POLICY BRIEF

# Investing in Nigeria's Data and AI Workforce

*The Click-On Kaduna Data Science Fellowship Programme as a national model*

How a subnational fellowship in Northern Nigeria offers a scalable, evidence-based pathway to closing the country's data-science and AI skills gap.

COHORT 01 TO COHORT 05 CLICK-ON KADUNA · DATA SCIENCE FELLOWSHIP PROGRAMME


Cohort 1 (2021)


Cohort 5 (2026)

| | |
|---|---|
| PREPARED BY | Natview Foundation for Technology and Innovation (NFTI) |
| PREPARED FOR | Federal and State Governments · Development Partners · Donor Agencies · Philanthropic Foundations · Corporate CSR Programmes · Universities · Investors in Youth Capacity Building |
| DATE | July 2026 |

*In Brief*

*150 fellows graduated from the Click-On Kaduna Data Science Fellowship Programme across four completed cohorts from 2020 to 2025; tens of thousands of applications received with fellows selected through a four stage selection process that includes essay and video submissions, computer-based test and interviews with expert panelists; 45 are set to graduate in 2026; a 70% employment/further-study transition rate; and 40% of fellows drawn directly from the Kaduna State civil service. This is evidence that a modest, well-designed fellowship with institutional ownership and funding support can serve as a pipeline for government- and industry-ready data talent at a national scale.*

# Table of Contents

## Executive Summary

Nigeria's ambition to build a $1 trillion digital economy, operationalize its National Artificial Intelligence Strategy, and deliver on Nigeria Agenda 2050 depends on one resource the country does not yet produce at scale: skilled, government-ready, industry-ready data professionals. Global evidence points the same way — the World Economic Forum ranks big-data specialists, AI/ML specialists and data analysts among the fastest-growing occupations worldwide through 2030, and Nigeria's own National AI Strategy sets a target of equipping 70% of the young workforce (ages 16–35), including 50% women, with AI-related skills. The gap between this ambition and the country's current talent pipeline is the central problem this brief addresses.

Back in 2018, the Kaduna State government developed an ambitious policy agenda: the Kaduna Data Revolution Plan. It was designed to use real-time data to support evidence-based decision-making and improve governance. Driven by the Kaduna State Bureau of Statistics (KDBS), the plan harmonizes data across key sectors, including health, education, and agriculture. This plan gave rise to the Kaduna State Data Lab Project, jointly implemented by the Kaduna State Government, the Gates Foundation, and the Natview Foundation for Technology Innovation.

Understanding that a data revolution plan cannot be delivered by policies, platforms, or technology alone, the implementation team knew it first had to invest in building the capacity of the people who would make that vision a reality. It was from this realization that the Click-On Kaduna Data Science Fellowship Program (DSFP) was conceived.

The Click-On Kaduna Data Science Fellowship Program (DSFP) became a flagship initiative of the Kaduna State Government and is implemented by the Kaduna State Bureau of Statistics (KDBS) and the Natview Foundation for Technology Innovation (NFTI). Since 2020, with funding support from the Gates Foundation's Data Lab grant, DSFP has trained 150 fellows across four completed cohorts and is set to graduate 45 more fellows, combining classroom instruction, mentorship, soft-skills development, direct field placements within government MDAs, and specialization tracks (GIS, Data Engineering, and Machine Learning/AI).

The results are measurable: a 70% transition rate into improved employment or further study; 40% of fellows drawn directly from the civil service, embedding data literacy inside government rather than losing it to attrition; at least 50% female participation by design; and alumni now working at organizations from JPMorgan Chase and Deloitte to Departments of Planning, Research and Statistics within the Kaduna State Government itself, and pursuing postgraduate study at top global academic institutions. DSFP has demonstrated that a relatively modest, well-governed subnational investment can generate outsized returns in public-sector capability and youth employability.

This brief sets out the policy case, the evidence base, and concrete recommendations for federal and state governments, development partners, universities, and the private sector to institutionalize DSFP in Kaduna State and replicate it as a national model for building Nigeria's data and AI workforce. It closes with specific, fundable investment opportunities for partners ready to act.

