

Jigawa State Digital Economy Plan and Strategy (JDEPS)

Five Year Plan 2023 – 2028

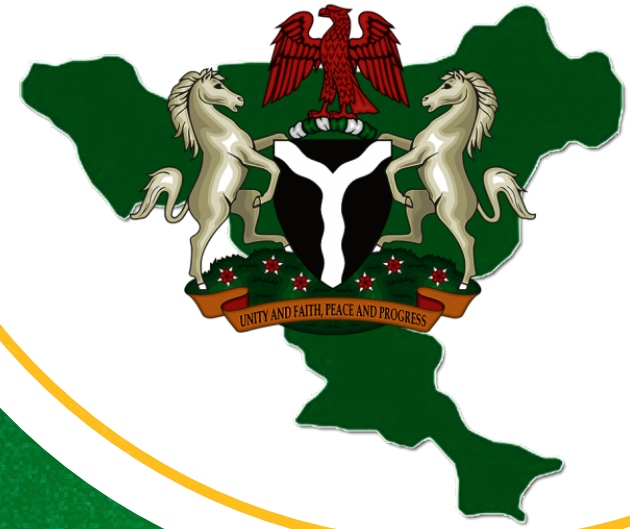
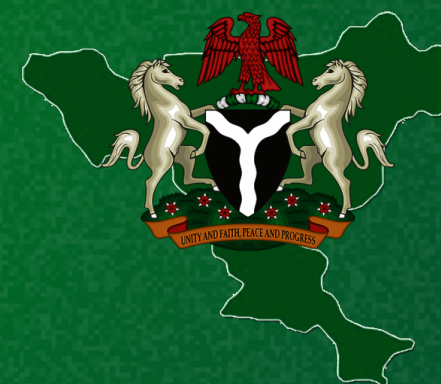




Table of Content

1. Background	1
2. Foreword.....	2
3. Preface.....	3
4. Gratitude to Contributors.....	4
5. Abbreviation.....	6
6. Pillar #1 : Developmental Regulation.....	7
7. Pillar #2 : Digital Literacy and Skills.....	14
8. Pillar #3 : Solid Infrastructure.....	24
9. Pillar #4 : Service Infrastructure.....	31
10. Pillar #5 : Digital Services Development and Promotion.....	36
11. Pillar #6 : Soft Infrastructure.....	41
12. Pillar #7 : Digital Society and Emerging Technologies.....	46
13. Pillar #8: Indigenous Content Development and Adoption.....	51
a. Key players to drive digital economy in Jigawa State.....	56
14. Implementation Roadmap.....	57





Digital Quote

"...That we would collaborate with the National Information Technology Development Agency (NITDA) to implement the State ICT Master Plan, promote e-governance, and the gradual emergence of the digital economy. Part of our resolve in this respect is to ensure that Jigawa State reaps the dividends of the fourth industrial revolution through the vigorous pursuit of innovation and technology...."

Excerpt from Inaugural Speech of His Excellency,
Malam Umar A. Namadi FCA
Executive Governor of Jigawa State



Vision

- *“To transform Jigawa into a leading digital economy state in Nigeria providing quality life and digital economies for all.”*

Mission

- *“To build a state where digital innovation and entrepreneurship are leveraged to create value and prosperity for all.”*



PREFACE

We are standing on the threshold of a new era, wherein the digital revolution is reshaping the world and transforming the way we live, work, and conduct business. As Jigawa State embraces this era of rapid technological advancements, we recognize the immense potential of the digital economy to drive inclusive growth, foster innovation, and empower the people of our state. The Jigawa State Digital Economy Policy and Strategy (JDEPS) serves as a roadmap to harness the power of the digital economy and unleash its transformative impact on our state. This policy is a testament to our commitment to creating an enabling environment that nurtures digital innovation, attracts investments, and unlocks new opportunities for our citizens. In developing this policy draft, we have engaged in consultations with experts, stakeholders, and industry leaders to gain valuable insights and best practices. We have listened to the aspirations of our people and understood their needs, ensuring that this policy is rooted in the realities and aspirations of Jigawa State. The digital economy policy outlines a comprehensive strategy that encompasses various dimensions of the digital economy, ranging from digital infrastructure and connectivity to digital skills development, entrepreneurship, and digital governance. It takes into account the unique strengths and challenges of our state, leveraging our rich cultural heritage, entrepreneurial spirit, and technological advancement.

This policy draft emphasizes the importance of collaboration and partnerships. We acknowledge that the digital economy is not built by the government alone but requires the active participation of academia, the private sector, civil society, and our citizens. By fostering collaboration and leveraging collective expertise, resources, and ideas, we can accelerate digital transformation. Furthermore, inclusivity lies at the heart of developing this digital economy policy and strategy. Jigawa State is committed to bridging the digital divide, ensuring that every citizen, regardless of their background or location, has access to affordable and reliable digital infrastructure. We prioritize digital skills development, particularly among underserved communities, to empower people with the knowledge and tools to fully participate in the digital economy. As Jigawa State embarks on this journey towards a thriving digital economy, we are aware of the challenges and risks that lie ahead.

