

A Data Governance Framework for Africa

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The Context

To create a vibrant market for the use of data, while still protecting the individual rights of those on the continent, Africa must lead the way in developing its data strategy and data governance framework. This data governance framework should account for the continent's unique characteristics while addressing gaps in digitization, identity, and access to data across countries. This background paper discusses the key features of an effective data governance framework within an African context; it identifies the key dimensions that merit consideration in this regard; and it

describes the principles that should animate such a system for governing how data is deployed on the continent.

The Problem

Africa must define a continental strategy and devise a governance framework that maximizes the use of data while ensuring productive cross-border data flows and protecting individual rights. The continent lacks sturdy and expansive national or regional structures for governing data, and individual African nations have yet to develop legislation to safeguard data use and digital transactions—an absence likely to cause market fragmentation due to insufficient harmonization. Meanwhile, the data governance frameworks that do exist, albeit in their limited form, lack coherence in terms of principles, scope, and enforceability across jurisdictions. The rapidly changing landscape of data generation, storage, and mining capacity—as well as the dearth of human and financial resources, reliable institutions, and enforcement capacity to support an efficient data governance environment—will, absent immediate action by key stakeholders, cause the continent to regress at the moment when it is arguably positioned to show its greatest progress ever.

Without a coherent data governance framework, data generated in Africa risk being improperly utilized within each country and in other parts of the world, leading to an unbalanced platform of data exchange with countries where data are closely regulated. African countries, therefore, must take the lead in establishing the appropriate frameworks that will serve not only their own national interests but also those of the continent as a whole. Governments, development institutions, and nonstate actors should collaborate to implement and enforce data governance laws and policies that can make the continent's digital economy more competitive while, at the same time, enhancing transparency, trust, and digital inclusiveness for all users.

Data governance involves establishing principles to enable an environment for the sharing ofdata, with the ultimate goal of improving living standards, while at the same time recognizing and protecting the rights of data originators and users. Data governance covers aspects of data at both the micro and macro levels. At the micro or firm level, data governance includes management of the availability, usability, integrity, and security of data, while the macro development of such a framework requires the establishment of an appropriate economic, legal and institutional ecosystem, as well as the development of proper standards for the exchange and protection of data.

A sound data governance framework requires that institutions and stakeholders have the right incentives to produce, protect, and share data. A comprehensive understanding of data governance also demands consideration of key dimensions

including (a) the relevant stakeholders who use data and those who are impacted by the use of data; (b) the lifecycle of data from creation to destruction; (c) the typology of data, reflecting relevant characteristics that impact processing, storage, and accuracy; and (d) enabling pillars such as economic, legal, and institutional aspects that create the necessary infrastructure for using data and maximize its productivity.

The key stakeholders who generate and use data include households, the private sector, governments, and civil society, with households and the private sector being major data producers and/or consumers and governments and civil society offering essential safeguards concerning its use. The data lifecycle details the key steps that occur between the creation and destruction or reuse of data, specifically the collection, processing, and storage of data; transferring or sharing of data among users; analysis and value addition; archiving and preservation for future use; and destruction of data at the end of the cycle. Data typologies classify data according to a particular lens or perspective, and include for example private versus public data, or structured versus unstructured data. The key underpinning pillars include the economic, legal, and institutional frameworks that facilitate the appropriate use of data while protecting data privacy.

Establishing an effective data governance framework for Africa requires a clear delineation of its objectives and careful attention to the unique characteristics of the continent. Africa has a large informal sector, an agricultural sector that dominates in production, and most of its commercial entities are small businesses. Much of the population connects through mobile phones, but data access levels are low. Additionally, data access across households is highly uneven and depends on geographic location and economic status. For most Africans, the costs of enjoying internet access are prohibitive. Further, digital-format data are highly limited in Africa; many public datasets are not digitized, and wide access to those that are digitized is low, fragmented, and inconsistent.

Data strategies and governance frameworks do not exist in many African countries; and, where frameworks do exist, they are typically incomplete, disjointed, or not fully aligned with other existing and relevant legislation already in place, such as laws protecting individual rights. What's more, due to weak institutions, governance issues, or limited capacity, levels of enforceability within existing frameworks are low across the continent.

Implications for policymakers

A pan-African data governance infrastructure can help the continent realize a single market for data, thereby enabling the creation, use, and reuse of data by individuals across Africa and spurring economic growth and development while protecting the rights of data subjects. A necessary prerequisite for a single data market is the generation of sufficient data to allow economies of scale through utilization. This means that an appropriate framework to rapidly increase data digitization and widespread access must be developed in parallel with a data governance framework.

Realizing an effective data governance framework is contingent on the establishment of countrylevel guidelines that provide a template instructing nations on the precise components necessary for a comprehensive framework, while also establishing principles to ensure coherence across the components within a country. Further, a complementary overall framework linked to and interoperable with nation-level frameworks should be established at the continental level.

An effective framework requires a clear set of definitions and categories for different types of data as well as rules pertaining to the use and reuse of data within each category. In this regard, a framework should clearly define private versus public data and should offer clear guidelines on the use of each type. But effective implementation should also go a step further, designating key public datasets to be shared both nationally and across borders—datasets that should be identified according to the strategic interests of countries, thereby calling for a concurrent effort to determine and prioritize interests that will maximally promote the sharing of data.

A comprehensive data governance framework must rest on the widespread engagement of all stakeholders in a social contract that defines the protection of individual data, thereby building rust, creating an enabling environment that adds value to data, and promoting an equitable system. Such a social contract could overcome negative externalities resulting in the underutilization of data for productive activity and, if properly implemented, it could define the role of and cultivate trust in data intermediaries. Further, an effective data governance structure must promote access that offers benefits to small businesses in particular, and the costs of adhering to the framework must not be prohibitive.

To fulfill its objectives, the data governance framework should adhere to certain central principles, including (a) promoting an agile framework to allow for innovation and experimentation; (b) ensuring accountability of all stakeholders within the data lifecycle; (c) establishing standards for data accuracy and quality; (d) developing protocols for the standardization of data, thereby underpinning data quality and enabling interoperability; (e) preserving transparency in the utilization of data; (f) enabling equitable access of public data to all data users; (g) securing non-prohibitive costs of compliance to regulations relating to data; (h) promoting competition in the use and reuse of data; and (i) seeing to it that data sharing at an international level, outside Africa, occurs in full compliance with the rules of Africa's data governance framework.

The data governance framework should be governed by the principle of light-touch regulation, allowing innovation and experimentation, while still possessing the agility to respond quickly to information and implement lessons learned. The large number of use cases for data are unknown, and a restrictive regulatory stance discourages the realization of their full potential. A conducive environment for innovation can be established through regulatory sandboxes, as well as by leveraging the global experiences of other countries as they implement their own frameworks. A conducive framework should also be promoted by regulating data applications appropriately as they are introduced, while still maintaining a principle of widespread availability of public data.



Mission

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