# 1. Policy Context

## 1.1 Nigeria's Digital Economy at an Inflection Point

The Federal Government of Nigeria has set a target of a $1 trillion economy by 2030 as part of the Renewed Hope Agenda, with the Medium-Term National Development Plan 2026–2030 positioning digital transformation as a central growth lever within the longer 30-year Nigeria Agenda 2050 framework. The National Digital Economy Policy and Strategy (NDEPS) 2020–2030, launched by the Federal Ministry of Communications, Innovation and Digital Economy, organizes the country's digital ambitions around eight pillars, with Pillar 2 — Digital Literacy and Skills — explicitly committing the government to deliver large-scale training for citizens, public servants, and students to raise workforce readiness.

Nigeria's finalized National Artificial Intelligence Strategy (NAIS), published by the Federal Ministry of Communications, Innovation and Digital Economy with NITDA as implementing body, sets out a five-year vision (2025–2029) built on three goals; *economic growth and competitiveness, social development and inclusion, and technological leadership* delivered through five pillars spanning *AI infrastructure, ecosystem development, sector adoption, responsible AI, and governance*. Strikingly, the Strategy sets a measurable human-capital target: equipping at least 70% of Nigeria's young workforce aged 16–35, including 50% women, with AI-related skills, and using this to help reduce unemployment by five percentage points.

> **WHY THIS MATTERS FOR DSFP**
>
> *DSFP's target demographic (ages 18–35), its 50% female participation design standard, and its direct placement of fellows within government MDAs already mirror the exact population and skills mix the National AI Strategy is designed to reach, making it a ready-built delivery vehicle for government at any level and donors to adopt and institutionalize.*

## 1.2 The Fourth Industrial Revolution and Data-Driven Governance

Across the world, governments are converging on the insight that policy quality is now inseparable from data quality. The World Economic Forum's Future of Jobs Report 2025, drawing on a survey of over 1,000 employers representing more than 14 million workers across 55 economies, found that AI and big data top the list of fastest-rising skills, ahead of cybersecurity and technological literacy, and identifies Big Data Specialists, AI/Machine Learning Specialists, and Data Analysts and Scientists among the fastest-growing occupations globally through 2030. The same report projects that 39% of workers' core skills will change by 2030, making continuous data and AI upskilling a standing requirement over a one-off investment.

For public institutions specifically, data-driven governance has moved from an innovation project to an operating requirement. For serious governments, data is used for modern planning, budgeting, monitoring and evaluation, and social protection targeting. Governments that care about real impact

now depend on agencies that can reliably collect, clean, model, and visualize data. Kaduna State's own experience, which has involved piloting data use across the health value chain with support from the development partners, reflects this shift at the subnational level, and DSFP was designed specifically as the human-capital engine for that transformation.

### 1.3 Global Demand for Data and AI Professionals

Multilateral organizations, governments, and the private sector across the globe are competing for an extremely narrow pool of trained data and AI professionals, and Nigerian talent is already a visible part of that global market. DSFP alumni now work at JPMorgan Chase in the United States, pursue graduate study at the University of Surrey, Carnegie Mellon University Africa, and the University of Westminster on a Chevening scholarship, and hold research posts as far afield as Israel's Zuckerberg Institute of Water Research. This is a double-edged signal, as it validates the quality of Nigerian-trained data talent while underscoring the urgency of building a pipeline large enough to ensure skilled graduates strengthen Nigerian institutions first — before or alongside competing globally.

## 2. Problem Statement: Nigeria's Data and AI Skills Gap

Nigeria's development ambitions are constrained less by the absence of data than by the shortage of people who can turn data into decisions. Four interlocking problems define this gap.

### 2.1 Shortage of Skilled Data Professionals

Even as global demand for data analysts, data engineers, and AI/ML specialists accelerates, Nigeria's tertiary education pipeline produces comparatively few graduates with hands-on, tool-specific competence in modern data platforms (cloud data engineering, GIS, statistical programming, machine learning). The result is a structural mismatch: Nigeria's official unemployment rate stood at 4.3% and youth unemployment at 6.5% in the most recent NBS Labor Force Survey (Q2 2024), yet employers in data-intensive sectors like banking, telecoms, health, and government routinely report difficulty filling technical data roles, pointing to a skills mismatch and not just a matter of a simple jobs shortage.

