Nigeria - DPI Readiness of States

The Digital Public Infrastructure (DPI) Readiness Report

July 2025







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List of abbreviations

Abbreviations	Full form
Al	Artificial Intelligence
API	Application programming interface
BODS	Beneficiary Ownership Data Standards
BVN	Bank verification number
CAs	Certifying authorities
CBN	Central Bank of Nigeria
DNCR	Department of National Civil Registration
DoPS	Delivery of public services
DPI	Digital public infrastructure
DPIA	Data protection impact assessment
DSAR	Data Subject Access Request
FCT	Federal Capital Territory
FMCIDE	Federal Ministry of Communications, Innovation, and Digital Economy
FMI	Federal Ministry of Interior
G2G	Government-to-government
G2P	Government-to-person
GB	Gigabytes
GBB	Galaxy Backbone
GDP	Gross domestic product
HIV	Human Immunodeficiency Virus
HRMS	Human resource management system
ICT	Information and communications technology
ID	Identification
INEC	Independent National Electoral Commission
IT	Information technology
ITU	International Telecommunication Union
KYC	Know your customer



Abbreviations	Full form
Mbps	Megabits per second
MDAs	Ministries, departments, and agencies
MIS	Management information system
MNO	Mobile network operators
MOSIP	Modular Open-Source Identity Platform
NASITDEA	Nasarawa State Information Technology and Digital Economy Agency
NCC	Nigerian Communications Commission
NDPA	Nigeria Data Protection Act
NDPC	Nigeria Data Protection Commission
NDR	National Data Repository
Ne-GIF	Nigeria e-Government Interoperability Framework
NGF	Nigeria Governors' Forum
NIBSS	Nigerian Interbank Settlement System
NIDB	Nigeria Identity Database
NIMC	National Identity Management Commission
NIN	National Identification Number
NIP	NIBSS Instant Payment
NITDA	National Information Technology Development Agency Act
NPopC	National Population Commission
NRTP	National Rural Telephony Project
NUBAN	Nigerian Uniform Bank Account Number
ОТР	One-time password
SIM	Subscriber Identity Module
TIN	Tax Identification Number



Foreword

Digital authorities play a pivotal role to address public finance challenges. They champion a unified digital ecosystem across all government service points. Their efforts vitally streamline government operations, enhance data-driven decision-making, and improve the quality and accessibility of public services for all citizens. Within the lens of digital public infrastructure (DPI), digital authorities drive innovation, inclusion, and competition at scale through a reusable, interoperable, and openly governed digital foundation that benefits all actors in a digital economy, including private players.

This report builds on this premise to answer the question: How can digital authorities be supported so they can engender a digital economy and improve state-wide service delivery? This report seeks to answer this question by (i) providing a baseline assessment of the DPI readiness and maturity of states in Nigeria, and (ii) developing a roadmap that outlines a plan for states to effectively adopt and scale DPI as a pathway for inclusive digital transformation. The objective is to support a coordinated approach and response to DPI adoption in all states of the federation, particularly in domestic resource mobilisation (DRM) and social service delivery.

The DPI Readiness Report has been put together to provide digital authorities with the tools and knowledge to build a digitally-centric environment through policy, digital skills, and digital infrastructure; building blocks, encompassing digital identity, payment systems, and data-sharing initiatives; and the delivery of public services via platforms and sectoral initiatives.

The report was produced alongside a study on the Intelligent Revenue Authority (IRA) - an independent DPI report for revenue authorities.

This DPI project benefits from our public finance work, which provides technical assistance to state governments on DRM through research, advocacy and capacity building. Digital authorities should find this report a reference document for their digital transformation strategies, especially since it helps address the country's varied levels of digital maturity. We encourage the use of the DPI readiness tool to scale up DPI adoption in other jurisdictions.

I extend my deepest gratitude to our Public Finance team and our technical partner, MicroSave Consulting (MSC), for their professionalism and thoroughness in carrying out this flagship project. The digital authorities of states and stakeholders consulted throughout the process provided invaluable feedback that has made this report possible. Their dedication to ensuring contextual accuracy makes this document authoritative and actionable.

H.E. AbdulRahman AbdulRazaq CON Chairman Nigeria Governors' Forum



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The report was prepared under the supervision of the programme lead, David Nabena, and delivered under the Nigeria Governors' Forum's State Level Public Finance Support and Digital Transformation programme.

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Executive summary

The Nigeria Governors' Forum (NGF) initiated this digital public infrastructure (DPI) readiness assessment across all Nigerian states to achieve two main objectives. The first was to assess the readiness of states to use DPI approach in the delivery of public services effectively. The second goal was to develop a roadmap that outlines a plan for states to effectively adopt and scale DPI as a pathway for inclusive digital transformation.

This report supports the NGF and seeks to identify the strengths and gaps in digital identity systems, interoperable payment systems, data exchange platforms, data governance frameworks, and foundational connectivity infrastructure.

The report covers six main sections. The first section provides a snapshot of Nigeria's DPI ecosystem and highlights its current status and key challenges in detail. The second section outlines the study's objectives, which trace back to Nigeria's current DPI realities. The third section introduces the DPI readiness assessment framework, structured around three pillars, multi-layered verification protocols, and the study's limitations. The fourth section classifies states into maturity levels. The fifth section illustrates the assessment's key findings across pillars and sub-pillars. The sixth and final section provides a phased roadmap for states at different maturity levels to accelerate the adoption of DPI approach in delivery of public services.

The assessment framework measures DPI readiness across three pillars - enabling environment (policy, digital skills, ICT infrastructure), building blocks (identity systems, payment systems, datasharing), and the delivery of public services (digital platforms and sectoral initiatives). Given its potential to rapidly create new opportunities for essential public services, the assessment reviewed the adoption of DPI in five priority sectors - agriculture, health, education, social protection, and land administration.

The report concludes that 20 states are at medium DPI readiness maturity, 12 at low maturity, and two states, Akwa Ibom and Oyo, at high maturity. In the enabling environment pillar, only two states, Akwa Ibom and Oyo, show high maturity, 22 demonstrate medium maturity, and 10 fall under the low maturity level.

Under the building blocks pillar, only Nasarawa State is in high maturity, while 18 states are in medium maturity, and 15 in low maturity. In the delivery of public services pillar, six states - Abia, Akwa Ibom, Enugu, Jigawa, Oyo, and Sokoto - have achieved high maturity, while 17 states are in medium maturity. In comparison, 11 states fall under the low maturity category in the delivery of public services pillar.

The report's lessons conclude that low maturity-level states must adopt a three-phase roadmap. The foundational phase requires states to set DPI policies, comply with national guidelines, improve digital skills through training programmes, enhance smartphone access, digitise key payment processes, and build sectoral DPI strategies.

In the second phase, the states must scale their existing ICT infrastructure, enable NIN authentication in public services, expand digital payments to at least 50% of ministries, departments and agencies (MDAs), pilot G2G data exchange, and deliver at least 30% of public services online.



Finally, they must achieve 95%+ NIN coverage and 100% digital public service delivery, use dashboards for monitoring, and enforce grievance resolution mechanisms.

Medium-maturity states are to follow a two-phase roadmap. In the first phase, they must scale their ICT infrastructure, link state functional IDs with the NIN, ensure integration of digital payments in 70% MDAs, and provide 50% of public services online. In the second phase, they must deploy a real-time dashboard to monitor compliance, reach 95%+ NIN coverage, onboard all MDAs on the G2G data exchange platform, link state functional IDs with NIN, and implement multimodal grievance resolution mechanism.

High-maturity states can seek to build AI-enabled dashboards, deploy 100% electronic registries and digital payments across all MDAs, integrate emerging technologies into ICT skill-based curriculums in the state training programmes for all MDA staff, ensure 95%+ NIN coverage among population, link state functional IDs with NIN, conduct hackathons and ideathons, and establish digital innovation incubators.



1. A snapshot of Nigeria's DPI ecosystem

Digital public infrastructure (DPI) represents a fundamental shift in digital transformation. It has moved beyond isolated technological solutions to establish shared, foundational digital ecosystems for public good. The World Bank defines <u>digital public infrastructure (DPI)</u> as systems that serve as foundational, digital building blocks designed for the public benefit. DPI can also be seen as an approach to building digital systems for scale, impact and safety, while adhering to the principles of interoperability, reusability and privacy by design. These building blocks offer essential digital functions at a population scale, which allows public and private service providers to reuse these systems, innovate, and roll out new services more quickly and efficiently across various sectors.

The three building blocks of DPI captured in this report include digital identity, digital payment and data exchange systems as illustrated below:

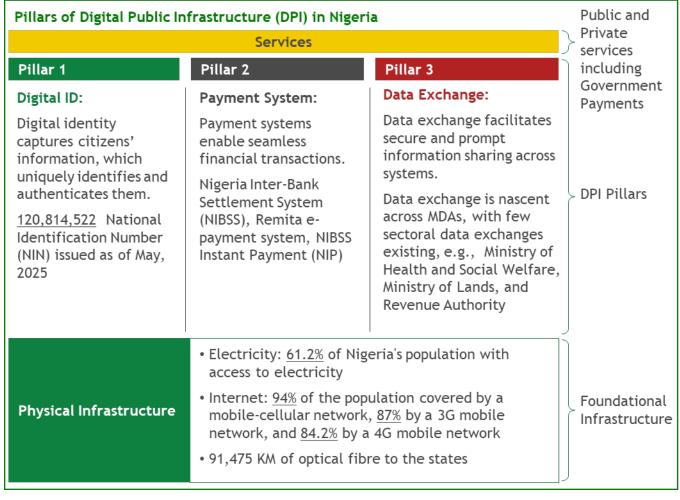


Figure 1: Building blocks of DPI



1.1. Current status

Digital identity

Nigeria's identity system dates back to 1978, when the Department of National Civil Registration (DNCR) was set up within the Federal Ministry of Interior (FMI). The DNCR was tasked with issuing national identity cards. The programme lasted 18 months. Later, in 2001, the DNCR contracted a private partner to enrol people and issue national identity cards at a fiscal cost of USD 236.8 million. The programme ran for five years, issued national identity cards to <u>37.3</u> million people, and was eventually called off.

In 2007, the government passed the National Identity Management Commission (NIMC) Act (No. 23) to manage the country's identity system. Through this Act, the NIMC came into effect in 2010 with a mandate to establish, manage, and maintain Nigeria's National Identity Database (NIDB). Since then, NIMC has made significant progress in the establishment of a robust national digital identity system by issuing the National Identification Number (NIN).

The NIN is an 11-digit unique identifier valid for a lifetime. It is integrated with <u>services</u>, such as health insurance, tax, immigration, banking, e-payments, and SIM registration, among others. The NIN is assigned after biometric enrolment, which includes fingerprints, facial pictures, and <u>digital signatures</u>. As of May 2025, <u>120.81</u> million Nigerians have been enrolled in the NIN database, which covers more than 52.80% of the population.

The NIMC has also been piloting mobile and contactless enrolment systems and has entered a partnership with MOSIP (Modular Open-Source Identity Platform) to explore open-source digital ID solutions and authentication services. Today, the NIN is considered one of the essential modes for KYC and identity verification throughout Nigeria for <u>wallets and accounts</u>. The NIN system has a high uptime of <u>99.999%</u> over the past many years and a 90% authentication success rate, with average transaction processing time of one minute.

Digital payments

The digital payments infrastructure in Nigeria is driven by regulatory advancements from the Central Bank of Nigeria (CBN) and managed by the Nigerian Interbank Settlement System (NIBSS). Nigeria has 311.65 million active bank accounts. The transaction value of e-payments in the first six months of 2024 was NGN 1.6 quadrillion.

The NIBSS platform provides the backbone and infrastructure for payment settlement, which enables banks, payment switching companies, and payment processing companies to facilitate real-time transactions in Nigeria. NIBSS, under the CBN cashless policy of 2011, has launched a NIBSS Instant Payment (NIP), which is claimed to be the first account-based payment system in the world. Nigeria also has a vital payment gateway named "REMITA", a CBN-licensed platform mainly used by federal and state governments to collect their revenues and make payments.

However, specific challenges persist in the payment ecosystem. For example, mobile money uptake is constrained by regulatory limitations that restrict the full participation of mobile network operators (MNOs). Some states, such as Kogi, Adamawa and Kaduna, own their payment platform and gateway but face system reliability issues. Digital infrastructure gaps, such as uneven access to electricity and low smartphone penetration, further exacerbate exclusion. The country needs to improve access to KYC-compliant financial products through NIN-BVN linkages, strengthen agent networks in remote



areas, and revise MNO participation policies to advance digital financial inclusion. On the brighter side, financial inclusion in Nigeria has grown significantly from 56% in 2020 to 64% in 2023.

Data exchange

Effective data exchange is crucial if Nigeria is to reap the benefits of digitisation. For this to happen, the country must allow agencies to share and use data for service delivery, planning, and decision-making. Nigeria has made some headway with sector-specific data exchange initiatives, such as the National Data Repository (NDR) for health data. Yet, many ministries, departments, and agencies (MDAs) operate siloed systems.

The NDR manages more than 1.6 million active HIV patient records from 1,997 facilities. In the financial sector, the CBN, through regulatory frameworks released in 2021 and 2023, plans to operationalise open banking in Nigeria, which may emerge as one of the significant use cases of data sharing in Nigeria. Besides open banking, transaction data flows through intermediaries, such as the NIBSS, payment switching and processing companies. While these entities operate under CBN oversight, their primary functions do not include the management of broader cross-sectoral data-sharing use cases.

The Nigeria Data Protection Commission (NDPC) complements these technological interventions and provides legal backing for data rights and privacy, which is crucial to build trust in digital systems. The NDPC gets its power and authority from the Nigeria Data Protection Act, which was enacted in 2023. Additionally, a nationally shared services infrastructure, hosted within Galaxy Backbone (GBB) Limited's systems, a wholly-owned government infrastructure company, provides a foundational platform for data exchange in Nigeria. GBB's infrastructure and installed capabilities will be harnessed to build Nigeria's data exchange infrastructure. When fully developed and interoperable, these existing systems will form the foundation of Nigeria's DPI to support and enable efficient service delivery in the country.

By building on this foundation, Nigeria can create a more efficient and transparent public service delivery system, reinforcing the social contract between the government and its citizens. While core components for data exchange, such as sectoral registries, open banking rules, interoperability framework, and data-protection laws exist, a truly cross-sectoral exchange platform is yet to be realised. State government IDs cannot easily integrate with federal systems or other states without common APIs or data-sharing protocols.

Infrastructure

Nigeria has widespread 3G and 4G coverage. However, rural digital adoption remains a challenge. Unreliable electricity supply and poor infrastructure further restrict DPI adoption and sustainability. As per the World Bank data for 2023, Nigeria's mobile internet users are only 39.2% of the total population. An ICT use survey reveals that, out of the individuals without a connection, 50% stated that they do not use the internet because they cannot afford devices to access it. More than 25% reported 'no electricity' as the reason, while more than 20% said 'there is no signal'.



40% of the population uses 2G network for browsing, not for advanced applications. 2G users are considered internet users, but their internet activity is minimal because they cannot access most internet services due to high latency and low internet speed. Due to this, Nigeria currently ranks 83rd out of 162 countries globally for average download speed, with a rate of 38.87 Mbps.

Efforts to expand fibre optic networks and connect major cities and towns are underway, supported by initiatives, such as the National Rural Telephony Project (NRTP) and the Nigerian National Broadband Plan (2020-2025). Broadband penetration as of April 2025 was 48.15%.

As per a <u>study</u> by ITU, a 10% increase in mobile broadband penetration in low-income countries yields at least 1.6% increase in the gross domestic product (GDP). The Nigerian National Broadband Plan 2020-25 is designed to deliver data download speeds of a minimum

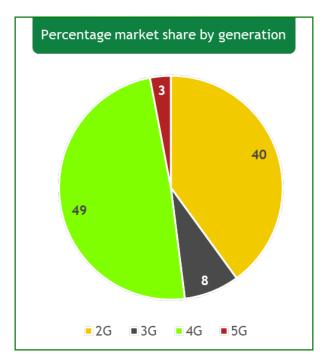


Figure 2: Percentage market share by generation (NCC)

of 25 Mbps in urban areas and 10 Mbps in rural areas, with adequate coverage available to at least 90% of the population by 2025 at a price of not more than NGN 390 per 1 GB of data, that is, 2% of the median income or 1% of the minimum wage. The country's digital infrastructure comprises 90 active tech hubs. They serve as launchpads for startups and help encourage innovation by bringing together talent, ideas, and resources, thereby enhancing the country's capacity to accelerate digital transformation.

Key facts	
Network coverage	
Population covered by mobile-cellular network (2022)	94 %
Population covered by 3G mobile network (2022)	87 %
Population covered by 4G mobile network (2023)	84.2 %
Fixed broadband subscriptions	
Fixed broadband (% of total): 256kbit/s - <2Mbit/s (2021)	68 %
Broadband Penetration (Apr, 2025)	48.2 %
Total fixed broadband subscriptions (2023)	117,000
Internet subscriptions	
Mobile cellular subscriptions per 100 inhabitants (2022)	102
Number of active subscribers for data through ISP (Apr, 2025)	141.98 M
Individuals using internet (% of total population), 2023	39.2 %

Figure 3: Current state of digital infrastructure in Nigeria



Policy and regulatory landscape

DPI can accelerate Nigeria's digital transformation, and can also assist in the realisation of the Digital Transformation Strategy for Africa (2020-2030). Nigeria's DPI framework is anchored on three instruments within the supervisory oversight of the Federal Ministry of Communications, Innovation, and Digital Economy (FMCIDE). First is the National Information Technology Development Agency Act (NITDA Act) 2007, which is central in regulating ICT development, mandatory project clearance for public and private ICT initiatives, and standardisation of ICT services deployed across the nation. The second instrument is the Nigeria Data Protection Act (NDPA), 2023, which has created the Nigeria Data Protection Commission to ensure compliance, including enforcing privacy rights, child data protection, and cybersecurity standards. The third instrument is the "Federal Government Directive to All Federal Public Institutions on The Use of Galaxy Backbone Limited as the First Service Provider for All Information Communication Technology (ICT) Projects".

Recent policies, such as the <u>National Digital Economy Policy and Strategy (2020-2030)</u> and the National Digital Economy and E-Governance Bill 2025, are ongoing policy interventions by the government to grow the digital economy and facilitate electronic transactions, communications and digital service delivery - key ingredients for a DPI ecosystem.

