

# **Resilient Data Governance Frameworks for Emerging Economies:**

The sub-Saharan Africa Case





# Preface

In the rapidly evolving landscape of the digital economy, data has emerged as one of the most critical assets for driving innovation, efficiency, and growth. For emerging economies in sub-Saharan Africa, the opportunities presented by this data-driven era are immense. However, these opportunities come with the responsibility of establishing robust data governance frameworks that can safeguard privacy, ensure security, and promote the ethical use of data.

At [Prescott Data](#), we understand that the path to building resilient data governance frameworks is not a one-size-fits-all journey. Each nation, with its unique cultural, economic, and regulatory environment, requires a tailored approach that considers its specific challenges and opportunities. In crafting this white paper, our goal is to provide a comprehensive guide that goes beyond the theoretical and delves into practical, actionable strategies that can be adopted across the diverse tapestry of sub-Saharan Africa.

We are at a pivotal moment where data can significantly contribute to solving some of the region's most pressing challenges—whether it's improving healthcare delivery, enhancing agricultural productivity, or fostering financial inclusion. However, to harness the full potential of data, we must address foundational elements such as data privacy, security, quality, and access. This requires a concerted effort from all stakeholders, including governments, businesses, civil society, and international partners.

I believe that with the right strategies and frameworks in place, sub-Saharan Africa can position itself as a leader in data governance innovation. By embracing the principles of transparency, accountability, and inclusivity, we can create a data ecosystem that not only protects individuals' rights but also empowers organizations to unlock new opportunities for growth and development. As you engage with the insights and recommendations in this perspective paper, I encourage you to think about the broader implications of data governance in our society. It's not just about compliance or technical standards—it's about building a foundation for a digital future where data is used responsibly and ethically to drive positive change.



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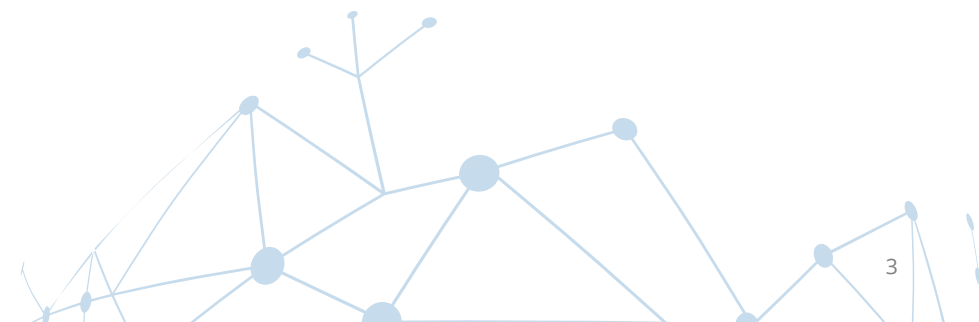


# Welcome to Africa's Digital Future: Data Governance Blueprint

Today, only 28% of African nations have comprehensive data protection laws, underscoring a significant regulatory gap that could impede the region's digital progress. While pioneers like Kenya and South Africa have set legislative benchmarks, inconsistencies across the continent hinder the seamless exchange of data and collaboration. With the digital economy projected to grow by 40% in the next five years, the urgency to establish harmonized, resilient data governance frameworks has never been greater.

In a world where data is the new oil, sub-Saharan Africa stands on the brink of a digital transformation that promises unprecedented opportunities for economic growth, innovation, and societal advancement. Yet, with this potential comes the critical need for robust data governance frameworks that can navigate the complexities of privacy, security, and ethical use.

Data, when governed effectively, can become a catalyst for innovation and economic empowerment. From improving healthcare outcomes and optimizing agricultural production to enhancing financial inclusion and driving digital trade, the potential for data to transform key sectors in Africa is vast. However, this transformation is contingent upon the establishment of governance structures that ensure data integrity, security, and ethical usage.




# Strategic Pathways to Resilience

There exists solid consensus in data communities that data is a strategic asset if properly utilized. However, the realization of this promise is contingent on applying a multi-faceted approach in data governance.

The modern day C-suite grapples with a bunch of fundamental questions which they often do not find full clarity on; is being data-driven even a real thing? Are we collecting enough data to start using AI? do we need to setup a data governance office or is it just another hype? Okay, we better comply with GDPR even though we have no clarity on the direct business value.

## What we think?

There's real value on the table in using data as a strategic asset; and being data-driven is also a real thing. But reaping the benefits requires a profound shift in the way organizations in sub-Saharan Africa think about creating value using data. It means applying data governance not as merely the most current coolest thing in data - but as the backbone of value creation from data scenarios collected by these organizations. A more unified approach might be the key to this - approaching data governance as sub-Saharan Africa instead of individual countries.



Success in data governance in sub-Saharan Africa means stepping out of the norm and moving as a unit.

Some of the ways to do this include:

- **Policy Harmonization:** A unified Pan-African Data Governance Accord is proposed to streamline regulatory standards, facilitate cross-border data flows, and align with global benchmarks such as GDPR.
- **Technological Investments:** Leveraging cutting-edge technologies like AI, blockchain, and cloud computing can enhance data security and scalability. Public-private partnerships will play a vital role in providing the necessary resources and expertise.
- **Stakeholder Collaboration:** Creating multi-stakeholder forums will foster an inclusive dialogue that incorporates perspectives from governments, businesses, civil society, and international partners.
- **Continuous Evaluation:** Implementing a Data Governance Maturity Model (DGMM) allows for ongoing assessment and adaptation of governance practices to meet evolving challenges and needs.



# A Vision for the Future

This paper envisions a future where sub-Saharan Africa not only keeps pace with global data governance standards but also leads in innovation and ethical data management. By implementing the strategic pathways outlined, the region can build a resilient data ecosystem that supports sustainable development, economic growth, and social well-being.

This blueprint is a call to action for all stakeholders to engage in the collaborative effort required to build data governance frameworks that are **robust, adaptable, and aligned with the unique context** of sub-Saharan Africa. It is an invitation to shape a digital future where data is not just protected but is also a force for positive change.