### 2.2 Weak Institutional Data Culture

Many Ministries, Departments and Agencies (MDAs) across Nigeria continue to rely on manual, paper-based, or fragmented data collection processes, with limited standardization of data governance, quality assurance, or interoperability between systems such as facility-level health records, the National Health Management Information System (NHMIS), and state-level statistical bureaus. Where technical skills exist, they are frequently concentrated in a handful of individuals rather than embedded institutionally, meaning a single transfer or resignation can erase years of capacity-building.

### 2.3 Poor Evidence-Based Planning and Fragmented Systems

Fragmentation between routine administrative data, survey data, and program monitoring data makes it difficult for planners to build a single, trustworthy picture of what is working. This weakens budget prioritization, undermines subnational accountability to citizens, and slows the country's ability to track progress against the Sustainable Development Goals and Nigeria Agenda 2050 targets.

### 2.4 Low Analytical Capacity Across Priority Sectors

The implications cut across every priority sector:

- **Health —** weak routine data on facility readiness, immunization coverage, and antenatal attendance slows outbreak response and resource allocation, as Kaduna's own Data Quality Assessments of routine health facility records have shown.
- **Education —** school census and enrolment data gaps undermine planning for teacher deployment and infrastructure investment.
- **Agriculture —** limited geospatial and remote-sensing capacity constrains precision planning for food security and climate adaptation.
- **Climate —** Nigeria's low-carbon transition commitments under Nigeria Agenda 2050 require GIS and environmental-data skills that remain scarce outside a few federal agencies.

- **Finance and social protection —** targeting of subsidies, cash transfers, and financial-inclusion programs depends on data-matching and analytics capacity that many state governments do not yet have in-house.
- **Governance and accountability —** without institutionalized analytical capacity, monitoring and evaluation risk becoming a compliance exercise rather than a genuine feedback loop for public service delivery.

**THE CORE POLICY PROBLEM**

*Nigeria has an ambitious digital economy, AI strategies, and strong global demand for data talent, but the country requires a systematic, government-embedded pipeline to turn young Nigerians and serving public servants from relevant MDAs into government-ready and industry-ready data professionals. DSFP shows what such a pipeline looks like in practice at the subnational scale, backed by six years of evidence.*

# 3. The Click-On Kaduna DSFP Model

DSFP was conceived as the human-capital component of the Kaduna Data Revolution Plan. Instead of a generic bootcamp, it was designed from the outset as a government-embedded fellowship: fellows train alongside — and eventually inside — the institutions that will use their skills.

## 3.1 Program Design and Curriculum

The 3-month core curriculum (eight modules) takes fellows from foundational data-management principles and data governance/ethics, through research design, e-based data collection, statistical analysis, SQL and database management, to R and Python programming, and finally to data storytelling and visualisation in Power BI, each module anchored in real Kaduna State case studies, such as reviews of KDBS's Data Quality Assessment framework and facility-level health data systems.

From Cohort 4 onward, fellows split into specialization tracks — Principles of Geospatial Data (GIS), Data Engineering (cloud platforms, Azure, data pipelines, warehousing), and Machine Learning and AI (supervised learning, model evaluation, feature engineering, applied generative AI), aligning fellow competencies directly with the specific technical roles employers are hiring for.

## 3.2 Learning Methodology

- **Mixed-method delivery —** in-class instruction, virtual learning via the DSFP LMS, IBM, and DataCamp, and hands-on field activity, giving fellows both structured guidance and flexible, self-paced depth.
- **Mentorship and networking —** fellows work directly with senior and mid-level managers at KDBS, the State Ministry of Health, and the State Primary Healthcare Development Board.
- **Real-life projects —** field activity generates genuine policy-relevant outputs.
- **Guest-lecture series —** engagement with senior public officials and thought leaders connects fellows to the policy context behind the data they work with.
- **Career development and alumni ecosystem —** an active tracking system connects graduating fellows to employment, further study, and an alumni network that continues to feed talent back into NFTI and partner institutions.