We recognize the need for a robust regulatory framework that safeguards privacy, protects intellectual property rights, and ensures cybersecurity. We are committed to addressing these challenges head-on by adapting our policies and regulations to the evolving digital landscape. The Jigawa State Digital Economy Policy and Strategy is not just a document; it is a commitment to our people, a call to action for all stakeholders, and a roadmap to a brighter future. We invite all citizens, businesses, and institutions to join us on this transformative journey as we build a prosperous, inclusive, and digitally empowered Jigawa State. Together, let us embrace the digital revolution and create a future where innovation flourishes, entrepreneurship thrives, and our people reap the full benefits of the digital economy.



GRATITUDE TO CONTRIBUTORS

We extend our heartfelt gratitude to all the stakeholders who participated in the co-creation workshop for the development of the Jigawa State Digital Economy Policy and Strategy. Your active engagement, valuable insights, and unwavering commitment have played a pivotal role in shaping this transformative roadmap. Throughout the workshop, we witnessed your enthusiasm, expertise, and dedication to building a thriving digital economy in Jigawa State. Your diverse perspectives, industry knowledge, and innovative ideas have enriched our discussions and contributed to the robustness of the policy.

By coming together as a collective force, we have fostered a collaborative environment that promotes knowledge sharing, encourages dialogue, and fuels innovation. Your contributions have been instrumental in identifying the key challenges, opportunities, and priorities that will guide our digital transformation journey.

We would like to express our appreciation to the representatives from academia, the private sector, civil society organizations, and government agencies for their active involvement and valuable contributions. Your diverse backgrounds and wealth of experience have enriched the discussions and ensured a comprehensive representation of stakeholders' interests.

We also extend our gratitude to the following ecosystem stakeholders from the public and private sectors:

- Ministry of Education, Science and Technology
- Ministry of Justice
- Ministry of Finance and Economic Planning
- Budget and Economic Planning Directorate
- Due Process and Project Monitoring Bureau
- State Internal Revenue Services
- Ministry of Land, Housing, Urban and Regional Planning
- Ministry of Information, Youth, Sports and Culture
- Ministry of Women Affairs and Social Development
- Jigawa State Investment Promotion Agency (InvestJigawa)
- Jigawa State Investment Promotion Agency (InvestJigawa)
- Jigawa State Institute of Information Technology (JSIIT)
- Manpower Development Institute (MDI)
- Startup Jigawa
- 12 Zone ICT
- Kool TechFix
- Alishell Ltd.
- Sarawa Infotech Ltd.
- Blue Sapphire Hub
- Galaxy ICT



Who worked tirelessly to ensure the success of the digital economy strategy policy. Your dedication, professionalism, and organizational skills have been invaluable in orchestrating a productive and inclusive workshop. The collaborative spirit demonstrated during the workshop exemplifies our shared vision and commitment to building a prosperous digital future for Jigawa State. We are inspired by the passion and enthusiasm displayed by all stakeholders and are confident that together, we will overcome challenges and realize the full potential of the digital economy. Your active participation will be vital in translating the strategies and recommendations discussed during the workshop into tangible actions that drive meaningful change.

Once again, we extend our sincere appreciation to every stakeholder who contributed to the success of the co-creation workshop. Your dedication and commitment have set the stage for a brighter, more inclusive, and digitally empowered Jigawa State.

Thank you for being part of this important journey.



ABBREVIATIONS

- Discs: Digital Innovation and Scale-up Centers
- ICT: Information Communication Technology
- IT: Information Technology
- JDEPS: Jigawa State Digital Economy Policy and Strategy
- LGAs: Local Government Areas
- MDAs: Ministries, Departments, and Agencies
- MSMEs: Micro Small and Medium Enterprises
- NDEPS: National Digital Economy Policy and Strategy
- NITDA: National Information Technology Development Agency
- OEMs: Original Equipment Manufacturers
- PPP: Public-Private Partnership
- RoW: Right of Way
- SeGIF: State e-government Interoperability Framework
- SMEs: Small and Medium Enterprises
- ToR: Terms of Reference



PILLAR 1

Developmental Regulation

Situation Analysis

Developmental Regulation has to do with the government's social, economic, and environmental policy objectives. To develop a thriving digital economy, it is necessary to implement the appropriate regulatory instruments. Currently, there are no dedicated MDAs responsible for the digital economy in Jigawa state as such, MDAs implement ICT projects in silos.

Furthermore, there is bureaucracy and a slow legislative/governance process to approving policies and the awareness level of the existing regulations with regards to the digital economy is low amongst key players and stakeholders. However, the state has developed an E-government master plan and strategy document governing the digital economy in the State.

Jigawa State developed strategic frameworks and action plans to promote a sustainable and socio-economically developed state through exemplary and transparent leadership, provision of social service through strong and functional institutions, and the development of physical infrastructure based on broad participation by the people (Planning, 2016). The State also developed a framework for an e-government masterplan to have an efficient and innovative public service and digitally empowered citizens and businesses that leverage the State's comparative advantages and the global digital economy opportunities for social, economic, and sustainable development. Galaxy ITT is in charge of the e-government master plan in the state (Ministry of Justice, no date).

Pillar Objectives

- To review and upgrade ICT-related existing laws and policies such as e-procurement, e-finance, digitization of revenue collection (e-tax), e-certificate in land registry, etc.
- To make a law that will regulate all ICT activities in the State.
- To Secure formal approval of the e-governance master plan for implementation
- To establish a full-pledged ICT Agency in the State

Existing Laws and Frameworks

No law or framework guides the digital economy in the state but some laws in the state highlighted the aspect of digital technology such as.