# What Makes Data Governance So Powerful?



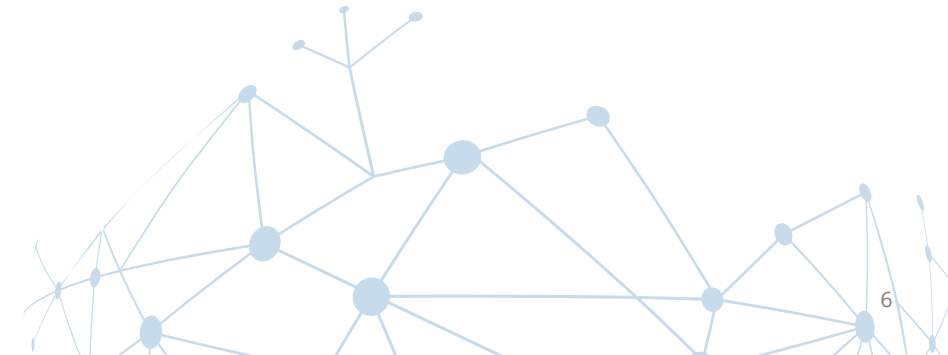
**Enabler of trust and compliance.** Data governance establishes a framework for data accuracy, reliability, and consistency. By defining clear policies and procedures for data management, organizations can foster trust among stakeholders—whether they are customers, partners, or regulatory bodies. In a world where data breaches and misuse can have severe consequences, trust becomes a vital currency. With increasing global attention on data privacy and protection, compliance with regulations such as GDPR or the African Union Convention on Cyber Security and Personal Data Protection is critical. Data governance provides the mechanisms for organizations to align with these standards, mitigating legal risks and enhancing cross-border data cooperation.

## **Catalyst for data-driven decision-making.**

Effective data governance ensures high-quality data through standardized processes for data collection, storage, and maintenance. This quality is crucial for accurate analytics, enabling businesses and governments to make informed decisions based on reliable insights.

Access to high-quality, well-governed data empowers decision-makers to leverage analytics and artificial intelligence (AI) tools. In sectors like healthcare, agriculture, and finance, this can translate to improved patient outcomes, optimized crop yields, and more inclusive financial services.

**Foundation for innovation and competitive advantage.** By ensuring data integrity and availability, data governance creates an environment where innovation can thrive. Startups and established companies alike can explore new business models, develop AI-driven applications, and create data-centric products with confidence. Organizations that excel in data governance can turn data into a strategic asset, gaining a competitive edge. For example, companies can personalize customer experiences, streamline operations, and identify new market opportunities through advanced data analytics, all built on a foundation of solid governance practices.





**Driver of operational efficiency.** Data governance helps in creating standardized processes and workflows for data handling. This streamlining reduces redundancies, minimizes errors, and ensures that data is used consistently across the organization. By implementing effective data governance, organizations can reduce costs associated with data management, such as storage and data retrieval. Efficient data lifecycle management, including data archiving and deletion policies, ensures that resources are optimally used.

**Enhancer of data security and privacy.**

Data governance frameworks establish protocols for securing sensitive data, including personal and financial information. By implementing measures like encryption, access controls, and anonymization, organizations can protect against data breaches and cyber threats. As data privacy concerns grow globally, governance ensures that organizations handle personal data responsibly. By adhering to privacy-by-design principles, data governance aligns with ethical standards and enhances consumer confidence.

**Cross-border collaboration and data sharing.**

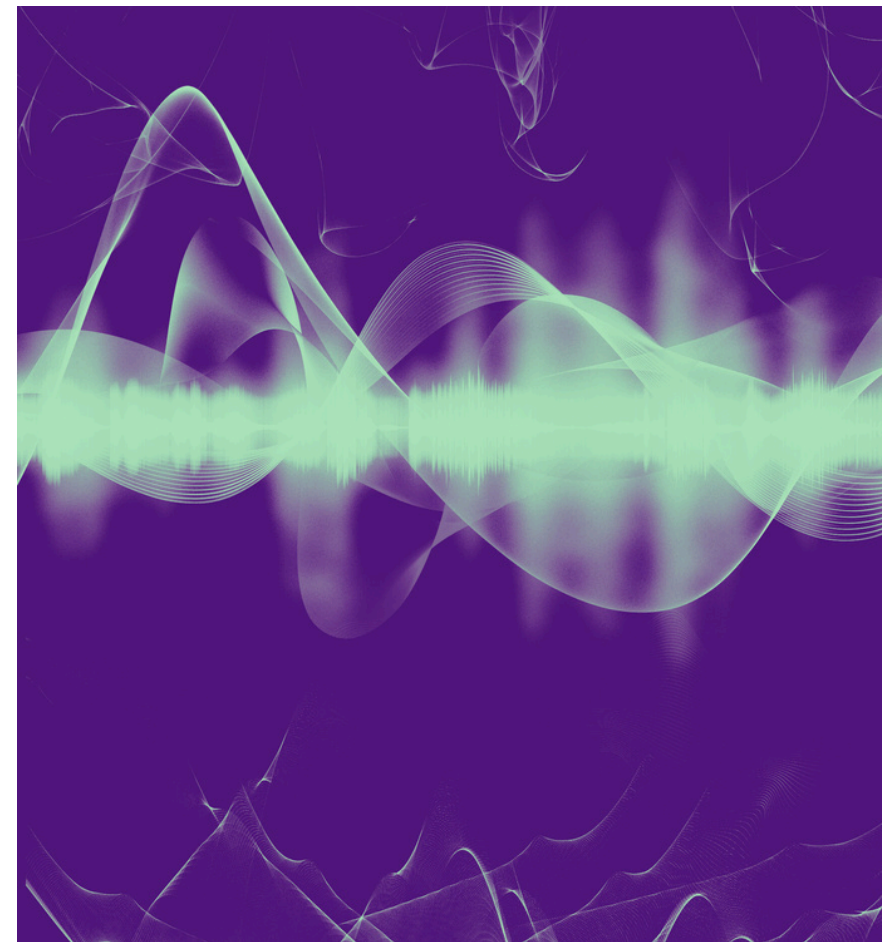
Effective data governance creates standardized data definitions, formats, and protocols, making it easier for different systems and organizations to share and use data. This is particularly crucial in sectors like healthcare and logistics, where seamless data exchange can drive efficiency and improve outcomes.

In a global economy, data is a key enabler of digital trade. Governance frameworks that align with international standards facilitate cross-border data flows, enabling businesses in emerging economies to engage in global markets and partnerships.

**Resilience on the face of crisis.**

Data governance plays a critical role in ensuring business continuity during crises, such as natural disasters, pandemics, or cyberattacks. By establishing protocols for data backup, disaster recovery, and incident response, organizations can maintain operations and safeguard critical information.