## 3.3 Partnerships and Innovation

DSFP has built a widening web of institutional partnerships: with tertiary institutions including Kaduna State University and Ahmadu Bello University, Zaria; with government MDAs across health, planning, identity management, and education; and, looking ahead to future cohorts, with regulatory and professional bodies to open more certification pathways.

The program has also worked with virtually all the major technology and innovation hubs in the state capital to strengthen its curriculum through practical industry exposure and create opportunities to

identify and engage some of the brightest minds in technology and data science. These partnerships have expanded the pool of mentors and industry experts contributing to the program, while giving fellows greater access to emerging technologies and professional networks. These collaborations continue to position DSFP as a platform that connects academic learning, government priorities and industry expertise to build a stronger and more innovative data ecosystem in Kaduna State.

# 4. Impact: Evidence From Five Years of Implementation

DSFP is unique and unusual among youth digital-skills programs in Nigeria for the length of its track record (five years and five cohorts) and for the depth of its integration into a single state government's data systems. The following evidence is drawn from the DSFP's tracking records.

| 150 | 45 | 70% | 40% |
|---|---|---|---|
| Fellows graduated (Cohorts 1–4) | Fellows set for graduation (Cohort 5) | Transition to employment / further study | Slots are reserved for state civil servants who return to their MDAs to apply their skills and train colleagues |

## 4.1 Scale and Reach

Recruitment was based on applications submitted by Kaduna State residents, including graduates in statistics, mathematics, computer science, engineering, economics, physical sciences, and health-related disciplines. Cohort size has grown from 30 fellows (Cohort 1) to a steady 40 per intake by Cohort 4, and to 45 by Cohort 5.

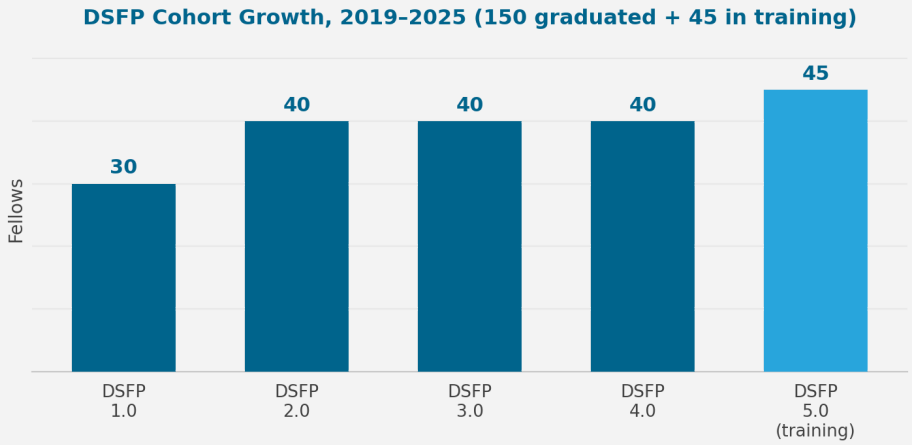


*Figure 1. DSFP cohort growth, 2020–2025.*

## 4.2 Gender Inclusion

Program design targets at least 50% female participation, addressing the historic underrepresentation of women in the technological workforce. Actual representation has ranged from 40% to 55% across cohorts, with Cohort 4 achieving 53% female participation, directly aligned with the National AI Strategy's own 50% women skilling target.