1.2. Key challenges

Skill and capacity gaps

Nigeria faces digital capacity constraints within government institutions. As per the <u>World Bank Report</u>, many public sector IT staff members lack advanced digital skills. The report further indicates that recent university graduates entering the digital job market often require more than one to four years of specialised training.

In the <u>UN E-Government survey of 2024</u>, Nigeria scored 0.278 in the <u>e-government literacy subindex</u>, which is below the world average of 0.459. This represents a major challenge for Nigeria to take full advantage of e-government services and e-participation opportunities. The situation calls for urgent interventions, including structured capacity-building initiatives, intensive public-private partnerships in training and internship-to-employment schemes to bridge ICT capacity gaps.

Digital divide

According to the World Bank, digital skills among the Nigerian population are at a moderate level, which causes low adoption of digital technology. As of April 2025, Nigeria has a <u>teledensity</u> of 79.78% but only <u>49.27%</u> of the telephone subscribers use <u>4G phones</u>, thus limiting their ability to utilise digital public services efficiently. The high cost of smartphones remains a significant barrier, especially for low-income households, creating a device-driven digital divide.

Cybersecurity concerns

The Nigerian Communications Commission (NCC) estimates Nigeria loses around <u>USD 500 million</u> annually to cybercrime. The country has been ranked <u>fifth</u> in a global report on threats from cybercrime activities. Consequently, concerns have emerged about how technology companies collect, store, and use personal data. Technology evolution presents new threats from AI-powered



attacks, such as phishing campaigns, polymorphic malware, and hyper-realistic deepfakes. These concerns erode trust in online platforms and services.

Nigeria's National Cybersecurity Policy was developed as a proactive response to control these activities. Still, compliance gaps, such as outdated legal frameworks, fragmented governance, limited public awareness, and resource constraints, impede the full implementation of the policy.

Lack of cross-sectoral data sharing

The nationwide cross-sectoral data exchange system is still in its developmental phase. The absence of such a system restricts interoperability of registries and other sectoral system, which in turn impedes the establishment of a seamless digital ecosystem.

Data exchange infrastructure is weak across most states. Most MDAs in states lack a data repository, such as the NDR, and rely on third-party vendors and manual processes, which further increases the risk of data duplication, inefficiencies, and non-compliance with data protection laws. The NDPC is working to bridge these compliance shortfalls, particularly within state MDAs.

Fragmented identity systems

Around 13 Nigerian states have their own state residential ID systems. In addition, many federal agencies, including the National Identity Management Commission (NIMC), the National Population Commission (NPopC), the Central Bank of Nigeria (CBN), the Independent National Electoral Commission (INEC), etc., also issue functional and foundational IDs.

Most of these identity systems are not interlinked or deduplicated and hence are prone to inefficiency. Moreover, if not linked, multiple identity systems contribute to duplication of infrastructure investments, software licensing and maintenance, and a higher cybersecurity burden. This also prevents seamless data exchange and creates barriers to service delivery across different governmental functions.



2. Study objectives and framework

2.1. Research objectives

The absence of a clear understanding of the digital readiness and maturity of Nigerian states has contributed to the varied levels of digital transformation in the country. The goal of this report is to provide an in-depth evaluation of the existing DPI landscape across all states in Nigeria to:

- Understand the DPI maturity levels of states in terms of their capacity to adopt and integrate DPIs in the delivery of public services;
- Provide evidence-based insights to design state-specific strategies for DPI adoption;
- Develop a roadmap based on current maturity that outlines the resources and infrastructure needs of the state to adopt and scale DPI effectively as a pathway for inclusive digital transformation.

2.2. Study design

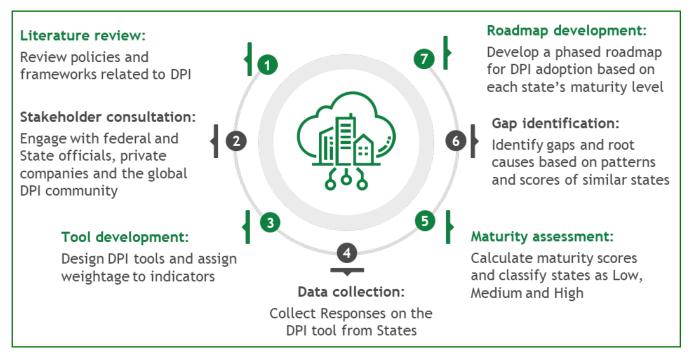


Figure 4: Methodology of the DPI readiness assessment

This study used a mixed approach to examine how DPI transforms the delivery of public and private services across Nigerian states. It involved the following steps:

- Literature review: Review the policies, guidelines, and frameworks related to DPI in Nigeria;
- **Stakeholder consultation:** Engage with federal and state-level officials, private sector players and the global DPI community to gather practical insights into the use of digital systems;



- Tool development and design: Design the DPI readiness assessment tool for digital transformation agencies;
- Primary data collection: Administer and collect responses on the DPI readiness assessment tool from states;
- **Scoring and maturity assessment:** Apply the scoring methodology to ascertain the DPI readiness maturity level of states;
- **Gap identification:** Identify the gaps and challenges based on the responses and maturity levels as per the DPI readiness assessment;
- Roadmap for improvement: Develop a phased roadmap for DPI adoption and scale-up

The initial phase of this study involved reviewing extensive documents gathered from independent sources and provided by the NGF. Stakeholder consultations were conducted with government officials at the federal and state levels and private sector players to gather contextual accuracy and practical insights into the Nigerian policy and operational environment.

Consequently, we developed a DPI readiness assessment tool based on the desk review and stakeholder consultations. This self-assessment tool was administered to states in January 2025 and completed by 34 states by April 2025. This was followed by a data analysis and indexing exercise to identify the digital maturity of all the states that participated in the assessment. The analysis helped identify gaps and build roadmaps for DPI adoption to inform the design of subsequent phases on advocacy and technical assistance.

2.3. Framework of the DPI readiness assessment tool

The DPI tool is a self-assessment questionnaire designed to evaluate states' readiness and maturity for DPI. The framework is structured around three fundamental pillars: Enabling environment, building blocks, and delivery of public services. Each pillar is further divided into sub-pillars, which are measured through multiple indicators.

- a) Enabling environment includes policy, digital skills, and ICT infrastructure.
- b) Building blocks encompass identity, payment systems, and data-sharing initiatives.
- c) Delivery of public services comprises platforms and sectoral initiatives.



			DPI P	illars				
Enal	Enabling environment			Building blocks			Delivery of public services	
Policy	Digital skills	ICT infrastructure	Identity	Payments	Data sharing	Digital platforms	Sectoral initiative	
Digital strategy Compliance with Nigeria Data Protection Act (NDPA) - 2023 Compliance with National Cybersecurity Policy Compliance with National Data Strategy 2022 Compliance with Nigeria e- Government Interoperability Framework (Ne-GIF)	Digital skills of government staff	Availability of hosting infrastructure Internet access Availability of Certifying Authorities (CAs) in the state Consent management	Coverage of identity system Authentication and authorization	Interoperabili of payments	Adoption of Beneficiary Ownership Data Standards (BODS) - Common Data Standards Data sharing infrastructure	Electronic registries Functional ID Status of digital services	DPI initiative for Agriculture DPI initiative for health DPI initiative for social protection DPI initiative for education DPI initiative for land administration	
	Outcome							
1	Classification of states based on their level of maturity States' understanding of the DPI ecosystem for comparative analysis and situation assessment							
3 ado	Roadmap for states to deploy and adopt DPI recommendations based on their maturity levels State plans with a phase-wise focus on policy, infrastructure, skills, building blocks and Platforms.							

Figure 5: Framework of the DPI readiness assessment tool

The tool captures critical dimensions of DPI, such as policy alignment, infrastructure availability, sector-specific initiatives, and digital service delivery. It aggregates a set of questions across these indicators to generate a holistic assessment of the state's capacity to implement and scale DPI solutions.



Selection of pillars, sub-pillars, and indicators

The pillars, sub-pillars, and indicators were selected after a comprehensive assessment of the tool's requirements as detailed in Table 1.

#	Pillars	Sub-pillars	Indicator
1	Enabling environment	Policy	Digital strategy
2			Compliance with the Nigeria Data Protection Act (NDPA) - 2023
3			Compliance with National Cybersecurity Policy
4			Compliance with National Data Strategy 2022
5			Compliance with the Nigeria e-Government Interoperability Framework (Ne-GIF)
6		Digital skills	Digital skills of government staff
7		ICT infrastructure	Availability of hosting infrastructure
8			Internet access
9			Consent management
10	Building blocks	Identity	Coverage of the identity system
11			Authentication and authorisation
12		Payment systems	Interoperability of payments
13		Data-sharing initiatives	Adoption of Beneficiary Ownership Data Standards (BODS) - Common Data Standards
14			Data-sharing infrastructure
15	Delivery of public	Platforms	Electronic registries
16	services		Functional IDs
17			Status of digital services
18		Sectoral initiatives	DPI initiative for agriculture
19		initiatives	DPI initiative for health
20			DPI initiative for social protection
21			DPI initiative for education
22			DPI initiative for land administration

Table 1: Summary of the DPI readiness assessment framework



2.4. Research respondents

The self-reporting assessment tool is designed for use by state digital authorities. State officials were introduced to the tool through interactive dissemination sessions to ensure they understood its methodology, features, and use. The NGF provided backstopping support to states to address queries during the assessment process.

Data collection methods

Technical officials of the digital authorities of states submitted the information for the DPI tool. The tool was administered following a detailed in-person workshop conducted in January 2025 in Abuja to guide officials on completing the tool. During this workshop, participants were advised to select the most suitable responses that reflect the status of their digital system. To ensure credibility and transparency, states must submit relevant documentation as evidence to support their responses. This standardised and guided approach helped ensure consistency and reliability in the data collected across all participating states. The administration cycle for the tool lasted between January and April 2025.

2.5. Quality measures

The DPI assessment framework incorporated verification protocols to improve data accuracy alongside the reliability and credibility of the evaluation process. These verification protocols established multiple layers of validation to ensure that collected information met defined quality standards, aligned with ground realities, and reflected verifiable evidence from authoritative sources, including policy documents, system demonstrations, stakeholder interviews, and publicly available datasets.

Verification and approval from senior officials: The assessment tools were self-completed by technical officers from the digital authority, followed by a formal approval by a high-ranking official, such as a director or the commissioner. This hierarchical validation process ensured institutional endorsement of provided information and accountability for data accuracy at the organisational level.

Submission of supporting documents: Respondents were required to provide comprehensive data sources and upload relevant supporting documentation to substantiate their responses across all assessment parameters. This requirement ensured that all claims were backed by verifiable evidence, giving credibility to the collected data.

Initial screening: The project team initially screened state-submitted responses to assess data completeness and internal consistency. In cases where the team identified gaps or inconsistencies, the NGF engaged directly with the respective state teams to obtain the necessary clarifications and data validation.

Independent verification by the NGF team: The NGF conducted rigorous verification checks, systematically cross-checking 5-10% of responses against the submitted documentation through random sampling methodologies. This independent verification approach enhanced the tool's reliability and maintained practical feasibility within resource and time constraints.

Verification from publicly available data: The verification process also relied on publicly available data. The use of trusted government publications and established repositories in this process removed potential bias and ensured uniform cross-validation of the assessment.



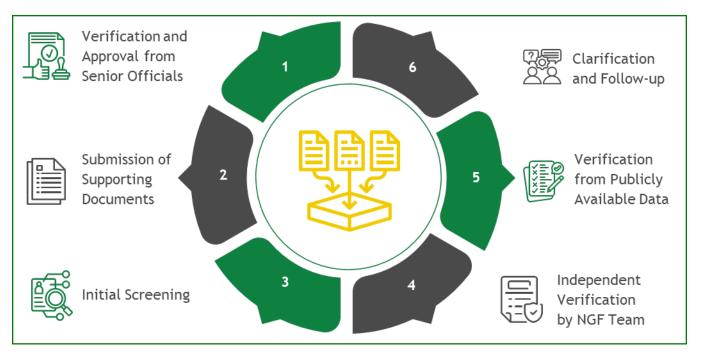


Figure 6: Verification protocols to ensure that correct and accurate data is collected

Clarification and Follow-up: States were asked for additional clarification whenever questions about responses to specific parameter questions existed. The clarification protocol maintained open communication channels between the assessment team and state representatives to facilitate accurate data interpretation.

2.6. Limitations

The following limitations were identified during the assessment and data analysis:

- The assessment relies on responses from state representatives, which, despite standardised guidance and tools, introduces the potential for subjective interpretation and reporting bias.
- Differences in respondents' comprehension of DPI concepts likely contributed to inconsistencies in data interpretation, particularly in technically nuanced sections.
- Three states Bayelsa, Imo, and FCT did not participate in the assessment, and several others submitted partial responses, which led to gaps in data that required cautious imputation based on secondary data.
- Given the scale and resource limitations, exhaustive validation of all submitted data across the 34 participating states was not feasible. Hence, the team adopted a samplingbased verification approach.

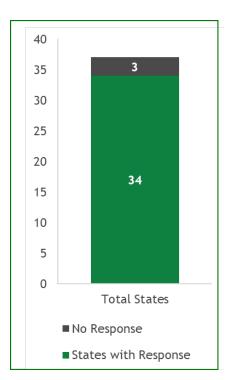


Figure 7: States participating in DPI Readiness assessment



- States employ varying methodologies to measure digital infrastructure and service delivery. This affected direct comparisons and required context-sensitive interpretation of the results.
- The assessment reflects data at a specific time and did not capture newly launched DPI initiatives after April 2025.

These limitations do not diminish the assessment's value. Instead, they provide an important context for interpreting the findings and developing suitable policy responses based on the complexity and diversity of Nigeria's state-level digital transformation environment.



3. Classification of states based on maturity levels

The assessment of the 34 participating states reveals a diverse landscape of DPI readiness, with states distributed across three distinct maturity levels (indicative) as follows:

Low-maturity states: These states are at the initial stage of their digital transformation journey. The key characteristics are as follows:

- Enabling environment: Digital transformation policies are either still at the draft stage or are yet to be implemented. Low digital literacy rates persist among the population, alongside infrequent training initiatives and underdeveloped or limited ICT infrastructure.
- Building blocks: These states have low coverage of NIN, with basic or no authentication
 mechanisms based on digital identity systems. Digital payment adoption is limited despite the
 early adoption of real-time payment systems, such as Remita. The data-sharing mechanisms are
 either non-existent or are in initial stages.
- Public service delivery: Access to digital public services is limited due to the lack of electronic registries and nascent sectoral DPI initiatives.

Medium-maturity states: These states are transitioning from foundational digital infrastructure to active adoption of digital solutions but still need to scale and optimise. The key characteristics are as follows:

- Enabling environment: Policies are in place and in line with national frameworks, but lack active implementation due to limited resources. Digital skill levels are growing through structured programmes and ICT infrastructure is also expanding.
- Building blocks: These states have moderate to high adoption of NIN among their population, with basic authentication mechanisms based on the digital identity systems in place. Multiple MDAs adopt payment systems, but they may lack full interoperability at a broad scale. Sectoral data-sharing initiatives may be present but are not widely integrated.
- Public service delivery: These states have initiated digital interventions across selected sectors.
 Electronic registries and functional IDs are available, but they might not be fully integrated with NIN.

High-maturity states: These states are at the advanced stage of digital transformation and are focused on the scale-up of DPI. They need to ensure the complete integration and interoperability of digital systems. The key characteristics are as follows:

- Enabling environment: These states are at the advanced stage of implementing policy frameworks aligned with national strategies. They have moderate to high mature and scalable ICT infrastructure, and high-skilled workforce powered through sustained digital skilling programmes.
- **Building blocks:** These states have moderate to high NIN coverage and use digital ID-enabled authentication capability. They have moderate to high mature payment system integration across MDAs and have enabled data sharing initiatives in multiple sectors.



• **Public service delivery:** These states are implementing digital initiatives in various sectors, such as agriculture, education, health, social protection, and land administration.

Status of States on DPI Maturity				
Low	Medium		High	
Adamawa	Abia	Kwara	Akwa Ibom	
Benue	Anambra	Lagos	Oyo	
Cross River	Bauchi	Nasarawa		
Delta	Borno	Niger		
Gombe	Ebonyi	Ogun		
Katsina	Edo	Ondo		
Kebbi	Ekiti	Osun		
Kogi	Enugu	Rivers		
Plateau	Jigawa	Sokoto		
Taraba	Kaduna			
Yobe	Kano			
Zamfara				

Figure 8: DPI readiness maturity level of Nigerian states



4. Data analysis and assessment

The cumulative assessment reveals a concentration of states in the medium and low maturity category, with significant disparities in digital public infrastructure readiness across the federation. Only two states achieved high maturity status (Akwa Ibom and Oyo). 20 states fall into the medium category, and 12 are in the low maturity bracket. This distribution indicates that while most states have established foundational digital capabilities, coordinated DPI implementation across Nigeria has room to improve substantially.

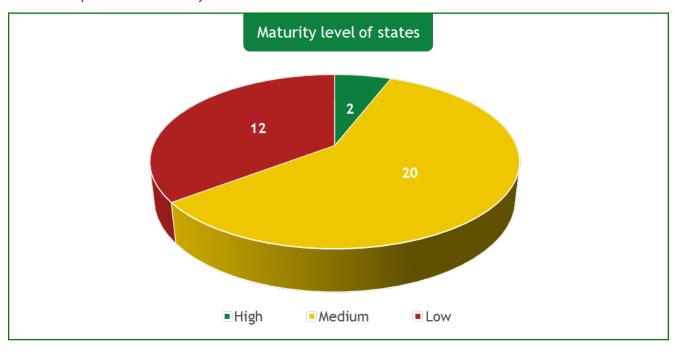


Figure 9: DPI readiness maturity of Nigerian states

States such as Enugu, Jigawa, and Lagos recorded high maturity concerning internet access, digital skills, hosting infrastructure, etc., but they need to improve their identity system's authentication and authorisation capabilities to strengthen their DPI ecosystem further. This initial evaluation demonstrates that while foundational digital infrastructure exists across most states, substantial gaps persist in policy implementation, maturity of DPI building blocks, digital systems interoperability, and delivery of public services in digital mode.

The analysis of the three fundamental pillars reveals distinct performance patterns across Nigerian states. The Enabling Environment pillar shows a moderate foundation, with almost 22 states reportedly achieving medium maturity. Most states lack compliance with basic policy frameworks and implementation inconsistencies. For instance, nearly 27 states recorded low maturity when assessed for compliance with the National Cybersecurity Policy.

