market through publicity and market advocacy campaigns that inform and build awareness as well as hosting engagement fora with regulators and FinTech practitioners. To address financial inclusion, it is imperative to provide the business case for serving the underserved as an ecosystem engagement tool.

COLLABORATE

We foresee this entity extending the spirit of collaboration through open-source tools like

the business case for the underserved as well as maintaining a library of open-source products library and datasets that FSPs can utilise. Ecosystem collaborations through hackathons and other competitive events will stimulate innovations to social and developmental problems and generate multiplier effects across industries.

7.4.3.Principle 3

Create a multi-disciplinary talent pool and employability opportunities across FinTech ecosystem.

Competencies across the financial services innovation, IT/digital, policy/regulations, business and management domains are essential to develop the requisite ecosystem talent.

Governance: set the “rules of play” and ensure fair play among the players.

To set standards and rules of fair play, we need to close the knowledge gaps among financial services regulators and other government agencies. In addition to understanding digital technologies, the ecosystem will be better served by smart policy design capacities.

Players: with the common goal of advancing the financial services industry through technological innovation.

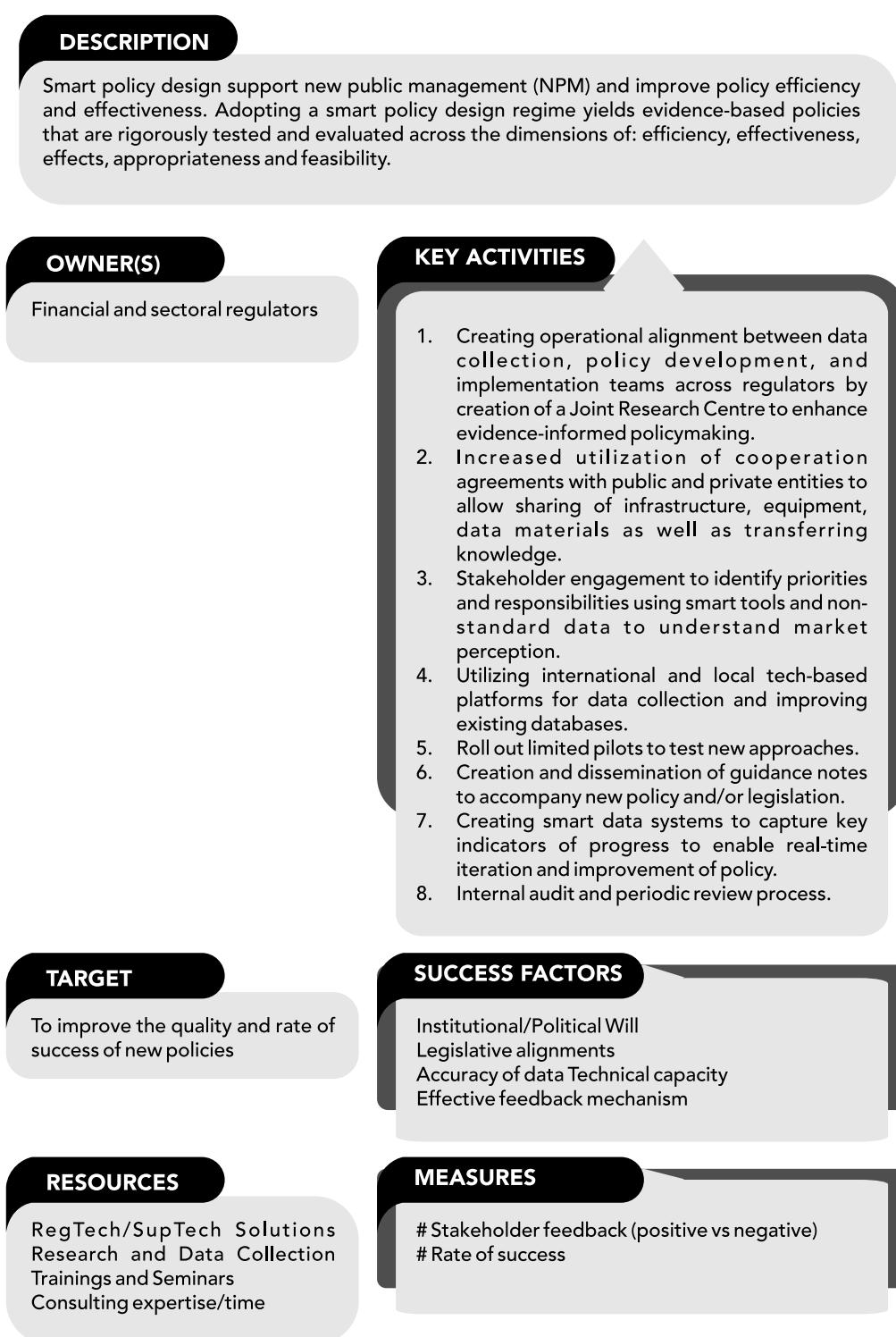
Complementary to up-skilling regulators is to build a talent pool of young digitally savvy Nigerians and improve employability levels. This requires a holistic approach to build a FinTech competency framework/curriculum that will result produce talent across the value chain, including but not limited to innovators/entrepreneurs, software engineers, media, public relations and customers. The role of education providers in developing the talent is another integral part of the ecosystem. Given the diverse capabilities



The objective to enhance employability will require complimentary developmental capacities that can be offered through apprenticeships and internships and supported by mentoring.

7.5. Strategic Initiatives

7.5.1. Adopt smart policy design and implementation practices





7.5.2. Design and implement balanced and proportionate policies and regulations

DESCRIPTION

Smart policy design support new public management (NPM) and improve policy efficiency and effectiveness. Adopting a smart policy design regime yields evidence-based policies that are rigorously tested and evaluated across the dimensions of: efficiency, effectiveness, effects, appropriateness and feasibility.

OWNER(S)

Financial and sectoral regulators

KEY ACTIVITIES

1. Creating operational alignment between data collection, policy development, and implementation teams across regulators by creation of a Joint Research Centre to enhance evidence-informed policymaking.
2. Increased utilization of cooperation agreements with public and private entities to allow sharing of infrastructure, equipment, data materials as well as transferring knowledge.
3. Stakeholder engagement to identify priorities and responsibilities using smart tools and non-standard data to understand market perception.
4. Utilizing international and local tech-based platforms for data collection and improving existing databases.
5. Roll out limited pilots to test new approaches.
6. Creation and dissemination of guidance notes to accompany new policy and/or legislation.
7. Creating smart data systems to capture key indicators of progress to enable real-time iteration and improvement of policy.
8. Internal audit and periodic review process.

TARGET

To improve the quality and rate of success of new policies

SUCCESS FACTORS

Institutional/Political Will
Legislative alignments
Accuracy of data
Technical capacity
Effective feedback mechanism

RESOURCES

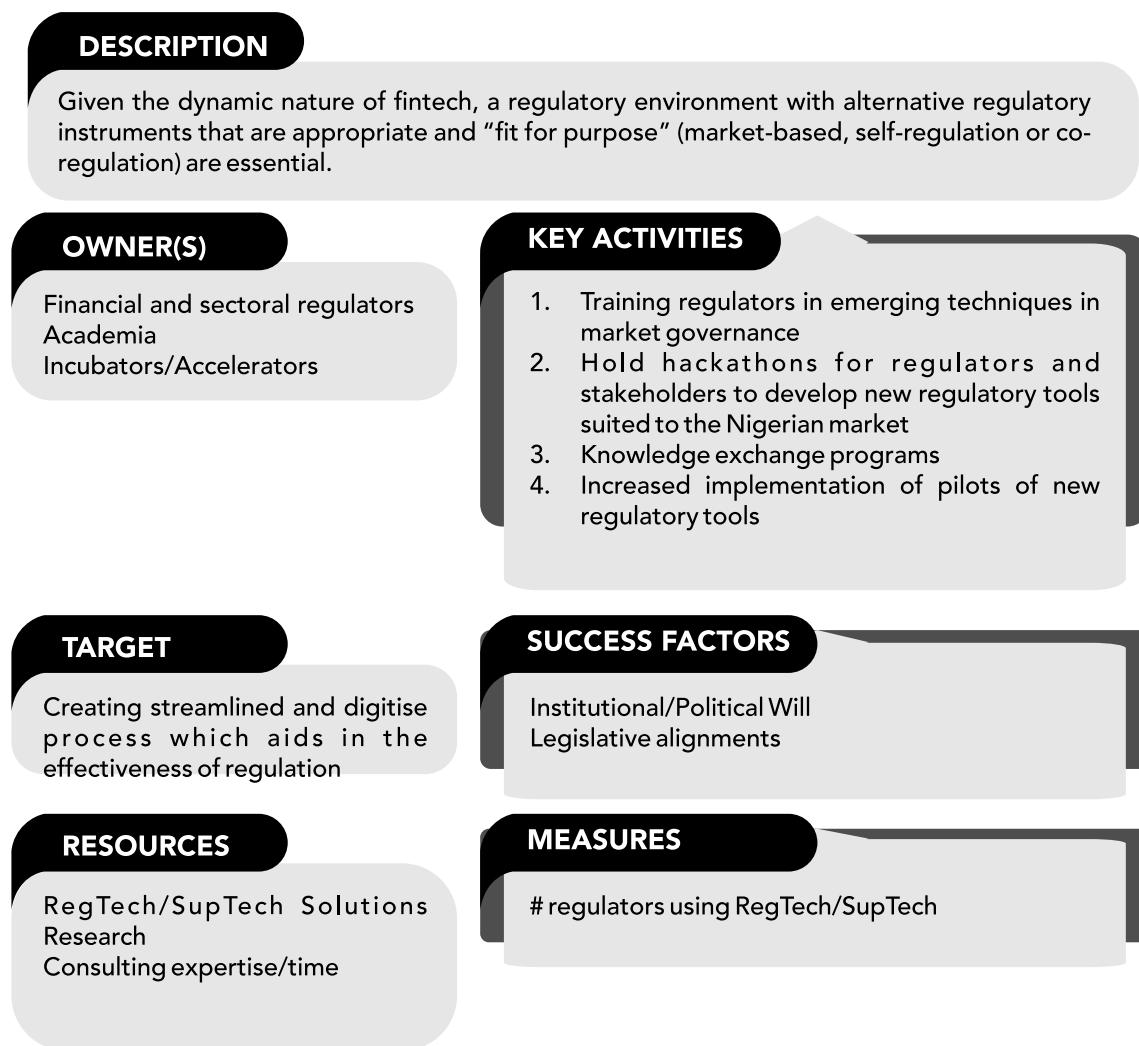
RegTech/SupTech Solutions
Research and Data Collection
Trainings and Seminars
Consulting expertise/time

MEASURES

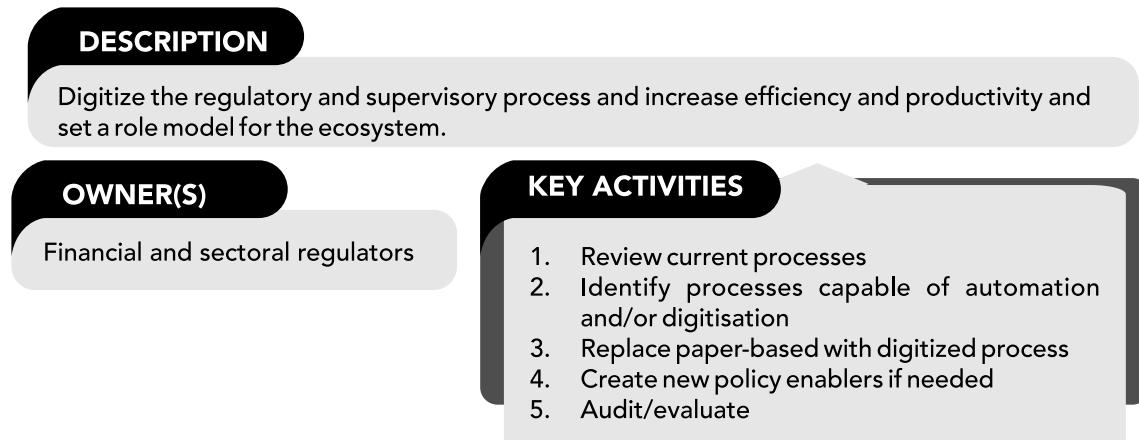
Stakeholder feedback (positive vs negative)
Rate of success