- Jigawa State Comprehensive Development Framework II
- Jigawa State Revenue (Codification and Consolidation) law.
- Due process and project monitoring bureau law.
- Jigawa State Public Expenditure and Financial Management Law.
- ICT education Policy development by the Federal Ministry of Education (FME)
- Jigawa State Fiscal Responsibility Law.
- Jigawa E-government Plan Draft

Call to Action

- Government to review and approve the digital economy policy and strategy document (JDEPS).
- Establish an agency backed by an enabling mandate that will coordinate, promote, support, and facilitate the deployment of a sustainable and inclusive digital economy in the state.

Implementation Strategy

Initiatives

Establish a Jigawa state agency for digital economy.

Processes

- Conduct a thorough analysis and research to understand the scope and potential impact of the agency's work.
- Define the agency's mandate and functions.
- Develop a legislative Framework.
- Establish governance and organizational structure.

Implementation Strategy

Initiatives

Establish a Jigawa state agency for digital economy.

KPIs	Risks	Mitigation Strategies
● Timeline of the establishment of the agency. ● Number of consultations held with key stakeholders, including government officials, industry representatives, and relevant experts. ● Completion of necessary legislation or regulations to provide a legal basis for the agency's operation. ● Organizational Structure of the Agency	● Establishing and operating a government agency requires significant financial resources. There's a risk of budget overruns, especially if the ● agency's projects and initiatives are not well-managed or if there are unforeseen expenses. Changes in government or political landscape may result in shifting priorities or policy reversals. ● Government agencies often face bureaucratic hurdles and red tape, which can slow down decision-making processes and hinder agility	● A thorough assessment of the state's specific needs and capabilities should guide the agency's initiatives. ● Establishing legal frameworks and policies that safeguard the continuation of the project across government transitions. ● To gain support from multiple political parties or factions. A bipartisan approach can enhance the agency's credibility and reduce the risk of political opposition in the future

Implementation Strategy

Initiatives

Assemble and evaluate all existing laws that are linked to the digital economy including the national policies and laws for domestication.

Processes

- Review and revise all existing state ICT laws to adapt to changing technological advancements, market dynamics, and societal needs. National policies and laws for domestication.
- Conducting periodic reviews of the laws, policies, and regulations, seeking feedback from stakeholders, and considering emerging trends and challenges.

Implementation Strategy

Initiatives

Assemble and evaluate all existing laws that are linked to the digital economy including the national policies and laws for domestication.

KPIs

- Number of new or converged laws enacted.
- Number of regulatory frameworks established to promote fair competition, consumer protection, data privacy, and cybersecurity.
- Compliance rate among digital businesses and service providers with relevant regulatory requirements.

Risks

- Regulatory burden as excessive or overly complex regulations can create a burden on businesses and hinder innovation.

Mitigation Strategies

- Ensure the use of established methodology and mechanisms.



PILLAR 2

Digital Literacy and Skills

Situation Analysis

A digital economy can only be as robust as its citizens' level of digital literacy. Literacy today encompasses more than the capacity to read and write. A person who is literate in the fourth industrial revolution must be digitally literate. As the significance of digital technology to society increases, so does the value of digital literacy as an instrument for lifelong education. In terms of government initiatives about digital literacy and skills in Jigawa state, the state has a policy on digital literacy in its education bill, through the Ministry of Education, Science and Technology.

Jigawa State has been one of the early movers to drive digital literacy in Nigeria since 2000 when it launched the Jigawa State Institute of Informatics and International ICT Scholarship (State Ministry of Education) to provide digital technology skills to its youthful population. This institute has trained over 5000 youths amidst low digital literacy inclusion and deepening, as about 50% of Jigawa state citizens are rural dwellers who do not have network coverage and thus find it almost impossible to access the digital literacy initiatives.

Pillar Objectives

- To integrate digital literacy and skills into the state educational curriculum at all levels.
- To support training and capacity building among public sector employees.
- To create a pool of Jigawa state citizens with digital skills.
- To bridge the gap between academia and industry.
- To minimize access barriers to digital tools for Jigawa citizens.

Existing Laws and Frameworks

There is a policy on digital literacy in the Ministry of Education policy document (ICT education Policy developed by the Federal Ministry of Education)

Call to Action

- Digital skills should be mandatory from primary to tertiary institutions in the State.
- Upgrading of digital infrastructure accommodating assistive technology tools across the State to support inclusion in digital economy transformation.
- Government pursues Public Private Partnership (PPP) model as a strategy to coopt the private sector into the digital economy process and utilization of existing infrastructure.

Implementation Strategy

Initiatives

Document and revive the existing ICT Centers around the State for efficient digital literacy delivery.

Processes

- Secure funding and engage stakeholders.
- Collect data on ICT centers and develop a repository.
- Mapping and review of the functionality of all ICT training centers across the state.

Implementation Strategy

Initiatives

Document and revive the existing ICT Centers around the State for efficient digital literacy delivery.

KPIs	Risks	Mitigation Strategies
● Number of identified ICT centers. ● Coverage and reach of ICT centers mapping initiative. Evaluation of infrastructures in the ICT centers.	● Incomplete and inaccurate data, resulting in a skewed or unreliable representation of ICT centers in the state. ● Difficulty in verifying the accuracy and authenticity of the data collected during the mapping process.	● Conduct thorough research and engage with key stakeholders to ensure comprehensive data collection and validation. ● Implement regular data validation and maintenance processes to ensure the accuracy and currency of the mapping database

Implementation Strategy

Initiatives

Utilize the standard curriculum and training modules on digital skills (Basic-Advance) to support stakeholders in their disciplines, trade, and professions.

