Catalysing growth in Nigeria through regional innovation

Opportunities and challenges for developing ICT-led innovation hubs across Nigeria

Abridged Report
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EXECUTIVE SUMMARY

CONTEXT AND METHODOLOGY

The information communication technology (ICT) sector in Nigeria has experienced rapid growth over the past 15 years, yet the development in leveraging ICT has been uneven across different regions in the country. Technology is an integral part of a thriving innovation ecosystem, serving both as an input (e.g., creating access to information and resources) and an output (e.g., new business models, products, and services). In Nigeria, the push for technology adoption varies significantly from one state to the next, driven by disparities in available talent, understanding of innovation, infrastructure, and government priorities.

Innovation hubs can act as a mechanism for infrastructure, and government priorities. In addition to serving as a platform for key actors to network and collaborate, an innovation hub can act as a rallying point for the development of innovation hubs within Nigeria’s regional ecosystems. Our analysis focused on demand, supply, and the enabling environment as drivers of innovation. The regional assessment involved a detailed analysis of select cities within the geopolitical zones, which provide insights on innovation readiness, identifying critical gaps in the innovation ecosystem, and recommending potential roles innovation hubs could play within the ecosystem.

We examined international examples of successful hubs to understand what factors drive success and sustainability and how these lessons could be applied to the setup of innovation hubs within Nigeria’s regional ecosystems. Our analysis focused on demand, supply, and the enabling environment as drivers of innovation. The regional assessment involved a detailed analysis of select cities within the geopolitical zones, which provide insights on innovation readiness, identifying critical gaps in the innovation ecosystem, and recommending potential roles innovation hubs could play within the ecosystem.

This report aims to assess the current innovation ecosystem across Nigeria and recommend design principles for innovation hubs to be developed regionally in the short and medium term. We examined international examples of successful hubs to understand what factors drive success and sustainability and how these lessons could be applied to the setup of innovation hubs within Nigeria’s regional ecosystems. Our analysis focused on demand, supply, and the enabling environment as drivers of innovation. The regional assessment involved a detailed analysis of select cities within the geopolitical zones, which provide insights on innovation readiness, identifying critical gaps in the innovation ecosystem, and recommending potential roles innovation hubs could play within the ecosystem.

The innovation ecosystem. This report aims to assess the current innovation ecosystem across Nigeria and recommend design principles for innovation hubs to be developed regionally in the short and medium term.

The global analysis uncovered several key commonalities across successful innovation hubs. Several key principles emerged as drivers of innovation hubs:

1. Pre-existing market demand is critical to the success of hubs
2. Technology plays a key role within the innovation ecosystem
3. Innovation hubs should be considered enablers of a broader purpose, serving both short- and medium-term goals
4. Stakeholder participation is critical to success

Our assessment revealed three stages of innovation readiness across Nigeria: ready, nascent and pre-innovation. The innovation readiness of the city helps provide insight into how far a city is from organically spurring innovation as well as into how best to support the ecosystem. “Ready” describes environments that are in the implementation phase of creating an innovation hub (e.g., Lagos and Abuja). “Nascent” environments are those in which a discourse on innovation is taking place, but there is not yet sufficient activity or commitment to sustain steady progress towards a functional ecosystem (e.g., Kaduna, Edo). Finally, the “pre-innovation” stage describes environments in which a range of pressing social and economic priorities limit the level of discourse around new ideas (e.g., Adamawa).

RECOMMENDATIONS

Based on our findings, four interventions are key to driving innovation. To catalyze innovation across Nigeria, interventions must:

1. IDENTIFY AND GENERATE DEMAND. Create programs and avenues where private sector demand is pulled to address challenges. Demand side interventions such as an innovation challenge could significantly help innovative products and services (incubated by regional hubs) reach scale.
2. ALIGN INCENTIVES WITH MARKET FAILURES. To further encourage regional innovation, experienced innovation hub operators should be incentivized to set up hubs in new locations across the regions, through programs which provide these operators with detailed information on the local area, access to state government support, tax incentives, etc.
3. ADVOCATE FOR TECH-ENABLED INNOVATION AND CREATE MARKET LINKAGES. Government and technology hubs need to play the role of amplifiers in areas where tech-enabled innovation is thriving. To effective grow private sector demand, government and interested partners have a role to play in amplifying the ongoing work by hubs.
4. PROVIDE LONG-TERM FUNDING FOR INCUBATION PROGRAMS. An incubation program is one of the biggest cost drivers for a hub. The program focuses on developing entrepreneurs, with little or no experience and supporting them from the idea stage through to an actual business. Innovation partners, such as government and donors, should provide long-term funding for incubation programs.