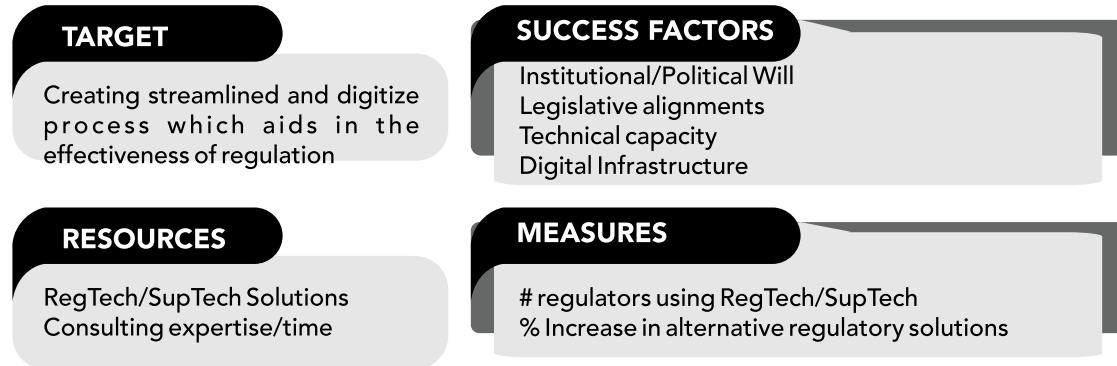


7.5.3. Promote alternative regulatory instruments

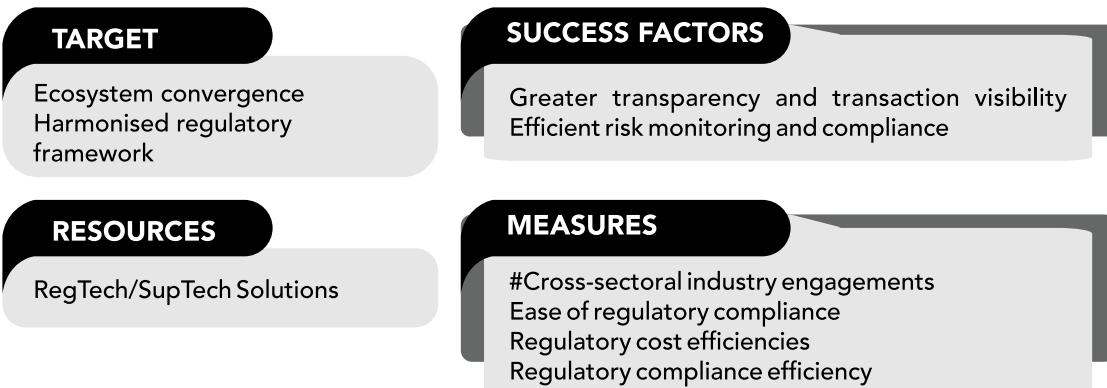
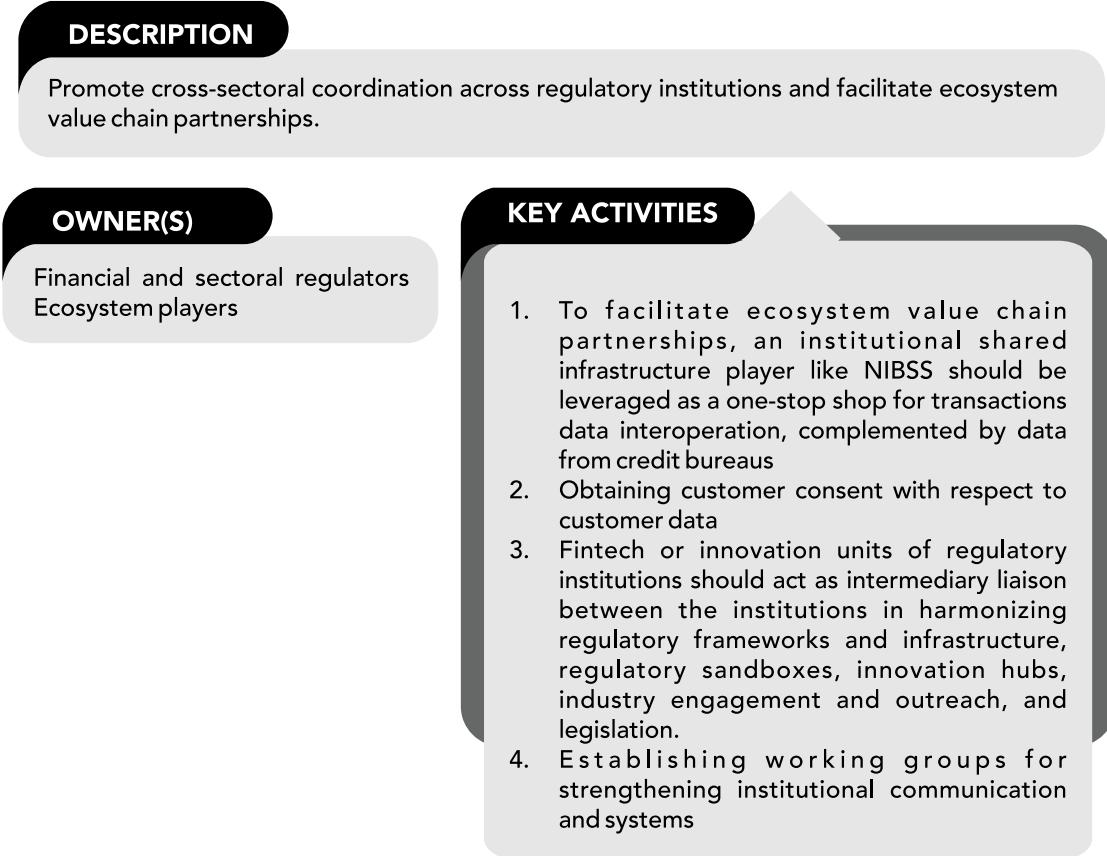


7.5.4. Digitize regulatory and supervisory processes



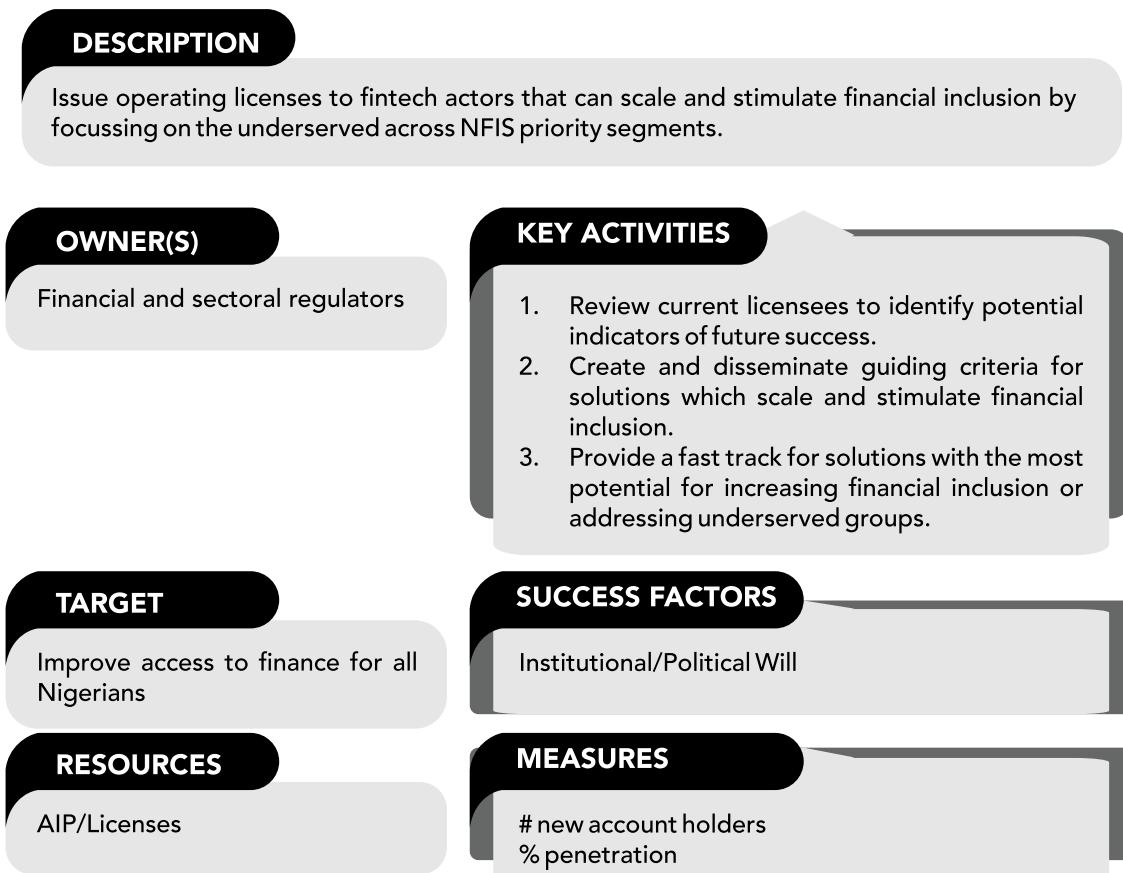


7.5.5. Enhance institutional coordination structures and practices.

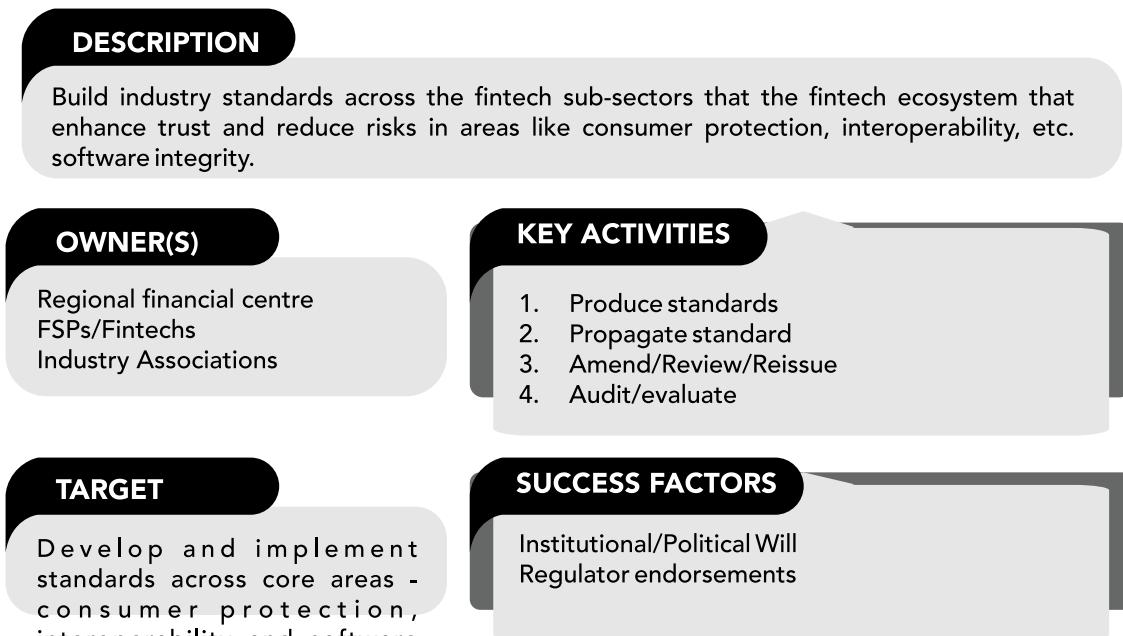




7.5.6. License fintech players that can scale



7.5.7. Build industry standards across fintech sub-sectors



**RESOURCES**

International best practice/standards
Consulting expertise/time

MEASURES

Standards set/established # Standards implemented

7.5.8. Build fintech policy enablers

DESCRIPTION

Policy enablers are strategies that facilitate fintech implementation. These include identity systems to provide eKYC and support data sharing and coordinate institutional relationships.

OWNER(S)

Financial and sectoral regulators
Academia

KEY ACTIVITIES

1. Conduct periodic audit/assessment of policy enablers – catalogue, classify and prioritise
2. Identify ecosystem policy-frictions
3. Create new policy enablers if needed
4. Audit/evaluate

TARGET

Creating an ecosystem with multiple policy enablers working in tandem to drive the industry
Reduce policy frictions amongst ecosystem actors by building policy enablers and facilitating access to fintechs.

SUCCESS FACTORS

Ecosystem endorsements
Regulator endorsements

RESOURCES

Scientific research
Consulting expertise/time

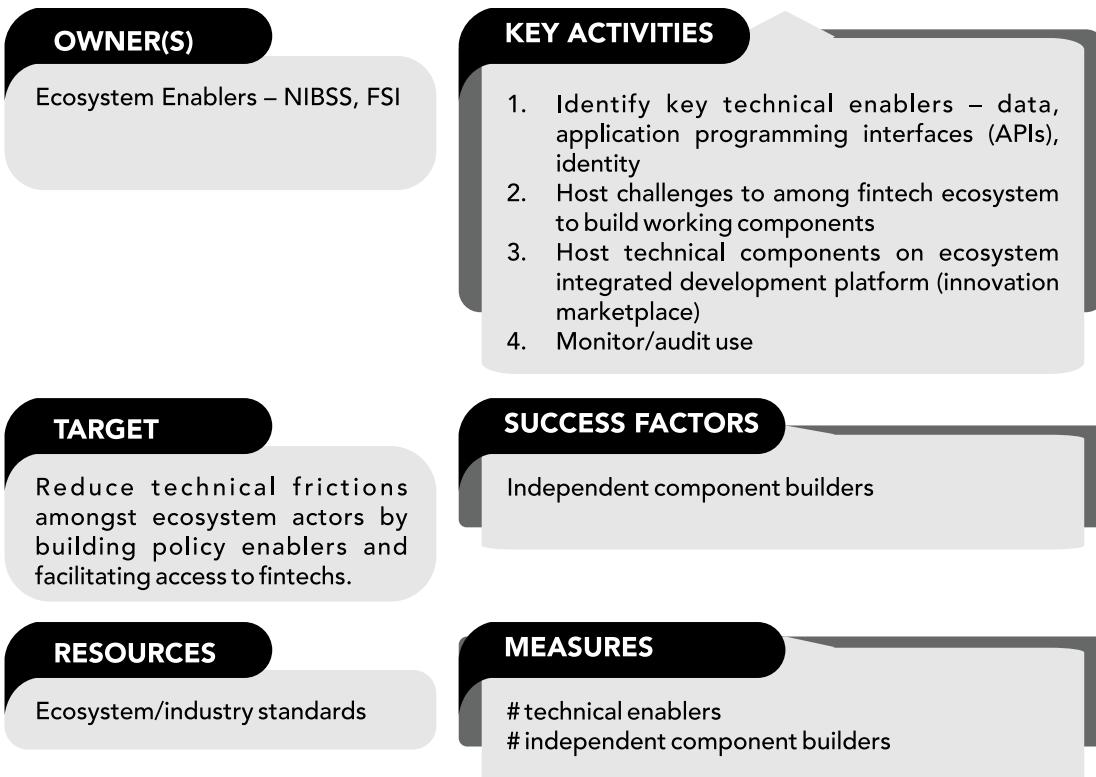
MEASURES

fintech sub-sectors (CCAF)
% nation-wide Internet penetration
% tech adoption - AI, ML, DLT, APIs
scholarly intellectual contributions (research)

