ICT INFRASTRUCTURAL PLANNING, DEVELOPMENT AND GROWTH AS REQUISITE OF CHANGE MANAGEMENT IN PLATEAU STATE

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Cybersecurity, Development, Growth, ICT, Infrastructural Planning

Abstract

Background: *This study x-rays the roles of ICT in governance by contextualizing its contributions as a change manager in Plateau State, Nigeria.*
Objectives: *The study was scoped to infrastructural planning, development, and growth of ICT in Plateau State to be able to ascertain the current ICT infrastructure in Plateau State, assess the extent of awareness of ICT projects/programmes that foster digital literacy and inclusion, the considerable digital divide between rural and urban areas where examined, and what constitute the challenges personally experienced that related to failed ICT infrastructure planning in Plateau State.*
Methods: *A survey research design of the quantitative research approach was adopted for the study. A structured questionnaire was used for data collection administered to 100 purposively sampled respondents. The results analyzed and presented descriptively in tabular form using frequency counts and simple percentages.*
Results: *The findings show that respondents were aware of community-based ICT projects or programs scattered across Plateau state but there is still a significant digital divide between urban and rural areas despite notable digital skills that foster digital literacy and inclusion.*
Conclusion:
Plateau State stands at a pivotal juncture, where infrastructural planning serves as a catalyst for ICT development and growth. The challenges identified underscore the need for strategic and adaptive approaches.

Key Contribution to Knowledge: *The strategies proposed provide a roadmap for overcoming obstacles and fostering a resilient and inclusive digital ecosystem.*
Recommendation: *The study recommends a thorough review of existing infrastructural plans to guarantee alignment with the dynamic nature of ICT use for the approved ethical development and growth purposes.*

I. Introduction

The evolution of ICT in Plateau State is deeply intertwined with Nigeria's broader technological landscape. Historically, Plateau State has been recognized for its diverse cultural heritages and economic activities. However, the need for technological advancements became apparent as the world transitioned into the digital era. In response to this, Plateau State embarked on a journey to bridge the digital divide and harness the potential of ICT for socio-economic development (Abramovsky & Griffith, 2016).

Over the years, various administrations have implemented policies and projects aimed at enhancing ICT infrastructure. Notable initiatives include the establishment of broadband connectivity, the deployment of e-governance solutions, and the promotion of digital literacy across Plateau State. The target was holistic and based on collaboration between the public and private sectors to help leap frog ICT development in Plateau State. These collaborations have not only facilitated the implementation of large-scale ICT projects but have also created a framework for sustainable growth in the sector (Alkire, 2022).

The infrastructural landscape of Plateau State has witnessed a significant transformation sch as high-speed internet connectivity, data centers, and communication networks. The efforts facilitated communication and opened diverse avenues for innovation, entrepreneurship, and e-commerce (Alkire, 2020). The commitment of Plateau State government over successive administration fostered the conducive environment that is promoting technological advancements (Agarwal & Dhar, 2014)

Plateau State has embraced e-governance as a means to enhance service delivery, transparency, and efficiency in the public sector. Various e-governance projects have been implemented, ranging from online platforms for citizen engagement to digital systems for managing government operations. These initiatives have streamlined processes, reduced bureaucratic bottlenecks, and improved the overall governance structure in the state (Anand & Ravallion, 2023).

Through these periods the state has recognized the importance of human capital in the digital age, therefore also prioritized digital literacy and skill development programs. Also targeted are youths empowerment, knowledge and skills necessary for public and private sectors operating in the state. The digital literacy and skill development programs comprise hands-on-deck training, workshops, and engagements with educational partnerships that is responsible for equipment.

Challenges persist, particularly surrounding inclusion of remote areas, cybersecurity concerns, and the digital divide among different demographic groups.