“It is important to acknowledge that for quality innovation to occur, long term commitments will have to be made to strengthen the innovation ecosystem.”
Stakeholder participation is crucial across board. Implementation of these interventions will vary depending on the current state of innovation in the city, but engagement by a broad range of stakeholders—including government, business, civil society, and researchers—is critical to the health of the innovation ecosystem.

For innovation ready cities such as Lagos and Abuja, implementation of initiatives can begin in the short term with all stakeholders. Innovation hub operators can seek to demonstrate the sustainability of the hub model, raise capital to support businesses, and collaborate with other hubs operators to build networks. Private investors and donors, including academia, can identify partner hubs to invest in, either directly or through shared R&D and pipeline development at universities. The Federal Government can spotlight innovation hubs and crowd in investors and donors, including academia, can identify partner hubs to invest in, either directly or through shared R&D and pipeline development at universities. The Federal Government can spotlight innovation hubs and crowd in investors and donors, including academia.

Across nascent-stage cities such as Edo, Kaduna, and Anambra, a long-term view should be taken to drive innovation over a three to five-year span. The private sector can host networking events and hack-a-thons, to connect industry actors. State governments should invest in ICT infrastructure and identify physical assets that can support emerging innovation hubs. Donors can provide linkages to existing programs and emerging ecosystem actors. Donors can sponsor skills development programs, and provide linkages to existing programs and emerging ecosystem actors. The private sector can develop linkages to emerging networks and individuals that are developing solutions relevant to the business. Innovation hub operators can be opportunistic. If hubs emerge, operators can develop linkages to other hubs nationally and use linkages to government and state governments to attract private interest as well as spotlight emerging innovations from hub locations.

Finally, it is important to note that while hubs, if properly designed and maintained, can be powerful cogs in Nigeria’s innovation ecosystem, they are unlikely by themselves to plug all the gaps in the country’s innovation ecosystem.

Technology is an integral part of a thriving innovation ecosystem, serving both as an input (e.g. creating access to information and resources) and an output (e.g. new business models, products and services). The ICT sector in Nigeria has experienced rapid growth over the past 15 years, averaging 31% annual growth between 2009 and 2014 while contributing an average of 11% to GDP annually from 2010 to 2014. Advances in ICT also serve to optimize efficiency in the performance of key sectors including agriculture, education, finance, and health.

Despite the unique role that technology can play in enabling innovation, there has been varied interest and investment across regions in the country. The push for technology adoption varies across the country, driven by reasons such as a lack of talent, lack of understanding of innovation, absence of infrastructure, and competing government priorities. Regions in the country that are relatively advanced, have been propelled by private and individual investments in talent and the infrastructure required to support an ecosystem.

In this context, innovation hubs can act as a mechanism to catalyze regional innovation and job growth. In addition to becoming a platform for key actors to network and collaborate, it can also act as a rallying point for the innovation ecosystem (comprising demand, supply and enabling environment) to develop. This report aims to assess the current innovation ecosystem in Nigeria and recommend design principles for innovation hubs to be developed regionally in the medium to short term.

In response to the need for a sustainable approach to leveraging innovation hubs to spur growth and employment in Nigeria, the Job Creation Unit (JCU), sought to examine the global experience in catalyzing growth through innovation; and assess the prevailing ecosystem for innovation across the country to determine the appropriate role for innovation hubs, and the business and operating models critical to their success. This engagement builds on the development of the JCU’s strategic framework by offering a perspective on the role of innovation, and technology-enabled innovation, as a tool for driving growth across Nigeria’s geopolitical zones.

In support of this initiative, the UK Department for International Development (DFID) through its Policy Development Facility Phase II (PDD II) engaged the services of Dalberg Advisors and Accenture Development Partnerships, to support the Job Creation Unit on this study.

Stakeholder participation is crucial across board. Implementation of these interventions will vary depending on the current state of innovation in the city.