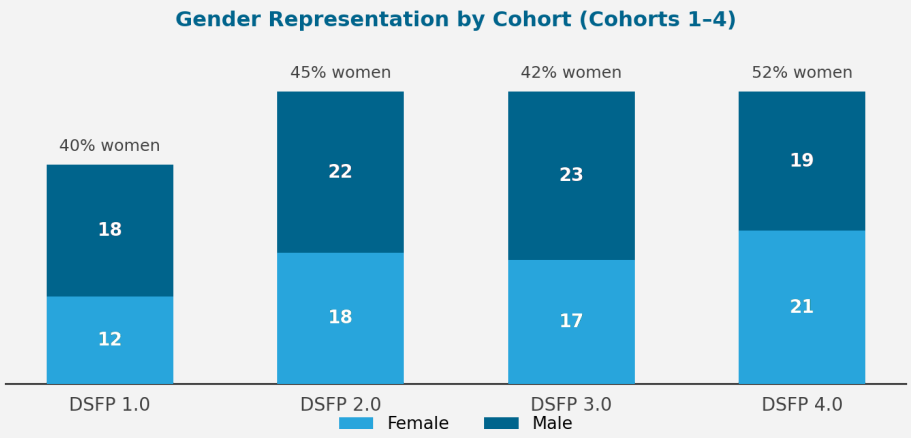


*Figure 2. Gender representation by cohort, DSFP 1.0–4.0.*

## 4.3 Institutional Embedding: Civil Servant Participation

40% of fellows are civil servants drawn from the Department of Planning, Research and Statistics (DPRS) and key MDAs, particularly in health, with the remaining 60% recruited from the general youth population across Kaduna State. This is a deliberate institutionalization strategy: civil-servant fellows report cascading their training to colleagues within their own MDAs, embedding a broader culture of data literacy that outlives any individual fellow's tenure in the program.

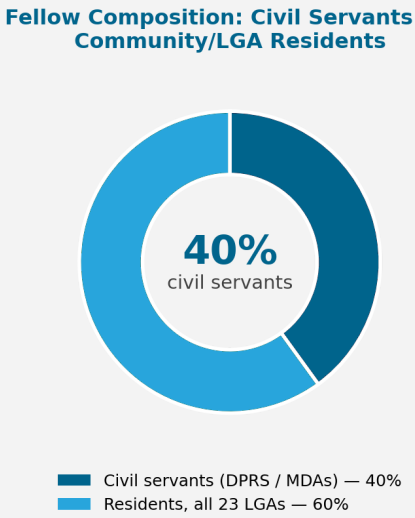


*Figure 3. Fellow composition by civil-servant status.*

## 4.4 Workforce and Career Outcomes

DSFP reports a 70% transition rate into improved employment or further study — a strong outcome by the standards of youth digital-skills programs region-wide.

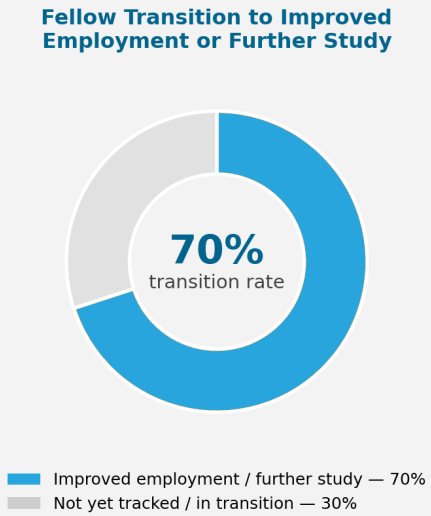


*Figure 4. Fellow transition to employment or further study.*

Alumni placements illustrate the range of pathways DSFP now opens:

| Pathway | Alumni placements |
|---|---|
| Global private sector | Strategy Analytics Associate, JPMorgan Chase & Co. (US); Operations Analyst, Deloitte Nigeria; Data Analyst, Stanbic IBTC/Abuja Data School; Team Lead, First Bank of Nigeria; Data Analyst, Guinness Nigeria; AI/ML Engineer |
| State and Federal Government | Planning Officer II, Kaduna SPHCB; Analyst (GIS), KDBS; Data Officer, PTCU/KDBS; Special Assistant to the Lagos State Governor (Lateef Jakande Leadership Academy Fellows) |
| Postgraduate study abroad | PhD Associate, University of Surrey (UK); MS in Electrical & Computer Engineering, Carnegie Mellon University Africa; Chevening Scholar 2025/26, Global Public Health with Data Science, University of Westminster (UK); Ph.D. Associate, University of Twente(Netherlands), MSc Artificial Intelligence, Qassim University (Saudi Arabia) |
| Development and civic-tech sector | Program Manager, Data Science Nigeria; Data Analyst, CCDRN Nigeria; Data Analyst, KADRIMA; Program Officer, Access to Justice; Data4SDGs Data Value Advocate; Capacity Accelerator Network Fellow, Global Partnership for SDGs; Data Analyst, CHAI; Data Analyst, HSDF |
| Retained within NFTI and KDBS | Multiple alumni retained as Junior/Senior Data Analysts at KDBS and NFTI, sustaining and supporting the state MDAs across different projects |