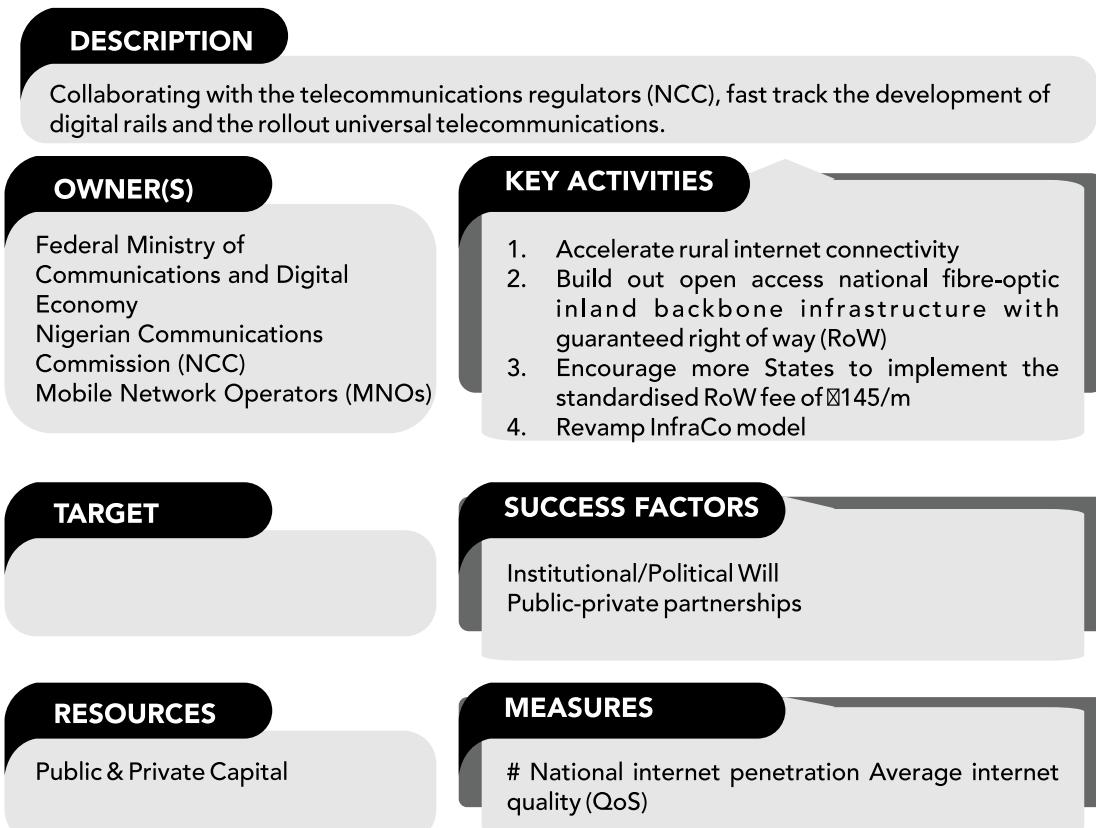
7.5.9. Build fintech technical enablers

DESCRIPTION

Technical enablers are those technological components that enhance fintech development and growth. These include resilient payments infrastructure, digital infrastructure and application programming interfaces (APIs) are essential technical enablers.



7.5.10. Fast track universal telecommunications access





7.5.11. Get fintech firms regulation fit

DESCRIPTION

Inform and educate fintech practitioner community by hosting sessions to bridge the interaction gaps between regulators and practitioners and enhance regulatory clarity (reducing uncertainty) and promoting know-how of regulatory principles, frameworks and rules.

OWNER(S)

Financial and sectoral regulators
Academia
FSPs/Fintechs

KEY ACTIVITIES

1. Development of a compliance curriculum for fintech companies as well as for legal practitioners
2. Creation of Knowledge Exchange Platforms to allow stakeholders across sectors to discuss issues related to research and innovation.
3. Developing market incentives for firms showing significant compliance (e.g. reduce regulatory fees, waivers)
4. Compliance training prior to obtaining licenses, identifying key compliance requirements and regulatory priorities and continuous professional development for key officers of licensees.
5. Review of current reporting processes to enable collection of information from new market participants and on new products and activities.

ARGET

Creating streamlined and digitize process which aids in the effectiveness of regulation

SUCCESS FACTORS

Institutional/Political Will Legislative alignments

RESOURCES

Financial Supervisors
AIP/Licenses

MEASURES

convenings/knowledge exchange sessions
trainings
regulated fintechs

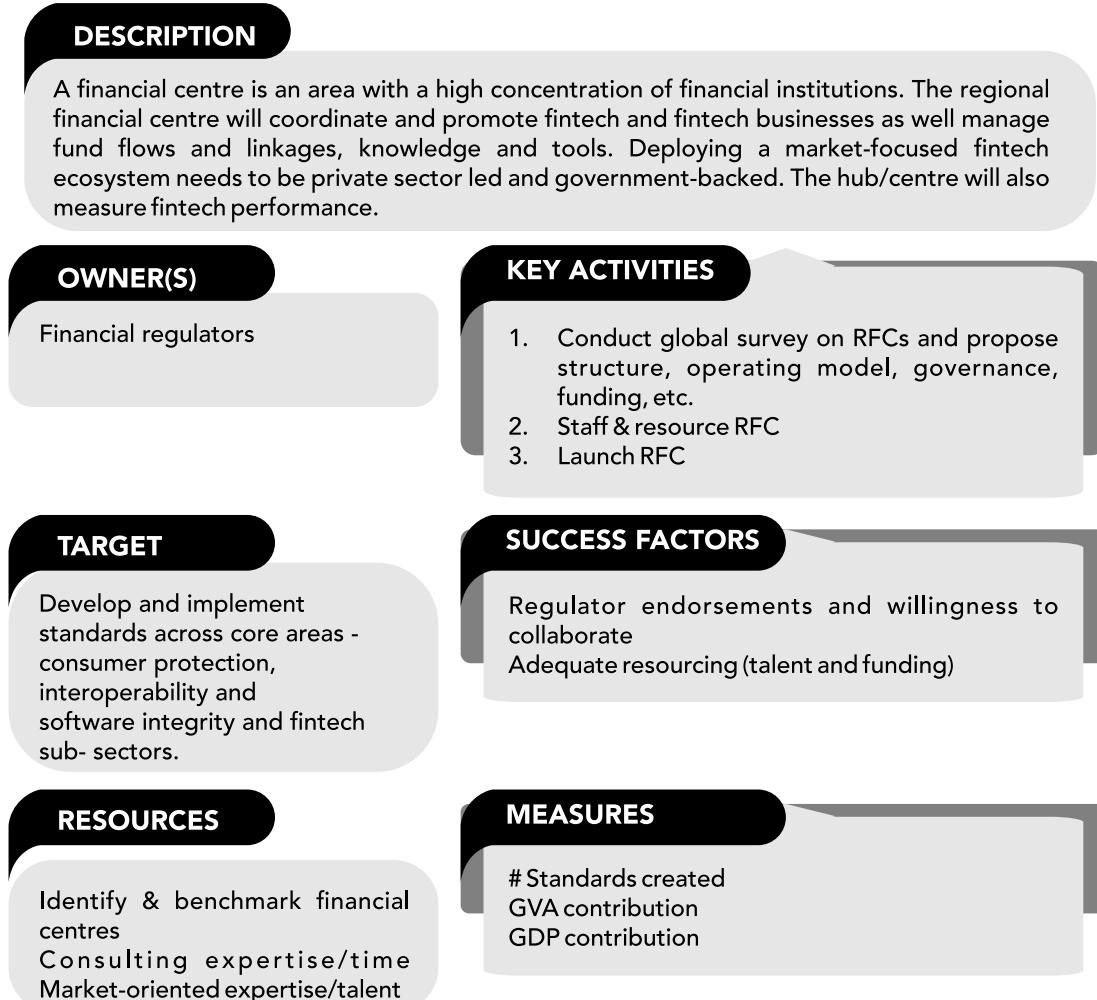
7.5.12. Advocate universal access to energy

DESCRIPTION

Understanding the importance of energy, the financial eservices ecosystem should advocate and promote the need for universal access to energy



7.5.13. Establish a regional financial centre/hub





7.5.14. Build fintech clusters

DESCRIPTION

Build a network of accelerators/incubators/co-working spaces that will support fintech clusters across societal and developmental challenges/financial services sub-segments across the country

OWNER(S)

Financial and sectoral regulators
Investors
Incubators/Accelerators

KEY ACTIVITIES

1. Conduct a landscape analysis to understand institution types and linkages for an efficiently functioning FinTech cluster
2. Identify an appropriate location for the cluster, equip the location and attract ecosystem members to the cluster
3. Establish incentives that will attract local and international organizations to the cluster
4. Appoint an agency to manage the careful develop of the Nigerian FinTech Cluster
5. Provide access to capital, talent and other resources that will enable the proper functioning of the cluster
6. Develop a framework to constantly monitor cluster performance and upgrade the cluster when necessary

TARGET

Viable and active clusters working within incubators and accelerators and multiplying fintech impacts