Processes

- Adopt the British Council skills for digital Inclusive participation.
- Conduct Stakeholder Engagement (Meetings, workshops)
- Share curriculum with stakeholders

Implementation Strategy

Initiatives

Utilize the standard curriculum and training modules on digital skills (Basic-Advance) to support stakeholders in their disciplines, trade, and professions.

KPIs	Risks	Mitigation Strategies
● Percentage of schools, training or educational institutions that have adopted curriculum. ● Level of integration with existing subject areas and learning objectives. Availability of materials and resources.	● Insufficient resources to effectively implement the curriculum. ● Limited flexibility and customization. ● Difficulty in updating and maintenance of the curriculum to keep up with the fast-paced digital landscape.	● Conduct a thorough needs assessment. ● Involve stakeholders including education and industry professionals. ● Provide training to trainers to ensure readiness to implement the standardized curriculum. ● Partner with industry stakeholders to ensure the curriculum aligns with current and future trends.

Implementation Strategy

Initiatives

Develop a pool of standard facilitators on digital skills and literacy.

Processes

- Collect data on the ecosystem facilitators of digital skills based on level of proficiency and certifications.

KPIs

- Number of facilitators identified and certified to provide training

Risks

- Availability of qualified instructors

Mitigation Strategies

- Develop flexible and adaptable training programs that can be quickly updated to address emerging technologies and changing market demands.
- Invest in the development of qualified instructors and trainers, providing them with opportunities for continuous learning and skill development.

Implementation Strategy

Initiatives

Launch Digital Skills for All Project to provide skills to all people across age, gender, special needs, and social strata.

Processes

- Digital skills for all projects:
 - a) Reach out to development partners, private sectors, and other MDAs to raise funds.
 - b) Host training of facilitators across all LGA in Jigawa State.
 - c) Call for applications and allocate beneficiaries to centers close to their proximity.
 - d) Host a series of periodic trainings across the State.

KPIs

- I Number of individuals receiving digital skills training

Risks

- Skills Mismatch
- Rapid technological changes
- Scalability and reach

Mitigation Strategies

- Conduct regular skills gap assessments and labor market analyses to ensure that the digital skills being developed align with industry needs.
- Foster partnerships and collaborations with industry stakeholders to gain insights into current and future skill requirements.

Implementation Strategy

Initiatives

Government to partner with academia in the area of digital knowledge and skills acquisition such as IT professional certificates and entrepreneurship for job creation.

Processes

- Assessment and analysis by conducting a comprehensive assessment of the existing digital literacy levels and skills gaps within the populace of the state.

KPIs

- Number of partnerships and collaborations established with relevant stakeholders

Risks

- Resource constraints
- Rapid technological changes
- Scalability and reach

Mitigation Strategies

- Conduct regular skills gap assessments and labor market analyses to ensure that the digital skills being developed align with industry needs.



PILLAR 3

Solid Infrastructure

Situation Analysis

The solid infrastructure pillar will address the deployment of fixed and mobile infrastructure to increase the state's broadband penetration. Without nationwide access to high-speed Internet, an inclusive and thriving digital economy will be difficult to achieve. Currently, in Jigawa state there are no policies guiding broadband access, data center, and spectrum frequency management. There's a low level of awareness of the Nigerian National Broadband Plan (NNBP) including the Right of Way (RoW) policy. Ironically, the Jigawa State House of Assembly does not have a committee on ICT/Digital Transformation.

The data center in the State Secretariat is the offshoot of the project called State and Local Government (SLOGO) which started in 2016. SLOGO also has a component called State Integrated Financial Management Information System (SIFMIS). It was financed by the European Union (EU) through the World Bank. Previously, Jigawa State used Integrated Financial Management. Jigawa State also took the giant stride to set up Galaxy ITT Backbone (JSG) IP Based Broadband by Galaxy ITT backbone and IT training centers for Civil Servants.

Pillar Objectives

- To identify and fill existing gaps of the required ICT physical infrastructure.
- To accelerate the penetration of affordable and quality broadband internet in the state.
- Support proliferation of data centers across the state.

Existing Laws and Frameworks

- · Currently exists a framework concerning payment of Right of Way (RoW) charges on the laying of fiber optics in the state.
- · There are also charges for mask installation which may require harmonization between the State Internal Revenue Service, Ministry of Lands, and the Local Governments in the state to avoid multiple taxes.

Call to Action

- Reduce or waive the cost of right of way to enable Internet Service Providers to set up in Jigawa State.
- Incentivize hardware companies with tax haven-free/low-price field establishment.
- To equip tertiary institutions with relevant facilities (modern fabrication labs) to be able to offer courses/programs related to hardware production.

Implementation Strategy

Initiatives

Identify and fill existing gaps in the required ICT physical infrastructure.

Processes

- Identify Infrastructures Gaps in all Local Government Areas (LGAs)
- Streamline and simplify the permitting and licensing processes for infrastructure deployment

KPIs

- Number of procurement and installation of requisite solid infrastructure.
- Expansion of broadband coverage to ensure that rural communities have access to high-speed internet services.

Risks

- The affordability of internet services may be a barrier for rural residents.
- Limited availability of technical support and maintenance services in rural areas.