The Building Blocks pillar demonstrates moderate to low performance, particularly in identity systems through NIN integration. Data-sharing capabilities remain one of the weakest components, with 26 states achieving low maturity. The Delivery of Public Services pillar exhibited the most diverse performance range, with advanced states demonstrating comprehensive digital service platforms while others maintain predominantly manual processes.



Comparative analysis across the eight specific sub-pillar areas reveals that digital skills and identity systems are relatively stronger across the states, with only three states in low maturity in these sub-pillars. At the same time, ICT infrastructure, payment systems and data-sharing initiatives show the most significant variation and potential for improvement. The policy, platforms and sectoral initiative sub-pillars occupy middle-ground positions, with moderate adoption patterns across the federation.

Identity systems show promising coverage through NIN integration, though authentication capabilities vary significantly. With five states in high maturity and 16 in low maturity, Platform development demonstrates the widest performance spectrum. Under this sub-pillar, 25 states have reportedly achieved low maturity in electronic registries, reflecting diverse state-level digital transformation priorities and resource allocation strategies.

The following sub-sections provide a detailed analysis of each pillar for states.

4.1. Enabling environment

The Enabling Environment pillar, a critical foundation for DPI implementation, recorded significant disparities in performance across the three sub-pillars: Policy, digital skills, and ICT Infrastructure.

4.1.1. Performance across sub-pillars

The analysis of the enabling environment pillar shows improvement potential across the three sub-pillars, with the digital skills sub-pillar emerging as the strongest performing area, where 22 states achieved high maturity. Low policy adherence and weak ICT infrastructure emerge as the two major challenges within the enabling environment pillar.

Only three states achieved a high maturity status in the policy framework sub-pillar. Eighteen states fall into the medium maturity category, while 13 fall into the low maturity category. This distribution indicates substantial work is required to establish foundational policy environments conducive to DPI adoption in Nigerian states. High-maturity states have complied with most national policies and frameworks. In contrast, low-maturity states, such as Cross River, Kebbi, Kogi, and Adamawa, have reported that they are still at the initial stage concerning the DPI policy framework development. The low-mature states in this sub-pillar have not complied with many national ICT policies, but they have a dedicated ICT MDA to achieve these targets, providing a way for further improvements.

The compliance with NDPA 2023 presents concerning gaps, with more than 50% of the states reporting low maturity and only 25-30% possessing the necessary tools and infrastructure for effective enforcement, including data classification tools, privacy management platforms, and data protection impact assessment (DPIA) Tools. This disparity highlights the need for capacity building and infrastructure investment to bridge the compliance gap. Similarly, compliance with the National Cybersecurity policy indicator revealed significant vulnerabilities, with 27 states falling in the low maturity category.



#	State	Policy	Digital Skills	ICT Infrastructure	Enabling Environment
1	Abia	Medium	High	Low	Medium
2	Adamawa	Low	Low	Low	Low
3	Akwa Ibom	High	High	Medium	High
4	Anambra	Medium	Medium	Medium	Medium
5	Bauchi	Medium	High	Low	Medium
6	Benue	Medium	Low	Low	Low
7	Borno	Low	High	High	Medium
8	Cross Rivers	Low	High	Low	Low
9	Delta	Low	Medium	Low	Low
10	Ebonyi	Medium	High	Low	Medium
11	Edo	Medium	High	Medium	Medium
12	Ekiti	Medium	High	Medium	Medium
13	Enugu	High	High	Medium	Medium
14	Gombe	Medium	Medium	Medium	Medium
15	Jigawa	Medium	High	Medium	Medium
16	Kaduna	Medium	High	Medium	Medium
17	Kano	Medium	High	Medium	Medium
18	Katsina	Medium	Medium	Low	Low
19	Kebbi	Low	Medium	Low	Low
20	Kogi	Low	Low	Low	Low
21	Kwara	Low	Medium	Low	Low
22	Lagos	Medium	High	Medium	Medium
23	Nasarawa	Low	High	Medium	Medium
24	Niger	Medium	High	Low	Medium
25	Ogun	Medium	High	Medium	Medium
26	Ondo	Low	High	Low	Medium
27	Osun	Medium	Medium	Medium	Medium
28	Оуо	High	High	High	High
29	Plateau	Low	High	Medium	Medium
30	Rivers	Low	Medium	Medium	Medium
31	Sokoto	Medium	High	Medium	Medium
32	Taraba	Low	Medium	Low	Low
33	Yobe	Medium	High	Low	Medium
34	Zamfara	Low	High	Low	Low

Figure 10: State maturity across enabling environment sub-pillars



States, such as Akwa Ibom, Oyo, Enugu, and Lagos, among others, show high compliance with national policy frameworks, demonstrating proficiency in digital strategy, cybersecurity policy compliance, and data governance. For instance, Lagos State's Data Subject Access Request (DSAR) Policy has comprehensively aligned the state's actions with NDPA 2023.

Twenty-two states have reported adequate availability of ICT capacity to drive digital initiatives. Many high-maturity states deployed ICT cadres across government departments and implemented regular capacity-building programmes. However, it seems that Nigerian states continue to get perplexed by the differences between digitization and DPI approach. Hence, there is a need to conduct specialized capacity-building programs on DPI to equip the ICT Ministries of Nigerian states to craft, implement, and scale DPI in multiple sectors.

NITDA has supported ICT capacity-building efforts through initiatives, such as the Digital States Programme, which provides digital literacy training to Nigerian youth. However, more can be done, with NITDA collaborating with state digital or ICT ministries to align these training needs and placement opportunities across MDAs in the state to benefit public service delivery, such as the ICT cadre strengthening program.

The availability of ICT Infrastructure presents a dire picture. Only two states achieved high maturity, while 16 are in the medium and low maturity categories, respectively. This binary distribution, with most states in the medium and low category, highlights a consistent ICT infrastructure gap across the federation. Oyo, Borno, and Lagos are among the states that are reported to have strong technical foundations supporting their digital initiatives. High-performing states have invested in scalable data centres, implemented comprehensive cloud strategies, and established reliable network infrastructure capable of supporting DPI implementations. These states typically use a mix of onpremises and cloud deployments, with disaster recovery plans and robust security measures. For instance, Nasarawa State has established the Nasarawa State Information Technology and Digital Economy Agency (NASITDEA) to act as its data centre responsible for information management, storage, processing, and exchange, among other functions.

In contrast, low-maturity states lack basic hosting capabilities, have limited or no cloud strategies, and face significant connectivity challenges. These states need to improve fibre connectivity, cloud service implementation, and the development of data centres. Attracting private investment in fibre optic deployment will require states to offer investment incentives and support that complement the needs of operators or investors, especially where commercial viability is low.

The uneven maturity distribution in the enabling environment pillar highlights the importance of tailored approaches to address gaps in each component of the enabling environment pillar. Only four states demonstrate consistently high performance across multiple sub-pillars: Akwa Ibom (high in policy and digital skills, medium in ICT infrastructure), Borno (high in digital skills and ICT infrastructure, low in policy), Enugu (high in policy and digital skills, medium in ICT infrastructure), and Oyo (high across all three sub-pillars).

This overlap highlights the challenge of achieving balanced development across all enabling environment components. Conversely, 10 states show concerning patterns with low maturity across multiple subpillars and require comprehensive foundational interventions. These states include Adamawa, Kogi (low across all three sub-pillars), Benue (low in digital skills and ICT infrastructure), and Cross River, Delta, Kebbi, Kwara, Ondo, Taraba, and Zamfara (low in policy and ICT infrastructure).



4.1.2. Insights from the sub-pillar correlation analysis

The correlation analysis suggests a significant relationship between the three sub-pillars and provides insights into potential collaborative development approaches. The study shows a medium correlation between ICT infrastructure and digital skills, which suggests that human capital development and technical infrastructure investments are associated interventions.

Policy frameworks show a medium correlation with ICT Infrastructure but a weak correlation with digital skills. This means that the state's policy frameworks (the rules, regulations, and guidelines related to technology) tend to align with the state of its ICT Infrastructure (such as internet connectivity, data centres, hardware). Good policies enable strong ICT infrastructure. However, policies are not as effective at driving the growth of digital literacy and capabilities among people.

A significant reason for this discrepancy could be the higher focus on hardware development over human capacity in the DPI policies. Policymakers find it easier to focus on tangible infrastructure development and measure it, such as laying fibre optic cables, building data centres, and creating licensing spectrum. Policies can directly mandate and fund these physical deployments.

In contrast, developing digital skills is a long-term endeavour that may require education reform and collaboration between the government, the private sector (for job-relevant skills), civil society, and communities. Even if policies mention digital skills, the mechanisms for widespread skill development may remain weak, underfunded, or ineffective.

4.2. Building blocks

The building blocks pillar encompasses identity systems, payment systems, and data sharing initiatives as its three sub-pillars. These components form the core layers of DPI that enable secure digital interactions, seamless financial transactions, and interoperable service delivery across government entities. The sub-pillars are measured through five indicators that comprehensively evaluate how effectively states can verify user identities, process financial transactions, and exchange information across MDAs.

4.2.1. Performance across sub-pillars

The study found that most states use NIN for basic authentication. There is a huge variation in the level of NIN coverage (30% to 90%) among the Nigerian states. More than 20 Nigerian states have less than 50% NIN coverage. High-maturity states, including Abia, Lagos, Nasarawa, Kaduna, Kano, and Ogun, demonstrate exceptional identity system implementation through comprehensive NIN enrolment exceeding three-quarters of their populations. However, only Lagos has more than 90% NIN enrolment. This creates substantial barriers to universal digital identity coverage, essential for comprehensive DPI implementation.

Only a handful of states, including Abia, Bauchi, Nasarawa, Ekiti, and Jigawa, have reportedly used multifactor channels, such as biometrics, fingerprints, BVN, OTP, mobile apps, and offline verification. This limitation significantly impacts the states' ability to offer public services in digital mode and effectively participate in federal digital initiatives. Hence, more than 70% of states are at medium and low maturity levels in the identity sub-pillar.



#	State	Identity	Payment Systems	Data Sharing Initiatives	Building Blocks
1	Abia	High	Low	Low	Low
2	Adamawa	Medium	Low	Low	Low
3	Akwa Ibom	Medium	Medium	Medium	Medium
4	Anambra	Medium	High	Low	Medium
5	Bauchi	Medium	Low	Low	Low
6	Benue	Medium	Low	Low	Medium
7	Borno	Medium	Low	Low	Low
8	Cross Rivers	Low	High	Low	Low
9	Delta	Medium	High	Low	Low
10	Ebonyi	Medium	Low	Low	Low
11	Edo	Medium	Low	Medium	Medium
12	Ekiti	Medium	Medium	Medium	Medium
13	Enugu	Medium	High	High	Medium
14	Gombe	Medium	Medium	Low	Low
15	Jigawa	Medium	Low	Medium	Medium
16	Kaduna	High	Low	Low	Medium
17	Kano	High	Low	Medium	Medium
18	Katsina	Medium	Low	Low	Low
19	Kebbi	Low	Low	Low	Low
20	Kogi	Medium	Low	Low	Low
21	Kwara	Medium	High	Low	Medium
22	Lagos	High	Low	Medium	Medium
23	Nasarawa	High	Low	High	High
24	Niger	Medium	High	Low	Medium
25	Ogun	High	Medium	Low	Medium
26	Ondo	Medium	Low	Low	Medium
27	Osun	Medium	High	Low	Medium
28	Oyo	Medium	High	Low	Medium
29	Plateau	Medium	High	Low	Medium
30	Rivers	Medium	Low	Low	Low
31	Sokoto	Medium	Medium	Low	Medium
32	Taraba	Medium	Low	Low	Low
33	Yobe	Low	Low	Low	Low
34	Zamfara	Medium	Low	Low	Low

Figure 11: Maturity of states across sub-pillars of the building blocks pillar



The adoption and integration of established payment platforms, such as the NIBSS Central Switch and the NIBSS Universal Switch (NUS), also reveal substantial disparities, with state-level integration of payment systems varying from 20% to 70% among state MDAs. Twenty states are in the low maturity category, and they rely predominantly on manual payment processes with limited integration of interoperable payment platforms. The reliance on manual processes creates substantial inefficiencies, increases transaction costs, and limits transparency in government financial operations.

Nine states, including Anambra, Cross River, Delta, Enugu, Kwara, Niger, Osun, Oyo, and Plateau demonstrate high maturity through the adoption of NIBSS and NUS platforms across most of their MDAs. This reveals an advanced payment infrastructure with automated reconciliation capabilities and real-time settlement systems.

Data sharing emerges as the weakest link in Nigerian states' DPI building blocks, with only a few states deploying government-to-government exchange platforms or adopting common data standards. The assessment reveals that data sharing capabilities remain severely underdeveloped across 75% of the states. Only four states, Lagos, Edo, Enugu, and Nasarawa, have successfully deployed operational G2G platforms that enable real-time data sharing across government departments and maintain security and privacy protections. A detailed examination reveals that health, education, and land administration are the most preferred sectors in G2G data sharing. Nigerian states face multiple challenges in implementing and scaling data-sharing initiatives. These include a lack of standardised data formats, absence of dedicated data governance frameworks, limited technical infrastructure for data exchange, insufficiently skilled personnel for data management, and weak integration between different government systems.

The assessment also reveals that only 11 states have comprehensively implemented standardised beneficiary ownership data standards (BODS). This limited uptake of data-sharing initiatives has inhibited cross-agency collaboration and the integrated delivery of public services.

4.2.2. Insights from the sub-pillar correlation analysis

The study suggests a weak correlation among DPI components covering identity, payment systems, and data sharing. This reveals a critical insight into Nigeria's DPI development patterns that may challenge conventional assumptions about digital infrastructure synergies. This finding indicates that states cannot rely on spillover effects from identity system investments to automatically enhance payment system and data-sharing capabilities, which require deliberate and targeted interventions.

4.3. Delivery of public services

The delivery of public services pillar represents a detailed assessment of the current status of Nigeria's DPI ecosystem in various sectors. This pillar informs how well the foundational initiatives taken under the enabling environment and building block pillars translate to tangible citizen-facing services and transformative governance outcomes. This pillar comprises two critical sub-pillars: platforms and sectoral initiatives. These collectively assess the readiness and effectiveness of DPI initiatives to enhance public service delivery's operational and administrative efficiency for citizens.

This pillar exhibits the most pronounced performance disparities among all the DPI components. These disparities are evident in the data collected from states. Most states have developed advanced integrated digital systems for land administration but lack DPI initiatives in areas such as social



protection and agriculture. On the other hand, DPI initiatives in the education sector are lagging. This variation could stem from multiple factors, including technical capacity, resource allocation, and political buy-in. Institutional commitment to sectoral DPI adoption also varies widely, especially regarding MDA's adoption of common service portals.

4.3.1. Performance across sub-pillars

The platform development sub-pillar, which comprises electronic registries, functional IDs, and the status of digital services, is one of the critical determinants of a state's overall DPI maturity.

Nigerian states face serious challenges in implementing interoperable electronic registries, which is the foundation of delivering any public service delivery online or providing any social protection benefits. The study reveals that most states maintain manual registry systems with basic digitisation limited to simple data entry functions. Only four maintain electronic registries across all MDAs. Sokoto, Lagos, Jigawa and Akwa Ibom have achieved advanced electronic registry implementation through systematic digitisation of civil registration, business registration, and property records.

Other states, such as Abia, Anambra, Oyo, and Jigawa, follow closely at medium maturity, showcasing integrated registry systems that support real-time data access and cross-system integration. These states have successfully implemented unified registry platforms to a large extent to eliminate manual processes and enable automated service delivery.

For the functional ID assessment, three common functional ID systems were identified through stakeholder consultation interviews: State Resident IDs, Tax IDs, and Health Insurance IDs; these also have publicly available data sources for verification. Twelve states have successfully deployed residential identity cards: Abia, Akwa Ibom, Edo, Enugu, Jigawa, Kaduna, Katsina, Kwara, Lagos, Ondo, Osun, and Oyo. Lagos State's LASRRA card exemplifies advanced implementation by functioning as both a smart identity card and payment system for government services, transportation, and financial services. Interestingly, Kaduna State has made possessing either the State Resident Card or NIN mandatory for accessing government services since May 2021.

At least 10 states have implemented health insurance identification systems - Lagos, Oyo, Anambra, Kwara, Kaduna, Ekiti, Kebbi, Borno, Delta, and Enugu - providing dedicated health service access credentials. Kwara State's health ID system has comprehensive biometric integration that allows beneficiaries to access care without physical cards through biometric verification. These implementations showcase how state functional IDs extend beyond their basic purpose of identification to support integrated public service delivery.

Under the status of digital services indicator, 17 states, including Akwa Ibom, Oyo, and Sokoto, have achieved high maturity. Many of these states offer government service platforms with real-time transaction processing and accessibility compliance. They have also implemented progressive web applications that provide native app-like experiences while maintaining broad device compatibility.

This study focuses on five sectoral DPI initiatives: agriculture, health, education, social protection, and land administration. Land administration emerged as the sector with the most DPI initiatives, while social protection and agriculture have gained the least traction.



#	State	Platforms	Sectoral Initiatives	Delivery of Public Service
1	Abia	High	Medium	High
2	Adamawa	Low	Low	Low
3	Akwa Ibom	High	Medium	High
4	Anambra	Medium	Low	Medium
5	Bauchi	Medium	High	Medium
6	Benue	Low	Low	Low
7	Borno	Low	Medium	Low
8	Cross Rivers	Low	Low	Low
9	Delta	Low	Low	Low
10	Ebonyi	Medium	High	Medium
11	Edo	Medium	Medium	Medium
12	Ekiti	Medium	Medium	Medium
13	Enugu	High	High	High
14	Gombe	Low	Low	Low
15	Jigawa	High	High	High
16	Kaduna	Medium	Medium	Medium
17	Kano	Medium	Medium	Medium
18	Katsina	Medium	Low	Medium
19	Kebbi	Low	Low	Low
20	Kogi	Low	Low	Low
21	Kwara	Medium	Low	Medium
22	Lagos	High	Low	Medium
23	Nasarawa	Medium	Medium	Medium
24	Niger	Medium	Low	Medium
25	Ogun	Low	Medium	Medium
26	Ondo	Medium	Medium	Medium
27	Osun	Medium	Low	Medium
28	Oyo	High	High	High
29	Plateau	Low	Low	Low
30	Rivers	Medium	Medium	Medium
31	Sokoto	High	Medium	High
32	Taraba	Low	Low	Low
33	Yobe	Low	Medium	Low
34	Zamfara	Medium	Low	Medium

Figure 12: Maturity levels of states across the sub-pillars of delivery of public service



Only three states achieved high maturity in the DPI in the agriculture sector, through comprehensive farmer registration and agricultural extension platforms. Ten states demonstrated moderate maturity with basic farmer ID systems, and 21 showcased low maturity. High-performing states like Nasarawa and Jigawa have established NIN-linked farmer IDs with electronic registries to enable precision agriculture support. In contrast, low-maturity states, such as Kebbi and Cross River, rely entirely on manual verification processes for agriculture support to farmers.