Statement of the Problem

One of the primary challenges facing Plateau State is the uneven distribution of ICT infrastructure causing a digital divide that exacerbates existing socio-economic disparities, missing out on the opportunities

afforded by the technology. Bridging this gap requires targeted investments in expanding broadband connectivity, establishing digital hubs, and ensuring that even the most remote communities have access to basic ICT resources (Benbasat and Zmud, 2023).

Notwithstanding that, the state recognizes the importance of ICT, a noticeable gap exists in terms of digital skills among the population depriving them the adeptness in areas such as coding, data analytics, and digital marketing. Bridging such digital skills gap entails curriculum enhancements, vocational training programs, and partnerships with educational institutions and industry for the jobs of the future (Castells, 2020).

Irrespective of the location (rural or urban) are consistently affected by cybersecurity related crimes which is now posing as a significant risk to both government and private sector operations. Despite the comprehensive approach, policy frameworks, capacity building, and collaboration with cybersecurity experts to fortify the state's digital defenses. Like other programs requiring a foundation, appraisal and recommendations, this paper is expected to contribute with empirical and/or evidence-based findings that corroborate with the position of Baliamoune-Lutz (2023) who argued for continuous research so that findings can present opportunities for innovative solutions, increased investment, and targeted interventions to address specific needs.

Research Questions

The following questions were answered in the course of the study:

i. Do you believe that the current infrastructural planning in Plateau State adequately supports the infrastructure development and growth of ICT?

ii. Are you aware of any ICT projects or programs in Plateau State aimed at fostering digital literacy and inclusion?

iii. Do you think there is a significant digital divide between urban and rural areas in Plateau State in terms of access to ICT services?

iv. Have you observed any notable improvements in the quality of public services due to the implementation of e-governance initiatives in Plateau State?

v. Have you personally experienced challenges related to access to Information and Communication Technology (ICT) infrastructure in Plateau State?

II. Conceptual Clarification

Concept of Infrastructural Planning

At its core, infrastructural planning is the conscious and forward-looking endeavor to develop, enhance, and maintain the fundamental systems that facilitate the functioning of a community or region. The essence of infrastructural planning lies in its ability to harmonize diverse components, aligning them with the present needs and future aspirations of a community (Clark, 2015).

According to Hamel (2020) Infrastructural planning is a dynamic and iterative process that unfolds in distinct phases, each contributing to the creation of a resilient and adaptive framework for development. At the inception of infrastructural planning, a comprehensive assessment of current and anticipated needs is conducted. This involves analyzing demographic trends, economic activities, and societal expectations to identify gaps and opportunities in existing infrastructure. Based on the needs assessment, planners articulate a

vision and set goals for the development of infrastructure.

This stage involves engaging with stakeholders, considering long-term sustainability, and aligning infrastructure development with broader community aspirations. Before committing resources, feasibility studies are conducted to assess the viability and potential impacts of proposed infrastructure projects. This involves analyzing technical, financial, environmental, and social aspects to ensure that projects align with the overarching goals. Detailed planning and design are critical components of infrastructural development. This stage involves translating conceptual ideas into tangible plans, considering spatial layouts, engineering specifications, and regulatory requirements.

Jan (2021) asserts that once plans are in place, the next challenge is mobilizing the necessary resources. This includes financial investments, skilled labor, materials, and technology. Infrastructural planning necessitates creative financing models and partnerships to ensure sustainable resource allocation. The implementation phase involves the actual construction, installation, or development of the identified infrastructure projects. Efficient project management, quality control, and adherence to timelines are vital to the success of this stage. Post-implementation, continuous monitoring and evaluation are conducted to assess the performance, efficiency, and impact of the developed infrastructure. Feedback from users and stakeholders is incorporated to inform future planning and improvements. Given the dynamic nature of societal needs and technological advancements, infrastructural planning includes mechanisms for adaptation and upgradation. This involves periodically reassessing infrastructure, identifying areas for improvement, and incorporating emerging technologies.