Mitigation Strategies

- Implement policies and initiatives to improve affordability, including subsidies, incentive programs, etc.
- Prioritize infrastructure development and address connectivity challenges through strategic planning and targeted investments.

Implementation Strategy

Initiatives

Accelerate the penetration of affordable and quality broadband internet in the state.

Processes

- Partner with internet service providers (ISPs), telecommunication companies, and utility providers to leverage their expertise and resources in infrastructure deployment.
- Foster partnerships with ISPs, telecommunication companies, and technology vendors to share the costs and responsibilities of rural infrastructure development.

KPIs

- Cost and quality of service of internet services.
- Number of new establishments of Internet Service Providers in the state

Risks

- The affordability of internet services may be a barrier for rural residents.

Mitigation Strategies

- Implement policies and initiatives to improve affordability, including subsidies, incentive programs, etc.

Implementation Strategy

Initiatives

Increase the proliferation of data centers across the state.

Processes

- Encourage ISPs to share infrastructure, including towers, fiber networks, and access points, to minimize duplication and reduce costs.
- Explore public-private financing models or investment funds to attract private sector participation and sustain long-term rural connectivity initiatives.

KPIs

- Number of data centers established.
- Number of data centers actively hosting data

Risks

- Financial Implications
- Issue of power and maintenance
- Vandalism/theft

Mitigation Strategies

- Consider alternative funding mechanisms to offset potential revenue losses, such as public-private partnerships or seeking funding from other sources.
- Conduct comprehensive impact assessments and feasibility studies before implementation.

Implementation Strategy

Initiatives

Sensitization of public about Right of Way (RoW) policy.

Processes

- Educate landowners and communities about the importance of digital infrastructure and the potential benefits of reducing RoW costs.
- Cost evaluation and benchmarking

KPIs

- Number of public awareness of RoW Policy

Risks

- Issue of landowner compensations
- Financial Implications

Mitigation Strategies

- Engage with stakeholders, including infrastructure developers, landowners, and community representatives, to gather input and address concerns.
- Ensure transparency and fairness in the process by establishing clear criteria and guidelines for reducing RoW costs.



PILLAR 4

Service Infrastructure

Situation Analysis

The service infrastructure pillar will address the provision of dependable digital platforms to propel the digital economy. These platforms facilitate online transactions and interactions. In addition, they enable a supply of data from which the government and private sector can obtain useful insights for the development of the digital economy. Currently, Jigawa State has the State Integrated Financial Management Information System (SIFMIS) which is the information system used by the Jigawa State Government for recording, accounting, and reporting on its overall fiscal operations. The state also has a Payroll system, Integrated Financial Management System (IFMIS), and Jigawa State Government E-Procurement. This pillar supports the provision of a centralized online platform for the government to communicate with citizens and investors. It facilitates the implementation of digital government services and a paperless system. Without digital platforms to access services, the objective of developing a digital economy will remain unattainable.

Pillar Objectives

- Approval and implementation of the E-government Master Plan, including the State e-government Interoperability Framework (SeGIF) and Enterprise Architecture.
- Promotion and adoption of digital platforms.
- Use of digital platforms for the extraction and warehousing of anonymized big data for the public good.
- Promote the creation and use of digital platforms in government and non-government sectors.

Existing Laws and Frameworks

- There is no law in the state on digital services but a draft of the E-government masterplan has been developed and is domiciled at the Galaxy ITT.

Call to Action

- Jigawa State Government should review and approve the draft domesticated e-Government Master Plan and create an Agency to facilitate its implementation.

Implementation Strategy

Initiatives

Jigawa State Government to review and approve the draft domesticated e-Government master plan and develop a State e-Government Interoperability Framework (SeGIF) and Enterprise Architecture documents.

Processes

- Conduct a comprehensive assessment to identify the specific training needs of government employees in the context of e-government.
- Training of relevant stakeholders on e-governance.
- Analyze the existing skill gaps and areas where capacity building is required.

KPIs

- Training participation rate.
- Practical application of acquired skills and knowledge.
- Evaluating user satisfaction with e-government solutions and services.

Risks

- Resistance to change
- Skills Gap
- Limited adoption and utilization of skills

Mitigation Strategies

- Engage stakeholders in the transformation process.
- Establish effective governance frameworks, regularly monitor and evaluate the impact and effectiveness of digital service transformation initiatives.

Implementation Strategy

Initiatives

Digitalization of services

Processes

- Assess the current state of government services and identify areas for digitalization.
- Develop a roadmap for transitioning services to digital platforms, ensuring they are secure, accessible, user-friendly, and inclusive.
- Launch an extensive awareness campaign to educate citizens about the existence and benefits of the platforms and services.

KPIs

- Percentage of users or customers who have adopted and actively use the government digital services.
- Percentage of government services available online and accessible through digital channels

Risks

- Technical complexities and challenges in implementing and maintaining digital solutions.
- Risk of service disruptions or gaps during the transition from traditional to digital channels.

Mitigation Strategies

- Implement robust cybersecurity measures.
- Prioritize data protection and privacy, foster digital literacy and inclusion programs.

A white wireframe globe is positioned on the left side of the slide, partially overlapping the title text.