States, such as Ekiti and Nasarawa, have achieved high maturity in the DPI initiatives in the healthcare sector through patient record digitisation across primary, secondary, and tertiary facilities with NIN-linked health IDs. Eighteen states demonstrate moderate-level maturity with selective electronic health records, while 12 remain in a low maturity status. Low-maturity states, such as Kebbi and Taraba, use paper-based patient records without a digital health infrastructure.

Four states demonstrated high maturity, and 11 show medium maturity in DPI in the Education sector. High-maturity states, such as Enugu and Oyo, achieved medium-level maturity in student and teacher ID coverage with integrated learning management systems.

Twenty-four states showcased low maturity and eight displayed high maturity in DPI in social protection. High-maturity states, such as Jigawa and Kaduna, have implemented NIN-linked beneficiary IDs with real-time electronic registries for cash transfers, while the rest of the low-maturity states use paper-based beneficiary lists without digital payment integration.

Land administration stands out as the most digitally advanced sector. Twenty-six states have showcased high maturity and only six displayed low maturity in DPI in agriculture. Advanced states, such as Lagos and Rivers, have deployed comprehensive digital cadastres with NIN-linked property IDs and cross-database integration. In contrast, states such as Sokoto and Kebbi rely on manual land registries.

There are many underlying reasons for the disparity in DPI initiatives across various sectors among Nigerian states. Land administration, while complex, deals with structured, static, and geospatially anchored data, which makes it amenable to centralised, integrated systems. They manage a finite set of attributes (ownership, boundaries, titles) that, once digitised, require less dynamic cross-sectoral integration.

In contrast, social protection and agriculture initiatives involve highly dynamic, diverse, and often sensitive datasets (e.g., individual beneficiary data, crop yields, weather patterns, market prices). Implementing DPI in these sectors requires robust, real-time, and privacy-preserving data exchange mechanisms across multiple government agencies and private sector actors. This requires advanced interoperability standards, secure API development, and sophisticated data governance frameworks that many states lack, making it technically more challenging to establish sectoral DPI layers compared to the more contained scope of land administration.



5. Roadmap for states

Based on the insights from the assessment of the DPI readiness of Nigerian states, we have created a roadmap tailored to the three maturity levels to achieve the ideal DPI state. The table below shows the key characteristics of the ideal DPI state.

5.1. Ideal DPI state for Nigeria

Enabling environment	 Design and implementation of policy and regulatory mechanisms that enable the adoption of the DPI approach by the Nigerian State Strong digital transformation capability within MDAs Scalable, interoperable, secure, and privacy-preserving ICT Infrastructure supported by universal high-speed connectivity
Building blocks	 Accessible and sustained use of the national digital ID by all residents Availability of updated and integrated electronic registries in all MDAs Integration of all the foundational building blocks of DPI - National digital ID, payment systems, and data sharing systems across multiple sectors
Delivery of public services	 Delivery of all public services through various digital modes Implementation of an effective multimodal grievance resolution mechanism by all MDAs Presence of DPI-based solutions in various sectors to improve outcomes for citizens

5.2. Roadmap for low-maturity states

Low-maturity states must adopt a three-phase approach to transition to the ideal DPI state.

Phase 1: Building a strong foundation

- Develop and implement state policies and strategies related to DPI through a dedicated MDA responsible for the state's digital transformation
- Comply with national policies and guidelines related to DPI, such as the National Data Protection Act, Nigeria e-Government Interoperability Framework (Ne-GIF), etc.
- Integrate digital competency frameworks to assess digital skills gaps and define ICT roles for various MDAs
- Conduct regular structured training programmes (offline + online) on various DPI concepts and topics; these training programmes can be based on innovative learning methods, such as gamification



- Assess current hosting requirements and existing infrastructure needs to ensure adequacy and expand high-speed connectivity in the state with the help of telecom service providers and federal agencies
- Interface with federal agencies to craft a strategy for increasing smartphone penetration in the state
- Map existing payment workflows, assess integration gaps, and coordinate with the State Treasury and NIBSS to onboard priority MDAs
- Digitise key payment processes, such as G2P and vendor payments
- Design a platform for G2G data exchange based on the National Interoperability Framework (Ne-GIF)
- Build and review sectoral strategies (e.g., health, education, agriculture, social protection, land administration) to align with DPI building blocks - digital ID, digital payments, and data sharing systems
- Complete the digitisation of all the databases and registries across all MDAs

Phase 2: Driving implementation and integration

- Conduct capacity building programmes on advanced topics related to DPI and monitor the performance of the government ICT workforce
- Scale the existing ICT infrastructure to host current and future e-services across all MDAs to ensure high availability and performance
- Partner with the NIMC to achieve state-level NIN enrolment of 80%+ of the population through targeted campaigns via mobile and last-mile registration units
- Integrate and enable authentication in at least three public services using the NIN system
- Accelerate the integration of state functional IDs with NIN for de-duplication purposes
- Roll out digital payment systems across 50% MDAs with automated reconciliation and real-time reporting
- Integrate digital payment systems into core platforms, such as HRMS and eProcurement, with embedded audit trails
- Develop a data exchange platform for G2G data sharing and pilot it in two to three MDAs
- Build digital platforms to deliver at least 30% of public services online to residents and businesses
- Develop integrated and interoperable electronic registries in all MDAs

Phase 3: Scale up and innovation

- Deploy real-time dashboards to monitor compliance of the implementation of key policies and strategies related to DPI across all MDAs
- Onboard all MDAs on the G2G data-sharing platforms
- Ensure 95%+ coverage of NIN in the state
- Implement a multi-modal grievance resolution facility for all the public services
- Ensure 100% adoption of digital payment system across all MDAs
- Deliver all public services through various digital modes



5.3. Roadmap for medium-maturity states

Medium-maturity level states need to build further on their existing foundation to high maturity. These states need to adopt the following two-phase approach to transition to the ideal DPI state.

Phase 1: Drive implementation and integration

- Conduct capacity-building programs on advanced DPI topics and enable MDAs to become data controllers
- Assess and scale existing hosting infrastructure to host current and future e-services across all MDAs
- Accelerate the integration of all state functional IDs with NIN for de-duplication purposes
- Ensure 70% integration of the digital payment system for public service delivery across MDAs
- Collaborate with the NIMC to achieve at least 70% coverage of NIN in the state
- Develop a data exchange platform for G2G data sharing and adopt it for at least 70% of MDAs
- Build or scale digital platforms to deliver at least 50% of public services online to residents and businesses
- Adopt the interoperability framework by 70% of the MDAs

Phase 2: Scale-up and innovation

- Deploy real-time dashboards to monitor compliance of the implementation of key policies and strategies related to DPI across all MDAs
- Ensure 100% integration of a digital payment system for public service delivery across MDAs
- Collaborate with NIMC to achieve at least 95%+ coverage of the NIN in the state
- Onboard all MDAs on the G2G data sharing platforms
- Build and scale digital platforms to deliver all public services online to residents and businesses
- Adoption of the interoperability framework by 100% of the MDAs
- Implement real-time feedback and monitoring loops for continuous improvement for policy adherence by states
- Link state functional IDs (tax, health, education) with the NIN, and to permit real-time use cases across key public and private services; this would also facilitate seamless integration of government registries and build trust through user feedback, strong security, and grievance resolution
- Implement a real-time dashboard using NIBSS and CBN data for analytics and oversight for continuous improvement in payment system interoperability
- Strengthen multimodal grievance resolution mechanisms across various sectors to improve public service delivery



5.4. Roadmap for high-maturity states

States with high maturity have shown strong compliance with the foundational framework and building blocks of the DPI ecosystem. However, these states are currently at the boundary of medium and high maturity. To achieve the ideal state of DPI maturity, they require the highest level of commitment, focused within a single, dedicated phase.

Integration, innovation, and scale up

- Sustain and deepen capacity-building programs on advanced DPI concepts, digital skills, and digital innovations to strengthen the ICT cadre across all MDAs
- Build Al-powered dashboards that can offer actionable insights for policy and decision making, and integrate the MIS data of all the MDAs into the dashboard
- Integrate emerging technologies into ICT skill-based curriculum in the state training programme for all MDA staff
- Ensure 100% integration of the digital payment system for public services across all MDAs
- Deploy a 100% electronic registry infrastructure that allows state MDAs to manage existing registries
- Collaborate with the NIMC to achieve 95%+ population coverage in the state
- Link state functional IDs with NIN for effective deduplication
- Establish digital innovation incubators to help startups use the state's DPI ecosystem
- Promote innovations and regular capacity building through hackathons and ideathons



Annexure 1: State profiles

How to read a state profile

Each state has a dedicated one-page profile in this report, which gives a snapshot of that state's readiness to implement and scale DPI. These profiles are based on the assessment of several indicators. It uses simple visual elements and colour coding to help readers easily understand the findings.

The most prominent feature of each state profile is the colour-coded maturity assessment. We have used three colours throughout the document to show the level of DPI maturity:

• Eagle red: Low maturity

• Gold: Medium maturity

• Green: High maturity

These colours are used consistently across all sections - whether for individual indicators, sub-pillars, or pillars - to reflect how advanced or prepared a state is in each area. Each profile starts with a map of Nigeria, with the specific state highlighted in gold colour so that readers can identify its geographical location.

A key visual element in each profile is a speedometer-style gauge. This graphic shows the respective state's aggregate DPI maturity, with a needle pointing towards one of the three colour zones (red, gold, or green). It gives a quick visual summary of where the state stands in its overall digital readiness journey.

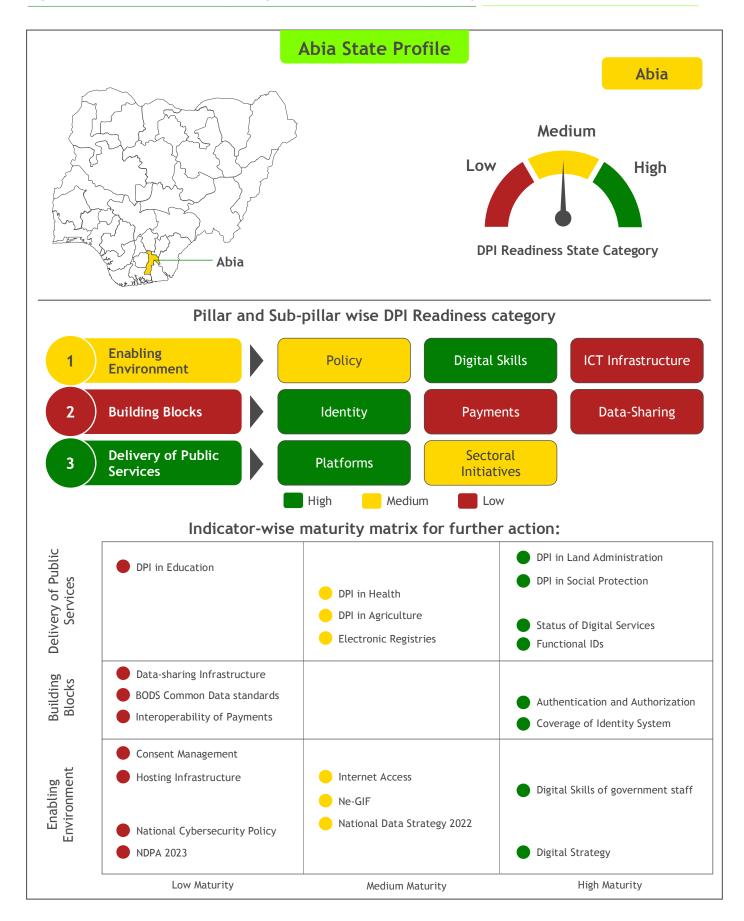
The profile is divided into three pillars:

- Enabling environment (e.g., policies, digital skills, ICT infrastructure)
- Building blocks (e.g., digital ID, payments, data sharing)
- Delivery of public services (e.g., platforms, sectoral initiatives)

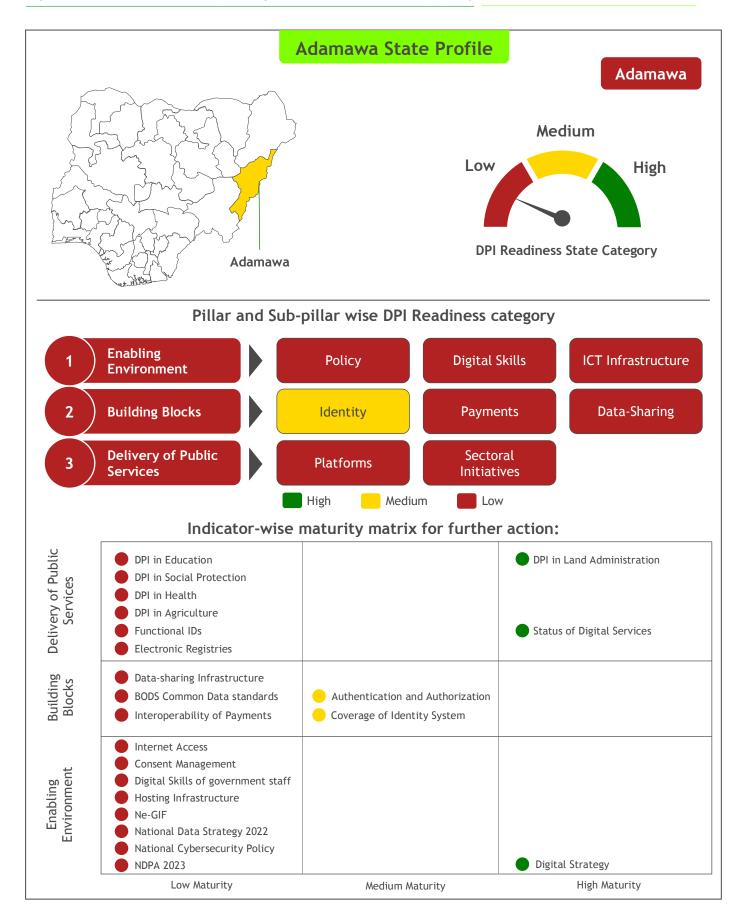
Each pillar is further broken down into sub-pillars and indicators, and the same colour coding is used to show maturity for each measure.

The bottom of each profile has a detailed indicator-wise matrix table that helps identify the indicator's maturity level. The indicators are below the sub-pillar level. This matrix includes all 22 indicators used to assess DPI readiness.