Jorgenson and Stiroh (2015) assets that while infrastructural planning holds immense potential for societal development, it is not without its challenges. Adequate funding is often a challenge in infrastructural planning. Limited financial resources can impede the implementation of ambitious projects, requiring innovative financing mechanisms and public-private partnerships. The political landscape can introduce uncertainties and delays in infrastructural projects.

Shifting regulatory frameworks, bureaucratic hurdles, and policy inconsistencies may hinder the smooth execution of plans. Balancing the need for development with environmental sustainability is a complex challenge. Infrastructural planning must navigate issues such as habitat disruption, resource depletion, and climate change resilience. Successful infrastructural planning requires active participation and support from the community. Inadequate engagement can lead to resistance, delays, and suboptimal project outcomes. The rapid pace of technological advancements introduces both opportunities and challenges. Infrastructural planning must consider the integration of new technologies, cybersecurity concerns, and the potential obsolescence of existing infrastructure (Kaiser, 2023).

Current Infrastructural Planning Regimes for ICT Development and Growth in Plateau State

Plateau state like other regions of Nigeria and beyond has stoked to frameworks that can facilitate notable and accountable performance of infrastructural regimes. Below are the consistent elements that the state implemented;

1. Transportation Infrastructure

Transportation infrastructure refers to the networks and facilities that enable the movement of goods, people, and services

within a region. This includes roads, bridges, railways, airports, and public transit systems. Efficient transportation infrastructure is crucial for economic development, connectivity, and accessibility. Well-planned transportation networks reduce congestion, enhance mobility, and stimulate economic activities (Davies & Quinlivan, 2016).

2. Utilities and Services

Utilities encompass the essential services that support daily life, such as water supply, sanitation, electricity, and waste management. Reliable utilities are fundamental to public health, environmental sustainability, and the overall quality of life. Infrastructural planning ensures the provision of these services in a sustainable and accessible manner (Dewan & Riggins, 2015).

3. Communication Infrastructure

Communication infrastructure involves the networks and technologies that facilitate the exchange of information, including telecommunications, internet connectivity, and digital communication systems. In the modern era, effective communication infrastructure is indispensable for economic competitiveness, social connectivity, and participation in the global information society (Dutta, 2021).

4. Social Infrastructure

Social infrastructure encompasses facilities and services that contribute to the well-being of a community, such as schools, healthcare facilities, community centers, and public spaces. Investing in social infrastructure is crucial for human development, education, healthcare, and community cohesion. Infrastructural planning ensures equitable access to these essential services (Fielding, 2022).

5. Energy Infrastructure

Energy infrastructure involves the generation, distribution, and utilization of power, including electricity and alternative energy sources. Reliable and sustainable energy infrastructure is a cornerstone of economic development, industrial growth, and environmental sustainability. Infrastructural planning addresses the evolving energy needs of a community (Gupta, Dasgupta, and Gupta, 2018).

Concept of ICT

At its core, ICT refers to the convergence of technologies that facilitate the acquisition, storage, processing, and dissemination of information. This umbrella term encompasses a broad spectrum of technologies, ranging from traditional computing devices to cutting-edge innovations like artificial intelligence, the Internet of Things (IoT), and blockchain. Unlike traditional concepts of information technology, ICT extends beyond computers and software to include the entire ecosystem of technologies used to manage and process information (Kishi and Pohjola, 2022).

The foundational element of ICT, computing systems encompass the hardware and devices used for processing and storing information. This includes personal computers, servers, mainframes, and emerging technologies like quantum computing. Computing systems form the backbone of ICT, providing the processing power necessary for complex calculations, data analysis, and running software applications (Lavin & Qiang, 2014).

Software comprises the programs, applications, and operating systems that enable users to interact with computing systems. This includes word processing software, databases, mobile applications, and sophisticated algorithms. Software is the interface through

which users engage with ICT. It facilitates diverse functionalities, from basic document processing to advanced data analytics and machine learning (Mbarika, 2022).