PILLAR 5

Digital Services Development & Promotion

Situation Analysis

The digital services development and promotion pillar will focus on the creation of an innovative digital ecosystem that supports Innovative Driven Enterprises (IDEs) and Micro Small and Medium Enterprises (MSMEs). Currently, Jigawa state does not have any policy, framework, or guidelines supporting technology Startups or Services. There is a need to support the existing training centers in terms of training and to upgrade their capability to innovation hubs. There is little or no discussion about the startup bill or awareness about it among stakeholders. Furthermore, there's a need for innovation hubs that can build the capacity of both government employees and citizens.

Pillar Objectives

- Support for the creation of innovation-driven enterprises and digitally enabled SMEs.
- Facilitation of mentorship and funding programmes to support innovation driven enterprises and digitally enabled MSMEs.
- Enabling innovation driven enterprises and digitally enabled MSMEs.
- Facilitate the launch of Digital Innovation and Scale-up Centers (DISC), IT and innovation hubs.
- Facilitate PPP synergy to promote digital services in the State.

Existing Laws and Frameworks

- Presently no laws and frameworks are available. However, the use of Information Systems was encouraged in the Procurement Law of the Due Process & Project Monitoring Bureau.

Call to Action

- Adoption of the Jigawa Digital Economy Start-Up Act
- Facilitate a knowledge exchange program for existing tech hubs to build capacity and gain better exposure to create improved programs.
- Public Private Partnership for Hubs to set up in Jigawa state.
- Jigawa State Government to equip and utilize the Technology Incubation Center in Dutse, to encourage the culture of digital transformation, and support skills hunting and innovation.

Implementation Strategy

Initiatives

Jigawa State Government should build and utilize existing ICT centers and upgrade existing ICT hubs.

Processes

- To conduct a state-wide Need Assessment.
- Development of the implementation plan.
- Implementation of the recommendations from the Needs Assessment report
- Monitoring and evaluation
- Encourage public private partnership, and also Private Hubs to support culture of skill hunting and innovation.

KPIs

- Number of existing ICT centers upgraded and utilized.
- Number of new ICT centers established and utilized.
- Number of individuals or organizations that have acquired digital skills or received training through the ICT center.

Risks

- Financial limitation and lack of funding
- Political and policy shifts such as changes in political leadership

Mitigation Strategies

- Provide long-term sustainability plans, and regularly evaluate and adapt support mechanisms.
- Collaborate with partnerships on funding and financing.

Implementation Strategy

Initiatives

Support innovation-driven enterprises and digital MSMEs.

Processes

- Engage with relevant stakeholders such as entrepreneurs, industry experts, academic institutions, and community organizations.
- Domesticating Startup Act to provide a supportive policy and regulatory framework that encourages the establishment and growth of innovation hubs.

KPIs

- Number of new startups established.
- Number of governmental supports provided in enabling startups to navigate challenges and sustain their operations.
- Number of jobs created by innovation-driven enterprises and digital MSMEs.

Risks

- Poor program design or execution can result in inefficiencies, delays, or misalignment with the needs of innovation-driven enterprises and digital MSMEs.

Mitigation Strategies

- Governments should adopt strategies that balance support with entrepreneurial independence.
- Regular review and adaptation of the programs based on feedback and emerging trends



PILLAR 6

Soft Infrastructure

Situation Analysis

The soft infrastructure pillar aims to increase public trust in the use of digital technologies and participation in the digital economy. It emphasizes the significance of cybersecurity and other standards, frameworks, and guidelines that encourage citizens to adopt digital technologies. This pillar addresses data privacy and the deployment of technologies such as the public key infrastructure. Currently, there is no harmonized existing law or policy governing the digital economy in Jigawa state. Thus, much work is needed to be done in this pillar to achieve a robust digital economy in Jigawa state.

Pillar Objectives

- Review and Strengthen Cyber Security Instruments to ensure that Citizens are Secured.
- Strengthening Data protection Instrument.
- Support Digital for Data Implementation Programme.

Existing Laws and Frameworks

- Jigawa State has no Existing Law, Framework, or Roadmap.

Call to Action

- Domestication of National Data Protection Law
- Domestication of Cybercrime Act 2015.
- Awareness initiatives on digital rights and data protection and Cyber security laws.
- Online IT safety training and workshops.

Implementation Strategy

Initiatives

Enact legislation and regulations to protect individual privacy, data security, and intellectual property rights in the digital realm.

Processes

- Conduct a comprehensive needs assessment to understand the current ICT threat landscape.
- Conduct a thorough legal review of the proposed legislation and regulations to ensure consistency and effectiveness.

KPIs

- Monitor the effectiveness of data security measures and privacy controls.
- Measure the rate of adoption of digital services by citizens.

Risks

- Cyber security threat.
- Privacy concerns.

Mitigation Strategies

- Develop and enforce comprehensive data protection and privacy policies.
- Train citizens on cybersecurity best practices.

Implementation Strategy

Initiatives

Provide subsidies or grants to individuals or enterprises for digital upskilling and reskilling programs.

Processes

- Conduct a comprehensive assessment of the digital skills requirements and gaps in the workforce or specific industries.
- Define the objectives and expected outcomes of the upskilling and reskilling programs.

KPIs

- Number of people that completed the training/retraining program.
- Employment Outcomes
- The number of new digital enterprises or startups established by beneficiaries of the programs.

Risks

- Insufficient funding or improper allocation of funds
- Inadequate monitoring and evaluation mechanisms can hinder the ability to assess the impact and effectiveness of the upskilling and reskilling programs.