Governance models can be designed to adapt to changing circumstances, allowing organizations to respond effectively to emerging challenges and threats. This adaptability is crucial in regions prone to instability or rapid change, ensuring that data remains an asset rather than a liability.

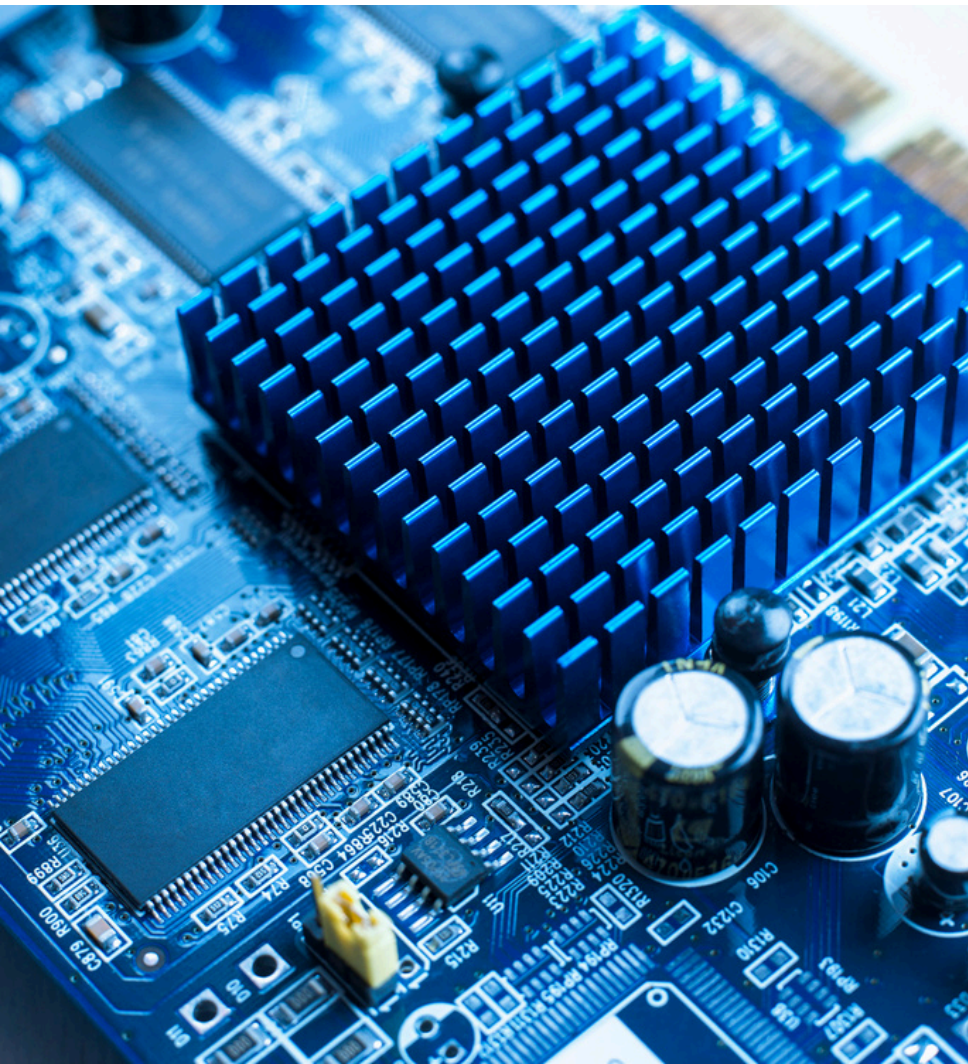


# Challenges in sub-Saharan Africa

Building resilient data governance frameworks in sub-Saharan Africa requires addressing a range of challenges that are unique to the region. These challenges span infrastructural, regulatory, cultural, and economic dimensions, each posing significant obstacles to the effective management and use of data.

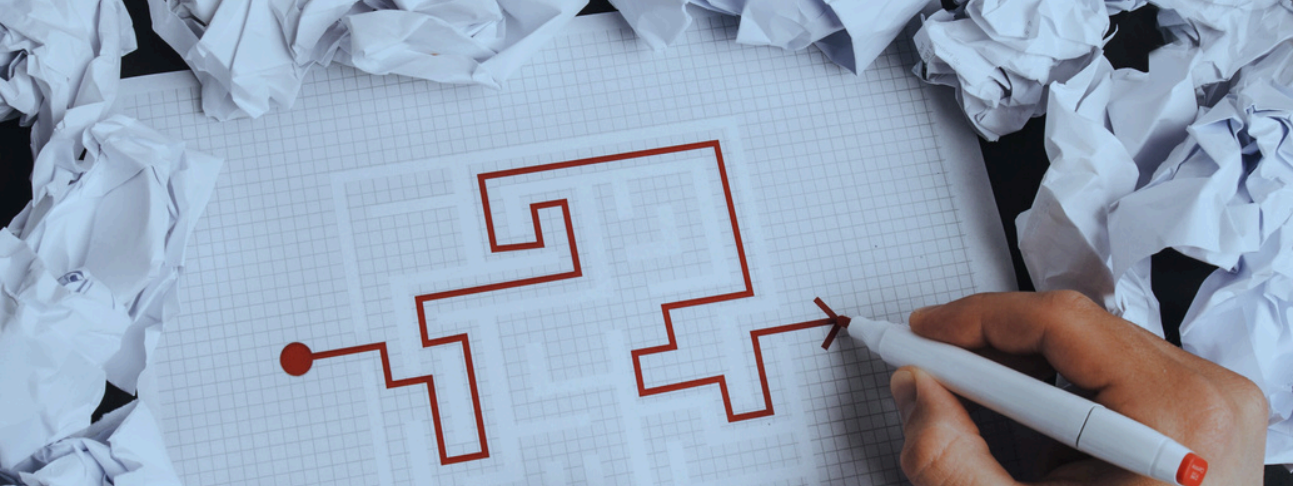






## Infrastructural Limitations

- **Digital Divide:** One of the most pressing issues is the digital divide, with stark disparities in internet penetration between urban and rural areas. While cities like Nairobi and Lagos enjoy internet penetration rates as high as 60%, rural areas lag behind significantly, often with rates below 15%. This digital divide limits the reach of data-driven services and the implementation of robust data governance practices in rural and underserved communities.
- **Basic Infrastructure Deficits:** Countries like Ethiopia and the Democratic Republic of the Congo exemplify the challenges of building foundational digital infrastructure. Political instability and economic challenges have hindered the deployment of reliable broadband networks, data centers, and other critical infrastructure. In such environments, even basic data management becomes a challenge, let alone the sophisticated requirements of data governance.
- **Connectivity and Power Issues:** Frequent power outages and unreliable internet connections in many parts of the region further complicate data management and security. Without stable and consistent access to digital infrastructure, maintaining data integrity and ensuring timely data processing becomes a significant hurdle.