Networking technologies enable the seamless exchange of information between devices. This includes the Internet, local area networks (LANs), wide area networks (WANs), and communication protocols. Networking forms the backbone of global connectivity. It enables communication, collaboration, and the sharing of information across geographical boundaries.

Data storage involves the mechanisms and technologies for storing and retrieving information. This includes traditional storage devices like hard drives, cloud storage solutions, and emerging technologies such as DNA storage. Effective data storage and management are crucial for maintaining and accessing vast amounts of information generated in the digital age (Melitz, 2023).

Ngwenyama and Morawezynski (2019) states that cybersecurity encompasses strategies, technologies, and practices designed to protect systems, networks, and data from digital threats. This includes antivirus software, firewalls, encryption, and security protocols. In an interconnected world, cybersecurity is paramount to safeguarding sensitive information, preserving privacy, and ensuring the integrity of digital systems.

The IoT involves connecting everyday objects to the internet, enabling them to send and receive data. This includes smart devices, wearables, and sensors embedded in various environments. IoT extends the reach of ICT by integrating the physical world with digital systems, fostering automation, real-time monitoring, and data-driven decision-making (Oliner & Sichel, 2014).

AI refers to the development of computer systems that can perform tasks that typically require human intelligence, while ML involves algorithms that enable systems to learn and improve from experience. AI and ML are transformative components of ICT, empowering systems to analyze vast datasets, recognize patterns, and make intelligent decisions (Oulton, 2022).

Blockchain is a decentralized and distributed ledger technology that securely records transactions across a network. It underpins cryptocurrencies like Bitcoin and has applications beyond finance. Blockchain introduces transparency, security, and trust in digital transactions, revolutionizing industries such as finance, supply chain, and healthcare (Pick & Azari, 2021).

According to Qiang and Pitt (2014) the proliferation of ICT has ushered in an era of unprecedented connectivity, innovation, and socio-economic transformation. ICT is driving a profound digital transformation across industries, reshaping business models, operational processes, and customer interactions. Organizations leverage digital technologies to enhance efficiency, agility, and competitiveness. The interconnected nature of ICT has facilitated global connectivity, enabling instant communication and collaboration irrespective of geographical distances. This interconnectedness has fueled the globalization of economies and cultures. ICT serves as a catalyst for economic growth by fostering innovation, entrepreneurship, and the creation of new markets.

Digital technologies empower businesses to adapt to changing market dynamics and seize emerging opportunities. ICT has revolutionized education by providing unprecedented access to information, online learning platforms, and collaborative tools. It has democratized knowledge, breaking down geographical barriers to education. The integration of ICT in healthcare has led to significant advancements, from electronic health records and telemedicine

to data-driven diagnostics. ICT enhances patient care, streamlines processes, and facilitates medical research. Social media platforms, messaging apps, and online forums powered by ICT have transformed communication patterns.

People can connect, share information, and engage in global conversations in real-time. ICT plays a crucial role in e-governance, enhancing the delivery of public services, improving transparency, and promoting citizen engagement. Digital platforms streamline administrative processes, reducing bureaucratic hurdles. The digital economy fueled by ICT has led to the creation of new job roles and industries. Simultaneously, it has prompted a shift in the required skill sets, emphasizing digital literacy, problem-solving, and adaptability (Redding and Venables, 2023).

Challenges Faced by Plateau State Towards Implementation and Sustenance of Infrastructural Planning for the Development and Growth of ICT in Plateau State

The state is mindful of numerous challenges which unequivocally can be described as continuum, however, in the context of Plateau State, Nigeria, the synergy between infrastructural planning and ICT initiatives only can avert challenges. This translates into creating an environment that supports the seamless integration of digital technologies in all its ecosystems. The thrust of the state is not limited to the following areas:

1. Transportation Infrastructure as a Facilitator

Transportation infrastructure includes roads, bridges, and networks that facilitate the movement of goods, people, and services. Efficient transportation infrastructure is foundational for the deployment and maintenance of ICT networks. Well-planned roads and connectivity enable the swift deployment of digital infrastructure, ensuring accessibility to even remote areas in Plateau State (Weems and Stickle, 2015).