Implementation Considerations and Next Steps

Pre-innovation-stage cities such as Adamawa require consistent ecosystem building over a six-year span. Federal and state governments can invest in ICT infrastructure, host networking events to connect industry actors, and sponsor hack-a-thons and innovation competitions. Donors can sponsor skills development programs, and provide linkages to existing programs and emerging ecosystem actors. The private sector can develop linkages to emerging networks and individuals that are developing solutions relevant to the business. Innovation hub operators can be opportunistic. If hubs emerge, operators can develop linkages to other hubs nationally and use linkages to government and state governments to attract private interest as well as spotlight emerging innovations from hub locations.

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**METHODOLOGY**

Deloitte was tasked with (i) reviewing the global experience at driving growth and innovation in cities and regional contexts, with a specific emphasis on the role of innovation hubs; (ii) conducting a regional diagnostic assessment to understand the potential for technology-driven innovation across Nigeria's six geopolitical zones, by profiling the supporting ecosystem for innovation in a sample of states; and (iii) providing recommendations on business and operating models for regional innovation hubs across the country.

The innovation assessment focused on three primary factors: demand, supply, and the enabling environment. We further divided supply into financing and investment, talent, and research and development (R&D); we also subdivided the enabling environment into policy factors, infrastructure factors, and network factors.

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**KEY FINDINGS FROM GLOBAL INNOVATION HUBS**

We identified four underlining principles that guide the success and impact of innovation hubs globally:

1. **Pre-existing market demand is critical to the success of hubs.** Although a thriving innovation ecosystem may yield solutions beyond what is expected, hubs should actively start with the question of where demand exists.
2. **Technology plays a key role within the innovation ecosystem, both as an input and output.** It is not, however, sufficient in and of itself. R&D, finance, infrastructure and talent are also critical.
3. **Innovation hubs should be considered enablers of a broader purpose, serving both short and medium-term development goals, e.g., job creation, increased access to infrastructure.**
4. **Stakeholder participation is critical to success.** It is essential to engage key stakeholders so they understand that a thriving innovation ecosystem will create value for the public, private, and social sectors alike.

These four principles revealed key lessons for the development of innovation hubs in Nigeria:

- Clearly establish the intended outcomes of the hub
- Partner to deliver programs and build the ecosystem
- Plan for sustainability from the outset with multiple commercial models
- Design the hub for proximity and human interaction
- Develop innovation hubs bearing in mind they are not a panacea
- Use policy levers to create a conducive environment for innovation

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**APPRAOCH AND METHODOLOGY TO THE STUDY**

1. Global innovation studies
   - Global innovation hub selection
   - Regional innovation hub selection
2. Regional diagnostic across Nigeria
   - INNOVATION ECOSYSTEM FRAMEWORK
     - Understanding the demand and supporting environment for, and the drivers of, innovation
   - BUSINESS MODEL CANVAS
     - Understanding the key business model elements of each selected innovation hub
3. Implications for design of regional hubs across Nigeria
   - High-level innovation hub archetypes
   - Implications of diagnostics
   - Recommendations and imperatives

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* Work was undertaken with support from Accenture Development Partnerships, who developed innovation case studies to understand the global models that might work in Nigeria.
RECOMMENDATIONS

Beyond individual hubs, targeted and broad-based interventions are required to spur regional innovation in the short and long term. We identified four imperatives for key stakeholders:

1. Identify and generate demand. Create programs and avenues where private sector demand is pulled to address challenges. Innovation hubs need strong inputs from both the demand and supply sides to provide meaningful output while remaining sustainable. A demand-side intervention such as an annual innovation challenge could significantly help innovative products and services (incubated by regional hubs) achieve scale.

2. Align incentives with market failures. Encourage existing innovation hub operators to move to new locations and spur regional innovation. As the innovation ecosystem has grown recently, there has been stronger appreciation for talent and innovation residing outside the epicenter of Lagos. To further encourage regional innovation, experienced innovation hub operators should be incentivized to set up hubs in new locations across the country.

3. Advocate for tech-enabled innovation and create market linkages. Government and technology hubs need to play the role of amplifiers in areas where tech-enabled innovation is thriving, to publicize ongoing activities and grow interest from High Net Worth Individuals in start-up investments. Effective private sector demand and financing are closely linked, and have the potential to transform the local landscape.

4. Provide long-term funding for incubation programs. Innovation partners, such as government and donors, should provide long-term funding for incubation programs. This funding should be provided directly to support the incubation programs that innovation hubs undertake. Hubs will be selected after a screening process; funding can be directed towards specific sectors.