SUCCESS FACTORS

Institutional/Political Will
Legislative alignments

RESOURCES

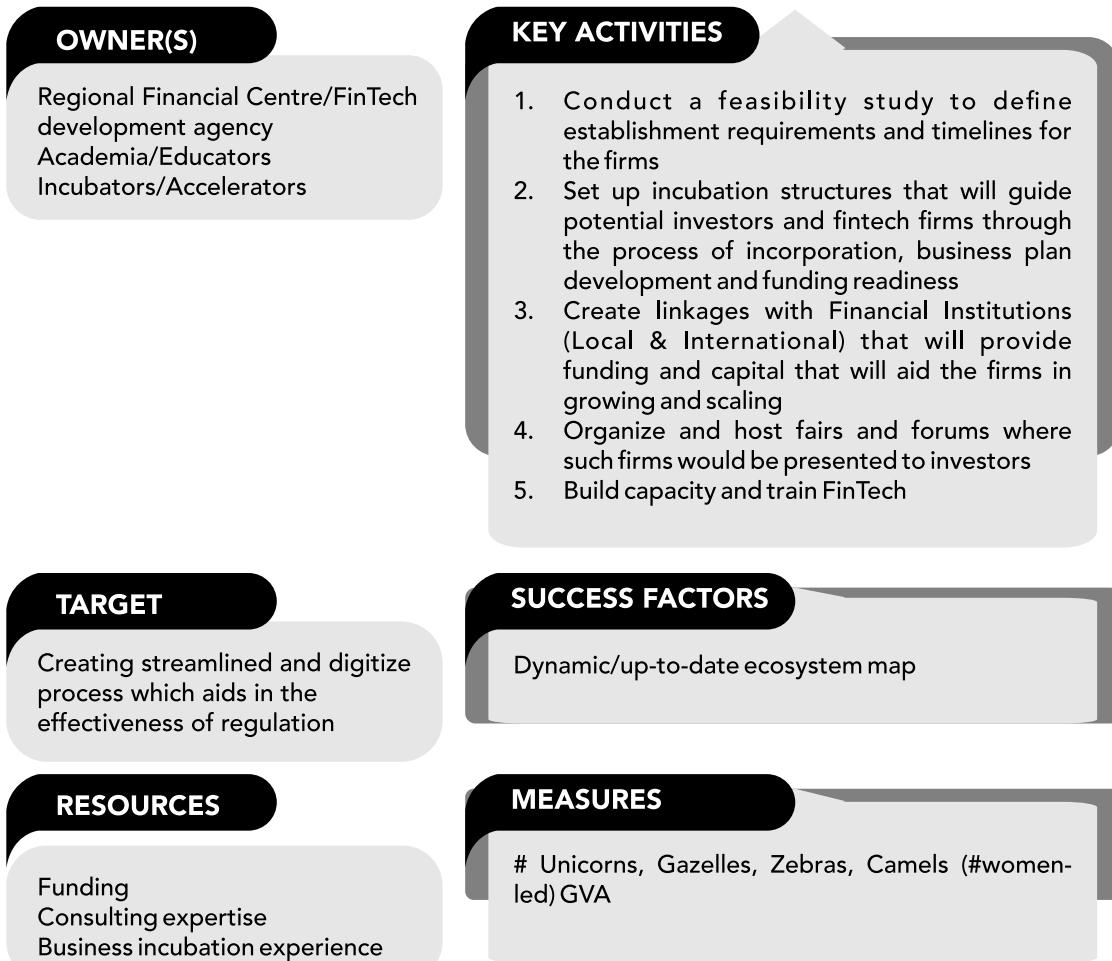
Financial Supervisors
AIP/Licenses

MEASURES

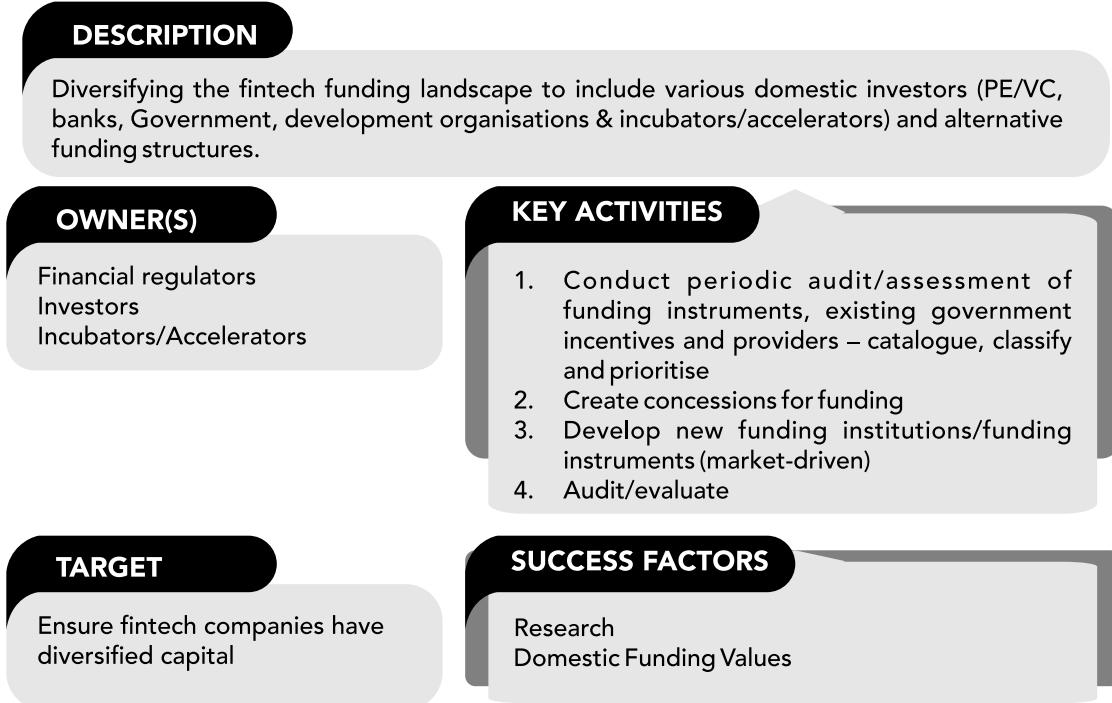
Jobs created by the Cluster
innovators/cluster
sectors/cluster

7.5.15. Develop scalable investment ready fintech firms

A well-functioning ecosystem that is contributing to jobs creation, growth in GDP and increase in attraction of FDI must have scalable and investment ready FinTech companies



7.5.16. Diversify funding landscape



**RESOURCES**

Funding
Consulting expertise
Statutory and regulatory changes

MEASURES

Angels, VCs, Crowdfunding platforms (domestic & foreign)
Envelope size of capital raised domestic & international
Gender-based investments/raises

7.5.17. Inform and build awareness**DESCRIPTION**

Develop fintech markets through publicity and advocacy campaigns that inform and build awareness of the potentials and existence of FinTech in Nigeria.

OWNER(S)

Financial and sectoral regulators
Incubators and accelerators
FSPs/Fintechs
Civil society organizations
Ecosystem enablers

KEY ACTIVITIES

1. Develop a strategic communications plan that will inform and educate the different stakeholder groups on the value and potential of FinTech – The plan shall include print media communication, town hall meetings, industry engagements, social media, and international events
2. Develop a world-class website that communicates FinTech in Nigeria very elaborately
3. Build integrated social media handles that amass followers and track performance
4. Develop specific communication strategies addressing the different stakeholder groups.
5. Integrate digital literacy into financial literacy initiatives that reach the target population segments.

TARGET

Attainment of NFIS goals

SUCCESS FACTORS

Widespread awareness and adoption of FinTech

RESOURCES

Media agency support

MEASURES

publicity campaigns
financial education campaigns

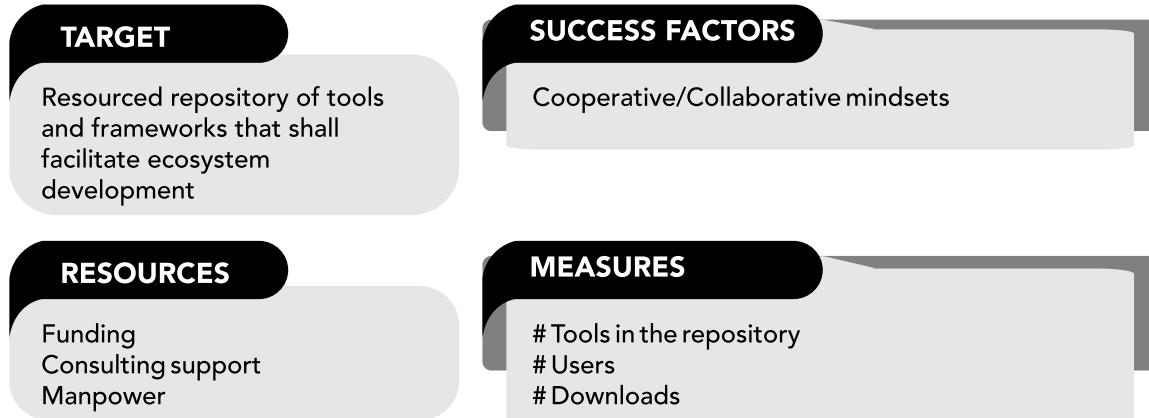


7.5.18. Build industry linkages

DESCRIPTION	Host engagement fora between regulators and industry practitioners and facilitate the cross-pollination of knowledge.
OWNER(S)	Industry associations Incubators/accelerators Academia
KEY ACTIVITIES	<ol style="list-style-type: none"> 1. Develop business case for partnerships 2. Identify ecosystem pain points 3. Host learning fora using global knowledge experts 4. Coordinate Communities of Practice 5. Build indigenous partnership frameworks
TARGET	A collaborative ecosystem with co-creation and ensures fintechs play to their strengths
SUCCESS FACTORS	Institutional will Collaborative mindsets # Partnership arrangements
RESOURCES	Global knowledge expertise Online learning community
MEASURES	# Convenings # Collaborations

7.5.19. Build and maintain library of tools to support the ecosystem

DESCRIPTION	The growth and development of the ecosystem will be dependent on the repertoire of tools that are available to the ecosystem to support policy formulation, product development, product deployment and service delivery. Examples include open-source datasets and products library that FSPs can utilise (public goods), and knowledge tools that will engage fintech actors to address the needs of underserved defined as priority segments in NFIS.
OWNER(S)	Financial and sectoral regulators Regional Financial Centre Financial services providers Ecosystem enablers
KEY ACTIVITIES	<ol style="list-style-type: none"> 1. Define repository format for tools and frameworks that will be made available to the ecosystem 2. Develop this repository, partition it and make it accessible to the ecosystem 3. Define a data upload and download policy 4. Communicate this repository to the ecosystem so that participants can make available the tools and frameworks available to them



7.5.20. Host hackathons and other competitive events



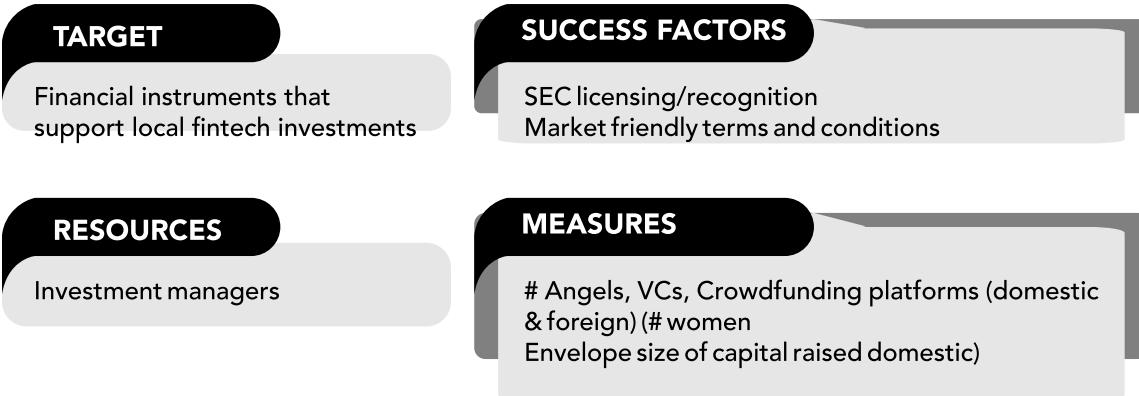


7.5.21. Track fintech ecosystem performance

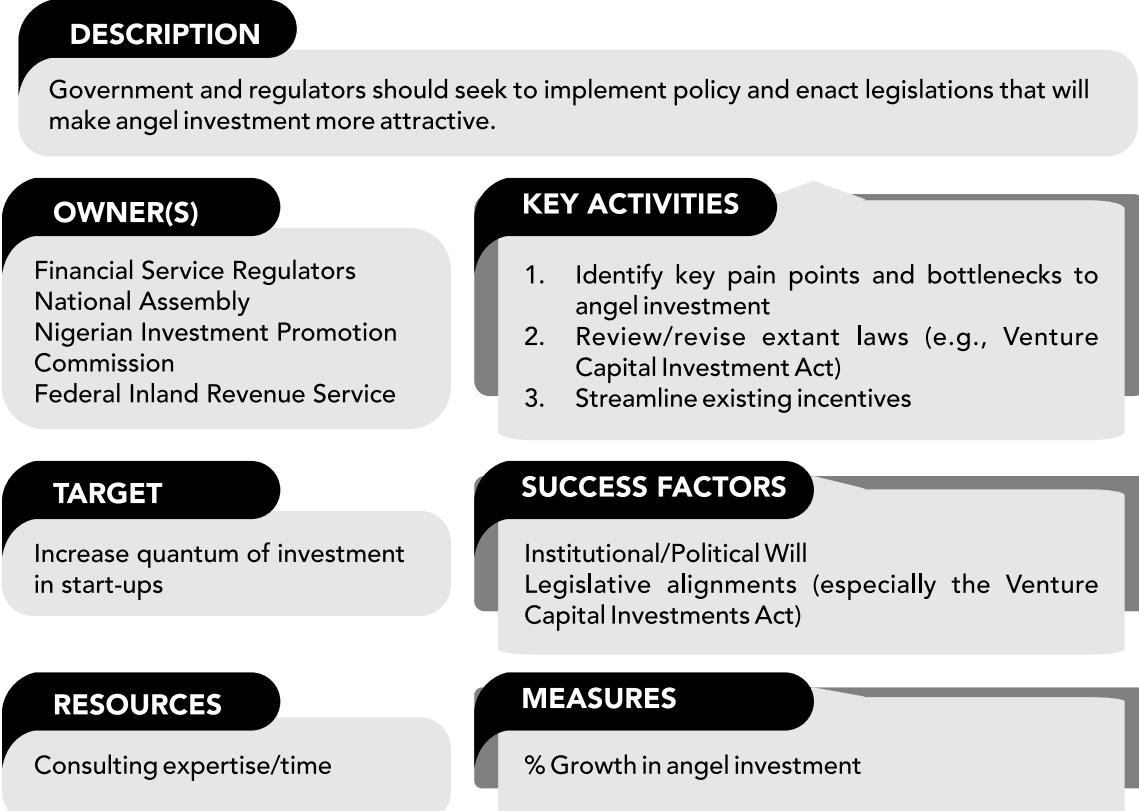
DESCRIPTION	The growth and performance of the ecosystem will be best tracked with an independent performance management framework that ensures that all the goals and objectives set are accomplished within the set timelines.
OWNER(S)	Regional Financial Centre
KEY ACTIVITIES	<ol style="list-style-type: none"> Establish ecosystem performance monitoring system across the dimensions of policy, activity, capital, etc. as defined in M&E framework Define ecosystem parameters to be tracked Periodically measure performance of different dimensions against 2024 targets Report the performance to industry stakeholders periodically Collaboratively work with activity owners to devise corrective actions to improve performance
TARGET	Attainment of NFIS goals
SUCCESS FACTORS	Access to data
RESOURCES	Funding Technology Infrastructure Consulting support Manpower
MEASURES	Total investments.raises (#women) Envelope size of capital raised domestic & international Fintech ecosystem ranking/performance score # fintech sub-sectors (categorised by CCAF taxonomy) # Sector Value (Gross Value Added (GVA)) /# Women GVA # Women-led fintech firms