Africa's fragmented data protection laws hinder digital growth and pose risks to data security and ethical AI use.



## Regulatory and Policy Gaps

- **Lack of Comprehensive Legislation:** While 23 African countries have enacted some form of data protection law, the quality and enforcement of these laws vary widely. In many cases, the regulations lack the depth and clarity needed to address modern data governance challenges, such as cross-border data flows, data residency requirements, and the ethical use of AI.
- **Fragmented Regulatory Environment:** The absence of a harmonized regulatory framework across the continent impedes data sharing and cooperation between countries. This fragmentation creates complexities for businesses operating across borders, limiting the potential for regional digital trade and collaboration. For example, while Kenya's Data Protection Act (2019) is well-developed, neighboring countries may have less stringent or entirely different regulations, creating a patchwork of compliance requirements.
- **Enforcement Mechanisms:** Even where data protection laws exist, enforcement is often weak due to limited resources, technical capacity, and political will. Regulatory bodies may lack the tools and expertise to monitor compliance effectively, leaving individuals' data vulnerable to misuse.





## Skills and Capacity Building

- **Skills Gap:** The region faces a significant shortage of skilled data professionals. According to UNESCO, less than 1% of tertiary-level graduates in Africa specialize in data science or related fields. This gap extends beyond technical skills to include expertise in data governance, cybersecurity, and regulatory compliance.
- **Education and Training:** Current educational curricula in many African universities do not adequately cover emerging fields like data science, artificial intelligence, or data governance. While initiatives like the African Masters in Machine Intelligence (AMMI) program are beginning to address this gap, there is a need for broader, more inclusive efforts to build a workforce capable of implementing and managing data governance frameworks.
- **Organizational Capacity:** Many public and private sector organizations in sub-Saharan Africa lack the internal capacity to manage data governance effectively. This includes not only technical capacity but also the ability to establish data governance policies, frameworks, and oversight structures.

Africa's skills gap in data science and governance, with under 1% of graduates specializing in these areas, highlights the need for expanded education and capacity-building.



## Cultural and Societal Factors



**Data Privacy Perceptions:** Cultural norms and societal attitudes towards data privacy and sharing vary across the region. In communal societies, such as those in parts of Nigeria and Uganda, there is a tradition of open information sharing within communities. This practice can conflict with Western-centric notions of data privacy and individual rights, creating a challenge for implementing data governance frameworks that are both effective and culturally sensitive.

**Community Data Practices:** In some cases, data is viewed as a communal resource rather than a private asset. This perspective can lead to resistance against regulations perceived as restrictive or alien to local customs. Navigating these cultural nuances requires a tailored approach that respects local practices while ensuring data privacy and security.

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## Economic and Resource Constraints

**Financial Limitations:** Many countries in sub-Saharan Africa face significant economic constraints that limit investment in digital infrastructure and data governance initiatives. This lack of funding affects the development and maintenance of cybersecurity infrastructure, data centers, and regulatory enforcement capabilities. For example, while the African Union's Agenda 2063 highlights the importance of technology and data for economic growth, the financial resources required to implement these goals are often lacking.

**Cybersecurity Vulnerabilities:** Limited investment in cybersecurity infrastructure makes systems vulnerable to data breaches and cyberattacks. The cost of implementing advanced cybersecurity measures, such as encryption and network security protocols, can be prohibitive for many organizations and governments in the region.

**Funding for Data Governance Programs:** Establishing and maintaining data governance programs requires ongoing funding for training, technology, and compliance activities. In many cases, these investments compete with other pressing needs, such as healthcare, education, and infrastructure development.

Sub-Saharan Africa allocates less than 1% of its GDP to cybersecurity and data governance, leading to weaker frameworks and increased vulnerability in the digital economy.

A woman with long dark hair is seated at a desk in a futuristic, neon-lit environment. She is wearing a large, over-ear headset with a microphone and is looking intently at a computer monitor. Her right hand is resting on her chin, and her left hand is on the desk near a keyboard. The desk is illuminated with a bright blue light. In the background, there are glowing orange and blue lines, suggesting a high-tech or data center setting. The overall atmosphere is one of intense focus and technological sophistication.

# The Value in Resilient Data Governance Frameworks

For CDOs, the new AI era presents a unique opportunity to build value using robust data governance frameworks



## Enabling Digital Trade

- **Facilitating Secure Cross-Border Data Flows:**

- The rise of e-commerce and digital services in Africa has created new opportunities for economic growth. However, these opportunities are contingent on the ability to exchange data securely and compliantly across borders. Effective data governance frameworks are essential for establishing trust in digital transactions and ensuring compliance with international data protection standards.
- Projected Growth in Digital Trade: Cross-border e-commerce in Africa is projected to reach \$75 billion by 2025, driven by increasing internet penetration and a growing middle class. To capitalize on this growth, data governance frameworks must facilitate secure data exchange, protect consumer data, and ensure compliance with diverse regulatory requirements across different countries.
- Boosting Regional Integration: Harmonized data governance policies can enhance regional integration by enabling seamless digital trade within the African Continental Free Trade Area (AfCFTA). This integration can drive intra-African trade, reduce transaction costs, and foster a competitive digital market.

Africa's cross-border e-commerce could hit \$75 billion by 2025, but this growth relies on strong data governance for secure and compliant data flows.





Combining data governance with big data analytics transforms agriculture and finance, enhancing yields and financial access.

## Economic Empowerment

Enhancing Key Sectors Through Big Data Analytics:

- In agriculture, a sector that employs more than 60% of Africa's population, data governance plays a crucial role in harnessing the power of big data analytics. By ensuring data accuracy, quality, and security, farmers and agribusinesses can leverage data to make informed decisions on crop selection, irrigation, and pest control.
- Case Example: Ghana's Precision Agriculture: In Ghana, data-driven initiatives such as the "E-agriculture" platform provide farmers with real-time data on weather, soil health, and market prices. This has led to more efficient farming practices, improved crop yields, and better access to markets, contributing to food security and economic empowerment.
- Access to Financial Services: Data governance also facilitates the responsible use of alternative data for credit scoring, helping to extend financial services to unbanked populations. By analyzing transaction histories, mobile money usage, and social data, financial institutions can assess creditworthiness and offer loans to individuals and small businesses who lack traditional credit history.