ROLE OF PARTNERS

Broadly, stakeholders can help to support these imperatives by playing a number of roles across the three innovation stages.

- **HUB OPERATORS** in pre-innovation environments can develop linkages to other hubs nationally and use linkages to federal and state governments to attract private interest. At the nascent phase, operators can develop an incubation program, through grants and private capital, with links to mature companies. In a ready environment, hub operators can share challenges with other hub operators and collaborate on solutions, as well as raise capital to support businesses.

- **The PRIVATE SECTOR** in a pre-innovation environment can develop linkages to emerging networks and to individuals that are developing solutions relevant to the business. In a nascent innovation environment, private sector actors can host networking events, hack-a-thons, or innovation competitions to connect industry actors. When the environment is ready, the private sector can develop relationships with innovation hubs linked to existing products/services, supply chain challenges, HR/personnel issues, etc.

- **DONORS** can develop or sponsor skills development programs focused on human/social development challenges in pre-innovation environments. In a nascent environment, donors can focus on skills development programs that may feed into innovation hubs. In ready environments, they can provide R&D and market intelligence investments to help de-risk early-stage investments.

- **AMPLIFIERS** harness existing entrepreneurship and amplify its impact and reach. This role is most critical when innovation is happening organically and but requires branding to reach the next level. Government, the business community, development partners, and research institutions can all play this role.

- **Catalysts** provide the initial spark, drive, and infrastructure for innovation activity. Catalysts are needed when initial investment is required to kick-start the ecosystem and put the country on the map. Government, the business community, development partners, and research institutions can all play this role.

- **A DRIVER** will take the lead role in growing, funding, and supporting innovation. This role is most needed when continued investment is required to maintain momentum. Government and the business community can best play this role.

- **ORCHESTRATORS** bring together and coordinate innovation activities. This is only relevant when elements of the innovation ecosystem exist but are in need of coordination to reach their full potential. Government, businesses, and development partners can all play this role.

- **Enablers** create an economic and policy environment conducive to innovation. Enablers are most effective when the challenges to stimulating and creating an effective environment for innovation can be met by changes to policy at the national or local level. Government is best positioned to act as an enabler.

Furthermore, **STAKEHOLDERS** can take on various generic roles depending on ecosystem needs and capabilities—including that of amplifier, catalyst, driver, orchestrator, and enabler.
For innovation ready cities such as Lagos and Abuja, implementation of initiatives can begin in the short term with all stakeholders. Innovation hub operators can demonstrate whether or not the innovation hub model is sustainable, raise capital to support businesses, share challenges with other hub operators and collaborate on solutions, and identify market demand for tech-enabled innovation, either within industry and government or across sectors (i.e., health, education, agriculture, energy access, finance).

Private investors, including academia, can (i) develop relationships with innovation hubs linked to existing products/services, supply chain challenges, HR/personnel issues, etc., and (ii) identify partner hubs to invest in, either directly into businesses launching from the hubs, or through sharing R&D and pipeline development at universities. The Federal Government (Ministry of the FCT) can spotlight innovation hubs and crowd in support from donors and private investors, identify physical assets in FCT—particularly land—and ensure that the emerging physical locations for the innovation center can be expanded, invest in ICT infrastructure nationally, revisit education curriculum to support innovation, and catalyze/invest in privately managed financing vehicles to support innovation.

Across nascent-stage cities such as Edo, Kaduna, and Anambra, key activities are required to drive innovation over a three-year span. The private sector can host networking events, hack-a-thons, and innovation competitions to connect industry actors. State governments can also host networking events, hack-a-thons, innovation competitions to connect industry actors. In addition, they can invest in ICT infrastructure and identify physical assets that can support emerging innovation hubs. The Federal Government can invest in ICT infrastructure nationally, revisit education curriculum to support innovation, and catalyze/invest in privately managed financing vehicles to support innovation.

Donors can provide linkages to existing programs and emerging ecosystem actors, invest in/ support infrastructure development for the innovation ecosystem, and develop/sponsor skills development programs focused on human/social development challenges that may feed into innovation hubs (if they emerge). Finally, after three or more years, innovation hub operators can develop an incubation program through grants and private capital with links to mature companies. They can also develop an attractive space for knowledge workers and continue to facilitate connections across ecosystem actors, including industry, academia, and the public sector.