## 4.5 Institutional and Governance Impact

Under the technical supervision of KDBS and NFTI, the DSFP has supported institutional capacity to collect, analyze, and use data for evidence-based policymaking. The fellows and their alumni have been involved in projects such as the Health Facility Census, Citizens' Perception on Health Insurance Scheme Surveys, Longitudinal Studies on Human Resources for Health and Supply Chain Management across Primary Healthcare Facilities, and many others.

## 4.6 Community Impact

Kaduna State has developed a growing pool of indigenous data professionals who understand local development challenges and can provide sustainable technical support to government institutions. Perhaps one of DSFP's most remarkable impacts is on those it has never formally trained. As the program grew in reputation, it inspired many aspiring applicants to acquire data analytics and other digital skills before applying. For many young people, preparing for DSFP has become a motivation to begin learning data analytics in the first place. This way, it has helped cultivate a culture of continuous learning, raise the profile of data skills, and strengthen Kaduna's broader technology talent ecosystem.

Overall, the DSFP is helping build a government that listens more closely, plans more wisely, and serves its citizens more effectively. The program is making it easier to identify unmet needs, respond to them with confidence, and ensure that public investments benefit all communities. A lasting legacy of the fellowship is that it has helped build a stronger foundation for inclusive development, ensuring no one is left behind.

# 5. Cost-Benefit Analysis

A rigorous, audited cost-benefit study of DSFP is available upon request. In the interim, the qualitative and comparative case for investment is strong on four grounds.

## 5.1 Productivity Gains

Each civil servant who gains practical competence in data collection, cleaning, and analysis reduces the state's reliance on external consultants for routine data tasks and shortens the time from data collection to usable insight. This is a productivity gain that compounds every time that fellow trains a colleague.

## 5.2 Improved Planning and Stronger Monitoring

A workforce fluent in data pipelines, GIS, and visualization tools such as Power BI enables MDAs to move from static, backward-looking reporting to dashboards that support real-time monitoring and course correction. This directly strengthens the evidence base for budget allocation and program design.

## 5.3 Better Policy Outcomes and Public Service Delivery

The state's use of DSFP-trained analysts to support key health programs has improved data flows into health-system decisions, which in turn improve service delivery outcomes for citizens. This impact pathway is replicable in education, agriculture, and social protection.

## 5.4 Improved Accountability

Institutionalized data capacity — rather than capacity concentrated in a handful of consultants or in one-off surveys — makes it structurally easier for citizens, oversight bodies, and development partners to hold the government accountable for its stated commitments, because the underlying data infrastructure and the skilled personnel to interrogate it reside within the government itself.

## 6. Alignment With National and Global Priorities

DSFP does not sit outside Nigeria's policy architecture. The program operationalizes several of its central commitments at the subnational level.

| Framework | Point of alignment |
|---|---|
| Nigeria Agenda 2050 / MTNDP 2026–2030 | NA-2050's vision of a "dynamic, industrialized, knowledge-based economy" and the MTNDP's push toward a $1 trillion economy both depend on exactly the kind of applied data and digital talent DSFP produces, embedded in the human-capital-development pillar of national planning. |
| National Digital Economy Policy and Strategy (NDEPS) 2020–2030 | DSFP is a direct, operational implementation of Pillar 2 (Digital Literacy & Skills), which commits the government to large-scale training for citizens, public servants, and students to raise workforce readiness. |
| National Artificial Intelligence Strategy (NAIS) 2025–2029 | DSFP's 18–35 age focus, 50% women-participation target, and Machine Learning/AI specialization track mirror NAIS's own headline target of skilling 70% of the young workforce (16–35), including 50% women, in AI-related competencies. |
| Sustainable Development Goals (SDGs) | DSFP directly supports SDG 3 (health data systems), SDG 4 (education access via the fellowship itself), SDG 5 (gender equity in tech), SDG 8 (decent work and youth employment), and SDG 17 (data partnerships). |
| African Union Agenda 2063 and Continental AI initiatives | DSFP contributes to Agenda 2063's aspiration for a skilled, technologically empowered African workforce and to the continental push. This is reflected in the AU's Continental AI Strategy, which prioritizes African-grown, African-relevant AI and data talent over continued dependence on imported expertise. |