Resilient data governance empowers tech ecosystems to innovate smarter, protecting intellectual property while fostering collaboration and driving technological advancements.

## Supporting Innovation

Creating an Environment for Startups and Tech Ecosystems:

- Innovation ecosystems, such as **Kenya's Silicon Savannah**, rely on data governance to create an environment that protects intellectual property and fosters innovation. By ensuring data security, privacy, and ethical use, data governance frameworks can encourage the development of new technologies, applications, and business models.
- Protecting Intellectual Property: Startups and tech companies require assurance that their data and intellectual property will be safeguarded. Data governance provides the legal and technical frameworks necessary to protect innovations from unauthorized access and misuse, thereby encouraging investment in research and development.
- Fostering Collaboration: Well-defined data governance policies facilitate collaboration between academia, industry, and government. Shared data repositories and open data initiatives, governed by clear policies, can drive collaborative innovation and accelerate the development of solutions for local challenges.



## Improving Public Services

### Enhancing Service Delivery Through Data Analytics:

- Governments can leverage data analytics to improve public services, from healthcare and education to transportation and social welfare. Data governance ensures that data is collected, processed, and used in a manner that respects privacy and security while enabling data-driven decision-making.
- **Case Example: Rwanda's E-Health Initiative:**
  - Rwanda's e-health initiative is a prime example of how data governance can improve public services. By integrating patient data across healthcare facilities, the government has been able to enhance healthcare delivery, streamline patient management, and reduce redundancies in medical records.
  - Strict data privacy and security measures are implemented to ensure that sensitive patient information is protected, building public trust in digital health services.
- **Urban Planning and Infrastructure:** In urban planning, data governance enables the use of geospatial data and sensor networks to manage city infrastructure efficiently. For instance, data-driven traffic management systems can optimize public transportation routes, reduce congestion, and improve air quality.



Data governance fuels advanced analytics in public services, balancing innovation with privacy to revolutionize healthcare and urban infrastructure.

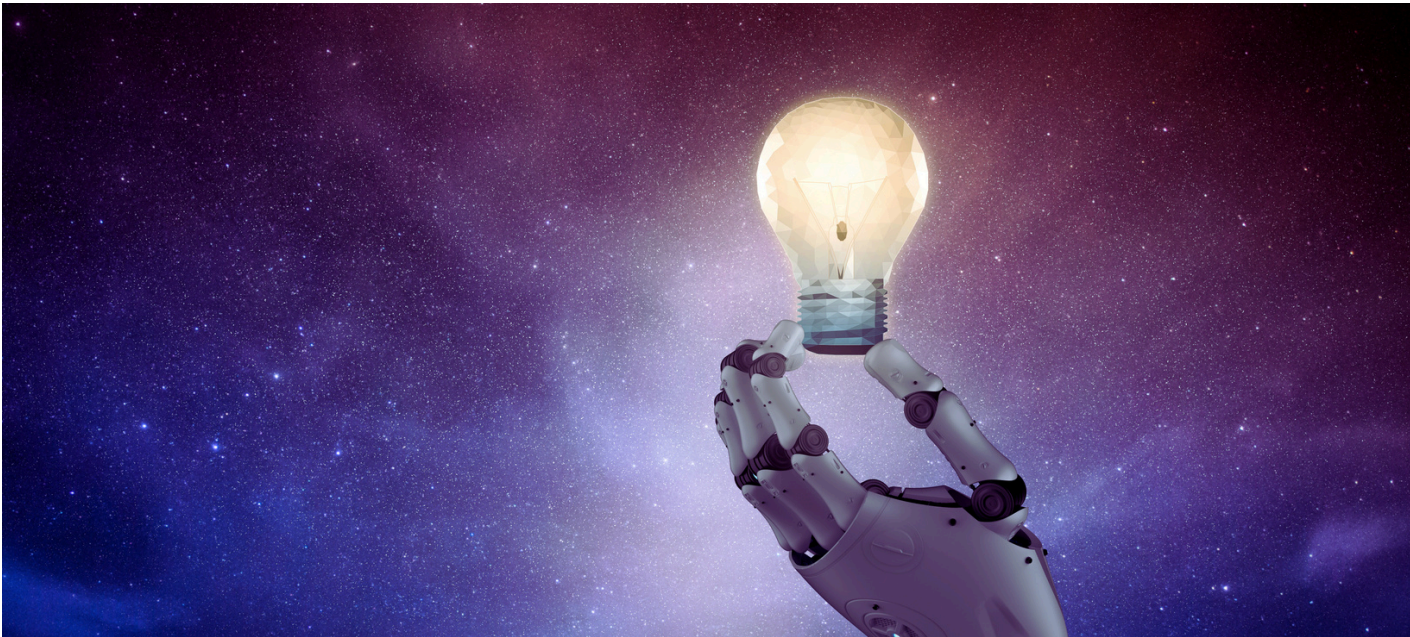


## Driving Social and Economic Inclusivity

### Inclusive Data Policies:

- Data governance frameworks that emphasize inclusivity can help ensure that marginalized and underserved communities are not left behind in the digital transformation. Policies that promote open data and equitable access can empower communities, improve transparency, and support grassroots innovation.