Pre-innovation-stage cities such as Adamawa require consistent ecosystem building over a six-year span. State governments can invest in ICT infrastructure, host networking events to connect industry actors, and sponsor hack-a-thons and innovation competitions—with a particular focus on addressing the shocks and stresses facing the state, e.g., natural disasters, flooding, ethno-religious conflicts, poverty, etc.

Donors can develop/sponsor skills development programs focused on human/social development challenges, provide linkages to existing programs and emerging ecosystem actors, and invest in/ support infrastructure development for the innovation ecosystem. The Federal Government can invest in ICT infrastructure nationally and revisit education curriculum to support innovation. The private sector can develop linkages to emerging networks and individuals that are developing solutions relevant to the business. Innovation hub operators can be opportunistic if hubs emerge, operators can develop linkages to other hubs nationally and use linkages to government and state governments to attract private interest as well as spotlight emerging innovations from hub locations.
Particularly at pre-innovation and nascent stages, hub operators have three key considerations in developing appropriate business models.

First, when focused on developmental objectives or responding to market failures, innovation hubs will need to look beyond commercial capital (towards government or donors) in order to achieve sustainability. Given the significant expense of incubation and training programs, funding will need to be provided to support startups and grow the ecosystem; revenue streams are unlikely to meet this cost base and therefore external funding in the form of grants from donors, private organizations, and possibly government sources will be required.

Second, designing a hub for commercial sustainability is heavily dependent on market demand, the vision of the owners, and their available resources (i.e., grants and personal funds). To drive sustainability, a hub must carefully hone its business plan to its primary source of income, if designed for commercial sustainability, or to securing grants for achieving social impact.

Finally, significant support is often required to aid the growth of the hub in its first years of operation, particularly as market demand becomes aligned with the hub’s offering. Across various scenarios analysed, the upfront and running costs are not covered by revenues until Year 4 and onward. Early revenue streams to innovation hubs are low, with long-term investments (in businesses) not normally yielding return for many years.
<table>
<thead>
<tr>
<th>STATE</th>
<th>CURRENT ECOSYSTEM</th>
<th>REQUIREMENTS TO UNLOCK INNOVATION</th>
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<tbody>
<tr>
<td><strong>PLATEAU</strong></td>
<td></td>
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<tr>
<td><strong>Demand</strong></td>
<td>The State government has plans to develop a fully functional technology park by 2023, however there is limited public information about the specific actions that will be taken to realize this vision.</td>
<td><strong>Requirement to Unlock Innovation</strong></td>
</tr>
<tr>
<td><strong>Supply</strong></td>
<td>Through the Plateau State Microfinance Agency, over NGN 500m in loans have been disbursed to date to MSMEs, though unclear if the agency is able to extend funding to startups.</td>
<td>Identify and groom sources of private sector demand.</td>
</tr>
<tr>
<td><strong>Enabling Environment</strong></td>
<td>The state is in the final stages of formalizing the creation of the Plateau State Information and Communication Development Agency (PICTDA) through its ICT Policy.</td>
<td>Improve access to digital skills training and business incubation services for the large student communities.</td>
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<td><strong>ADAMAWA</strong></td>
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<tr>
<td><strong>Demand</strong></td>
<td>Having a largely informal private sector, the local private sector is not a credible source of demand for innovation.</td>
<td>Identify and align with sources of donor funding.</td>
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<td><strong>Supply</strong></td>
<td>The American University of Nigeria (AUN) and Modibbo Adama University of Technology (MAUTECH) are institutions supporting R&amp;D in grooming innovation in the state.</td>
<td>Government must be a willing first purchaser of technology solutions.</td>
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<td><strong>Enabling Environment</strong></td>
<td>Though a network for tech innovation is yet to emerge, AUN with co-funders in Silicon Valley plan to establish a Startup incubator on campus. The incubator will target innovation in agriculture, minerals, ICT, entertainment, and manufacturing.</td>
<td>Foster collaboration between the key universities to further drive applied research capabilities and leverage synergies.</td>
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<td><strong>ANAMBRA</strong></td>
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<tr>
<td><strong>Demand</strong></td>
<td>The State demand for ICT is focused on innovations that improve e-Governance. The State has two core digital platforms in place - Youth Connect and Government to Citizen.</td>
<td>Identify and embrace sources of private sector demand, specifically in agriculture, tourism, power and mining with the emerging direction of the State’s economy.</td>
</tr>
<tr>
<td><strong>Supply</strong></td>
<td>Anambra Small Business Agency supports startups and SMEs and has disbursed NGN 1.5 billion in loans in 2016.</td>
<td>Promote youth engagement in tech activities through academic institutions, to develop a talent pool willing to solve challenges.</td>
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<tr>
<td><strong>Enabling Environment</strong></td>
<td>Anambra State Investment Promotion and Protection Agency, has attracted over USD 2 billion of investment in energy, agriculture, and construction deals among others.</td>
<td>Promote alignment and coordination between government policies and regulations which are geared towards building a resilient and effervescent tech community.</td>
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<tr>
<td><strong>EDO</strong></td>
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<td><strong>Demand</strong></td>
<td>Edo State has developed an Agrihub program, which aims to use technology to improve agricultural yield. The main GDP driver in Edo State is agriculture. The state also has a focus on tourism and hospitality.</td>
<td>Identify and embrace sources of private sector demand.</td>
</tr>
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<td><strong>Supply</strong></td>
<td>Edo State ICT Agency has undertaken training programs the previous governor and has trained over 900 private citizens in Cisco, Microsoft, Oracle, biometric and tech enabled skills.</td>
<td>Promote youth engagement in tech activities through academic institutions, to develop a talent pool willing to solve challenges.</td>
</tr>
<tr>
<td><strong>Enabling Environment</strong></td>
<td>There are currently no private technology hubs operating in the state, though actors such as Sabi Hub, a private virtual hub are active.</td>
<td>Promote alignment and coordination between government policies and regulations which are geared towards building a resilient and effervescent tech community.</td>
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**The Innovation Ecosystems in Plateau and Adamawa are yet to develop to a state capable of supporting innovation.**