This alignment is precisely what makes DSFP attractive to a broad coalition of donors and governments. It is a single, proven delivery model that can advance federal digital-economy and AI targets, state-level service-delivery goals, and global development commitments simultaneously, thereby reducing the coordination cost for any partner considering where to direct capacity-building investment.

## 7. Policy Options

Government and donor partners face a genuine choice among four paths for Nigeria's data and AI talent pipeline. Each carries distinct advantages and limitations.

| Option | Advantages | Limitations |
|---|---|---|
| A. Maintain status quo(ad hoc, donor-by-donor training) | No new institutional commitment required; low near-term political cost | No mechanism to reach NAIS's national skilling targets at scale |
| B. Expand DSFP regionally(within Kaduna / neighboring states) | Builds directly on five years of proven delivery; fastest path to measurable results; low set-up risk | Funding limitations; benefits concentrated in one geography unless deliberately expanded |
| C. Institutionalize DSFP within the Kaduna State government | Converts a grant-funded pilot into a permanent public asset; guarantees continuity beyond any single donor cycle; deepens civil-service integration | Requires sustained political commitment across administrations |
| D. Establish a National Data Science Fellowship Program (DSFP as template) | Positions Nigeria to meet NAIS's national skilling targets; creates a federally-backed, multi-state talent pipeline; attracts larger-scale donor co-financing | Highest coordination complexity; requires federal-state alignment and a credible national delivery partner with a proven model — a role NFTI is positioned to fill |

These options are not mutually exclusive. The evidence in this brief supports a sequenced approach: institutionalize DSFP within Kaduna State (Option C) while simultaneously piloting replication in one or two additional states (Option B), building the evidence and delivery muscle needed to make the case for a National Data Science Fellowship Program (Option D) within the current NAIS implementation window (2025–2029).

# 8. Policy Recommendations

The following recommendations are organized by stakeholder group, so that each audience can identify its specific and actionable role.

## For the Federal Government

- **Seed a National Data Science Fellowship Program —** Commission a feasibility and costing study — using DSFP's five-year track record as the reference model for a federally co-financed fellowship operating across multiple states.
- **Link fellowship graduates to public-sector recruitment —** Create a recognized pathway (e.g., a data analytics stream within federal and state civil-service recruitment) for fellowship alumni, increasing the incentive for talented candidates to remain in public service.

## For State Governments

- **Institutionalize DSFP within the state budget —** Embed the fellowship model in the sub-national bureau of statistics' annual budget and workforce-development planning, reducing dependence on a single donor grant cycle.
- **Adopt a data-innovation-club policy —** Formalize community and school-based data innovation clubs as a standing youth-engagement structure.

## For Development Partners and Donor Agencies

- **Fund a transition/sustainability phase —** Support a bridging investment that shifts DSFP from grant dependency toward co-financed, state-owned delivery over 2–3 cohorts, with agreed matching-fund milestones.
- **Support replication in additional states —** Use NFTI's implementation experience as a template for data-capacity fellowships in other states pursuing data-for-governance agendas, prioritizing states with active SDG or health-data initiatives.

## For Universities and Academic Institutions

- **Establish university-based data innovation hubs —** Universities should create or strengthen data and innovation centers where students, academics, government, and industry can collaborate on practical challenges.
- **Strengthen university-industry partnerships —** Universities should partner with DSFP and technology organizations to give students access to practical projects, mentors, internships, and real-world datasets.