7.5.22. Stimulate domestic investment landscape

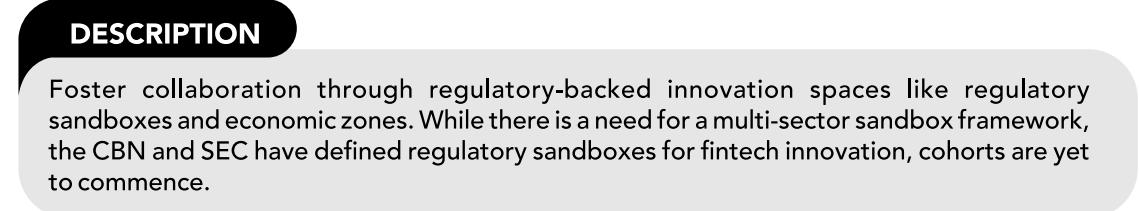
DESCRIPTION	Build local funding structures & instruments that stimulate domestic investors, especially for seed stage and grassroot fintech firms.
OWNER(S)	Financial regulators (SEC)
KEY ACTIVITIES	<ol style="list-style-type: none"> Develop framework for local investment schemes like syndicates, funding clubs and associated custodian services License/recognize investment promoters

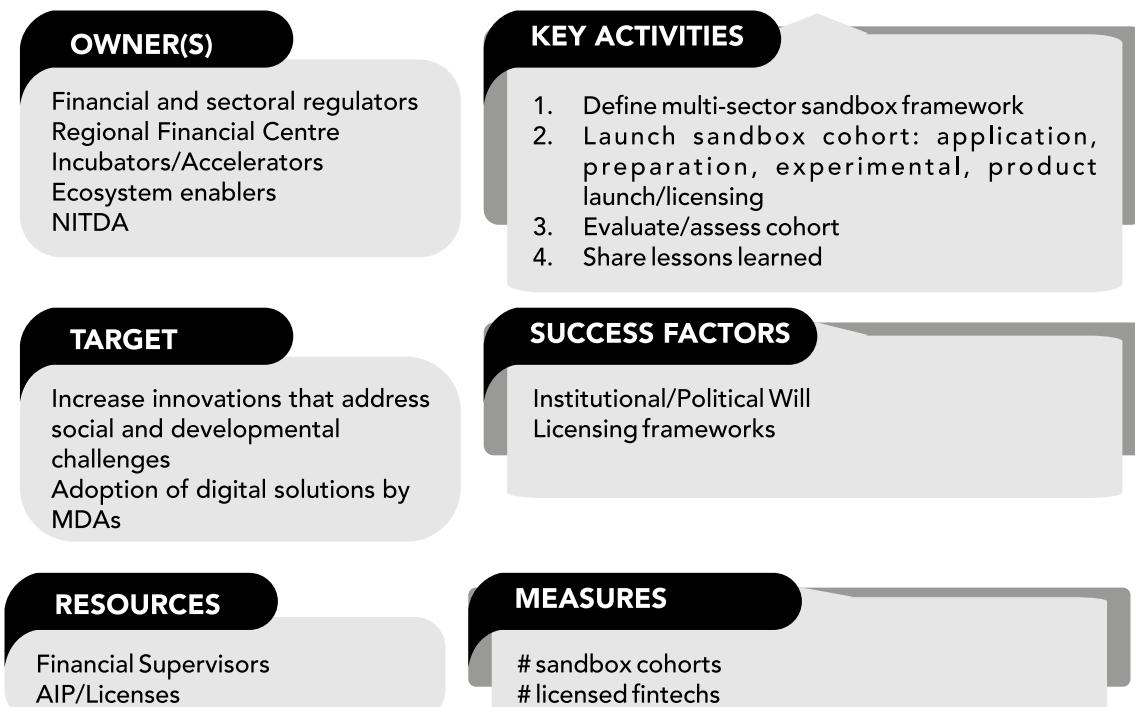


7.5.23. Incentivize Angel Investments

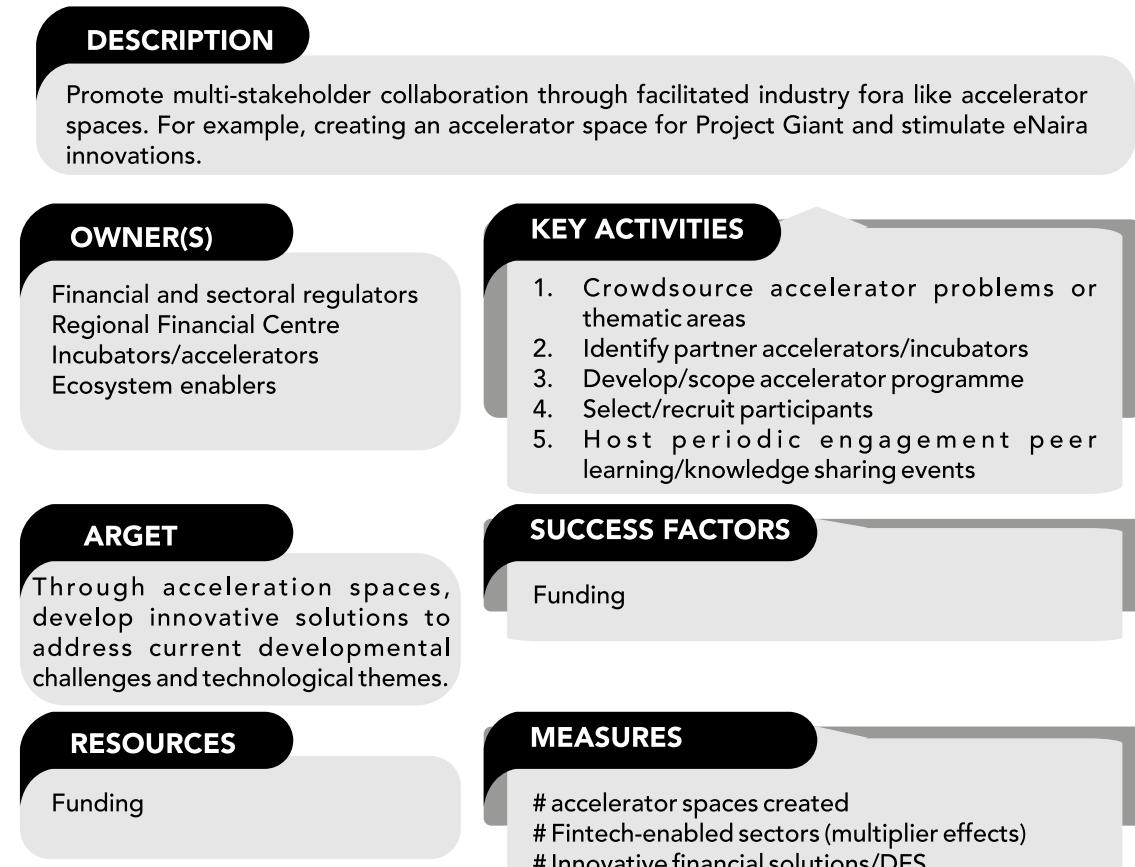


7.5.24. Create regulatory-backed innovation spaces





7.5.25. Promote multi-stakeholder collaboration



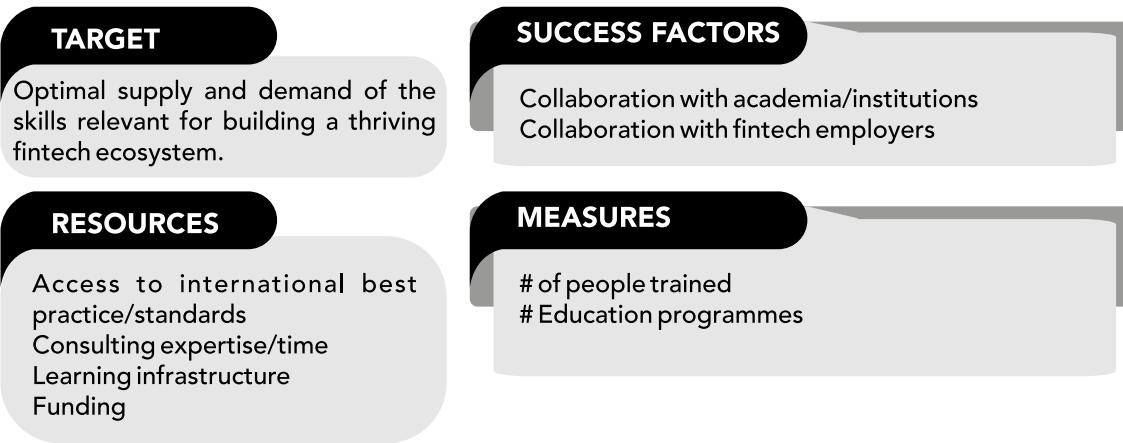


7.5.26. Showcase Nigerian fintech's internationally

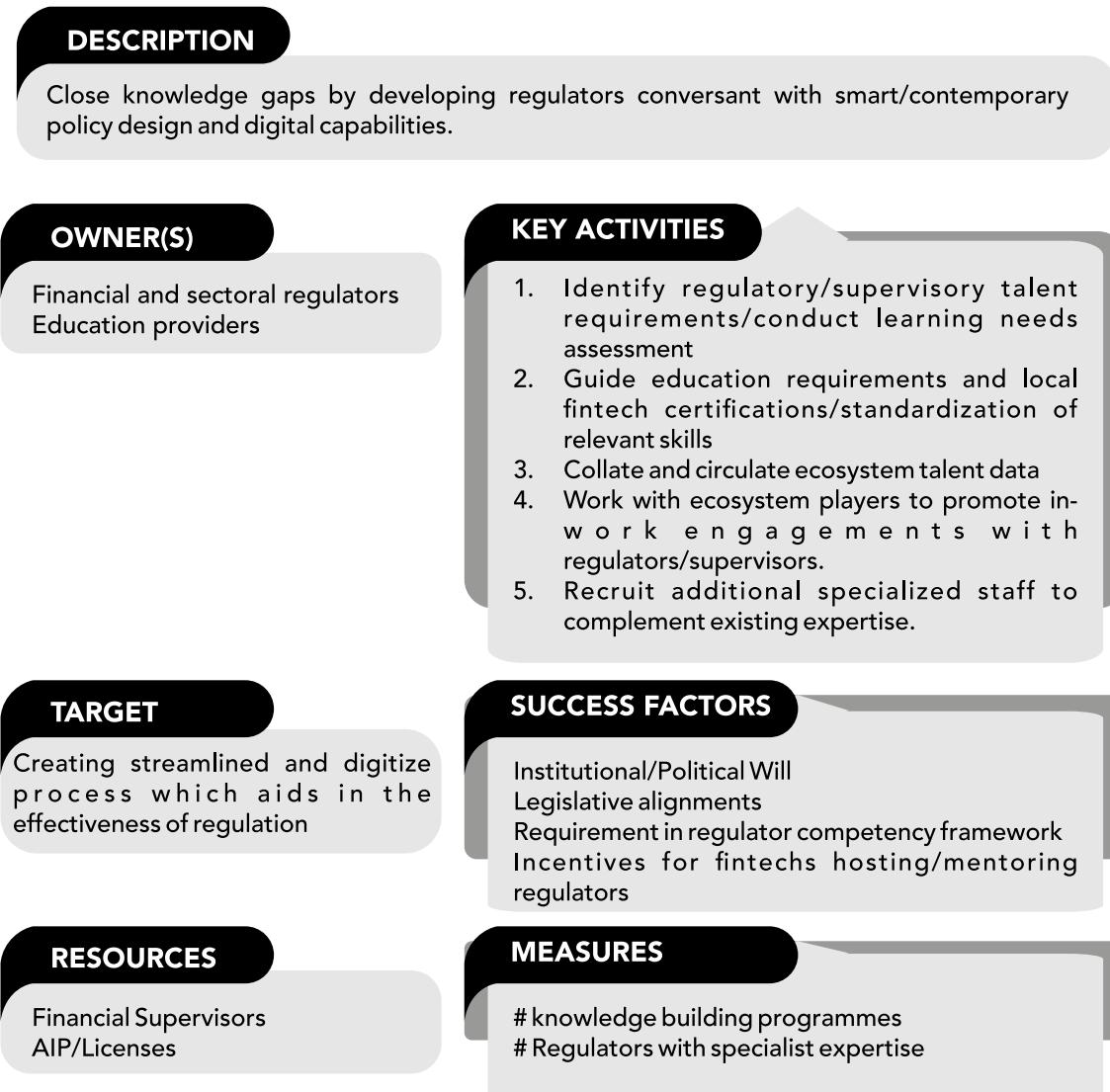
DESCRIPTION	OWNER(S)	KEY ACTIVITIES	TARGET	SUCCESS FACTORS	RESOURCES	MEASURES
Facilitate international collaboration opportunities by showcasing Nigerian fintech's through networks such as the Alliance for Financial Inclusion (AFI) and Global Financial Innovation Network (GFIN).	Regional financial centre	<ol style="list-style-type: none">Coordinate with international trade missions and Nigerian trade missions abroadDefine mission objectivesSelect fintech entities to showcaseSeek funding	Promote Nigeria as Africa's premiere fintech destination	Funding	Trade relationships Fintech association memberships	# international missions # international collaborations/new markers for Nigerian fintechs

7.5.27. Build fintech talent

DESCRIPTION	OWNER(S)	KEY ACTIVITIES
Build fintech competency framework/curriculum and working with education partners close knowledge gaps amongst innovators/entrepreneurs, software engineers and media.	Financial and sectoral regulators Education providers Incubators/Accelerators	<ol style="list-style-type: none">Identify ecosystem talent requirements/conduct learning needs assessmentGuide education requirements and local fintech certifications/standardization of relevant skillsCollate and circulate ecosystem talent dataWork with ecosystem players to attract, motivate and retain new fintech talent and upskill existing talent to meet current ecosystem developments/innovation (incentives for employers, knowledge programs for employees)Provide connection between providers and patrons of fintech talent



7.5.28. Build "smart/contemporary regulators"





7.5.29. Enhance employability opportunities

DESCRIPTION

Enhance employability capabilities of digital workers by building and implementing work skills through apprenticeship/mentoring/internship initiatives.