**Innovation Ecosystems in Anambra and Edo are still developing, and require sustained investments to encourage innovation.**
KADUNA AND OSUN NEED TO LEVERAGE THE UNIQUE AND POTENTIALLY STRONG TALENT BASE, TO CATALYSE INNOVATION ACROSS THE STATES

KADUNA

CURRENT ECOSYSTEM

Demand
• Several e-governance projects create demand for tech innovations – the Eyes and Ears Project dashboard provides an easy way for government to monitor over 1,400 projects

Supply
• Kaduna is one of the education centers in Nigeria. There is limited evidence that faculty research projects are linked to market needs

Enabling Environment
• CoLab hub brings together government representatives and aspiring innovators at regular events
• The government has also developed an ICT hub in partnership with local and international investors

REQUIREMENTS TO UNLOCK INNOVATION

Demand
• Investment promotion efforts aimed at stimulating growth need to be leveraged to spur innovation

Supply
• Basic and applied R&D assets currently under-optimized across the State need to be strengthened and aligned towards the flow of private investment and/or sustained government demand

Enabling Environment
• Increase opportunities for networking and co-generation of ideas amongst the diverse higher institutions in the State

OSUN

CURRENT ECOSYSTEM

Demand
• Under a PPP with RLG the Adulawo Technology City assembly plant was established to manufacture tech devices
• The Ooni of Ife has also signed a USD 1.4 billion Memorandum of Understanding (MoU) with Sprintport Technology Group to build a technology, media and agriculture incubation hub in the state

Supply
• Students at Obafemi Awolowo University have a strong talent pool and appetite for software development
• The Osun Youth Empowerment Scheme has provided training to 5,000 youth in ICT and hardware repairs

Enabling Environment
• There are no innovation hubs, but there are various tech based groups which include the Google Developers Group and the iLab which is linked to the Massachusetts Institute of Technology

REQUIREMENTS TO UNLOCK INNOVATION

Demand
• Encourage private companies to establish residence in the state to promote private sector demand for innovation

Supply
• Harness the potential of the academic institutions, to develop market led tech solutions, and spur growth in the economy

Enabling Environment
• Ensure effective alignment between several government policies geared towards building a resilient and effervescent tech community

CROSS RIVER

CURRENT ECOSYSTEM

Demand
• Cross River State has numerous smart governance initiatives such as – smart city agenda, which aims to move drive government administration via tech and ICT
• The state entered into a PPP with Huawei (OEM) and MTN Nigeria Limited to develop public wifi connection across the Calabar metropolis

