

LAGOS INNOVATION MASTER PLAN

INNOVATION AND TECHNOLOGY FRAMEWORK
FOR LAGOS SMART CITY



Lagos State Government



INTRODUCTION

The Governor's Vision

Economically vibrant cities are characterized by a culture of problem solving that encourages an innovation ethos. It is our intention to make Lagos State a 21st century economy that works and delivers on higher standards of living for all its citizens. True wealth must be evident in the quality of life of citizens.

To achieve this vision, it is imperative to facilitate a world-class innovation and technology ecosystem that drives Lagos State into its potential as the most dynamic and technically advanced economy in Africa.

This means a mutually beneficial symbiosis between Government and the technology private sector that unlocks critical value, bringing all hands (private sector, funders, tech talent, other stakeholders and resources persons) on deck.

We are committed to co-creating a safe, healthy, economically vibrant, green and sustainable city, predominantly driven by existing and new types of technology developed locally. In addition to the fact that innovation allows organizations to stay relevant in the competitive market, it also plays an important role in economic growth.

The ability to resolve critical problems depends on our ability to encourage and turbocharge innovation in Lagos. No one but us in Lagos with the mutual goal of taking this state to the next level can achieve this. We are thoroughly committed and determined to achieve thus.

Babajide Sanwo-Olu
Governor of Lagos State



The Vision of Innovation

This Innovation Masterplan contains a vision of innovation in the near future. This vision takes into account societal, as well as economic and technological trends.

The purpose of this vision is to serve as a practical framework in which citizens can develop new ideas for their future innovations. The speed at which technology – with all resulting trends – appears and evolves is so high that we are truly under pressure. Innovation is not easy to manage, nor is it easy to implement and effective innovation doesn't happen by accident. This Master Plan focuses on the 4 critical performance areas that are essential to the success of every innovation practice, and provides a sound and proven basis for sustained innovation improvement.

- Talent
- Access
- Funding
- Infrastructure

Each component has different trend flows and each trend flow presents several models with different levels of impact. These models provide a specific description of what the implications could be to the state, when taking into account its context and the level of ambition present. The plan would enable Lagos State to align its strategy with innovation investments and create a culture of innovation throughout the state. I trust this plan can help us to expand our horizons and, above all, that it will give us an opportunity to discover lots of practical ideas.

Mr. Hakeem Popoola FAHM
Honorable Commissioner
for Science and Technology



The Mission of Innovation

Nigeria and by extension, Lagos State is faced with a myriad of challenges, ranging from low living standards to stunted human capital development.

To solve the intractable challenges faced by our nation and our state, a mutually beneficial symbiosis between public administration and the innovation and solutions ecosystem must exist.

Public institutions must identify and turbocharge the levers that allow the local innovators and problem solvers proffer innovative solutions. This administration is committed to unlocking value by enabling the solutions ecosystem create value.

Innovation and Technology are enablers that raise the standard of living, deliver vibrant economies, increase efficiency levels and make industrial activities more climate friendly. This Administration is intentional about building the long-term future of this State by investing in Science, Education and Research.

With enabling policies such as the Lagos State Science and Research Act, a significant portion of Lagos State's budget has been dedicated to solve issues of national significance through research and development. This signals the Government's readiness to unlock the potential wealth hidden in our nascent solution industry.

Recognizing that collaboration and network-building are key to meaningful innovation and creativity, our doors are open to partnerships.

We invite you to partner with us as we unlock and turbocharge the key drivers to innovation and deliver a more productive, efficient and sustainable state.

Olatunbosun Alake
Special Adviser on Innovation
And Technology to the Governor



GOVERNANCE STRUCTURE

Governing board

- Governor

Execution

- Office of Innovation and Technology
- Ministry of Science and Tech
- Office of Transformation, Creativity and Innovation
- Ministry of Education
- Lagos State Employment Trust Fund

Monitoring

- Governor's Office
- Private Institutions
- NGO foundations



FRAMEWORK PILLARS



Access



Talent



Infrastructure



Funding





Access

Overview:

Accessibility to data or to markets is a key innovation enabler that drives the development of the industry. To turbo charge the innovation ecosystem, this administration intends to enable access in different dimensions to grow and catalyze locally developed solutions to solve the civic challenges and create new pots on wealth in the State.

