

Powering Africa's Data Infrastructure: No Power, No Digital Transformation

COVID-19 makes a chronic issue more urgent

Massive changes in how the world works, learns and does business have been made possible by the Internet and related information and communications technology (ICT). A dynamic and innovative African ICT sector is budding in cities like Lagos, Nairobi, and Dakar, and could lead the continent in its own digital transformation. But chronic challenges in the power sector significantly impact the region's digital competitiveness. The power-internet gap will widen in an increasingly digital post-COVID world if current challenges remain unaddressed.

**ELECTRICITY
ACCOUNTS FOR
MORE THAN HALF
OF DATA CENTER
OPERATING COSTS**

The Keystone of Africa's Power-Internet Nexus: Data Centers

This vicious cycle in the power-internet nexus is best exemplified by the data centers that sit at the core of the internet's infrastructure—centralizing data storage, computing power and networking equipment—making them critical to the transformation. In Africa, the industry is expected to demand 600MW of power in 2020, representing over \$1 billion in investment. Without cheap and reliable power, African data centers can't be competitive, and won't get built. Without robust data center development, Sub-Saharan Africa will see slower growth in technological industries and employment.

An agenda for Africa's digital future

Governments need to work in concert with ICT and power sector actors to put solving power at the heart of Africa's digital strategy. Ministries responsible for ICT need to emphasize that without reliable power, there will be no digital transformation. Governments should:

- **Prioritize the importance of investment in power and ICT sectors** as both a response to the current crisis and as a building block for long-term resilience.
- **Support and hold local utilities accountable** to invest in transmission and distribution infrastructure in order to increase grid capacity and reliability.
- **Recognize collaborative possibilities** between utilities and targeted industries that can improve outcomes in both sectors. Utilities can develop strategies to specifically attract data centers and other ICT customers through expedited power connections, aligned tariffs, and availability of renewable energy.

Data centers could help to drive power improvements by:

- **Serving as new stable long-term revenue** for utilities in financial distress, offering reliable, large-scale, 24/7 electricity consumption, including at "off-peak" times.
- **Improving technical quality of the grid** through investment, partnering with utilities, and paying local utilities for infrastructure that will benefit other customers.

- **Developing specific strategies to attract “anchor ICT customers”** with mutually aligned renewable interest through expedited power connections, aligned tariffs, and availability of renewable energy.

Conclusion

The COVID-19 pandemic has deepened reliance worldwide on the digital economy, exposing the lack of readiness in sub-Saharan Africa to power that economy. No power means no internet and no digital transformation. Without power, Sub-Saharan Africa has no hope for competitiveness in a post-COVID world where being digital is no longer optional or aspirational.