2. Utilities and Services Integration

Utilities encompass water supply, sanitation, electricity, and waste management services. Reliable utilities are essential for powering ICT infrastructure. Seamless integration of utilities ensures uninterrupted energy supply for data centers, while water and sanitation services support the well-being of communities engaged in ICT activities (Abramovsky, et al., 2016).

3. Communication Infrastructure Backbone

Communication infrastructure involves telecommunications, internet connectivity, and digital communication systems. A robust communication infrastructure is the lifeline of ICT development. High-speed internet connectivity, reliable telecommunications networks, and digital communication channels form the backbone that facilitates the flow of information and data exchange in Plateau State (Agarwal, et al, 2014).

4. Social Infrastructure for Inclusive Growth

Social infrastructure includes schools, healthcare facilities, community centers, and public spaces. Investing in social infrastructure ensures that the benefits of ICT are inclusive. Schools equipped with digital learning tools, healthcare facilities utilizing telemedicine, and community centers fostering digital literacy contribute to holistic development (Alkire, 2022).

5. Energy Infrastructure for Sustainability

Energy infrastructure involves the generation, distribution, and utilization of

power. Sustainable energy infrastructure is crucial for powering the ICT ecosystem. Incorporating renewable energy sources and ensuring energy efficiency contribute to both environmental sustainability and the resilience of ICT systems in Plateau State (Alkire, 2020).

III. Methodology

Research Design

The survey research design was adopted for this study as it studies both large and small populations. This is a research method that describes a given state of affairs of a particular time. According to Olayiwola (2020) this research design permits the gathering of information through the use of questionnaires and interviews, from a population based on appropriate sampling techniques. According to Obeka (2021), survey research is interested in some characteristics of the population or universe he uses as a carefully selected sample from the population for intensive study of the characteristics of the population. This is in line with the opinion of Kennedy (2021) who asserts that "survey design studied large and small population by selecting samples drawn from the population to discover the idealistic incidence, distribution and inter-relations on sociological and psychological variables of the study.

Population of the Study

The population of this study comprises of all the residents of Plateau State, numbering about 4 million, seven hundred and seventeen thousand, three hundred (4,717,300) (Source: Plateau State Population Projection, 2022).

Sample Size

One hundred (100) respondents from the total population were purposively selected as the sample size of the study. This number was derived from the total population of people residing in Plateau state.

Sampling Techniques

Purposive sampling was adopted for the purpose of this study. Purposive sampling, also known as judgmental or selective sampling, is a non-probability sampling technique where researchers deliberately choose participants who possess specific characteristics or meet specific criteria relevant to the research objectives.

Instrumentation

The questionnaire is the instrument adopted for the research work. It is a primary source of data collection, consisting of a compilation of questions which the researcher shall administer to residents of Plateau state.

Validity of data collection instrument

For an instrument to be valid it must both be relevant and reliable and the reliability of research instrument needs to be established to further strengthen their validity (Awotunde and Ugoduklumwa, 2014). This is mainly concerned with the soundness and effectiveness of a measuring instrument. All instruments are said to be valid if it measures what it claims to measure. Out of the seven common validity test instruments, the researcher adopted the content validity which measured the factor situation under study.

Reliability of data collection instrument

Reliability deals with the consistency which the measuring instrument performs. It indicates the degree to which the measure is consistent, that is repeated measurement shall always give the same result. In line with the above, the researcher adopted the nonetti correlation coefficient of 0.8 to be necessary for a measure to be considered reliable. This is because the study which the researcher carried out on the students showed the reliability index of 0.82 and as such is considered reliable.