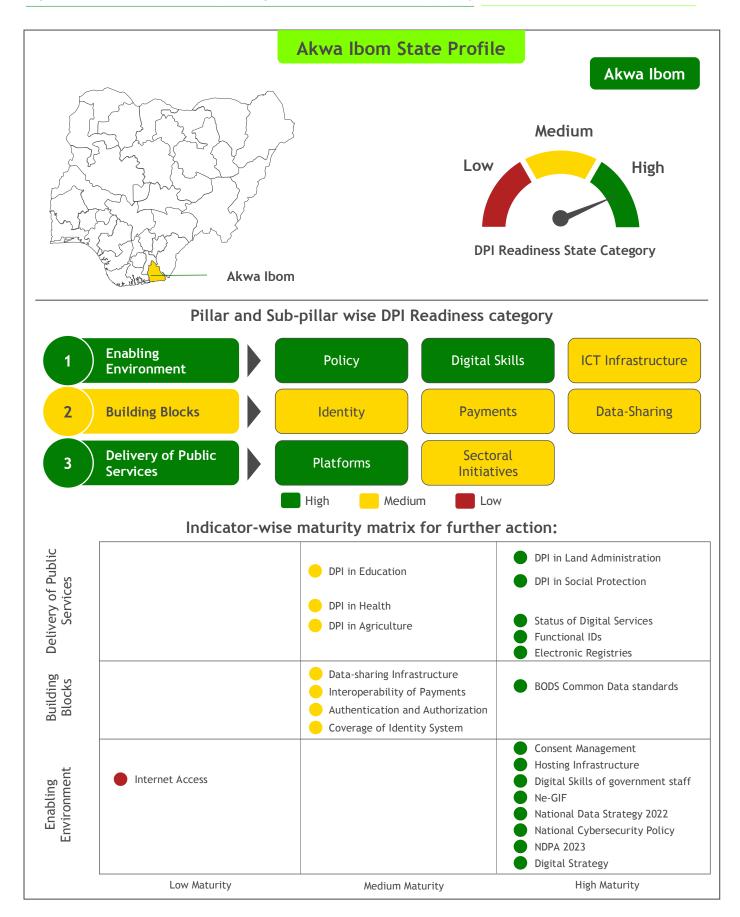




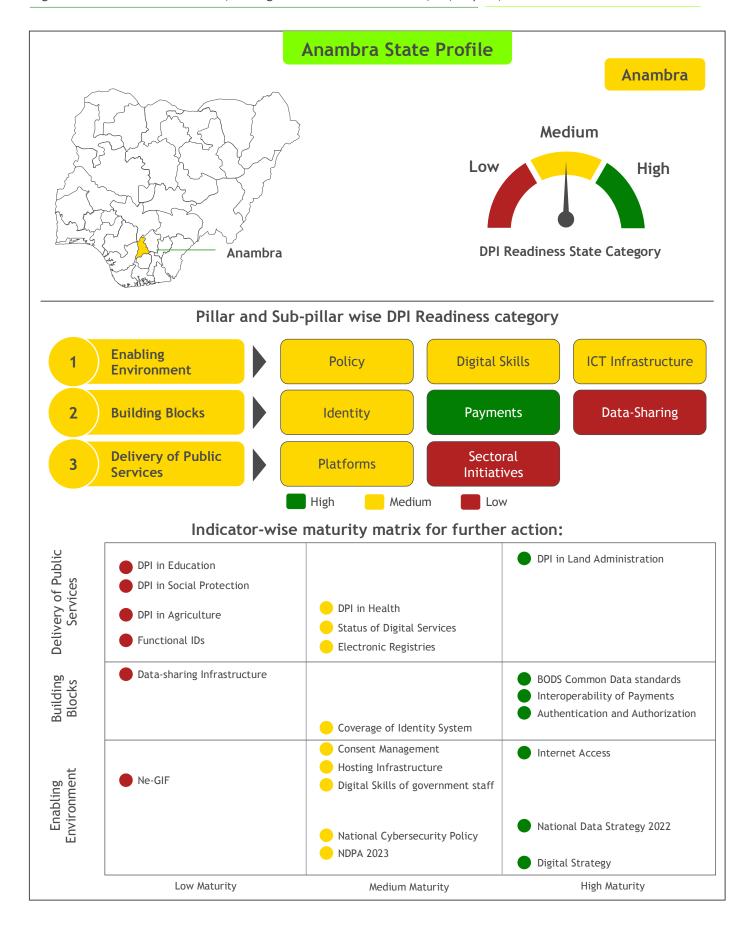




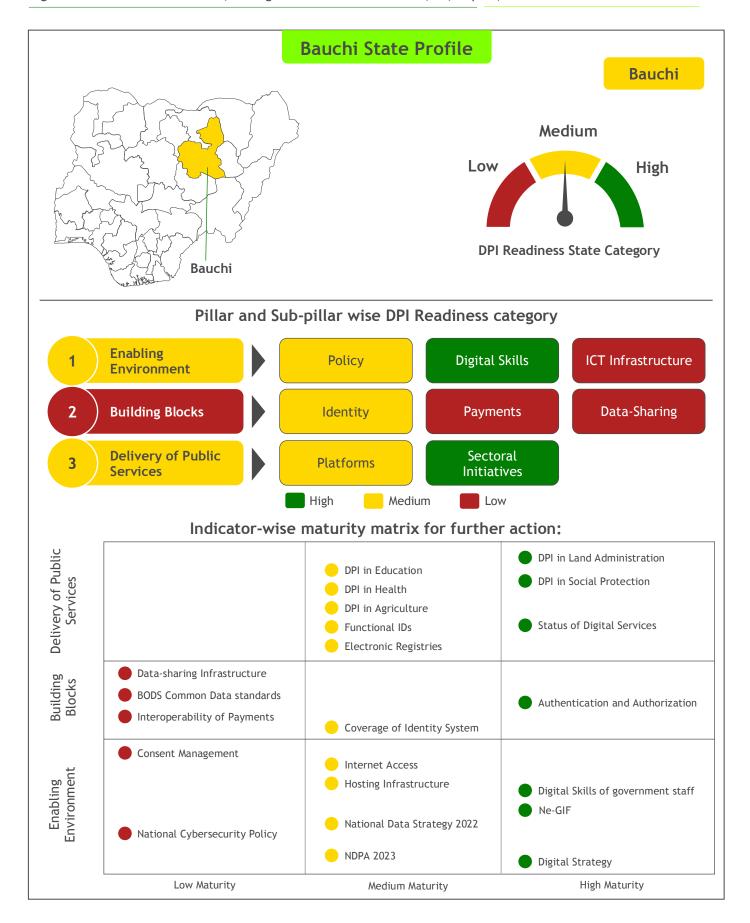




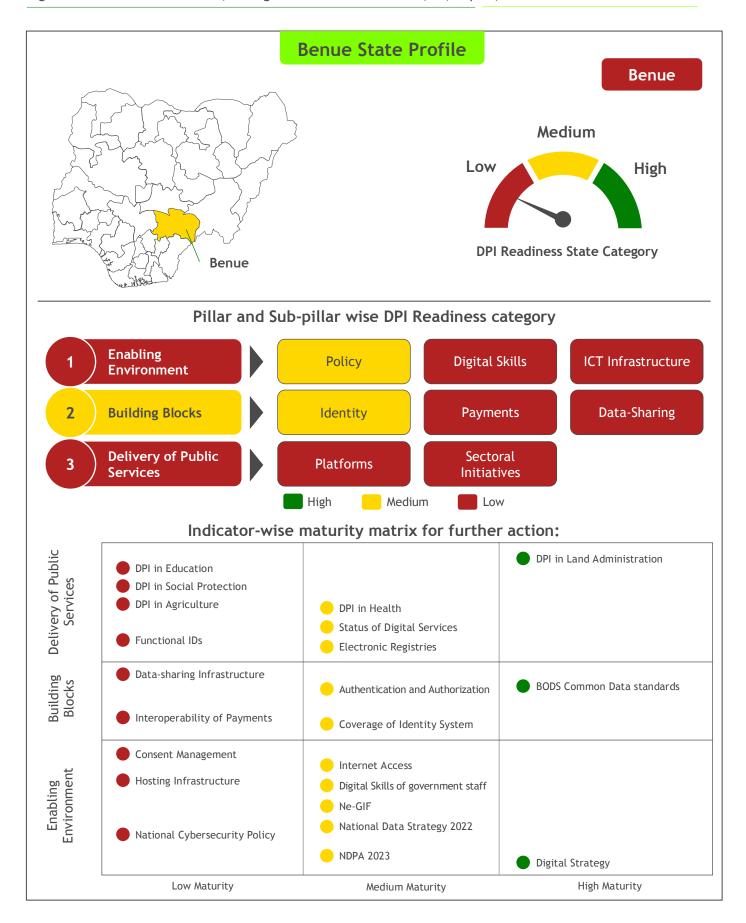




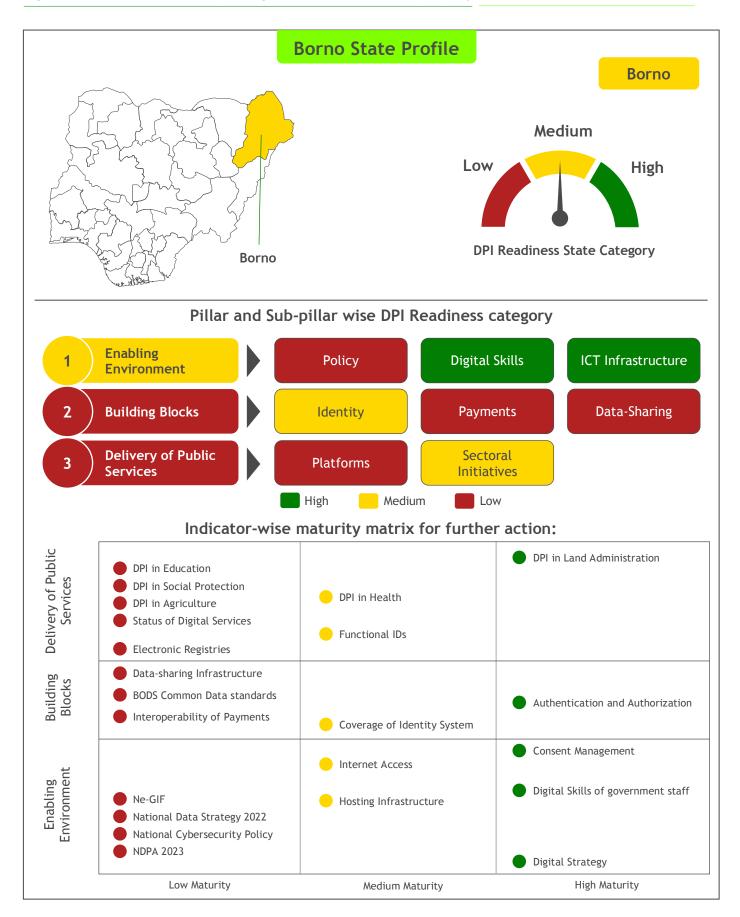




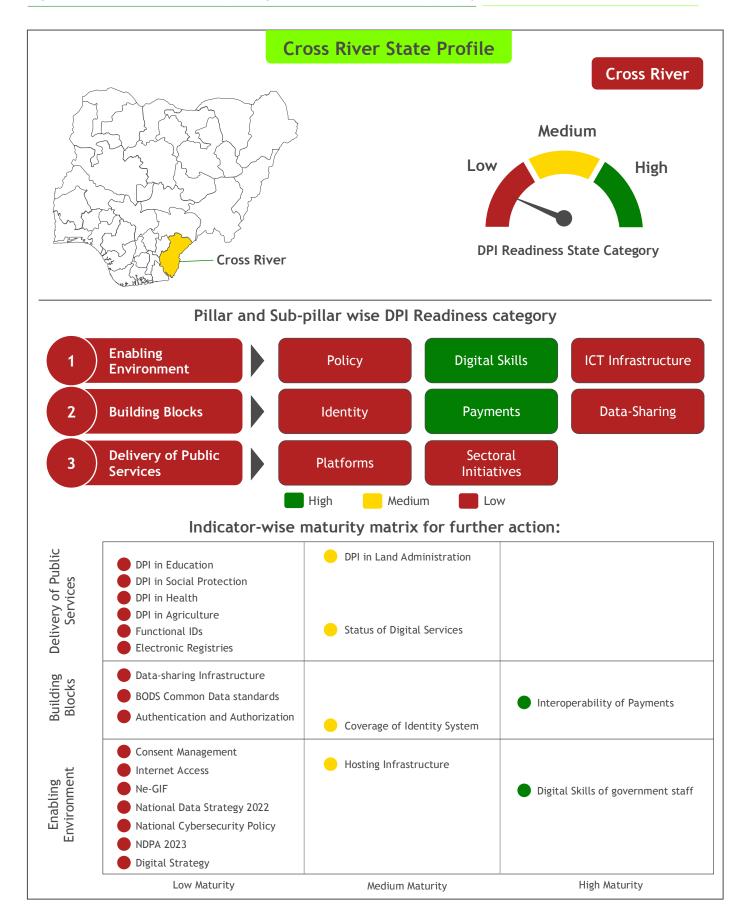




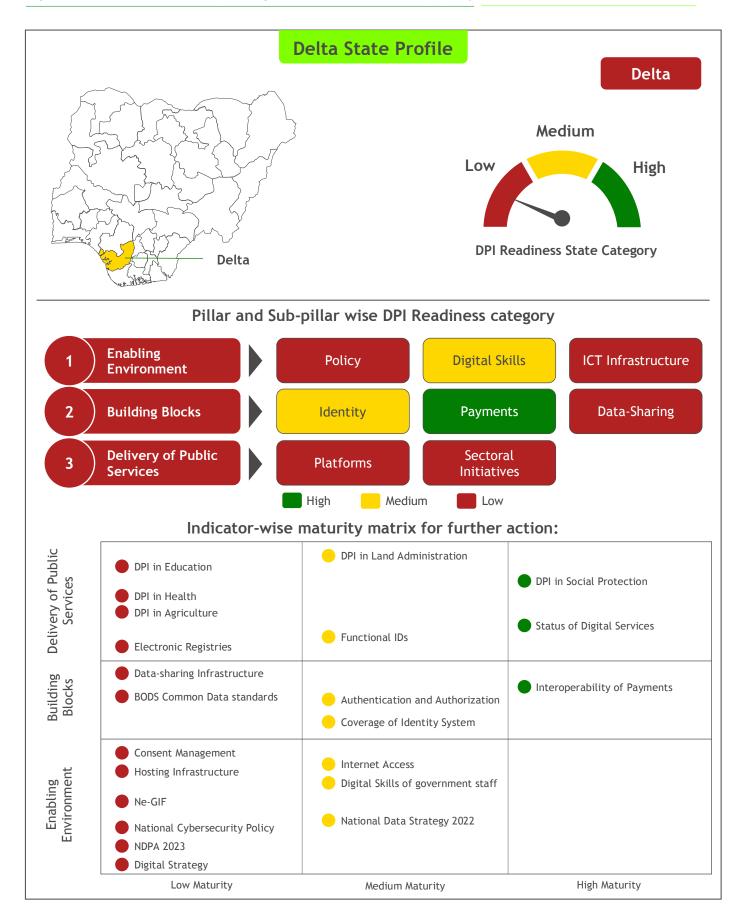




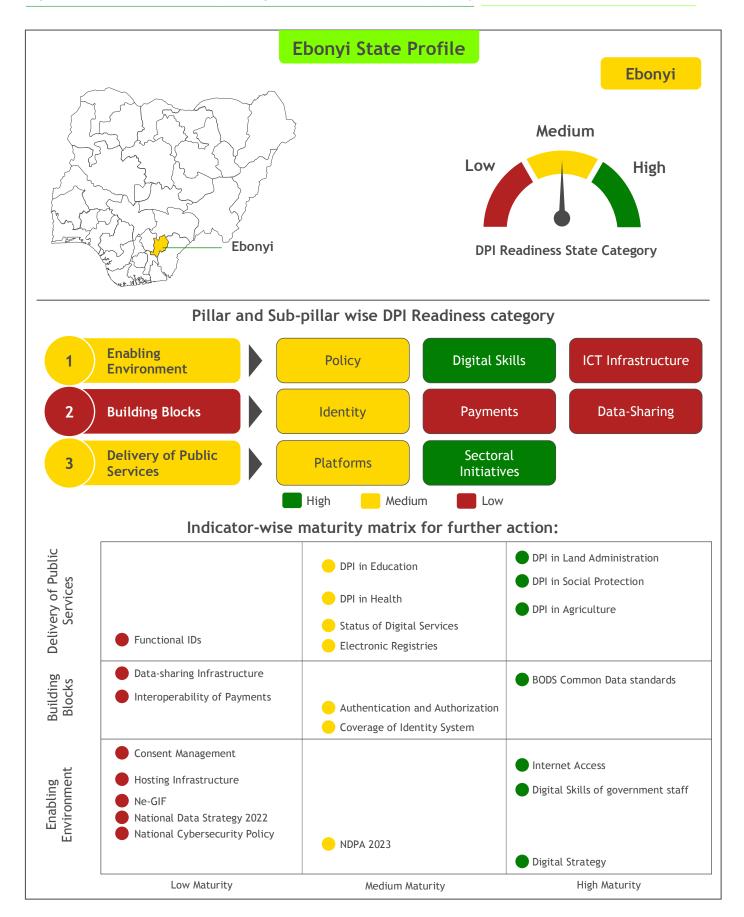




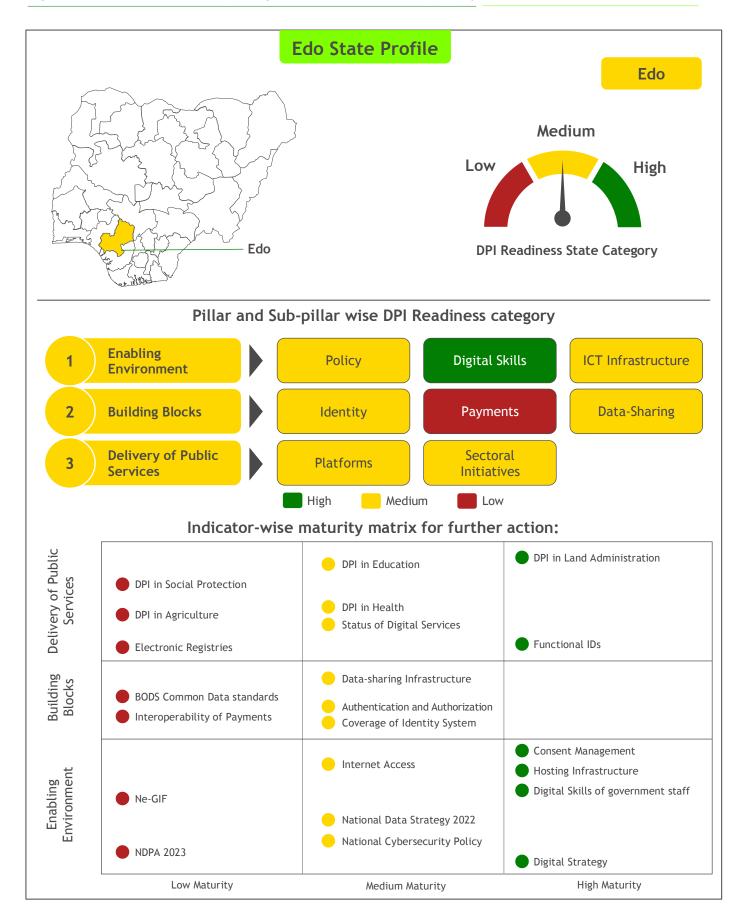




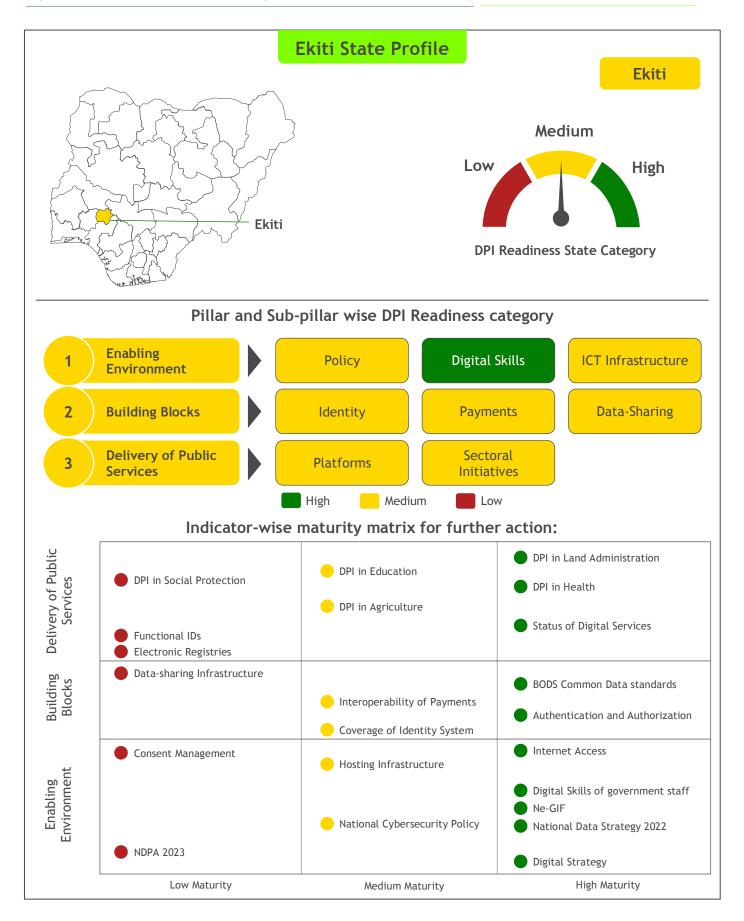




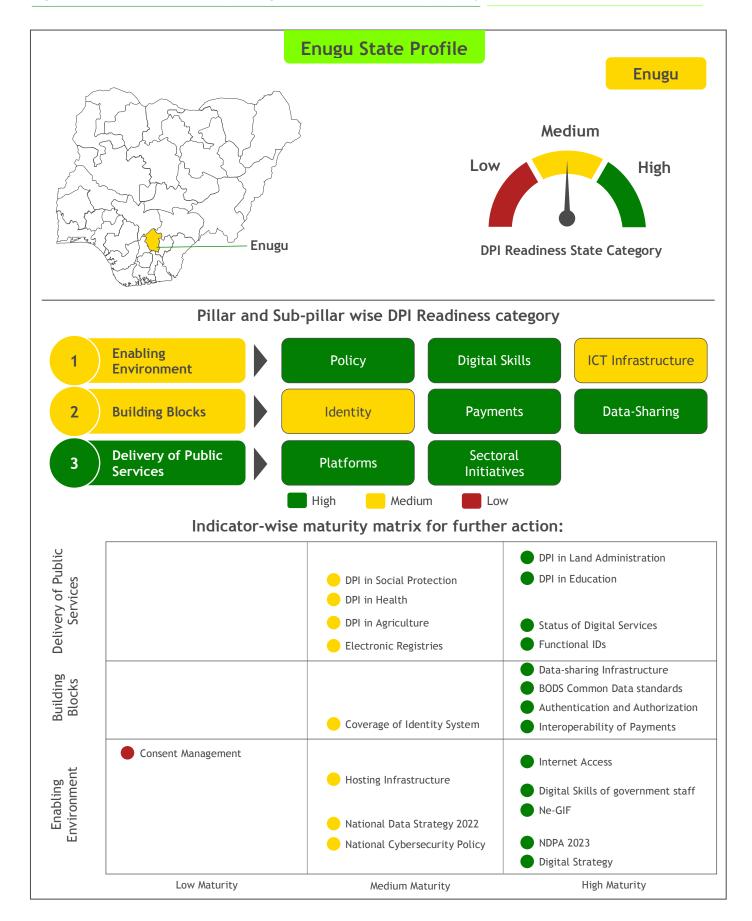




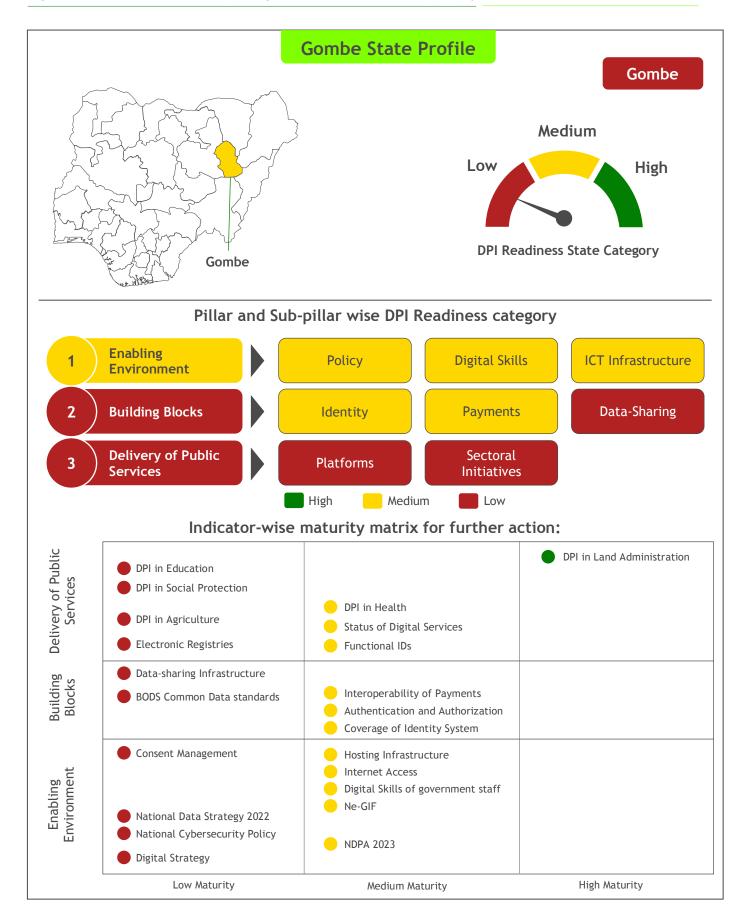




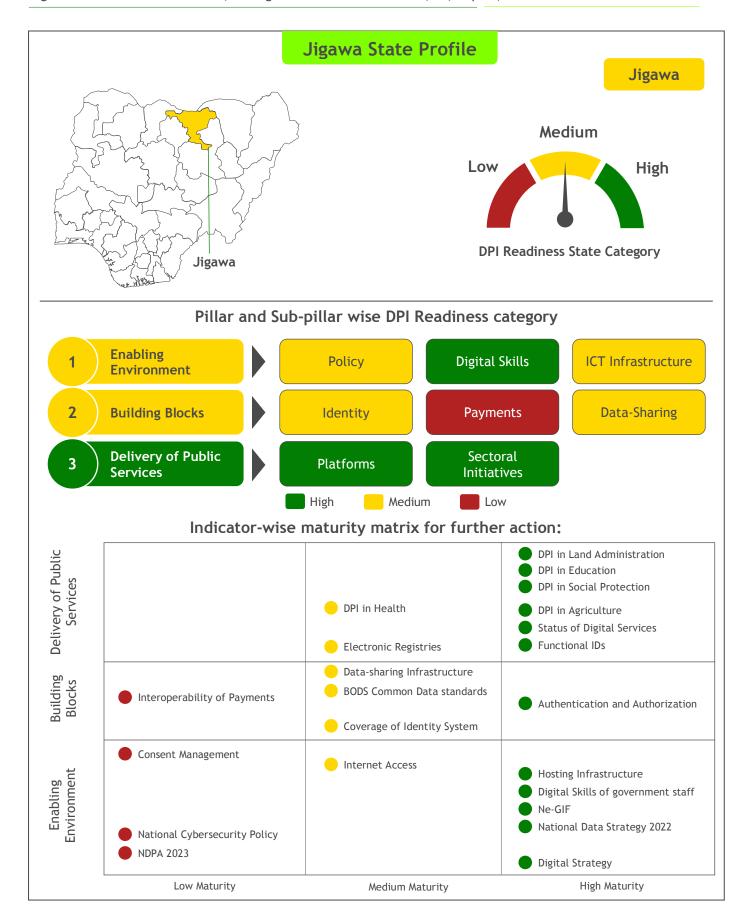




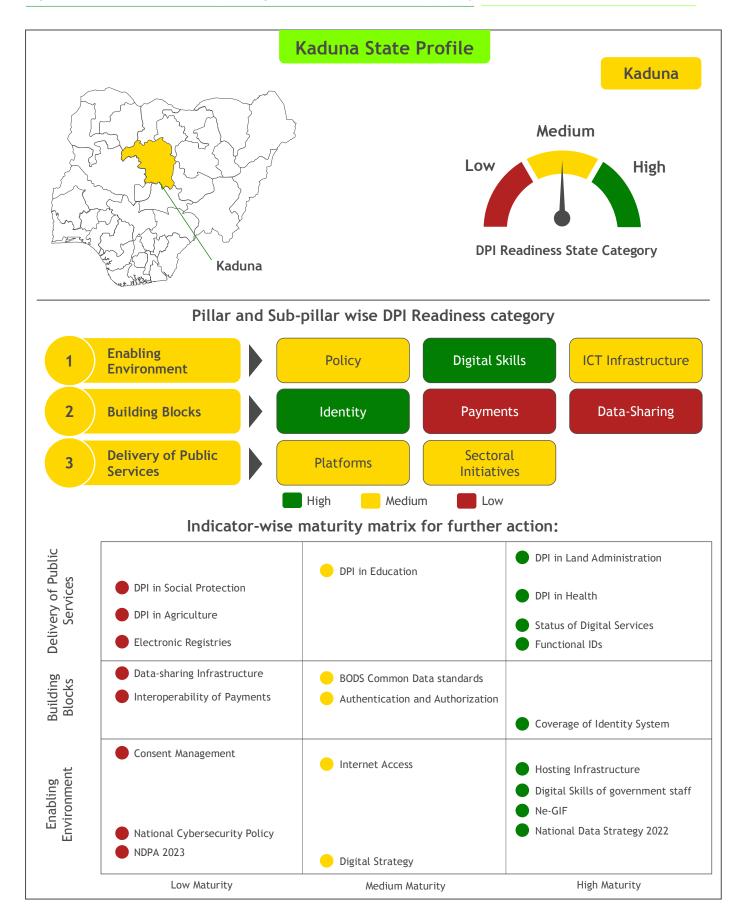




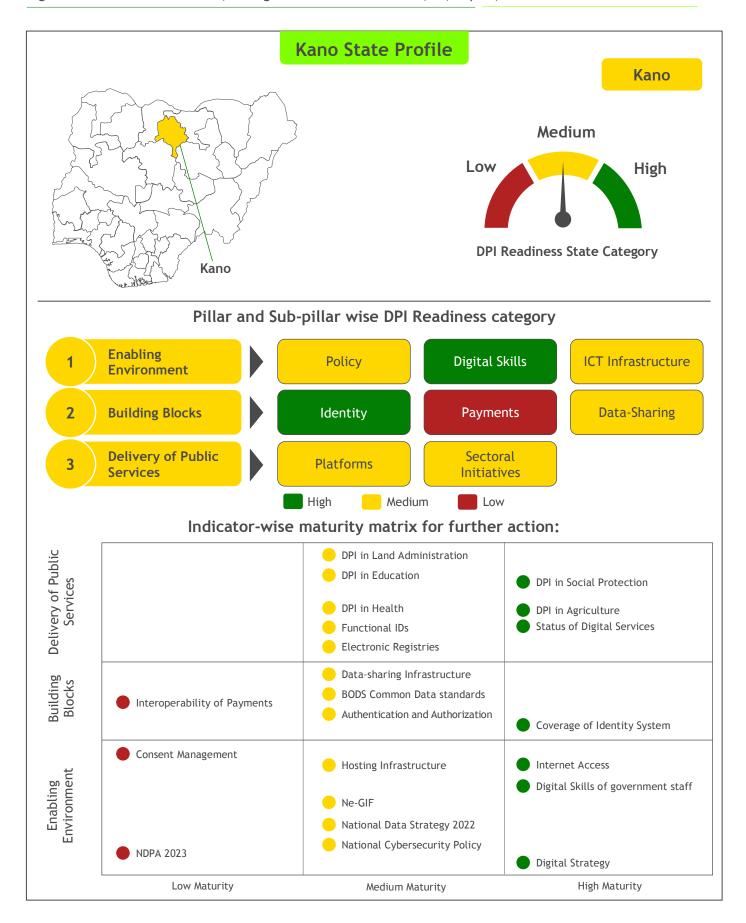




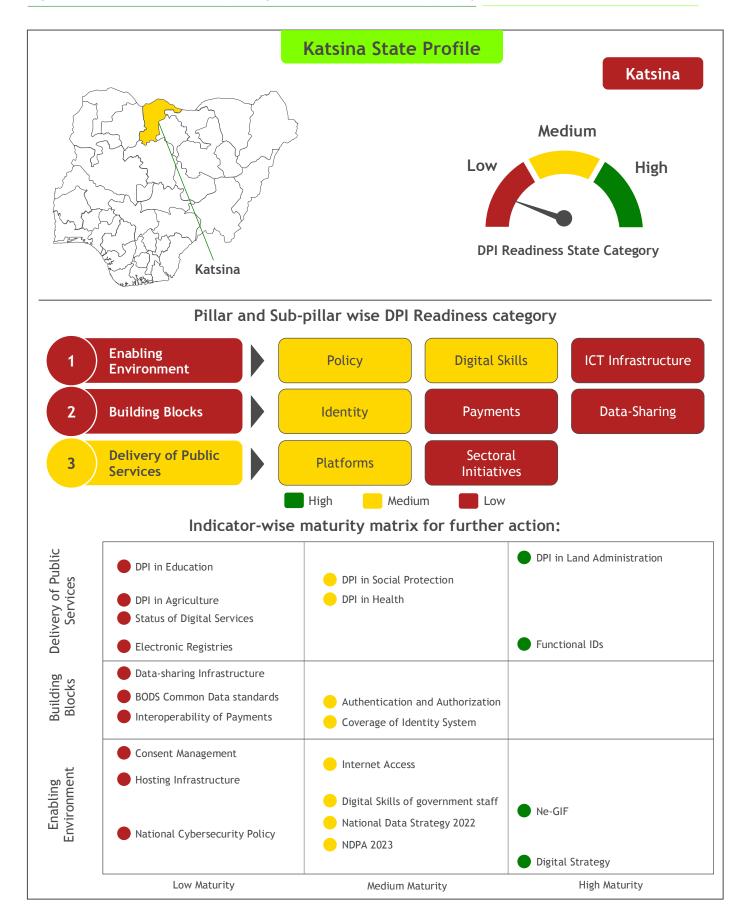




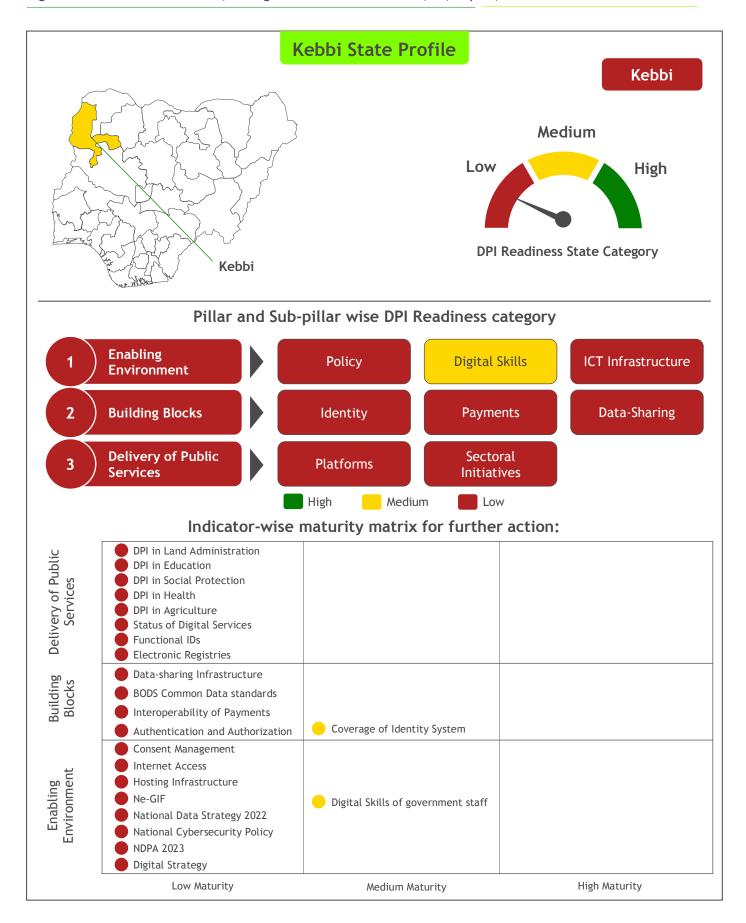




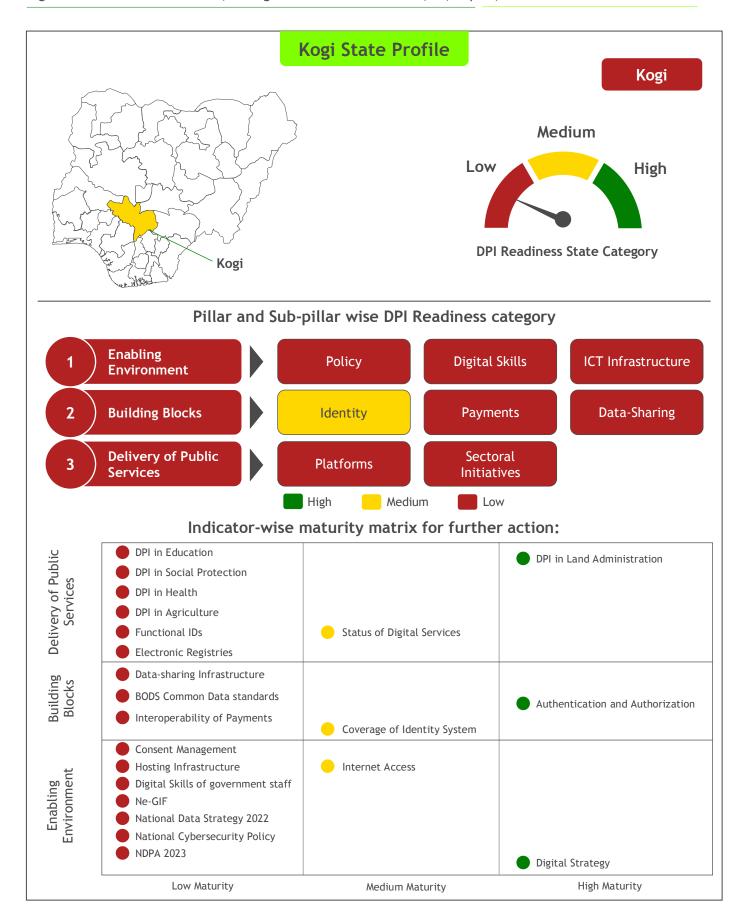




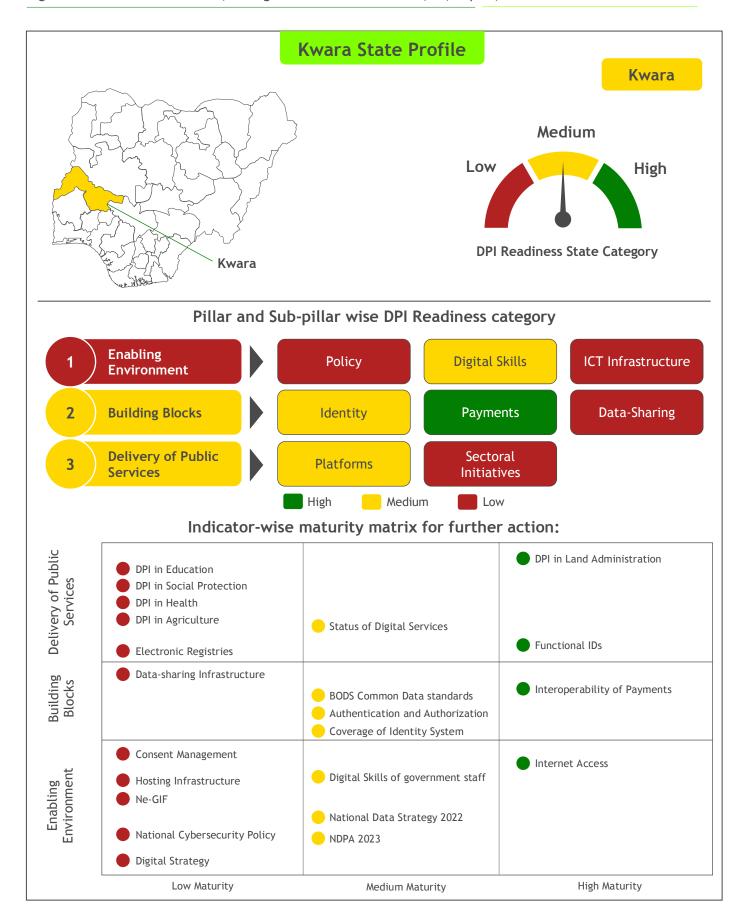




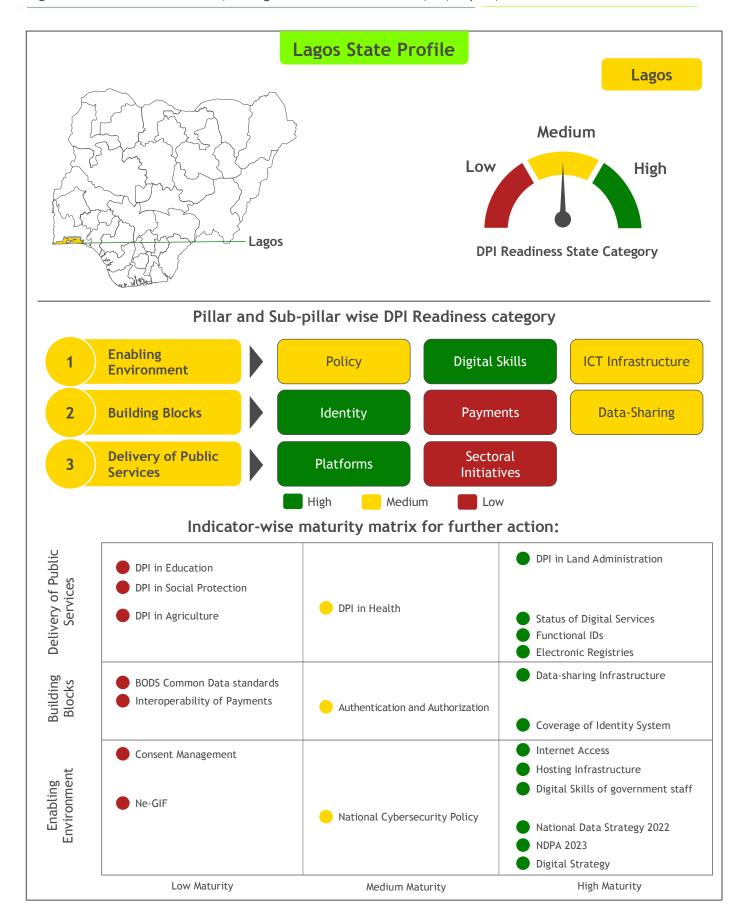




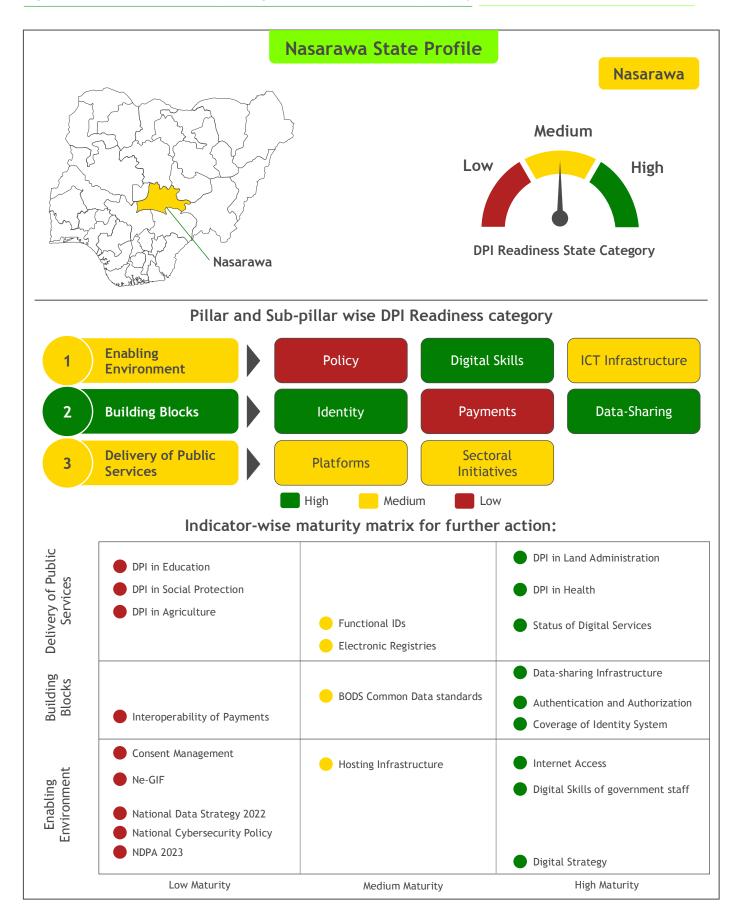




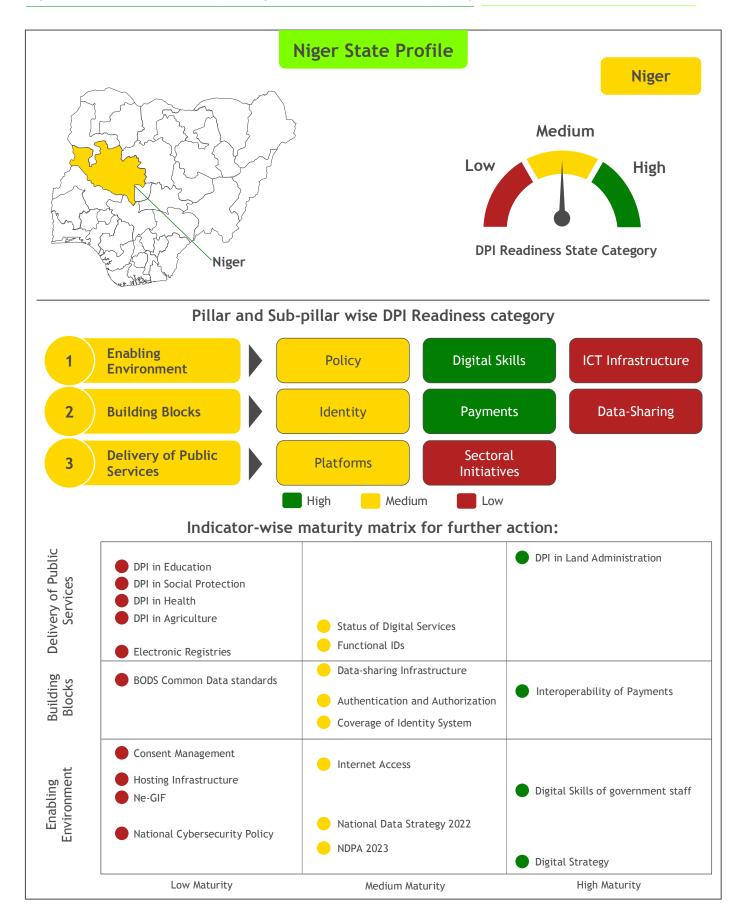




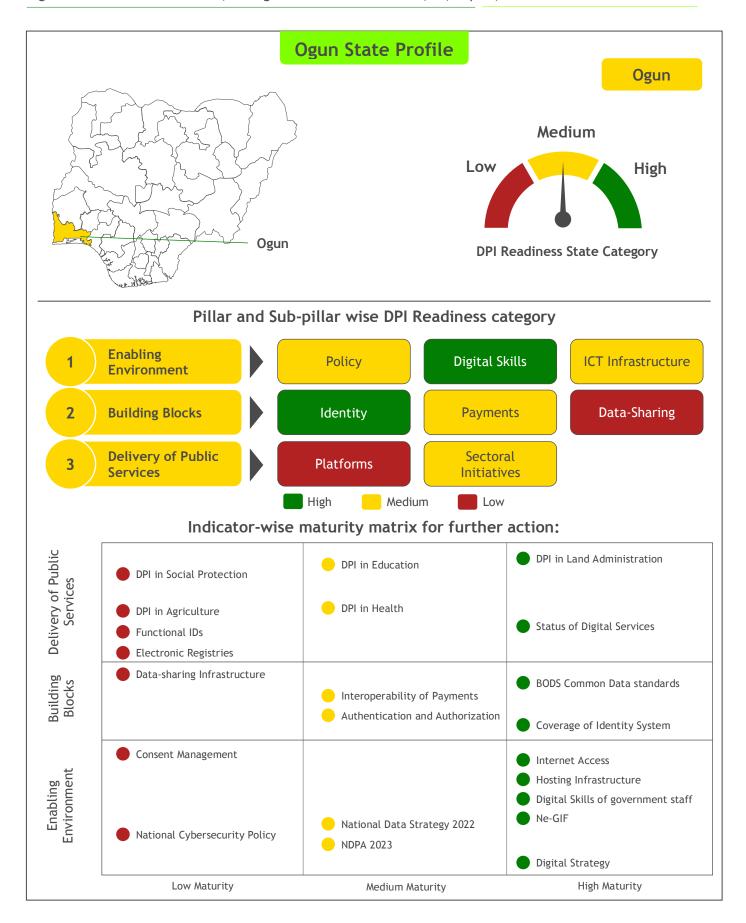




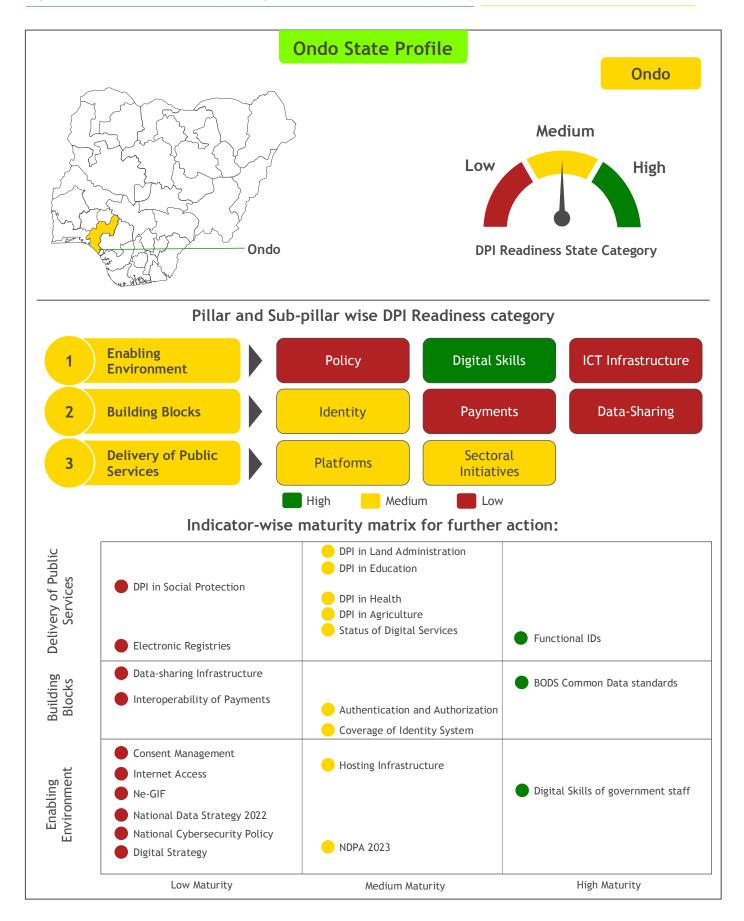




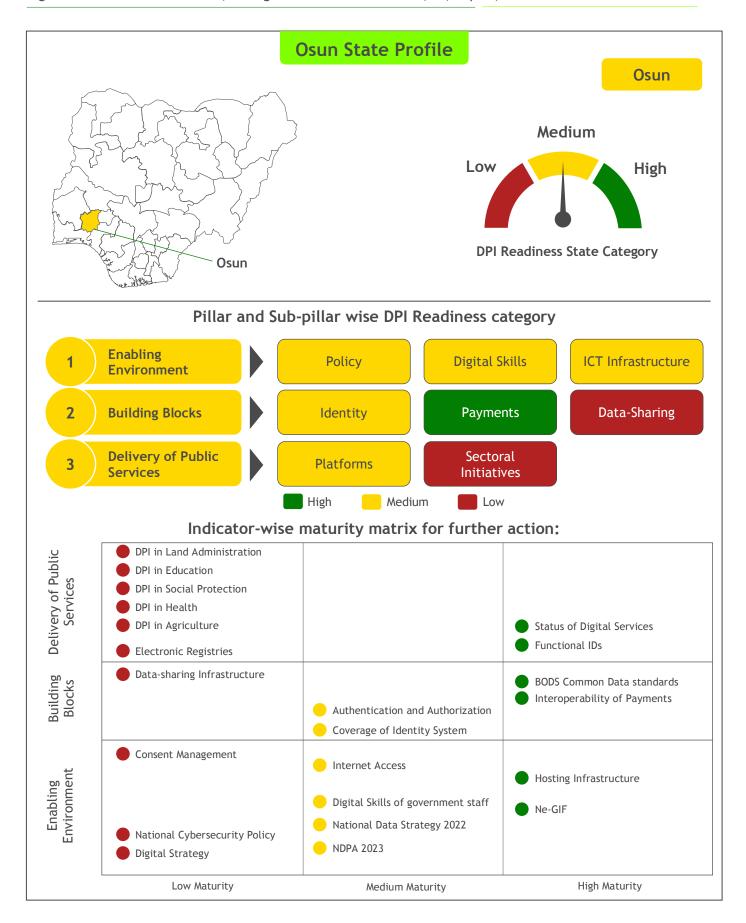




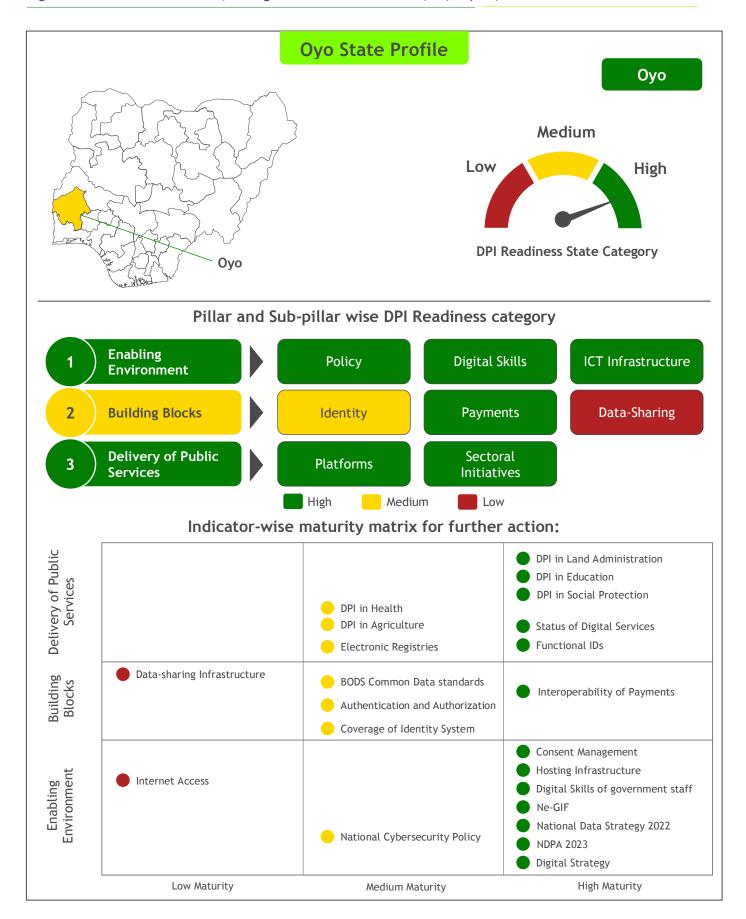




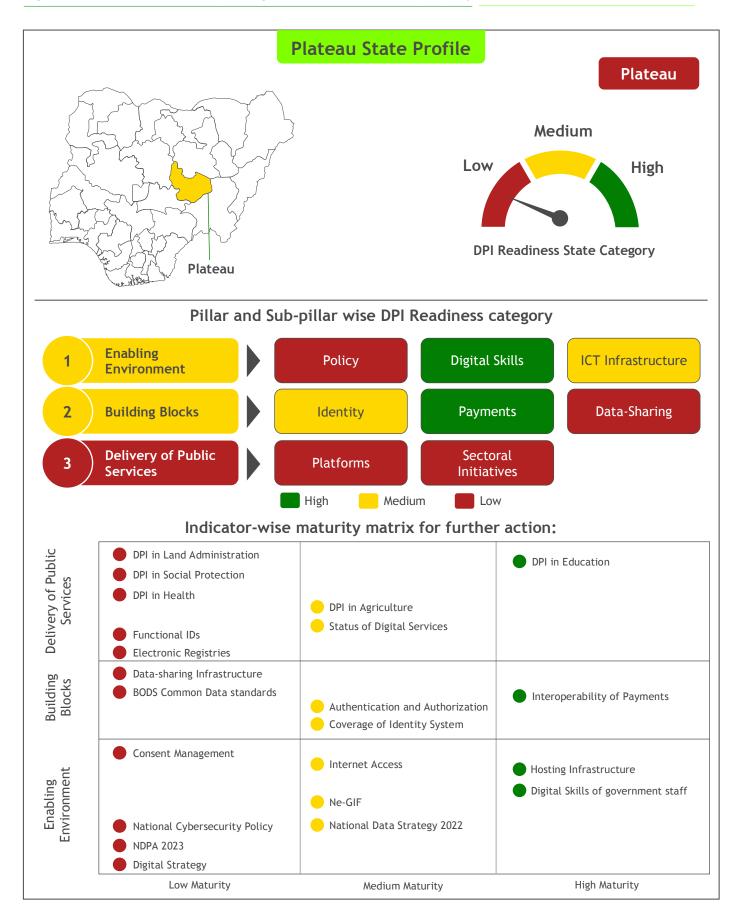




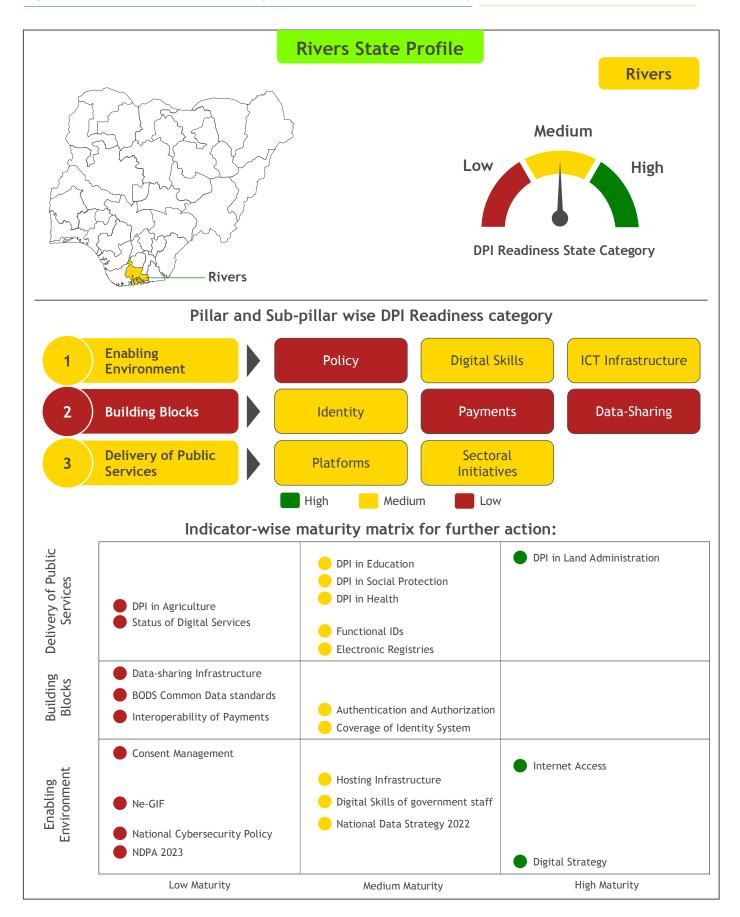




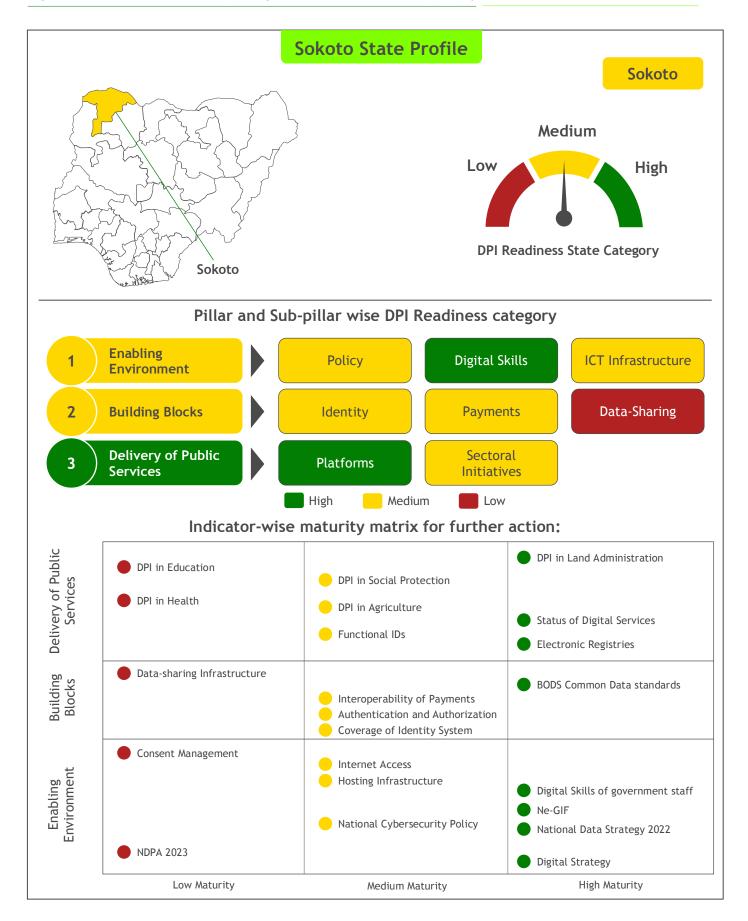




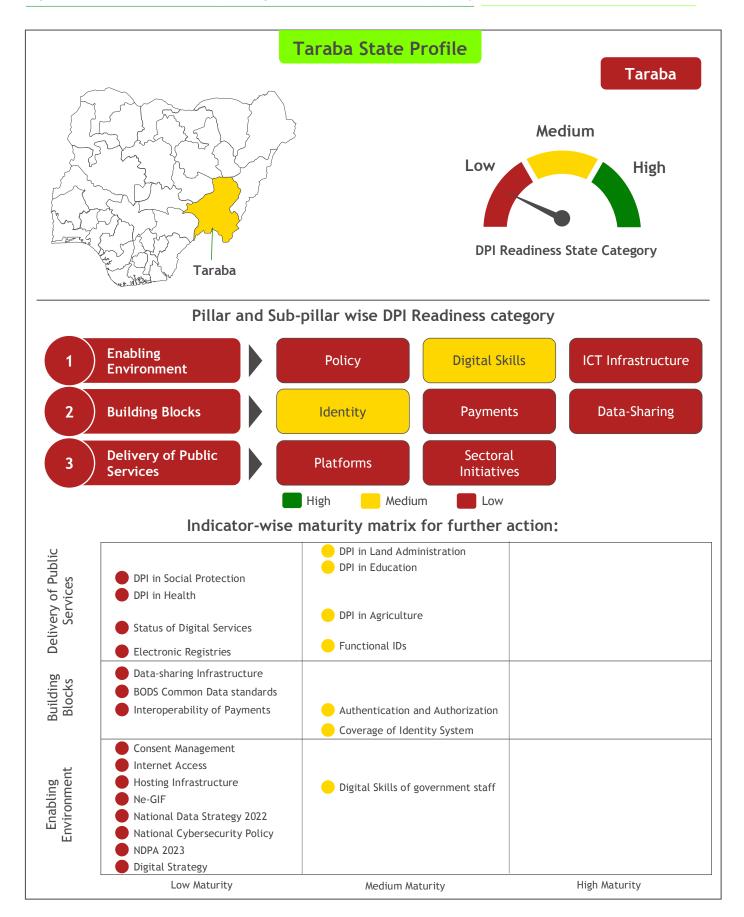




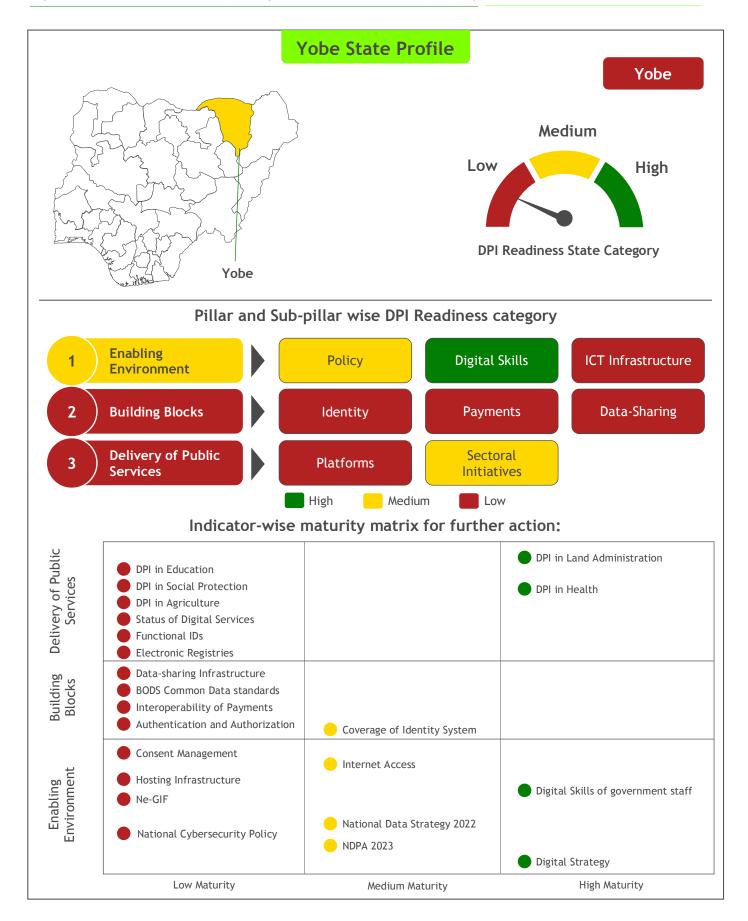




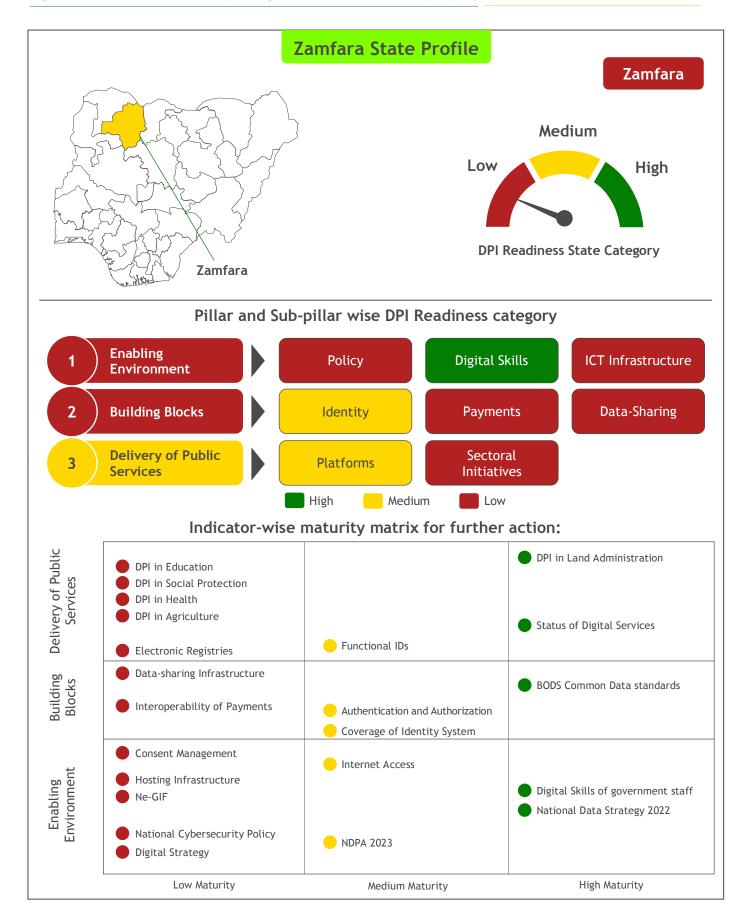














Annexure 2: Assessment methodology

The assessment methodology follows these key steps:

Step 1: Assigning weightages:

The DPI readiness assessment scoring provides an objective assessment of digital maturity across Nigerian states by standardising state responses into quantitative scores. Weightages are assigned to each pillar based on their importance, ease of implementation and overall impact on expected outcomes. These weightages reflect the relative importance of each pillar, sub-pillar and indicator. This method has been adopted to facilitate benchmarking, cross-state comparison, and identification of priority improvement areas. Each indicator has a fixed weightage that reflects its importance to DPI outcomes.

#	Pillars	Sub-Pillars	Indicator	Weightages
1	Enabling	Policy (10)	Digital Strategy	х
2	Environment (30)		Compliance with the Nigeria Data Protection Act (NDPA) - 2023	х