Data Access

Strategy Thrusts

Open Government: The Open Government initiative intends to provide relevant and useful information to the public. The concentration of this initiative will be the provision of an open platform where users can search through provided data categories and data sets. The intending objectives of this project include

- Provision of Information to the public on critical government areas to heighten citizen participation
- Government data repository for solution providers for more fit for purpose, product and services.
- Inform critical stakeholders for more effective and efficient decision making.

Connect Government: Subsequent phases of the Open Government project will also feature the connect government initiative. This will feature a centralized application programming interface on-top-of which multiple connected civic applications can be built using a standardized library of tools.

Market Access

Overview: Accessibility to markets catalyze growth for the solutions industry. This administration believes in helping facilitate or creating the markets needed for the Innovation ecosystem to grow and reach efficient sustainability levels.

Strategy Thrusts

Utilize Locale: This administration intends to increase the level of locally developed software solutions in its operations. This creates the market for local software developers and solution providers. The Government has taken the initiative by launching the **Lagos State Solutions Hub**. This democratizes Access to the relevant state actors that are required to evaluate locally engineered solutions for possible adoption.

Access

Connect Locale: In opening up the market for locally used software and technical solutions, the administration intends to facilitate useful networks for startups and other technical providers. Structuring and turbocharging the innovation ecosystem will enable startups connect with the right funders and the right market points for utilization of their solutions. Ongoing programs like Lagos Innovates from the Lagos State Employment Trust Fund.

Equipment Access

Strategy Thrusts

Marker Space: Partnering with local maker and engineering institutions, the administration intends to encourage the growth and proliferation of Maker Space programs. These programs and facilities serve as sandboxes where engineers and inventors can ideate, render and prototype their products very quickly. This enables quick iteration through the product management value chain. This will be a public sector supported but privately managed initiative.

Secondments: Startup secondments with established industrials is a program this administration is currently ideating. The objective is to deliver quick expertise transfer to startups that need to ramp up and deliver on critical milestones. The intention is that this will be a program managed by the private sector institutions.

Implementation Enablers

- Executive Orders
- Public Data Policy Lagos States
- Lagos State Science and Research Policy
- Local content policy

Implementation Responsibility

- Office of Innovation and Technology
- Ministry of Science and Technology
- Office of Transformation, Creativity and Innovation Lagos State Government
- Ministry of Economic Planning and Budget
- Partner Private Sector Institutions and Organizations





Access

Equipment Access Strategy Thrusts

Performance Evaluation Metrics

- Miles of fibre optic cables deployed
- Nodes and read connected
- Number of fit for purpose applications developed using open access platform
- % increase in participatory government
- Increase in Government trust and accountability

FRAMEWORK
PILLARS





Talent

Overview:

Which Lagos State boasting one of the highest literacy rates in the nation at 92%, significant challenges still remain in preparing young people for the future of work. The availability and employability of talent for the future economy remains a significant challenge. Lagos State intends to enable various nodes of the talent pipeline for the development of the Innovation ecosystem.

Employability

Strategy Thrusts

Market Connect Program: There exists significant capacity within the private sector to train and equip young people towards a future in industry and technology. This administration will support institutions that effectively assess market demands and customize their curriculums to the effective market need. An end to end program of market assessment, training and job matching will be developed to reduce un-utilized training outcomes and consequently increase the effectiveness of training programs. This administration led by the Ministry of Education, Science and Technology and the Office of Innovation will together with private sector players help increase employability levels in the training and education space.

Developers Academy

Strategy Thrusts

The Open Source Government Framework: As the need for efficiency and optimal operations rise, governments and private institutions alike require a steady stream of solutions that address the myriad of challenges within and without the public sphere. Additionally, the government is obligated to raise the level of expertise in various fields of operations. The Open Source Framework strives to deliver on the aforementioned fronts. A localized framework environment where governments needs are being addressed through the build of different open source solutions; and a development space where developers can hone their skills by working on complex projects for the administration.