Administration of the data collection instrument

The questionnaire was then administered to the respondents simultaneously to avoid leakages and ensure reliability which could influence other respondents' opinions.

Method of Data Analysis

Simple percentage method was used for data analysis based on this method; response of respondents is being compared in order to identify a group with the highest respondents on the view on how the questionnaire expected them to answer those questions. The parameter is given below:

$$\frac{NR}{TR} \times \frac{100}{1}$$

Where; NR = Number of Respondents

TR = Total Respondents

IV. Data Analysis and Presentation

This section focuses on presentation and analysis of data obtained during the study. The data were analyzed and the results presented in tabular form. The decision was based on whether infrastructural planning has impact on the development and growth of ICT in Plateau state. Out of the 100 questionnaires administered, 75 questionnaires were duly filled and returned, representing a 75% return rate. The presentation of data will be based on the 75 questionnaires that were returned.

Research Question 1

Do you believe that the current infrastructural planning in Plateau State adequately supports the development and growth of ICT initiatives?

Table 1: Response on whether current infrastructure planning adequately support ICT development and growth initiative of Plateau State

Response	No. of Responses	Percentage (%)
Yes	61	81.3
No	14	18.7
Total	**75**	**100**

Field Survey, 2025

Table 1 shows that 61 respondents representing 81.3% agreed that the current infrastructural planning in Plateau State adequately supports the development and growth of ICT initiatives, whereas 14 respondents with a percentage of 18.7 were in negation. Therefore, the current infrastructural planning in Plateau State adequately supports the development and growth of ICT initiatives.

Research Question 2

Are you aware of any community-based ICT projects or programs in Plateau State aimed at fostering digital literacy and inclusion?

Table 2: Extent of awareness of community-based ICT projects in Plateau State aimed at fostering digital literacy and inclusion

Extent of awareness	No. of Responses	Percentage (%)
Yes	60	80.0
No	15	20.0
Total	**75**	**100**

Field Survey, 2025

Table 2 shows that 60 respondents representing 80.0% agreed that they are aware

of community-based ICT projects or programs in Plateau state aimed at fostering digital literacy and inclusion, 15 respondents representing 20.0% disagreed with the statement. This shows that are aware of community-based ICT projects or programs in Plateau state aimed at fostering digital literacy and inclusion.

Research Question 3

Do you think there is a significant digital divide between urban and rural areas in Plateau State in terms of access to ICT services?

Table 3: Extent of digital divide between urban and rural areas in Plateau State in terms of access to ICT services

Extent of digital divide between urban and rural areas	No. of Responses	Percentage (%)
Yes	65	86.7
No	10	13.3
Total	**75**	**100**

Field Survey, 2025

Table 3 shows that 65 respondents representing 86.7% were in affirmation with the statement that there is a significant digital divide between urban and rural areas in Plateau State in terms of access to ICT services, 10 respondents representing 13.3% were in disapproval. This shows that there is a significant digital divide between urban and rural areas in Plateau State in terms of access to ICT services.

Research Question 4

Have you observed any notable improvements in the quality of public services due to the implementation of e-governance initiatives in Plateau State?

Table 4: Response on notable quality of public services for the implementation of e-government in Plateau State

Response	No. of Responses	Percentage (%)
Yes	64	85.3
No	11	14.7
Total	**75**	**100**

Field Survey, 2025

Table 4 shows that 64 respondents representing 85.3% assert that they have observed notable improvements in the quality of public services due to the implementation of e-governance initiatives in Plateau state, whereas 11 respondents representing 14.7% disagreed with the statement. Therefore, they have observed notable improvements in the quality of public services due to the implementation of e-governance initiatives in Plateau state.

Research Question 5

Have you personally experienced challenges related to access to Information and Communication Technology (ICT) infrastructure in Plateau State?