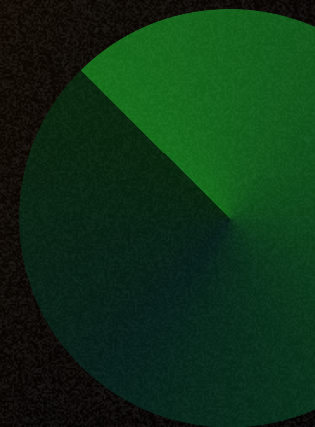
Mitigation Strategies

- Engage in rigorous program planning and design.
- Establish robust monitoring and evaluation frameworks, and ensure transparency and accountability.



PILLAR 7

Digital Society and Emerging Technologies



Situation Analysis

The digital society and emerging technologies concentrate on tying the growth of the digital economy to measures of the well-being of average citizens. The objectives of this pillar include addressing digital inclusion and financial inclusion. Currently, there are no robust provisions for PWDs in the digital economy draft plan and policy of the state. Furthermore, there is no strategy for women's inclusion in tech.

Thus, there is much work needed to be done in this pillar to achieve a robust digital economy in Jigawa state. Currently, the private sector in the state has taken the initiative to drive the digital society through programs such as Start-up Jigawa, and Next Jigawa. "Next Jigawa" is a platform driving agenda settings for digital policy. Next Jigawa involves CSOs, state and non-state actors, business membership organizations, people with disabilities (PWDs), academics, women, etc. to develop the policy of the citizen's charter which is shared, reviewed, modified, and used to drive digital inclusion of women in the state and Engausa Digital Literacy program in Ringim, etc.

Pillar Objectives

- Digital Inclusion across gender, disability, and social strata
- Financial Inclusion through the use of fintech solutions.
- Establishment of Emerging Technology Centers

Existing Laws and Frameworks

- Jigawa State has no Existing Law, framework, or roadmap that guides the digital society and emerging technologies.

Call to Action

- Domestication of the Start-up Act
- Domestication of Blockchain technology policy
- Infrastructure development through support for technology hubs to have incentives, such as high-speed internet, hardware, etc.
- Recognition of digital society groups and support.
- Setup of maker spaces through partnerships with development partners and private sectors.

Implementation Strategy

Initiatives

Foster digital inclusion and prioritize financial inclusion

Processes

- Create an enabling environment to acquire digital entrepreneurship skills through the establishment of functional digital vocational centers for All.
- Collaborate with technology hubs in the state to advance inclusive digital skills acquisition across social strata in the State.
- Promote the incubation program through targeted marketing and outreach activities to attract a diverse range of

startup applicants.
KPIs

Risks

Mitigation Strategies

- Number of financial supports provided to startups.
- Number of jobs created by the startups.

- Financial limitation.
- Unequal access to digital technologies and services leads to a greater digital divide.

- Collaborate with external partners on funding and support.
- Develop strategies to expand access to digital technologies, including affordable internet connectivity and devices in underserved areas e.g., in the villages.

Implementation Strategy

Initiatives

Support the emergence of new services and industries that are enabled by digital technologies.

Processes

- Government to collaborate with private sectors, academia, and development partners to create a center for excellence and emerging technologies.
- Establish partnerships with stakeholders who are passionate about promoting digital job opportunities and workforce development.
- Support advocates by providing them with the necessary tools and platforms to amplify their voices and initiatives.

KPIs

- The number and nature of partnerships established with stakeholders, such as industry associations, educational institutions, technology companies, etc.
- Assess the reach and impact of advocacy efforts by measuring the number of individuals reached through awareness campaigns, events, etc.

Risks

- Differences in ideas as the state government's objectives and priorities may not fully align with those of the advocates for transformation.

Mitigation Strategies

- Engage in transparent and inclusive processes.
- Provide adequate resources and support, and foster dialogue and collaboration.



PILLAR 8

Indigenous Content Development and Adoption



Situation Analysis

The indigenous content development and adoption pillar will provide a policy direction for promoting local digital innovations vis-à-vis digital service opportunities through the adoption and adaptation of digital technologies propelled and driven by indigenous digital talents in the State. It will identify jobs that are presently being outsourced and promote their repatriation to Jigawa citizens with digital skills. Currently, there are no laws or regulations about indigenous content development in Jigawa State. Indigenous talents and service providers are not being patronized enough. The state government needs to give more opportunities to its indigenes because of the pool of talent that exists. By promoting and implementing indigenous content, Jigawa state will be able to profit from the globalization of the digital technology market. It will also help the state save foreign currency and increase exports. The activities in this pillar will ensure that the grade of "Made in Jigawa" digital economy products meets international standards. Additionally, this pillar will aim to make Jigawa state a global outsourcing destination for digital employment.

Pillar Objectives

- Promotion of indigenous content
- Increasing public and private sectors' patronage of indigenous digital technology and business
- Support for Original Equipment Manufacturers (OEMs)
- Ensure compliance with regulatory guidelines for the Nigerian Content

Existing Laws and Frameworks

- Jigawa State has no Existing Law, framework, or roadmap.

Call to Action

- Training of youth and women on hardware production, repair, and maintenance.
- Incentive for hardware manufacturing companies to set up in the state.
- Emphasis on indigenous content.

Implementation Strategy

Initiatives

Recognizing and engaging indigenous talents and IT specialists in the state.

Processes

- Conduct a comprehensive needs assessment to identify the specific needs, aspirations, and challenges of indigenous communities regarding ICT.
- Stakeholders' engagement forum to foster and promote digital innovation and mutual IT supports services.