FRAMEWORK
PILLARS



FRAMEWORK PILLARS

Talent

Knowledge Transfer

Strategy Thrusts

Secondments: The Secondment program will feature knowledge workers placed in specific and critical projects across the state, training programs from technology and engineering companies and succession blueprints for companies that enable knowledge transfers in critical sectors of the economy. This is a critical area for the administration. This is currently being ideated.

Implementation Enablers

- Incentive programs for Talent in Government
- Benchmarking Code for Job and Career Matching.
- Curriculum Change or Updates

Implementation responsibility

- Lagos States Employment Trust Fund
- Ministry of Education
- Office of Innovation and Technology
- Innovation Incubators
- Innovation Support Network
- Private Sector Corporations
- Office of Transformation Creativity and Innovation

Performance Evaluation Metrics

- Percentage increase in employability levels
- Number of new Tech companies registered
- Percentage increase in senior level developers





Infrastructure

Overview:

Lagos' infrastructure goal include providing robust communication infrastructure and architecture that allows seamless communication across the state, deploying infrastructure that reduces costs of build for other private infrastructure providers and partnering with the private sector to build primary and secondary infrastructure to deliver superior access to consumers.

Internet Infrastructure

Strategy Thrusts

The Metro Fibre-Optic Initiative: Considerable work has gone into the ring infrastructure of Lagos. This administration plans to deploy over 6000km of metro fibre ducts and cables throughout the state.

The objectives of this project include;

- Increase Fibre tele-density within the state for higher communication outcomes.

- Decrease the infrastructure developed deployment costs for private sector players in the space.

- Open up new areas to new investment and development

- Enable growth of the Innovation and Solution ecosystem.

This is a Marquee initiative for the state that is believed will reap accumulates benefits for the solutions and innovation ecosystem.

Public Wi-Fi Projects: The state is and will continue to invest in public Wi-Fi project while incentivizing the private sector to invest in internet enabled spaces

FRAMEWORK
PILLARS



Infrastructure

Technology Zoning/Districts

Strategy Thrusts

The Digital Tech City: This is a blueprint for the tech zone that will feature a technology sector providing specialized office spaces, innovation hubs, housing units for players in the technology sector. Similar programs in other metropolitan cities have reaped industrial growth in such zones. This will enable the pooling of resources and focus of international players into the zone.

Infrastructure Incentives for Private Sector Players: This is currently being ideated.

Implementation Enablers

- Lagos States Infrastructure Deployments Framework
- Physical Planning Law
- Government Intervention and Executive Orders

Implementation Responsibility

- Ministry of Science and Technology
- Office of Innovation and Technology
- Lagos State Infrastructure Maintenance and Regulatory Agency
- Lagos State Employment Trust Fund
- Private Infrastructure Companies
- Ministry of Energy

Performance Evaluation Metrics

- % increase in prototyping
- Number of Homes passed by Fibre optic infrastructure



FRAMEWORK
PILLARS



FRAMEWORK PILLARS



Funding

Overview:

Educating the public and the international community about the innovation ecosystem and highlighting as well as underscoring the success stories we've had will build will contribute to helping the growth of patient capital by helping to guarantee or leading in funding key initiatives.

Impact Investments Capital

Strategy Thrusts

Research Grants: Funding for innovation is seen as a critical tenet of the THEMES agenda of this administration. As such research and development grants are seen as critical programs and interventions to be distributed through research institutions and innovation centers with identifiable outcome pursuits that address critical civic areas such as Health Technology, Green Energy, IOT, Smart City research and other areas.

Network Catalyst Programs: Local knowledge of the solutions industry in the commercial and money markets in Nigeria are at critically low levels. It is the intention of this administration to support Investment initiatives by the private sector to enable a proliferation of the local innovation industry at these levels. These Network catalyst programs will help connect the funding needed for continued growth in the industry.



FRAMEWORK PILLARS

Funding

Patient & Low Rate Loans

Strategy Thrust

Partnership Programs: Pooling resources between states, federal are bonafide funding platforms for the increase of critically needed capital for the growth of the industry. The administration will partner with the relevant stakeholders and international financiers for the actualization of increased funding in this space. The Lagos State Employment Trust Fund currently implements through the Lagos Innovation program a low rate loan program for hubs and startups which can be increased with defined outcomes and milestones.