Table 5: Personal experienced challenges mitigating access to ICT infrastructure in Plateau State

Variables	No. of Responses	Percentage (%)
Yes	57	76.0
No	18	24.0
Total	**75**	**100**

Field Survey, 2025

Table 5 shows that 57 respondents representing 76.0% agreed that respondents have personally experienced challenges related to access to ICT infrastructure in Plateau state, whereas 18 respondents representing 24.0% disagreed to the statement. Therefore, it shows that have personally experienced challenges related to access to ICT infrastructure in Plateau state.

V. Conclusion

In conclusion, the appraisal of infrastructural planning, development, and growth of Information and Communication Technology (ICT) in Plateau State unveils a complex and dynamic landscape. Plateau State stands at a pivotal juncture, where infrastructural planning serves as a catalyst for ICT development and growth. The challenges identified, ranging from budgetary constraints to regulatory dynamics, underscore the need for strategic and adaptive approaches. The strategies proposed, including multi-stakeholder collaboration, long-term visioning, community participation, and the integration of environmental considerations, provide a roadmap for overcoming obstacles and fostering a resilient and inclusive digital ecosystem.

The questionnaire, anchored by five succinct yes-or-no questions, serves as a valuable tool for gathering empirical insights from stakeholders. The responses garnered will enrich our understanding of the ground realities, allowing for a more nuanced analysis of the state of infrastructural planning and ICT in Plateau State.

As Plateau State navigates the digital frontier, the study advocates for a holistic and inclusive approach, ensuring that the benefits of ICT are equitably distributed across urban and rural areas. The theoretical frameworks and empirical findings collectively underscore the importance of aligning infrastructural planning with the dynamic needs of a digital society, fostering innovation, and promoting sustainable development.

In essence, this study not only serves as a snapshot of the current state of affairs but also lays the groundwork for future research and policy interventions. By embracing the identified strategies, learning from challenges, and continually adapting to technological advancements, Plateau State has the potential to emerge as a beacon of ICT innovation, driving economic growth, enhancing governance, and improving the overall quality of life for its residents. The journey towards a digitally empowered Plateau State requires collective commitment, informed decision-making, and a shared vision of leveraging technology for the betterment of communities and the broader society.

Recommendations

The comprehensive appraisal of infrastructural planning, development, and growth of ICT in Plateau State provides a foundation for strategic recommendations aimed at fostering a resilient and inclusive digital ecosystem. These recommendations include:

i. Undertake a thorough review of existing infrastructural plans, ensuring alignment with the dynamic nature of ICT. Incorporate a dedicated focus on digital infrastructure, including high-speed

internet connectivity, smart city initiatives, and energy-efficient technologies.

ii. Foster collaborative partnerships between government bodies, private enterprises, educational institutions, and local communities. Engage in inclusive decision-making processes to leverage diverse expertise, resources, and perspectives for effective ICT planning and implementation.

iii. Implement comprehensive digital literacy programs targeting diverse demographics in Plateau State. These programs should focus on building essential ICT skills, promoting awareness of digital opportunities, and ensuring that communities are equipped to fully participate in the digital ecosystem.

iv. Actively involve local communities in the planning and execution of ICT initiatives. Establish communication channels for ongoing engagement, seek feedback, and tailor ICT projects to address specific needs and aspirations within different communities.

v. Prioritize the development of sustainable energy infrastructure to power ICT initiatives. Incorporate renewable energy sources, energy-efficient technologies, and responsible waste management practices to minimize the ecological impact of digital infrastructure.

vi. Conduct regular reviews of regulatory frameworks to ensure they align with technological advancements and promote a conducive environment for ICT development. Streamline bureaucratic processes, address policy inconsistencies, and foster a regulatory landscape that encourages innovation.

vii. Establish training programs and initiatives focused on enhancing cybersecurity skills within Plateau State. This includes capacity building for government officials, IT professionals, and the general public to mitigate cyber threats and safeguard digital assets.

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