## For Corporate Organizations and Technology Companies

- **Fund specialization infrastructure —** Sponsor cloud credits, GIS licenses, or hardware for the GIS, Data Engineering, and Machine Learning/AI tracks, in exchange for early access to graduating talent.

- **Offer structured internships and hiring pipelines —** Formalize the informal hiring pathway already visible in DSFP's alumni outcomes into a standing internship-to-hire pipeline.

### For Philanthropic Foundations

- **Extend the DSFP model —** Building on the Gates Foundation's original catalytic investment, fund a new phase focused explicitly on institutionalization and multi-state replication rather than continued pilot delivery.
- **Prioritize women-in-tech funding —** Support scholarships and mentorship specifically targeting the 50% female-participation goal, addressing structural barriers that persist even where enrolment targets are met.

# 9. Investment Opportunities

Partners ready to act can support DSFP and its scale-up through the following specific, fundable opportunities:

| Opportunity | Description |
|---|---|
| Scholarships | Full or partial fellowship sponsorships for underrepresented candidates, particularly women and fellows from under-resourced regions. |
| AI labs | Capital investment in a dedicated AI/ML training lab, including GPU-enabled compute for the Machine Learning and AI specialization track. |
| Innovation hubs | Physical and virtual hub space linking fellows, alumni, and community data-innovation clubs for ongoing collaboration beyond the fellowship period. |
| Fellowship expansion | Funding to increase cohort size, extend DSFP to additional Kaduna sectors (education, agriculture), or replicate the model in other states. |
| Women in tech | Targeted scholarships, mentorship, and childcare/logistics support to sustain the 50% female participation standard through to completion, not just enrolment. |
| Research grants | Support for fellow- and alumni-led applied research, such as the existing position paper on data sources and health indicators, publishable for policy audiences. |
| Startup incubation | Seed funding and incubation support for alumni-led data and AI ventures. |
| Internships and industry placements | Structured, funded internship slots with corporate and development-sector partners as a bridge between graduation and full-time employment. |
| Cloud infrastructure | Sponsored Azure, AWS, or GCP credits to sustain and expand the Data Engineering track's cloud-computing components. |
| Faculty development | Investment in continuous training-of-trainers, so DSFP's growing community of instructors and alumni base can be credentialed to co-deliver future cohorts, lowering per-fellow delivery cost over time. |

## 10. Conclusion and Call to Action

Nigeria's digital-economy ambitions, its National AI Strategy, and its long-term development vision under Nigeria Agenda 2050 all converge on the same requirement: a workforce that can turn data into decisions at a scale the country does not yet have. The Click-On Kaduna Data Science Fellowship Program demonstrates with five years of evidence that this workforce can be built deliberately, inclusively, and inside government through a model that is already proven, already gender-inclusive by design, and already producing alumni who succeed at the highest levels of Nigerian and global institutions.

What DSFP has shown at the state level, Nigeria now needs at the national level. The choice facing federal and state governments, development partners, universities, and the private sector is whether to build on a model that works or to start from scratch in every state that tries.

This brief's core recommendation is straightforward: institutionalise DSFP within Kaduna State government as a permanent, budgeted programme; use the current NAIS implementation window (2025–2029) to pilot replication in additional states; and, on that evidence base, move deliberately toward a National Data Science Fellowship Programme that helps Nigeria meet its own stated target of skilling 70% of its young workforce in AI-related competencies by the end of the decade.

> **CALL TO ACTION**
>
> *Investing in data talent today is a precondition for stronger governance, faster economic growth, better public services, and Nigeria's credible claim to AI and digital leadership in Africa. NFTI invites governments, donors, universities, and the private sector to engage directly in institutionalization, replication, and the specific investment opportunities outlined in Section 9 of this brief.*

### About NFTI

The Natview Foundation for Technology Innovation (NFTI) is inspired by the potential of technology to contribute to the science of policy tracking, monitoring & evaluation, and insight discovery, using data science as a tool for social good.

*For more information, contact the NFTI Communications Unit via communications@natviewfoundation.org*