3			Compliance with National Cybersecurity Policy	х
4			Compliance with National Data Strategy 2022	Х
5			Compliance with the Nigeria e-Government Interoperability Framework (Ne-GIF)	х
6		Digital Skills (5)	Digital skills of government staff	х
7		ICT Infrastructure	Availability of Hosting Infrastructure	Х
8		(15)	Internet Access	Х
9			Availability of Certifying Authorities (CAs) in the state	х
10			Consent Management	Х
11	Building blocks	Identity (15)	Coverage of the identity system	Х
12	(35)		Authentication and Authorisation	Х
13		Payment systems (5)	Interoperability of payments	Х
14		Data-sharing initiatives (15)	Adoption of Beneficiary Ownership Data Standards (BODS) - Common Data Standards	х
15			Data-sharing infrastructure	Х
16	Delivery of public services	Platforms (20)	Electronic Registries	Х
17			Functional IDs	Х
18	(35)		Status of Digital Services	Х
19		Sectoral initiatives (15)	DPI initiative taken by the state for the agriculture sector	х
20			DPI initiative taken by the state for the health sector	х
21			DPI initiative taken by the state for social protection	х



#	Pillars	Sub-Pillars	Indicator	Weightages
22			DPI initiative taken by the state for the education sector	х
23			DPI initiative taken by the state for land administration	Х
Tota	ıl			100

Table 2: Weightage assigned to pillars, sub-pillars and indicators

(N.B.: The weightages for the sub-indicators have been removed from this report to minimise response biases during the completion of the DPI readiness tool)

Weightages were assigned to individual questions under each indicator. However, some questions, used for validation or detailed insights, were excluded from scoring and not assigned a weightage. These were designed to enhance the understanding of the actual scenario without impacting the final scores.

Step 2: Correction and validation:

Respondents from the 34 participating Nigerian states selected predefined responses linked to scores. NGF facilitated workshops and meetings to build awareness and provide clarifications where needed. The data submitted by states was verified against publicly available sources and system checks. In some cases, state responses were revised. In cases of incomplete submissions, unmarked questions were assigned no score, as only marked and verified responses were considered for the final assessment.