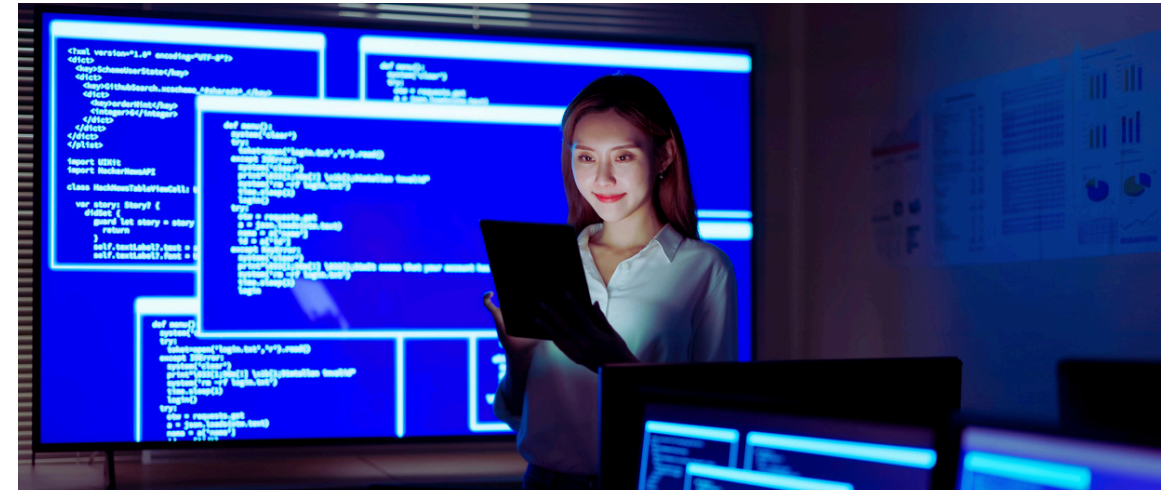
Promoting Gender Equality: Data governance can also play a role in promoting gender equality by ensuring that gender-disaggregated data is collected and used to inform policies and programs. This data can provide insights into gender gaps in areas such as education, employment, and healthcare, enabling targeted interventions.



## Strengthening National Security and Resilience

### Cybersecurity and National Resilience:

- In an increasingly digital world, data governance is integral to national security and resilience. Robust data governance frameworks establish protocols for protecting critical data infrastructure against cyber threats and ensuring the continuity of government services during crises.
- Disaster Response and Management: Data governance frameworks can enhance disaster response and management by ensuring that data on infrastructure, populations, and resources is accurate, accessible, and secure. This data is crucial for effective decision-making during natural disasters, pandemics, and other emergencies.



Investing in robust data governance is an investment in the future of Africa's digital economy. It not only protects the rights and privacy of individuals but also empowers governments, businesses, and communities to leverage data for growth, inclusivity, and resilience. As Africa continues to embrace the digital revolution, data governance will be the cornerstone of a prosperous and equitable digital future.

Data governance fortifies security by protecting critical infrastructure and defending against cyber threats.





# How to get started

Data Leaders and stakeholders in sub-Saharan Africa have key steps to follow for success

# Get policy and legal framework ready

## Pan-African Data Governance Accord

A Pan-African Data Governance Accord is envisioned as a collaborative effort to harmonize data protection laws across sub-Saharan Africa. By establishing a unified set of standards and principles, this accord would facilitate cross-border data flows, support regional integration, and foster a more conducive environment for digital trade and cooperation.

**Inspiration from GDPR:** The General Data Protection Regulation (GDPR) of the European Union serves as a model for creating a comprehensive and enforceable data protection framework. However, a Pan-African accord would need to be tailored to the African context, considering factors like cultural differences, varying levels of digital infrastructure, and the need for economic development.

**Localized Adaptation:** The accord would include guidelines for data privacy, data sovereignty, data transfer mechanisms, and individuals' rights regarding their personal data. It would also provide a blueprint for enforcement, including the establishment of national data protection authorities with the power to investigate and sanction non-compliance.







## Adoption of International Guidelines

- The OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data can serve as a foundational benchmark for crafting localized policies. These guidelines emphasize principles such as data minimization, purpose limitation, security safeguards, and accountability, which are crucial for building trust in data practices.
- Local Context and Customization: While adopting international best practices, it is essential to customize these guidelines to reflect local cultural, economic, and legal contexts. This includes recognizing communal data sharing practices, addressing socio-economic disparities, and promoting inclusivity in data governance.

**Prescott Data** believes in leading by example in developing data governance frameworks tailored to sub-Saharan Africa's unique context. It's the reason why we work with local communities to integrate communal data sharing practices, addressing socio-economic disparities while promoting inclusive policies. By customizing international best practices, we ensure our solutions are culturally sensitive, legally compliant, and foster an inclusive data ecosystem.

# Re-inventing organizational structures

## National Data Governance Councils

Establishing National Data Governance Councils is a strategic approach to overseeing data governance practices at the country level. These councils should be composed of representatives from government agencies, the private sector, academia, and civil society, ensuring a holistic and diverse perspective on data governance issues.

**Responsibilities:** These councils would be responsible for developing national data governance strategies, establishing data standards, promoting best practices, and ensuring compliance with data protection laws. They would also act as a liaison between national and regional data governance initiatives, fostering collaboration and knowledge sharing.

In addition to national councils, a regional coordination mechanism could be established to facilitate dialogue and alignment on data governance across the continent. This would include working towards the harmonization of policies, standardization of data practices, and support for cross-border data initiatives.

## Data Stewardship Roles

Within organizations, clearly defined roles such as Data Stewards, Data Protection Officers, and Chief Data Officers are essential for managing and overseeing data governance efforts. These roles involve responsibilities such as ensuring data quality, compliance with regulations, and the implementation of data governance policies.

**Training and Support:** Providing training and support for these roles is crucial, especially in a region where the data governance discipline is still emerging. Professional development programs, certifications, and knowledge-sharing networks can help build the necessary expertise.







# Investing in processes and procedures

## Data Quality Management (DQM) System

Implementing a robust Data Quality Management (DQM) system is critical for ensuring data integrity and reliability. A DQM system encompasses processes for data profiling, data cleansing, data validation, and data enrichment to maintain high data quality standards throughout the data lifecycle.

### Techniques for Data Accuracy:

- **Data Lineage:** Tracking the origin and movement of data through systems ensures transparency and accountability, making it easier to trace and rectify errors or inconsistencies.
- **Data Profiling:** Analyzing data for accuracy, completeness, and consistency allows organizations to identify and address quality issues proactively. For example, automated tools can flag missing or anomalous data entries for review.

**Data Lifecycle Management:** Establishing procedures for data creation, storage, usage, archiving, and disposal ensures that data is managed systematically and securely from inception to retirement. This includes defining data retention policies that align with regulatory requirements and organizational needs.





## Data Privacy Impact Assessments (DPIAs)

Conducting regular Data Privacy Impact Assessments (DPIAs) helps organizations identify and mitigate risks associated with data processing activities. DPIAs are especially important when implementing new technologies or processes that involve personal data, as they ensure that privacy considerations are integrated into the design and operation of systems.

**Regular DPIAs** are crucial for embedding privacy into new technologies, proactively mitigating risks and ensuring privacy is a core design principle.