Supply
• On access to finance, there are currently no private or state government funded initiatives designed to provide funding to start-ups in the state. The State government facilitates access to federally funded programs through the Central Bank of Nigeria and the Bank of Industry for start-up support

Enabling Environment
• The State has developed a One Stop Investment Centre (OSIC) to guide investors and reduce waiting times for business processes
• State initiatives include the Tinapa Knowledge City, developing a fiber optic cable network throughout the Calabar metropolis and public wifi in partnership with MTN, which will go live in 2017
• There are no private hubs in the state, and the government-supported hub is non operational. iDEA hub located within the Tinapa Knowledge City faced challenges in attracting foot traffic to the hub given its relatively far distance from the city centre and academic institutions

REQUIREMENTS TO UNLOCK INNOVATION

Demand
• Investment promotion efforts and public procurement aimed at stimulating growth across these economic sectors need to be leveraged to spur activities in the innovation ecosystem

Supply
• Create a viable platform to identify, train and encourage local talent to engage in developing skills that affect the economy in the region
• Leverage state government interest in upskilling efforts, such that a critical mass of technology savvy individuals can emerge to sustain the ecosystem in the state

Enabling Environment
• Develop the networks in the state through engagement of the various stakeholders and promote sustainability of talent growth by providing support mechanisms

CROSS RIVER REQUIRES SUSTAINED EFFORTS TO OVERCOME PAST ERRORS AND SPUR INNOVATION

CURRENT ECOSYSTEM

Demand
• Cross River

Supply
• Several e-governance projects create demand for tech innovations – the Eyes and Ears Project dashboard provides an easy way for government to monitor over 1,400 projects

Enabling Environment
• The Eyes and Ears Project dashboard provides an easy way for government to monitor over 1,400 projects

REQUIREMENTS TO UNLOCK INNOVATION

Demand
• Cross River

Supply
• Cross River

Enabling Environment
• Cross River
LAGOS AND ABUJA HAVE THE MOST ADVANCED INNOVATION ECOSYSTEMS IN THE COUNTRY, WITH RELATIVELY STRONG DEMAND, SUPPLY AND ENABLING ENVIRONMENT

**ABUJA**

**CURRENT ECOSYSTEM**

**Demand**
- Private sector activity in Abuja is evolving, hence private companies with national reach are more likely to generate demand, for now, than locally private industry

**Supply**
- The launch of the Abuja Angels Network in 2016 is indicative of the organic flow of private capital to support innovation
- Most innovation hubs and startups are self-funded, with some external funding through various development partners

**Enabling Environment**
- Abuja ranks as the easiest city to start a business in Nigeria, indicative of a welcoming policy environment for innovators
- There are several innovation hubs operating in the city which include Ventures Platform Hub, Enspire Hub, Stonebricks hub and TD4PAI amongst others

**REQUIREMENTS TO UNLOCK INNOVATION**

**Demand**
- Drive public sector demand through easier procurement laws to reduce the barriers to entry for start-ups

**Supply**
- Develop sustainable sources of financing to build the ecosystem through innovative mechanisms such as angel networks

**Enabling Environment**
- Encourage the flow of information to develop the network and promote collaboration

**LAGOS**

**CURRENT ECOSYSTEM**

**Demand**
- Lagos aims to adopt a host of tech solutions to improve administration in the state. An example is the state’s drive to teach coding to primary school children “Code Lagos”

**Supply**
- Through the Lagos State Employment Trust Fund, the government plans to provide NGN 25 billion support to startups and small businesses
- The Lagos Angel Network aims to provide early-stage, seed funding and mentoring for start-up entrepreneurs, and committed to raise NGN 100 million in 2016

**Enabling Environment**
- There are several hubs operating in the state, which include Co-Creation Hub, IDEA hub, L5LAB, amongst others
- Lagos is regarded as one of the most advanced states in the country in relation to infrastructure

**REQUIREMENTS TO UNLOCK INNOVATION**

**Demand**
- Educate, incentivize and develop the willingness to pay for innovation from the private sector

**Supply**
- Increased access to capital for potential technology investors will also allow for more incubation investments outside Lagos

**Enabling Environment**
- Foster stronger relationships between the technology innovation community in Lagos with innovators from other regions in the country, primarily through improving information flow