KPIs

- Number of Indigenous Content Creators.
- Track the number and diversity of partnerships established with indigenous communities and content creators.

Risks

- Lack of Connectivity and Infrastructure: Limited access to reliable internet connectivity and technology infrastructure in indigenous communities like villages.

Mitigation Strategies

- Invest in infrastructure development to improve internet connectivity in indigenous areas like the villages.

Implementation Strategy

Initiatives

Conduct a survey study on the type and nature of digital jobs and latent opportunities that exist in the state.

Processes

- Support and facilitate the creation of indigenous content that respects cultural protocols, languages, and traditions.
- Design and implement capacity-building programs and training initiatives to enhance digital literacy, ICT skills, and content creation capabilities among indigenous communities.

KPIs

- Indigenous IT talents are recognized and engaged to foster innovation.
- Track the reach and engagement of indigenous content, including metrics such as website visits, social media followers, video views, and content downloads in the state, in the country, and worldwide.

Risks

- Cultural Appropriation: The risk of non-indigenous individuals or organizations appropriating or misrepresenting indigenous culture, and traditional knowledge in digital content.

Mitigation Strategies

- Establish guidelines and protocols for the respectful and responsible representation of indigenous culture.

KEY PLAYERS TO DRIVE DIGITAL ECONOMY IN JIGAWA STATE

- Ministry of Science Technology and Innovation
- Ministry For Planning and Budget
- Ministry of Education, Science and Technology
- Ministry of Finance and Economic Planning
- Ministry of Justice
- Ministry of Information, Youth, Sports, and Culture
- Ministry of Land, Housing, Urban and Regional Planning
- Ministry of Women Affairs and Social Development
- Jigawa State Investment Promotion Agency (InvestJigawa)
- State Internal Revenue Services
- Budget and Economic Planning Directorate
- Due Process and Project Monitoring Bureau



SN	Pillar	Initiatives	Timeline						SN
			2023	2024	2025	2026	2027	2028	
1	Developmental Regulation	Establish a Jigawa state agency for digital economy.	X	X					Ministry of Education, Science and Technology. Ministry of Justice. Due Process and Project Monitoring Bureau.
		Assemble and evaluate all existing laws that are linked to the digital economy including the national policies and laws for domestication.	X						Ministry of Education, Science and Technology. Ministry of Justice.
2	Digital Literacy and Skills	Document and revive the existing ICT Centers around the State for efficient digital literacy delivery.	X						Jigawa State Bureau of Statistics.
		Utilize the standard curriculum and training modules on digital skills	X	X					Ministry of Education, Science and Technology
		Develop a pool of standard facilitators on digital skills and literacy.	X						Ministry of Education, Science and Technology.

SN	Pillar	Initiatives	Timeline						SN
			2023	2024	2025	2026	2027	2028	
2	Digital Literacy and Skills	Launch Digital Skills for All Project to provide skills to all people across age, gender, special needs, and social strata.	X	X	X				Ministry of Education, Science and Technology.
		Government to partner with academia in the area of digital knowledge and skills acquisition.	X	X	X	X	X	X	Ministry of Education, Science and Technology.
3	Solid Infrastructure	Identify and fill existing gaps of the required ICT physical infrastructure.	X						Ministry of Education, Science and Technology.
		Accelerate the penetration of affordable and quality broadband internet in the state.	X	X	X	X	X	X	Ministry of Education, Science and Technology
		Increase the proliferation of data centres across the state.	X	X	X				Ministry of Education, Science and Technology.
		Sensitization of public about Right of Way (RoW) policy.	X	X					Ministry of Education, Science and Technology.

SN	Pillar	Initiatives	Timeline						SN
			2023	2024	2025	2026	2027	2028	
4	Service Infrastructure	Jigawa State Government to review and approve the draft domesticated e-Government master plan and develop a State e-Government Interoperability Framework (SeGIF) and Enterprise Architecture documents.	X						Ministry of Education, Science and Technology.
		Digitalization of services	X	X	X	X	X	X	Ministry of Education, Science and Technology.
5	Digital Services Development & Promotion	Jigawa State Government should build and utilize existing ICT centres and upgrade existing ICT hubs.	X	X	X	X	X	X	Ministry of Education, Science and Technology.
		Support innovation-driven enterprises and digital MSMEs.	X	X	X	X	X	X	Ministry of Education, Science and Technology. Ministry of Information Youth Sport & Culture.

Implementation Roadmap

SN	Pillar	Initiatives	Timeline						SN
			2023	2024	2025	2026	2027	2028	
6	Soft Infrastructure	Enact legislation and regulations to protect individual privacy, data security, and intellectual property rights in the digital realm.	X						Ministry of Education, Science and Technology.
		Provide subsidies or grants to individuals or enterprises for digital upskilling and reskilling programs.	X	X	X	X	X	X	Ministry of Finance and Economic Planning.
7	Digital Society and Emerging Technologies	Foster digital inclusion and prioritize financial inclusion	X	X					Ministry of Finance and Economic Planning.
		Support the emergence of new services and industries that are enabled by digital technologies.	X	X	X	X	X	X	Ministry of Education, Science and Technology.
8	Indigenous Content Development & Adoption	Recognizing and engaging indigenous talents and IT specialists in the state.	X	X					Ministry of Education, Science and Technology.



Jigawa State Digital Economy Plan and Strategy (JDEPS)

JDEPS