# Embracing cutting-edge technology

## Secure Cloud Infrastructure:

- Developing a secure cloud infrastructure is paramount for scalable and secure data storage solutions. Cloud services that comply with international data security standards (e.g., ISO 27001, SOC 2) offer the flexibility and scalability needed for emerging economies while ensuring data protection.
- Data Encryption and Access Controls: Implementing encryption for data at rest and in transit, along with robust access controls, helps protect sensitive data from unauthorized access. Role-based access controls (RBAC) and multi-factor authentication (MFA) are essential security measures for safeguarding data.
- Data Residency and Sovereignty: Given the importance of data sovereignty, choosing cloud providers that offer data residency options within the continent is crucial. This ensures compliance with local data protection laws and addresses concerns around data control and jurisdiction.





## Blockchain Technology for Secure Data Sharing:

- Blockchain technology offers significant potential for secure, transparent, and tamper-proof data sharing. By providing a decentralized ledger system, blockchain can enhance data integrity and reduce the risk of unauthorized access or data tampering.
- **Use Cases in Healthcare and Finance:**
  - Healthcare: In sectors like healthcare, blockchain can facilitate the secure sharing of patient records between hospitals and healthcare providers while ensuring that sensitive data is protected and access is controlled.
  - Finance: In the financial sector, blockchain can be used to create transparent and secure transaction records, reducing the risk of fraud and enhancing the traceability of financial data.
- **Pilot Projects and Implementation:** Pilot projects in countries like Ghana have successfully used blockchain for land registry systems, demonstrating the technology's potential to streamline processes and enhance data security. Scaling these pilots into broader applications requires careful planning, investment, and collaboration among stakeholders.



# Insist on capacity building and skills development

## Centers of Excellence for Data Governance and AI

Establishing Centers of Excellence for Data Governance and AI can help build local expertise and drive innovation. These centers can serve as hubs for research, education, and the development of best practices, providing a platform for knowledge exchange and collaboration.

**Certification Programs and Training:** Offering certification programs in data governance, data privacy, and cybersecurity can help build a skilled workforce capable of managing complex data governance frameworks. These programs can be developed in partnership with international organizations and academic institutions to ensure alignment with global standards.

**Research and Development:** By fostering research in data governance and AI, these centers can contribute to the development of innovative solutions tailored to the African context. This includes exploring the ethical implications of AI, developing tools for data quality management, and creating frameworks for responsible data use.



## Public-Private Partnerships



Encouraging public-private partnerships is essential for fostering skill development and knowledge transfer. Initiatives like South Africa's Innovation Hub demonstrate how collaboration between the government, industry, and academia can drive the growth of a data-literate workforce.

**Knowledge Transfer and Mentorship:** Engaging industry experts and professionals in mentorship programs can provide valuable insights and practical experience to the next generation of data governance professionals. Knowledge transfer initiatives can help bridge the gap between theoretical knowledge and real-world application.

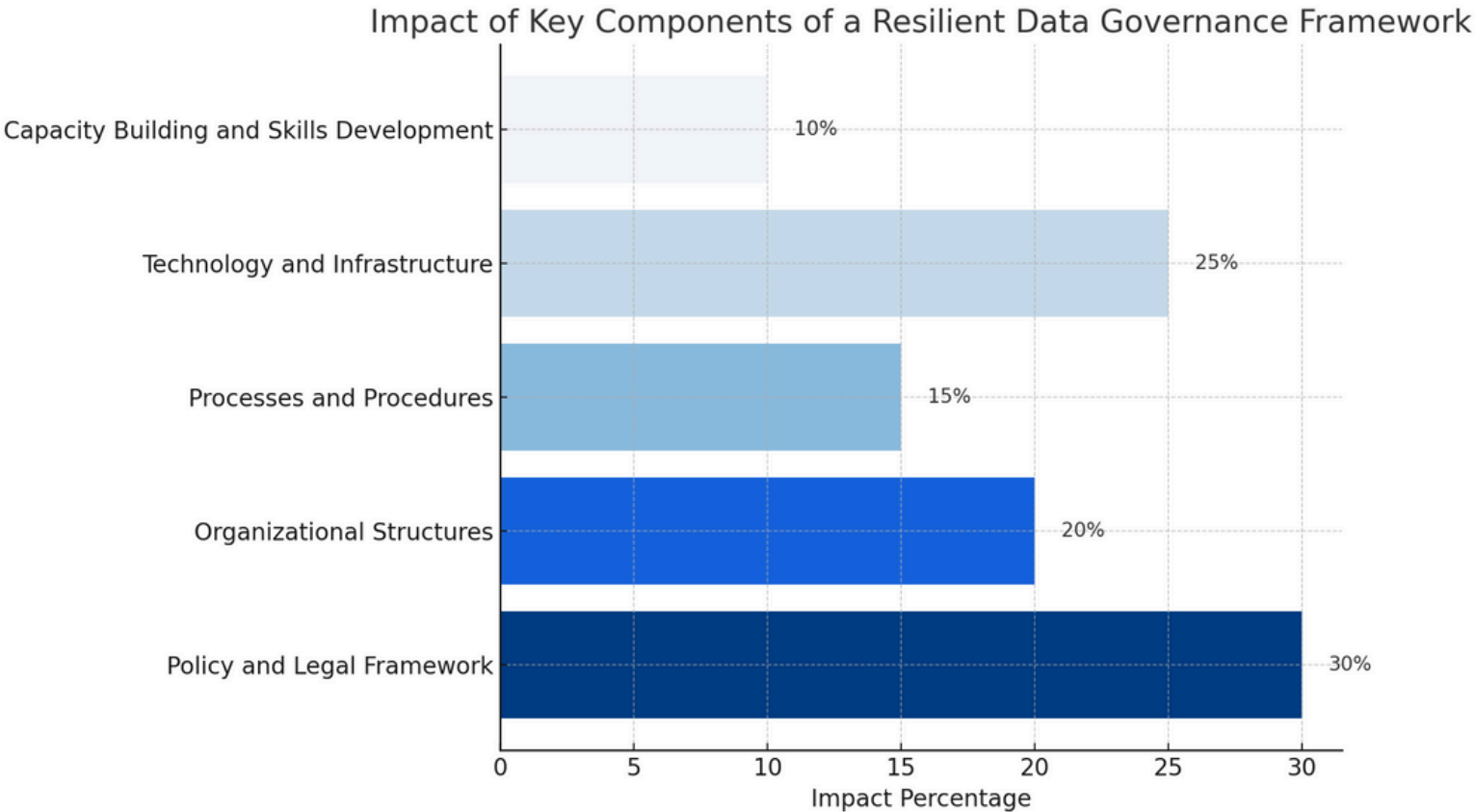
**Funding and Support:** Public-private partnerships can also provide funding and resources for training programs, research projects, and technology adoption, helping to build the capacity needed for effective data governance.