OWNER(S)

Incubators/Accelerators
FSPs/Fintechs
Regional financial centre

KEY ACTIVITIES

1. Create ecosystem. employability schemes for mentoring, apprenticeship, internship – Could be project-based or time-bound
2. Identify providers – mentors, participating fintechs, projects
3. Recruit mentees, interns, etc.
4. Enrol participants into employability programmes
5. Monitor and evaluate progress

TARGET

Fintech employability options through internships and apprenticeships.

SUCCESS FACTORS

Participating fintech companies
Available mentors

RESOURCES

Employability marketplace/platform

MEASURES

of people mentored/interned/apprenticed
mentors



8. Key Targets & Milestones

The vision of success for fintech in Nigeria aligns with pillar #5 of Nigeria's National Digital Economy Policy and Strategy, spanning inclusive growth and a healthy/vibrant financial hub/sector[20].

Inclusive growth recognises the contribution of the fintech ecosystem to national development such as gross domestic product in the telecommunications and information services sub-category, number of direct and indirect jobs created (traditional and digital), and the overall increase in productivity. The goals of the health and vibrancy of the

ecosystem projects active stakeholders across the financial services sub-sectors that are leading enterprises or building and exchanging programmatic interfaces, thereby fostering cooperation and collaboration.

Across the dimensions of inclusive growth and ecosystem development, highlights the outcomes across the social, digital infrastructure, policy/environment (governance), investment and practice domains.

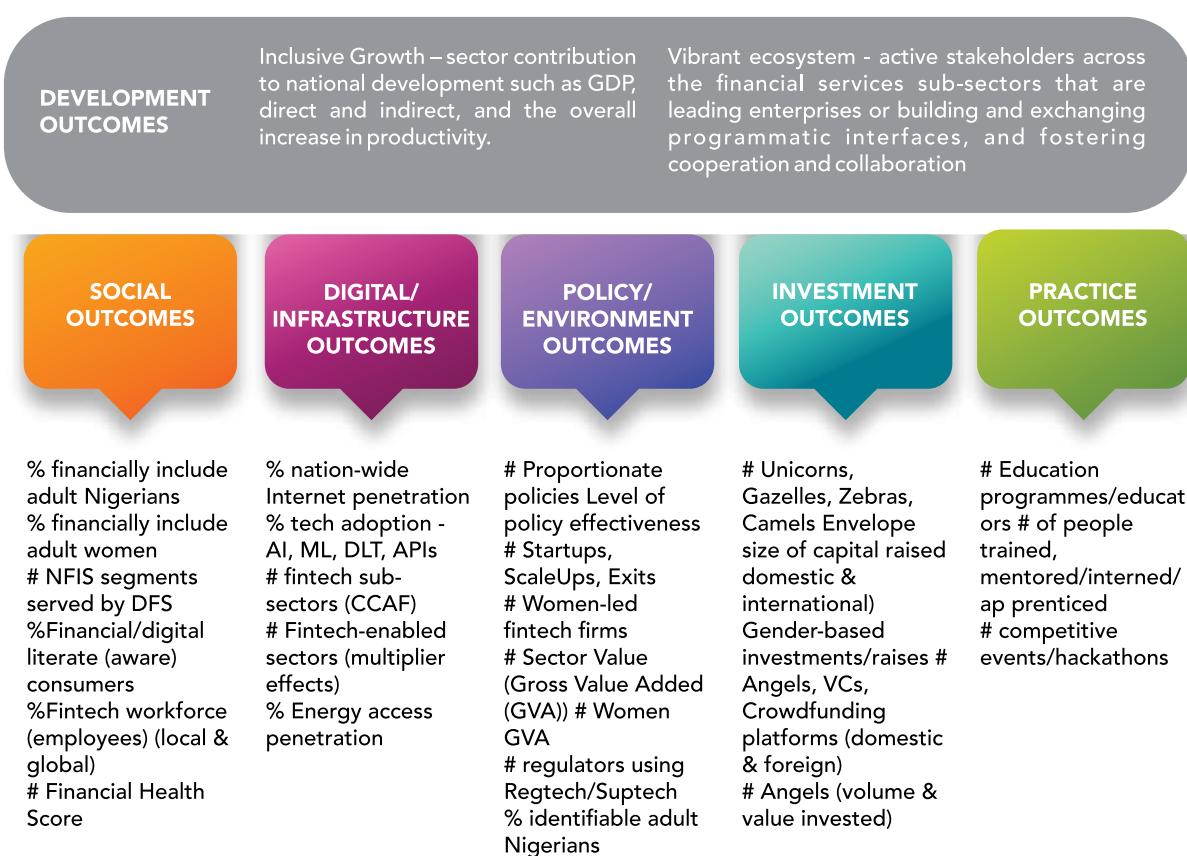


Figure 18: Fintech Strategy Summary



9. Implementation Roadmap

Following implementation planning, we envisage a 3-phased implementation approach that commences immediately upon approval of the plan and extends beyond the financial inclusion target date of 2024. This

approach is aggressive because of the limited timeline to demonstrate the role of fintech in driving inclusive finance and growth (see Figure 19) .

- Establish regional financial centre/hub (RFC)
- Build industry standards across fintech sub-sectors
- Build fintech policy enablers
- Build fintech technical enablers
- Inform and build awareness
- Build industry linkages
- Host hackathons and other competitive events
- Build fintech talent
- Adopt smart policy design and implementation practices
- Design and implement balanced and proportionate policies and regulations
- Fast track universal telecommunications access
- Advocate universal access to energy
- Stimulate domestic investment landscape
- Build and maintain library of tools to support the ecosystem
- Enhance employability opportunities
- Develop scalable investment ready fintech firms
- Create regulatory-backed innovation spaces
- Diversify funding landscape
- Digitise regulatory and supervisory processes
- Promote alternative regulatory instruments
- Build fintech clusters
- Enhance institutional coordination structures and practices
- Incentivise angel investments
- Track fintech ecosystem performance
- License fintech players that can scale
- Promote multi-stakeholder collaboration
- Showcase Nigerian fintech's internationally

Figure 19: Strategy implementation roadmap

The first stage of the implementation which spans 9-months will establish the building blocks both in the ecosystem and governance domains. The next 24 months will encompass the continued development of structures and enablers and will layer on the investment and capital raising structures for domestic and international investments. By the end of this phase, we anticipate improved DFS

perceptions and adoption levels, clearer regulations, regulator-market relationships and regulatory instruments that support innovative products and services. By 2024, Nigeria should have established fintech innovations and able to promote Nigerian fintechs internationally.



10. Stakeholder Roles & Responsibilities

The different strategic initiatives will be implemented by ecosystem actors listed in , with dependencies and implementation roles

highlighting actors that are responsible, accountable, consulted and informed (RACI) in Table 2 .

STAKEHOLDERS	ECOSYSTEM DEVELOPMENT
Nigerian market consumers	Users of the fintech applications
Civil society organisations	Organisations advocating and promoting fintech amongst the society
Tech Providers/enablers	Providers of technology enablers like digital infrastructure and tech development community
Financial and sectoral regulators	Regulators of the financial services industry and other regulators like infrastructure, data protection
Law enforcement agencies	Securing the digital landscape against criminals and criminality
Incumbents (banks, MMOs)	Licensed incumbents like banks, MMOs, PSPs that successfully launched digital banking products.
Fintech's (new entrants)	Technologically enabled new entrants building innovative products or deploying innovative business models.
Investors (Private capital, Public financing, International financing)	Providers of equity and debt capital
Incubators/Accelerators	Ecosystem facilitators supporting acceleration/incubation of start- up fintech firms
Education providers	Educational/capacity building institutions and educators building tech and talent
Industry associations	Aggregation of fintech market operators and other interested parties providing collective representation
Consultants/Advisers	Provide advisory and consulting guidance to fintech ecosystem
Fintech ecosystem talent	Talent supporting entrepreneurs/innovators in building fintech firms

Table 2: Ecosystem actors



S/NO	INITIATIVE	RESPONSIBLE ⁵	ACCOUNTABLE ⁶	CONSULTED ⁷	INFORMED ⁸
1	Adopt smart policy design and implementation practices	Sector regulators	Sectoral regulators	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
2	Design and implement balanced and proportionate policies and regulations	Sector regulators	Sectoral regulators	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
3	Promote alternative regulatory instruments	<ul style="list-style-type: none">• Financial and sectoral regulators• Academia• Incubators/Accelerators	Sectoral regulators	Operators	Entire ecosystem comprising players, partners, and other institutions
4	Digitize regulatory and supervisory processes	<ul style="list-style-type: none">• Financial and sectoral regulators	Sectoral regulators	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
5	Enhance institutional coordination structures and practices	<ul style="list-style-type: none">• Financial and sectoral regulators• Ecosystem players	Sectoral regulators Ecosystem players	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
6	License fintech players that can scale	Sector regulators	Sectoral regulators	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
7	Build industry standards across fintech sub-sectors	Sector regulators	Sectoral regulators	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
8	Build fintech policy enablers	Financial and sectoral regulators	Sectoral regulators	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
9	Build fintech technical enablers	Ecosystem Enablers – NIBSS, FSI	Sectoral regulators	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions

5 Carries out the tasks

6 Takes decisions of approving the initiative

7 Opinions sought prior to making decisions

8 Keep notified of progress



	Fast track universal telecommunication s access	<ul style="list-style-type: none"> • Federal Ministry of Communications and Digital Economy • Nigerian Communications Commission (NCC) • Mobile Network Operators (MNOs) 	Mobile Network Operators (MNOs)	Entire ecosystem comprising players, partners, and other institutions	Entire ecosystem comprising players, partners, and other institutions
10	Get FinTech firms regulation fit	<ul style="list-style-type: none"> • Financial and sectoral regulators • Academia • FSPs • Fintechs 	Financial and sectoral regulators	<ul style="list-style-type: none"> • FSPs • Fintechs 	<ul style="list-style-type: none"> • FSPs • Fintechs
11	Advocate universal access to energy	<ul style="list-style-type: none"> • Federal Ministry of Power • Energy Ecosystem • FS Ecosystem 	Energy Ecosystem	FinTech Ecosystem, Energy Ecosystem	FinTech Ecosystem, Energy Ecosystem
12	Establish a regional financial center/hub	Financial regulators	Financial regulators	Energy Ecosystem	Energy Ecosystem
13	Build Fintech Clusters	<ul style="list-style-type: none"> • Financial and sectoral regulators • Investors • Incubators/Accelerators 	Financial and sectoral regulators	Energy Ecosystem	Energy Ecosystem
14	Develop scalable investment ready Fintechs	<ul style="list-style-type: none"> • Regional Financial Centre • FinTech development agency • Academia/Educators • Incubators/Accelerators 	FinTech development agency	FinTech Ecosystem	FinTech Ecosystem
15	Diversify funding landscape	<ul style="list-style-type: none"> • Financial regulators • Investors • Incubators/Accelerators 	Financial regulators	FinTech Ecosystem	FinTech Ecosystem
16					



	Inform and build awareness	<ul style="list-style-type: none">• Financial and sectoral regulators• Incubators and accelerators• Financial Service Providers/Fintechs• Civil society organizations	Financial and sectoral regulators	None	None
17	Build industry linkages	<ul style="list-style-type: none">• Industry associations• Incubators/accelerators• Academia	Financial and sectoral regulators	None	None
18	Build and maintain a library of tools to support the ecosystem	<ul style="list-style-type: none">• Financial and sectoral regulators• Regional Financial Centre• Financial services providers• Ecosystem enablers	Financial and sectoral regulators	None	None
19	Host hackathons and competitive events	<ul style="list-style-type: none">• Regional Financial Centre• Incubators• Accelerators	Financial and sectoral regulators	FinTech Ecosystem	FinTech Ecosystem
20	Track FinTech ecosystem performance	<ul style="list-style-type: none">• Regional Financial Centre	Regional Financial Centre	FinTech Ecosystem	FinTech Ecosystem
21	Stimulate domestic investment landscape	<ul style="list-style-type: none">• Financial and sectoral regulators	Regional Financial Centre	FinTech Ecosystem	FinTech Ecosystem
22	Incentivize angel investments	<ul style="list-style-type: none">• Financial and sectoral regulators	Regional Financial Centre	FinTech Ecosystem	FinTech Ecosystem
23	Create regulatory-backed innovation spaces	<ul style="list-style-type: none">• Financial and sectoral regulators• Regional Financial Centre• Incubators/Accelerators• Ecosystem enablers	Financial and sectoral regulators	FinTech Ecosystem	FinTech Ecosystem
24					



25	Promote multi-stakeholder collaboration	<ul style="list-style-type: none"> Financial and sectoral regulators Regional Financial Centre Incubators/accelerators Ecosystem enablers 	Financial and sectoral regulators	None	None
26	Showcase Nigerian FinTech's Internationally	Regional financial centre	Regional financial centre	FinTech Ecosystem	FinTech Ecosystem
27	Build FinTech talent	<ul style="list-style-type: none"> Financial and sectoral regulators Education providers Incubators/Accelerators 	<ul style="list-style-type: none"> Education providers Incubators/Accelerators 	FinTech Ecosystem	FinTech Ecosystem
28	Build "smart/contemporary regulators"	<ul style="list-style-type: none"> Financial and sectoral regulators Education providers 	<ul style="list-style-type: none"> Education providers Incubators/Accelerators 	FinTech Ecosystem	FinTech Ecosystem
29	Enhance employability opportunities	<ul style="list-style-type: none"> Incubators/Accelerators FSPs/Fintechs Regional financial centre 	<ul style="list-style-type: none"> Education providers Incubators/Accelerators 	FinTech Ecosystem	FinTech Ecosystem

Table 3: Stakeholder roles in Strategy implementation



11. Risks and Mitigation Strategies

11.1. RISK FACTORS & OUTCOMES

The key risk factors limiting the national fintech strategy are:

Implementation: the ownership and coordination of this National Fintech Strategy and especially its implementation is a critical risk, especially regarding the participation of ecosystem actors and the allocation of resources. While the strategy addresses fintech development across the financial ecosystem, the different resources required to ensure the vision is achieved requires collaboration.