Implementation Enablers

- Better Macro-Economic Environment.
- Government guarantees
- Data Availability and Accessibility

Implementation Responsibility

- Lagos State Science Research and Innovation Council
- Lagos State Employment Trust Fund
- Institutional Investors
- Office of Innovation and Technology
- Ministry of Science and Technology
- Bank of Industry
- International Research Funds/Grants

Performance Evaluation Metrics

- % of Patent Application Increase
- Number of Inventions funded
- Number of Successful startups funded
- Increase in new funding Avenues





We intend to make Lagos State a 21st century city, delivering high living standard for all its citizens. This demands a world-class innovation and technology ecosystem and would entail a symbiosis between Government and the private sector. This Master Plan outlines our commitment to this **vision**.

- Babajide Sanwo-Olu, Governor of Lagos State

Our **mission** is to deliver a more productive, efficient and sustainable state by investing in science, education and research, as well as promoting public policies that will support this vision which will be powered by local innovators and problem solvers.

- Olatubosun Alake, Special Adviser on Innovation and Technology to the Governor

The FIAT Pillars



Access

- Data Access
- Market Access
- Equipment Access



Talent

- Data Access
- Market Access
- Equipment Access



Infrastructure

- Internet Infrastructure
- Technology Zoning District



Funding

- Impact Investment Capital
- Patient and Low Rate Loans

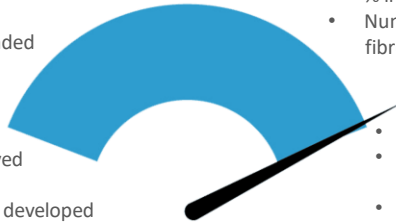
GUIDING POLICIES



PERFORMANCE METRICS



- % increase in patent application
- Number of inventions funded
- Number of successful startups funded
- Increased new funding avenues



- % increase in prototyping
- Number of homes passed by fibre-optic infrastructure



- Miles of fibre optics cables deployed
- Nodes and reads connected
- Number of open access platforms developed
- % increase in government participation, trust and accountability

- % increase in employment levels
- Number of new tech companies registered
- % levels increase in senior developers



ROADMAP & TIMELINES



GUIDING POLICIES

Lagos State Science , Research
And Innovation Act



PERFORMANCE EVALUATION METRICS



Talent:

- Increase Talent employability levels by 10% by Q1 2021
- Correlating Industry needs with training curricula
- Double High level developer numbers by 2022



Funding:

- Increase research funding by 50% by 2021
- Double Patent applications



Infrastructure:

- LASRIC
- Minimum 3K kilometers Fibre optic cable in 2020
- Minimum 5 - 10% increase in private sector fibre deployment
- Increase in private sector innovation facility provision



Access:

- 10% Govt data available to public by 2020





ROADMAP and TIMELINES

2020 Q1 - Q2

LASRIC Operational

2020 Q3 - Q4

Phase 1 - 3000 km Fibre-
Optic Backbone Laid

2021 Q1 - Q2

Open Government Platform Launch.
Open Government Platform (Phase 2).

2021 Q3 - Q4

Smart City Platform
50,000 Programmers trained

2022 Q1 - Q2

2022 - 2025

- Increase Open Government Initiative to cover most MDAs
- Government Guaranteed funding for Research and Development
- Government - Backed patients capital initiatives
- Open Source Govt. Smart City Platform environment initiative.



NEXT STEPS

Overview:

Overview: This MasterPlan is a live document; this means it will be constantly updated to reflect modifications and will be constantly reviewed as necessary. The masterplan will be available along with more information on; www.lagosinnovationmasterplan.ng



For the first time in the history of Lagos, there was an intellectual engagement between the Government and the Lagos Tech community in a Design-Thinking Parley. The product of this confab is the Innovation Masterplan of Lagos State, which forms the content of this publication.

The Lagos State Innovation Masterplan contains Four Pillars to innovate - Access, Funding, Talent and Infrastructure. These are the key issues faced by the tech community which Lagos State Government will address in order to increase technological penetration in the State. It is believed that addressing these Four (4) areas will accelerate Lagos to becoming a Smart City and as well help build a sustainable tech community in the State.

CREATING A SMART CITY