# Resilient data governance will transform data and tech landscape in sub-Saharan Africa

Our analysis reveals the varying impact of key components in creating a resilient data governance framework. The policy and legal framework holds the greatest influence at 30%, underscoring the importance of solid regulations and guidelines. Technology and infrastructure follow closely at 25%, highlighting the need for secure, scalable systems. Organizational structures contribute 20%, emphasizing the role of governance bodies in overseeing data practices. Processes and procedures account for 15%, ensuring data quality and reliability, while capacity building and skills development make up 10%, reflecting the importance of nurturing local expertise to support a sustainable data ecosystem

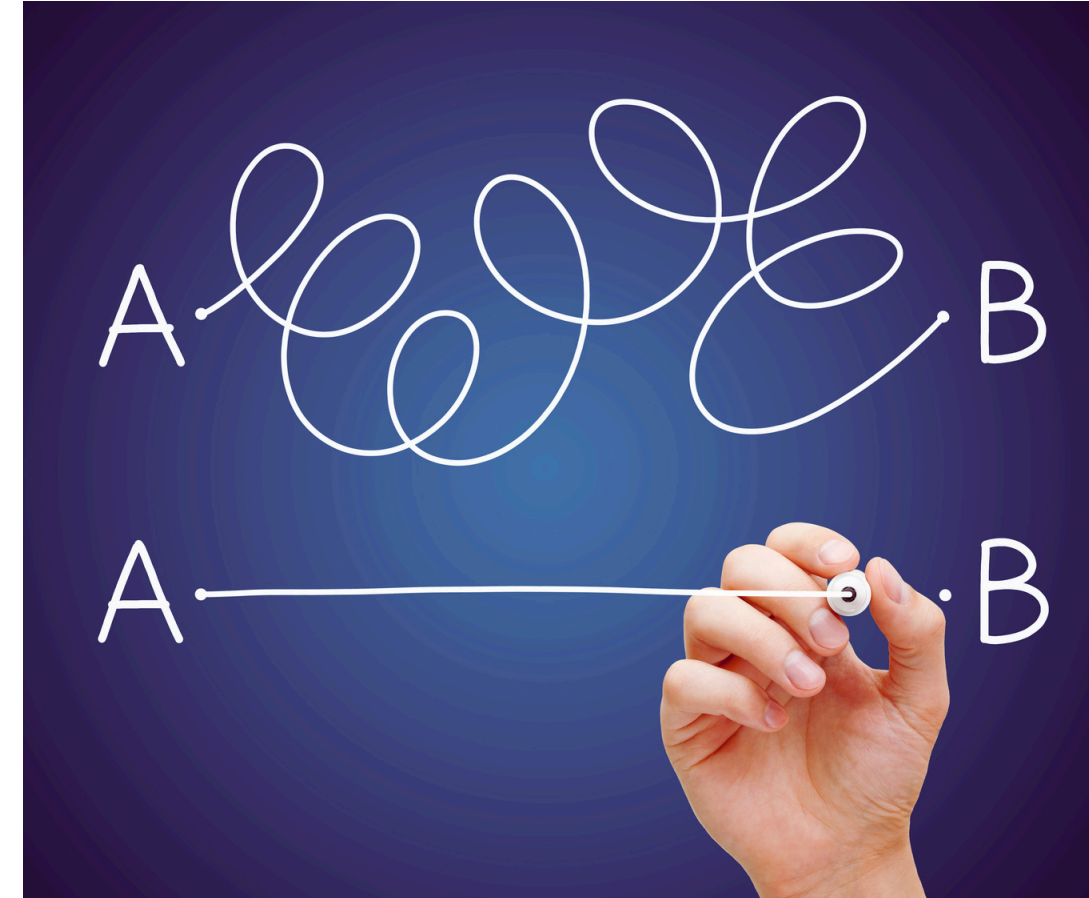
Impact of Key Components of Resilient Data Governance



Note: Estimates are based on expert analysis of the potential impact of each data governance component. Source: Prescott Data Research and Industry Standards.

# Best practice for implementation - build to scale always

- **Adopting a Phased Approach:**
  - A maturity model-based approach can guide the development of data governance capabilities. Starting with basic data policies and gradually integrating advanced data management tools ensures sustainable progress.
- **Stakeholder Engagement and Collaboration:**
  - Creating multi-stakeholder data governance forums can facilitate dialogue and consensus-building. The East African Data Governance Forum is an example where stakeholders discuss region-specific challenges and solutions.
- **Leveraging Regional and International Partnerships:**
  - Engaging with organizations like the World Economic Forum's Centre for the Fourth Industrial Revolution offers access to global expertise and best practices.
- **Promoting Data Literacy and Awareness:**
  - Implementing nationwide data literacy campaigns, similar to Singapore's National Data Literacy Program, can empower citizens and organizations to understand and leverage data responsibly.
- **Continuous Monitoring and Evaluation:**
  - Using frameworks like the Data Governance Maturity Model (DGMM) allows for ongoing assessment and enhancement of governance practices. Establishing key performance indicators (KPIs) for data quality, privacy, and compliance ensures accountability.





# Case studies - following the leaders



- **Kenya's Digital Economy Blueprint (2019):**

- Focuses on building a robust digital infrastructure and enhancing data governance. The blueprint has led to the establishment of data protection regulations and the formation of a Data Commissioner's Office.
- Impact: Improved digital service delivery, enhanced public trust, and attraction of international tech investments.

- **Nigeria's Data Protection Regulation (NDPR) 2019:**

- A comprehensive data protection framework modeled on international standards like GDPR. NDPR has resulted in increased compliance among businesses and has positioned Nigeria as a regional leader in data privacy.

- **Rwanda's Smart Africa Initiative:**

- Aims to accelerate socio-economic development through ICT. Rwanda's focus on data governance includes integrating blockchain technology for secure data management in sectors like healthcare and land registry.
- Outcome: Enhanced digital innovation and data security, fostering a conducive environment for international partnerships.

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