Digital rails: enabling the fintech multiplier effects beyond urban locations and banked Nigerians requires digital infrastructure rollout.

Infrastructure: Inadequate provision and access to energy could impede digital technology solutions rollout.

Technological: by virtue of the strategy's dependence on digital technology implementation and adoption, cybersecurity, technology failures (reliability, availability) would impact the strategic outcomes.

Strategic alliance frameworks: this fintech strategy hinges on building an inclusive ecosystem and collaborative work engagements and relationships between regulators and operators.

Regulatory clarity: the direction of financial sector regulators towards an innovation

friendly environment matched with minimal domestic funding will limit funding opportunities available to innovators and reduce products, enterprises, etc.

User adoption: low trust of financial service providers resulting from negative experiences and low advocacy.

The potential outcomes of these risks include the loss of global fintech market share/national competitiveness, higher financial exclusion and the inability to take advantage of the multiplier effects of fintech economic benefits.



11.2. RISK MATRIX

Failing to implement these strategic initiatives in this strategy will result not only stagnate the financial inclusion progress but also reduce market share among the

incumbents and reduce competitiveness. In addition, the potential of fintech to drive other economic sectors will diminish. The risk matrix in Figure 20 maps the risk factors and potential outcomes.

	LOSS OF MARKET SHARE/ COMPETITIVENESS	FINANCIAL EXCLUSION	MULTIPLIER EFFECTS/ [DIGITAL] ECONOMIC BENEFITS
Implementation	The inability of the financial services ecosystem to coordinate, collaborate and drive the National Fintech Strategy will limit Nigeria's ability to systemically grow the industry and showcase Africa.	The lack of ecosystem coordination to advance advocacy and awareness will ultimately impact the ability to grow and promote inclusive fintech.	The fintech ecosystem is foundational to showcasing the opportunities in Nigeria's digital ecosystem and initiatives to drive a digital economy. The inability to coordinate and allocate required resources to achieve the goals in the plan will have a negative multiplier effect across sectors that are not as organized as the financial services ecosystem.
Digital rails	The inability to provide digital access could result in dominance in some markets and loss of market share to informal or other alternatives.	Expanding the digital divide will only make it more expensive for already vulnerable communities to access financial services.	The inability to provide digital infrastructure will limit the extension of digital services to underserved markets and hence reduce the possibility of multiplier effects in other market segments.
Energy Infrastructure	Low energy access will limit the access to fintech solutions and loss of market share to informal or other alternatives.	The lack of an energy stack is a disincentive for digital and financial inclusion.	The inability to provide energy infrastructure will limit the extension of digital services to underserved markets and hence reduce the possibility of multiplier effects in other market segments.



	LOSS OF MARKET SHARE/ COMPETITIVENESS	FINANCIAL EXCLUSION	MULTIPLIER EFFECTS/ [DIGITAL] ECONOMIC BENEFITS
Technological	Technology failures resulting from systems unavailability (outages), reliability and cyber-attacks could limit fintech adoption and utilisation. This downward turn in the market will limit the businesses' ability to scale nationally and reduce competitiveness.	In addition to exacerbating the low trust in the financial services ecosystem, technological failures would reduce utilisation and reliance on alternative payment instruments like cash. Coupled with poor understanding amongst underserved market segments, this will hinder financial inclusion progress.	Advancing the digital economy requires integrated and reliable technological systems and services that are available and usable daily. Anticipated positive multiplier effects would be directly counteracted by the technology failures.
Strategic alliance frameworks	The role of partnerships and strategic alliances to enable co-creation across the value chain will enhance competitiveness and enrich the value chain with actors playing to their strengths.	Weak or non-existent alliances and frameworks will ultimately limit scale and the extension of financial services to underserved market segments and the NFIS priority segments.	The integration of financial services into sectoral systems can support financial health improvements and create economic benefits across workers in sectors like agriculture.
Regulatory clarity	The lack of clear and concise regulations may lead to the exit of serious fintech market players and investors. All in all, this could result in lower global fintech performance results and the perceived loss of competitiveness of Nigeria as a fintech hub.	Given that financial inclusion requires patient capital and time, the dearth of players in the market could result in focus on higher-income and easy to reach segments.	The lack of clarity on regulatory boundaries and institutional voids may limit innovation of bundled cross-sectoral products and services, especially as it may result in multiple licensing processes.
User adoption	Even if we build the fintech products and services, the users still need to adopt. Hence ensuring that the products are fit for purpose will only enhance the value of the providers and increase competitiveness.	Low user adoption of digital financial services (DFS) is one of the inhibitors of financial inclusion. Hence, strategies to drive adoption and ensure consumer needs are met are essential.	Lower user adoption reduces the innovation capacity from fintechs and has a negative multiplier effect on digital developments and adoption across sectors.

Figure 20: Risk matrix



11.3 MITIGATION STRATEGIES

First, mitigating the risks requires the ratification of this strategy by all financial and sectoral regulators. This commitment will be demonstrated through the actions (and inactions) taken and the adherence to the timelines.

Addressing these risks requires strategies highlighted below:

Ownership: establishing an independent Regional Financial Centre is critical to the advancement of fintech in Nigeria. The regional financial centre will coordinate and promote fintech and fintech businesses and manage fund flows and linkages, knowledge and tools. Deploying a market-focused fintech ecosystem needs to be private sector led and government-backed. The hub/centre will measure fintech performance and will bridge the gaps between regulators and the private sector.

Institutional collaborations: Foundational to the ownership structures for implementing this strategy is the commitment of the diverse financial and sectoral regulations to collaborate and innovate to enhance fintech ecosystem development in Nigeria.

Digital and Financial Literacy: building the digital and financial capabilities of the populace will enhance adoption and responsible use of DFS. Thus, the body of financial and sectoral regulators requires a cohesive approach in driving the mass literacy of users through partnerships with civil society organizations.

Regulatory Enablement: the changing role of

regulators in this digital era requires active engagements and fora for active solutioning. Changing the assumptions of the regulator as a gatekeeper to enablers will only enhance innovation and create an environment that seeks to address Nigeria's social and institutional problems whilst driving inclusive growth.

Awareness & advocacy of consumer protection: the success of fintech is dependent on the ability to address non-consumption and grow the pool of those accessing and utilizing financial services. This will require deliberate media and communications support that promote the ideology of digital financial services and tell stories about Nigerian companies.



12. Monitoring & Evaluation

Nigeria's fintech successes have been organic and may prove difficult to sustain without implementing deliberate and intentional strategies. The critical problems constraining inclusive fintech in Nigeria include:

Unmet demand: digital financial services/solutions not addressing the needs of the underserved (non-consumption)

Policy/Regulatory adequacy: The lack of proportionate and balanced policies and regulations to support the growing ecosystem limits sector participation

Ecosystem development: the fragmented and unstructured fintech ecosystem that evolved organically rather than by-design limits linkages and interplay across the ecosystem.

Addressing these core challenges, the National Fintech Strategy is complemented by a monitoring and evaluation (M&E) framework proposing mechanisms to assess the implementation efficacy and attainment of the targets.

The subsequent paragraphs highlight the M&E framework.

12.1. THEORY OF CHANGE

Development Goals	Inclusive Growth – sector contribution to national development such as GDP, direct and indirect, and the overall increase in productivity.
-------------------	--

Vibrant ecosystem - stakeholders across the financial services sub-sectors that are leading enterprises or building and exchanging programmatic interfaces, and fostering cooperation and collaboration

Long Term Outcomes	<ul style="list-style-type: none">• Society with consumers/users that are included using DFS, healthy and financially and digitally capable• A FinTech ecosystem that is creating and sustaining jobs• Use of diverse emerging technologies - AI, ML, DLT, APIs• Multiplier effect (enablement) across other industries/sectors• A regulatory environment with balanced and proportionate policies<ul style="list-style-type: none">• Employing smart regulatory and supervisory systems and insight-based supervision and oversight• An increase in the number of local and foreign direct investors• Increase in envelope size of investments
Intermediate Outcomes	Policy/Environment Changes



	<ul style="list-style-type: none"> • A regulatory environment that is balanced and progressive in ensuring that risks are identified and mitigated whilst operators are encouraged to thrive • Regulators guided by smart design and implementation principles • Adoption of diverse regulatory instruments (self-regulation/co-regulation) <p>Ecosystem Changes</p> <ul style="list-style-type: none"> • Organised and cohesive financial services ecosystem fostering linkages • FinTech firms that are regulation-fit/ready • Providing access to essential policy and technical enablers • Financial/digital aware Nigerian consumers (across priority segments) receptive to and utilising DFS (across financial sub-sectors) • Digitally connected communities supporting active participation in the digital economy • Emergent entrepreneurs, innovators and firms using innovative business models and developing solutions that address social and developmental challenges • Vibrant investment landscape with contemporary instruments and structures
Intervention Outputs	<ol style="list-style-type: none"> 1. Nigerian FinTech standards and consumer protection standards 2. Publicity campaigns/awareness building engagements 3. Digitally connected cities/towns/LGAs 4. Nigerian FinTech policy guidance & regulatory instruments (balanced and proportionate) 5. M&E-related unit/task team set up to track ecosystem performance measures 6. FinTech competency framework 7. Education programmes/educators at tertiary and professional levels 8. Equipped ecosystem talent (mentored, interned/apprenticed) 9. Competition event/hackathon winners 10. Amount (USD) raised to support start-ups/incubators (by stage) 11. Amount (USD) financing into the FinTech sector (domestic/international)

Table 4: Theory of Change

12.2. RESULT FRAMEWORK

The results framework maps the critical indicators across the policy, ecosystem and talent domains and proposes targets to be achieved by year 2024.



12.2.1. Policy Indicators

RESULTS	INDICATORS	2024 TARGET	DATA SOURCE
Balanced and proportionate policies	# Proportionate policies/regulations Policy effectiveness level/score # regulators using RegTech/SupTech #/% regulatory processes digitised # licensed/regulated fintechs	25 policies 80% 90% 95% 100%	Policy effectiveness tracker from ecosystem performance
Adoption of diverse regulatory instruments (self-regulation/co-regulation)	# Institutional collaboration arrangements	100%	
Emergent entrepreneurs, innovators and firms using innovative business models and developing solutions that address social and developmental challenges	# Start-ups, ScaleUps, Exits # Women-led fintech firms # Sector Value (Gross Value Added (GVA)) /# Women GVA # Fintech-enabled sectors (multiplier effects) # Innovative financial solutions/DFS # Angels (volume & value)	350 150 30% 100% 250 100%	Ecosystem tracker (RFC) NBS Ecosystem tracker (RFC)
Providing access to essential policy and technical enablers	% identifiable adult Nigerians (% women) # fintech sub-sectors (categorised by CCAF taxonomy)	60% 80%	NIMC Ecosystem tracker (RFC)
	% nation-wide Internet penetration % tech adoption - AI, ML, DLT, APIs % energy access	60% 50% 75%	NCC Ecosystem tracker (RFC) Energy Ministry/NBS

Figure 21: Policy Indicators



12.2.2. Ecosystem Indicators

RESULTS	INDICATORS	2024 TARGET	DATA SOURCE
Financial/digital aware Nigerian consumers (across priority segments) receptive to and utilising DFS (across financial sub-sectors)	<div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>% financially included adult Nigerians (% women)</p> </div> <div style="text-align: center;"> General: 95% (Women: 80%) </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># NFIS segments served by DFS</p> </div> <div style="text-align: center;"> 6 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># Financial Health Score</p> </div> <div style="text-align: center;"> 80 </div> </div>		EFinA
Financial/digital literate (aware) consumers	<div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>% Financial/digital literate (aware) consumers (% women)</p> </div> <div style="text-align: center;"> 80% </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># publicity campaigns</p> </div> <div style="text-align: center;"> 50 </div> </div>		
Organised and cohesive financial services ecosystem fostering linkages	<div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># linkages (ecosystem, regional, national)</p> </div> <div style="text-align: center;"> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># active fintech clusters</p> </div> <div style="text-align: center;"> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># accelerator spaces created</p> </div> <div style="text-align: center;"> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># sandbox cohorts</p> </div> <div style="text-align: center;"> </div> </div>	<p>Beyond 2024</p> <p>Ecosystem tracker (RFC)</p> <p>Incubators/Accelerators</p>	
	<div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># library/tools assets</p> </div> <div style="text-align: center;"> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Fintech ecosystem ranking/performance score</p> </div> <div style="text-align: center;"> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># global roadshows</p> </div> <div style="text-align: center;"> </div> </div>		Beyond 2024
Vibrant investment landscape with contemporary instruments and structures	<div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Envelope size of capital raised domestic & international)</p> </div> <div style="text-align: center;"> Average \$1 million </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Total investments /raises (# women)</p> </div> <div style="text-align: center;"> 50 </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># Angels, VCs, Crowdfunding platforms (domestic & foreign) (# women)</p> </div> <div style="text-align: center;"> 200 (50 women) </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p># Unicorns, Gazelles, Zebras, Camels (# women-led)</p> </div> <div style="text-align: center;"> 60 (20 women-led) </div> </div>		Ecosystem tracker (RFC)

Figure 22: Ecosystem Indicators



12.2.3. Talent Indicators

RESULTS	INDICATORS	2024 TARGET	DATA SOURCE
Competent fintech professionals	<p># Education programmes/educators</p> <p>25</p> <p># of people trained, mentored/interned/apprenticed</p> <p>2,500</p> <p>%Fintech workforce (local & global)</p> <p>60%</p>		Ecosystem tracker (RFC) Incubators/Accelerators
Regulators guided by smart design and implementation principles	<p># regulators trained</p> <p>400</p>		
New firms, innovators, entrepreneurs	<p># competitive events/hackathons</p> <p>40</p>		

Figure 23: Talent Indicators



13. Conclusion

This strategy paves the way for Nigeria to harness fintech development with intentionality, while retaining developmental outcomes in-country. The broad strategic

objectives of ecosystem development and governance align with global and domestic trends illustrated in .