Scoring typologies

Multiple scoring typologies were applied across parameters to ensure a robust and comprehensive assessment:

- 1. Binary options are used (e.g., Yes = 5, No = 0).
- 2. Range-based ordinal options are used (e.g., 0-35% = 1, 35-70% = 3, 70-100% = 5).
- 3. Maturity stage options (e.g., No activity → Operational with scores from 0 to 5).
- 4. Checklist-based additive options (e.g., grievance resolution channels).
- 5. Weighted nominal options (e.g., states with Residential IDS & TIN = 5, states with Residential IDS = 5, states with TIN only = 3)

Step 3: Calculation process

To assess the DPI maturity of each state, a structured multi-step calculation methodology is employed.

• Calculation of score for a parameter question:

Each question under an indicator is scored based on the state's response, using varied typologies: binary (Yes/No), maturity stages, percentage ranges, or multi-option formats. Each response is mapped to a defined score ranging from 0 to 5, depending on the question's structure and intent.



Each response score (0-5) is multiplied by the assigned question weightage (in %), with total weightage summing to 100% for each indicator. This weighted score gives the final score for each question.

Score for question = Score x weightage (in %)

• Maturity per indicator:

The total score for each indicator is then calculated by aggregating the weighted scores of all its constituent questions, reflecting the overall performance of the indicator.

Score for Indicator = (\sum Score for each question / 5) x weightage of an indicator

Based on this score, the indicator is assigned to a particular maturity level, which provides a comparative performance scale both at the indicator level as well as between two states.

• Aggregate score computation:

Once scores for all indicators are computed, they are aggregated at two levels:

- a. At each sub-pillar (e.g., Policy, Digital Skills under Enabling Environment);
- b. At the Pillar level (e.g., Enabling Environment, Building Blocks, and Delivery of Public Services).

Relative performance of states:

The final DPI Readiness maturity level for each state is calculated by aggregating indicator scores. This assesses each state's digital maturity and forms the basis for classification as follows:

- Low (0-40)
- Medium (41-70)
- High (70-100)

Example: Indicator 2- Compliance with the Nigeria Data Protection Act (NDPA) - 2023

To illustrate the calculation process, consider Indicator 2: *Compliance with Nigeria Data Protection Act (NDPA) - 2023*, under the *Policy* area of the *Enabling Environment* domain. This indicator includes three questions:

- 1. Do state MDAs (Ministries, Departments, and Agencies) correctly understand and interpret the Nigeria Data Protection Act (NDPA) 2023?
 - Yes: 5 Marks
 - No: 0 Marks
- 2. Are state MDAs required to become Data Controllers as per the Nigeria Data Protection Act (NDPA) 2023?
 - Yes: 5 Marks
 - No: 0 Marks
- 3. Are state MDAs equipped with all the necessary tools and infrastructure to enforce NDPA-2023?
 - Strongly Agree: 5 Marks



o Agree: 3 Marks

o Disagree: 1 Mark

Maximum Marks for Indicator 2:

5 (question 1) + 5 (question 2) + 5 (question 3) = 15 Marks

Scenario Example:

- If question 1 and question 2 are marked as "Yes" (5 Marks each) and question 3 as "Disagree" (1 Mark):
- The weightage of question 1, question 2, and question 3 is 50%, 0% and 50% then the score for each question is as follows:
 - \circ Score for Question 1 = Score x weightage (in %) = 5 x 50 % = 2.5
 - Score for Question 2 = Score x weightage (in %) = 5 x 0 % = 0
 - \circ Score for Question 3 = Score x weightage (in %) = 1 x 50 % = 0.5

• Indicator maturity:

If Indicator 2: Compliance with Nigeria Data Protection Act (NDPA) - 2023 has a total weightage of 2.5, then we have identified the maturity level based on the range of score where it lies -

Indicator level Weightage	Low Maturity Range	Medium Maturity Range	High Maturity Range
10 out of 100	0 to 4 score	4 to 7 score	7 to 10 score
8 out of 100	0 to 3.2 score	3.2 to 5.6 score	5.6 to 8 score
6 out of 100	0 to 2.4 score	2.4 to 4.2 score	4.2 to 6 score
5 out of 100	0 to 2 score	2 to 3.5 score	3.5 to 5 score
3 out of 100	0 to 1.2 score	1.2 to 2.1 score	2.1 to 3 score
2.5 out of 100	0 to 1 score	1 to 1.75 score	1.75 to 2.5 score
2 out of 100	0 to 0.8 score	0.8 to 1.4 score	1.4 to 2 score
1 out of 100	0 to 0.4 score	0.4 to 0.7 score	0.7 to 1 score

Table 3: Indicator Level Maturity Decision Matrix





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