Data Centres and Cloud: Where Africa's Data Lives

AiCE Africanism & Pan-African Studies — The 2% gap

The Data Centre Gap

Data centres are the physical buildings — filled with thousands of servers, connected by high-speed networks, cooled by massive air conditioning systems, and powered by redundant electricity supplies — that store and process the data of the digital economy. Every website, every app, every database, every AI model runs on servers in data centres. Where those data centres are located determines where Africa's data is stored, whose laws govern it, and who can access it.

Africa has approximately 2% of the world's data centre capacity despite having 17% of the world's population and being among the world's fastest-growing digital economies. This extraordinary gap means that most African digital services store their data on servers physically located outside Africa — in the United States, Europe, or increasingly Asian data centre hubs. This creates the same data sovereignty problem examined in an earlier unit: African data stored under foreign legal jurisdiction is subject to foreign access and foreign control.

The concentration of existing African data centres in just five cities — Johannesburg, Lagos, Nairobi, Cairo, and Casablanca — reflects both the economic geography of Africa's digital economy and the legacy of colonial infrastructure patterns concentrated in the port cities and administrative capitals where colonial infrastructure was originally built. The vast majority of African countries have no significant data centre capacity at all.

African Cloud: Building Local Infrastructure

The hyperscale cloud providers — Amazon Web Services, Microsoft Azure, and Google Cloud — have all established African regions in recent years. AWS has regions in Cape Town and Bahrain (serving parts of North Africa). Azure has regions in South Africa and is expanding. Google Cloud has a region in Johannesburg. These investments bring genuinely useful cloud services closer to African users, reducing latency and improving performance for African businesses and developers.

But they remain foreign-owned and foreign-controlled. Sovereign cloud infrastructure — data centre and cloud computing capacity owned and operated by African entities, subject to African law and governance — is a critical requirement for African digital sovereignty. Several African-owned cloud providers are emerging: CSquared in East Africa, Liquid Intelligent Technologies across sub-Saharan Africa, and national data centre programmes in Rwanda, Kenya, and Egypt. The African Development Bank has proposed an African Cloud Initiative that would provide continent-wide sovereign cloud infrastructure — an important initiative that deserves political and financial support.

Key Takeaways

Africa holds only about 2% of the world's data centre capacity against 17% of the world's population, meaning most African digital services store their data under foreign legal jurisdiction. Hyperscale cloud providers' new African regions improve performance but remain foreign-owned; genuine sovereignty requires African-owned alternatives like the proposed African Cloud Initiative. The next lesson examines the payment infrastructure needed to make the AfCFTA's single market actually function.