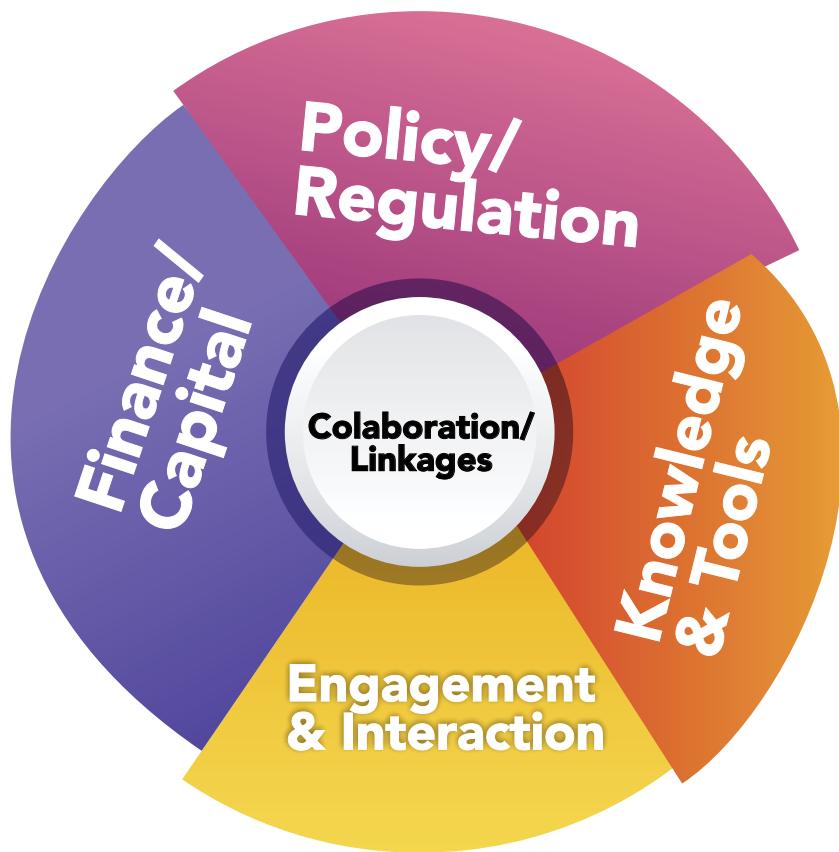


Figure 24: Fintech strategy pillars

13.1. ALIGNMENTS

13.1.1. Contemporary Initiatives

While technological advancements continue, this strategy broadly adopts a test and learn approach for fintech evolution by proposing structures that develop innovation and experimentation capabilities. Examples of these include the focus on policy and technical enablers and initiatives supporting the

buildout of fintech clusters, regulatory-backed innovation spaces, hackathons and other competitive events and multi-stakeholder collaborations to address emerging and perennial issues. Thus, innovations supporting advancements like the eNaira can be supported through acceleration and innovation spaces as proposed in the strategy. Section introduces the eNaira and potential use cases.



13.1.2. SEC is FinTech Roadmap

The recommendations in Table 3 represent the initiatives of the SEC Fintech

Implementation Roadmap 2019 alongside the initiatives in this National Fintech Strategy.

Recommendation	NFS Initiative
Institutional Collaborations	Enhance institutional coordination structures and practices
Fostering an Innovation Environment	Build FinTech clusters Host hackathons and other competitive events Create regulatory-backed innovation spaces Promote multi-stakeholder collaboration Build and maintain library of tools to support the ecosystem
Invest in RegTech and Process Improvement Technologies	Digitise regulatory and supervisory processes Build FinTech policy enablers
Consumer Protection, Security & Data Privacy	Enhance institutional coordination structures and practices Inform and build awareness Build industry standards across FinTech sub-sectors Build FinTech technical enablers
Driving a harmonised regulatory agenda	Adopt smart policy design and implementation practices Design and implement balanced and proportionate policies and regulations Promote alternative regulatory instruments
Cryptocurrencies, virtual financial assets and ICOs	Build FinTech policy enablers Build FinTech technical enablers
Accelerating investments in FinTechs	Stimulate domestic investment landscape



Recommendation	NFS Initiative
	Diversify funding landscape Develop scalable investment ready FinTech firms
Directory Services	Establish a regional financial centre/hub Track FinTech ecosystem performance
Capacity Building	Build FinTech talent Build “smart regulators” Enhance Employability Skills
Engagement with FinTechs	Build industry linkages

Table 5: Aligning SEC implementation roadmap

13.2. ACHIEVING FINANCIAL INCLUSION

Inclusive growth is at the core of this strategy that seeks to address Nigeria's societal and developmental challenges like financial inclusion. The strategic objectives of ecosystem development and governance seek to address the systemic gaps in the fintech ecosystem to support the vision “to be the leading inclusive fintech ecosystem operating out of Africa” and promote inclusive fintech. Thus, enabling fintech in Nigeria will require a governance environment that catalyses the entrepreneurial and technological capabilities of Nigerian digital natives whilst structuring the fintech ecosystem.

Achieving 95% financial inclusion by 2024 requires shifts in the assumptions from the consumer, operator and regulator perspectives.

Consumers: to trust formal financial services providers and the system

Operators: to understand the value in serving

the underserved and adopt their business models and propositions to meet the needs of diverse customer segments, especially as it relates to the trust multipliers like consumer protection.

Regulators: to recognise the dynamism of technological advancements, and through diverse regulatory instruments, support the development and use of innovative digital technologies whilst safeguarding the financial ecosystem.



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15. APPENDICES

15.1 Fintech Regulatory/ Policy Landscape (2011 - 2021)

	< 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 >
Cashless Policy	National Financial Inclusion Strategy	FSS 2020	BVN Policy	National Financial Inclusion Governance Committees	Switching Guidelines	Revised Guideline on Banc-assurance	Payment Service Banks	NDPR	PSB review	Open-Banking	
VAS Framework	Three-Tiered KYC	Card Issuance Guidelines	Capital Masterplan	Non-interest Masterplan	EFT & Bill Payment Regulation	Financial Services Standard Blueprint	Financial Services IT	New Licence Categorisation	Regulatory Sandbox		
FIS Secretariat	Agent Banking	Collateral Registry	Market Masterplan	Electronic Payment Guidelines	State Steering Committees	Fintech Roadmap Committee	Fintech Roadmap Committee	Micro-Insurance Window	Crowdfunding rules		
CBN NAICOM SEC NCC OTHERS	Revised MFB Guidelines	Micro-insurance Guidelines	Revised Guidelines on the Electronic Payments of Salaries, Pensions, Suppliers and Taxes in Nigeria	Capital Market Literacy Masterplan	Capital Market Financial Inclusion	Revised NFIS	Nigerian Capital Market	Virtual Financial Assets Committee	Release of Regulatory Incubation Guidelines	Digital Sub-Broker Rules	
	Stored Value/ Prepaid Card Issuance Guidelines	Guidelines for Takatul-Insurance Operators	E-Dividend management system	Draft Guidelines on Non-Interest (Islamic) MFBS	SANEF Strategy	Micro-pension Guideline	Micro-pension Guideline	Review of MFB	Statement On Digital Assets and Their Classification And Treatment	Robo-Advisory Rules	
	National Financial Literacy Framework	Revised Guide to Charges	Financial Inclusion Desk	Micro-insurance Operations	Payment System Management Committee	Blockchain & Virtual Financial Assets Market-wide Committee	USSD Framework	Regulatory Incubation			
			Dematerialization of share certificates	Pass-Through Deposit Insurance Scheme							
			Direct Settlement	Cash	Consumer Protection Framework						



15.2. Participating Organisations

Category	Organisation
Ministries	Ministry of Communication & Digital Economy (MC&DE)
Financial Services Regulators	Central Bank of Nigeria (CBN)
	Securities and Exchange Commission (SEC)
	National Insurance Commission (NAICOM)
	National Pension Commission (PENCOM)
Other Regulators	Federal Competition and Consumer Protection Commission (FCCPC)
	National Information Technology Development Agency (NITDA)
	Nigeria Communications Commission (NCC)
	National Identity Management Commission (NIMC)
Market Enablers	Nigeria Interbank Settlement System (NIBSS)
	Interswitch Limited
	Shared Agent Network Expansion Facility (SANEF)
Industry Associations (representing market actors)	Committee of e-Business Industry Heads (CeBIH)
	FinTechs Association of Nigeria
	Association of Licensed Mobile Payment Operators (ALMPO)
	Association of Licensed Telecommunications Operators of Nigeria (ALTON)
Others	Co-Creation Hub Nigeria
	Enhancing Financial Innovation & Access (EFInA)
	Alliance For Financial Inclusion (AFI)

15.3. ENAIRA INTRODUCTION & USE CASES

The eNaira is a Central Bank Digital Currency (CBDC), a new form of sovereign (fiat) digital currency issued by the Central Bank of Nigeria is the e-Naira. It is the digital form of the Naira and is used just like cash [21]. The eNaira was launched in October 2021 to facilitate micro-payments on a low-cost platform with reduced risks and catalyse the payments stack of the

digital economy.

The eNaira is a retail CBDC that modifies the conventional two-tier monetary system by making central bank digital money available to the public, just as cash is available to the public as a direct claim on the central bank [22]. Hence, the CBN issues and stores the eNaira and distributes the CBDC to financial institution and licensed service providers who provide the services (wallets) to



individuals and businesses (merchants). Individuals and businesses transfer value in real time via payment channels (e.g., mobile) [23]. eNaira value stored in digital wallets and can be used for payment transactions; and transferred digitally and at virtually no cost to anyone in the world with an eNaira wallet⁹.

Blockchain technology or distributed ledger technology (DLT), also used by cryptocurrencies like Bitcoin or Ethereum, is the foundational technology of the eNaira. In Nigeria, the eNaira objectives include monetary policy effectiveness, financial inclusion, payments and remittances efficiency (domestic and cross-border) and government payments. Given the eNaira objectives, use cases to drive adoption must have a good-market fit.

The following paragraphs summarises eNaira use case proposals.

Remittances and retail payments: as a digital currency, the eNaira is not subject to cash flow problems and delays in payments and is highly interoperable and can thus facilitate faster payments and remittances, eliminating the need for multi-step settlement processes. In addition, the eNaira can potentially improve efficiency and generate savings by reducing the reliance on cash and coins and redirect the biophysical and human resources currently devoted to maintaining those systems [24].

Financial inclusion: In addition to barriers

like distribution, trust in financial institutions has limited the adoption of financial services, with cash remaining the preferred alternative. Despite the availability of mobile money as a driver of financial inclusion, distribution (access to agents) and the conversions costs and efforts borne by participants at agent points where fiat money becomes digital, and vice versa¹⁰ still limit widespread adoption. The eNaira, an interoperable digital currency issued and authorised by the central bank, addresses these issues as conversion and intermediation costs become minimal or non-existent, thus reducing the cost of financial inclusion. However, making the eNaira, the de facto payment instrument will require widespread advocacy, enablement of the tiered KYC structure and offline capabilities and other mobile protocols like USSD.

Government Payments: The central bank can use a pre-programmed eNaira to pay intended beneficiaries on the social register, which could be accepted only for a specific purpose and at specifically authorised locations. This use case will ensure the proper use of social funds, ensure high-quality data can be collected on the performance of these programs, and help to prevent leakage or diversion of funds. This capability could be extended to other use cases in financial services and related ecosystems, where there exists a priority to maintain the integrity of funds and the purpose for which it is used.

⁹ <https://www.imf.org/en/News/Articles/2021/11/15/na111621-five-observations-on-nigerias-central-bank-digital-currency>

¹⁰ Also known as cash-in, cash-out (CICO)



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