



This article provides an in-depth analysis of how AI is transforming the telecom landscape in Africa, emphasizing the importance of strategic implementation and local context.

I have spent most of my career in telecom: from network design to operations, from business models to transformation challenges—always with the same underlying conviction that the gap between an ambitious strategy and sustainable success comes down to execution.

It is this experience that has forged my deepest conviction about artificial intelligence: AI is not a technology issue; it is, above all, a matter of transformation and execution.

What I observe today challenges me as much as it excites me. Too many organizations are layering AI tools onto un-reengineered processes and calling it transformation. But the operators who understand that AI is not an additional layer—it is a lever for transformation—are gaining a structural lead that their competitors will struggle to close.

This article is an invitation to think differently: not to adopt AI, but to build methodically, ambitiously, and with the clear-sightedness that only on-the-ground experience provides.

Deploying AI Is Not Enough

On May 12, 2026, Arthur Mensch, CEO of Mistral AI, testified before the French National Assembly that Mistral's engineers "no longer write lines of code" in the traditional sense. They now manage agents that produce the code themselves, with productivity gains reaching a factor of five to 20 depending on the use case.

AI Is Not Deployed; It Is Built. And Africa Has What It Takes

This shift doesn't just affect software companies. It is redefining the economics of any organization whose competitiveness relies on its ability to produce, deploy, and operate complex digital systems—which primarily concerns telecom operators.

Industry data confirms this acceleration: nearly half of all telecom operators have already deployed AI in at least one core business function, a level of adoption that places the sector ahead of all other industries. But deploying is not transforming. Between a quarter and a third of operators engaged in AI report that they are unable to measure the real impact of their investments—which undermines the sustainability of programs and delays scaling up. The gap that matters is not between those who use AI and those who do not yet; it is between those who know how to measure what they are building and those who are moving forward blindly.

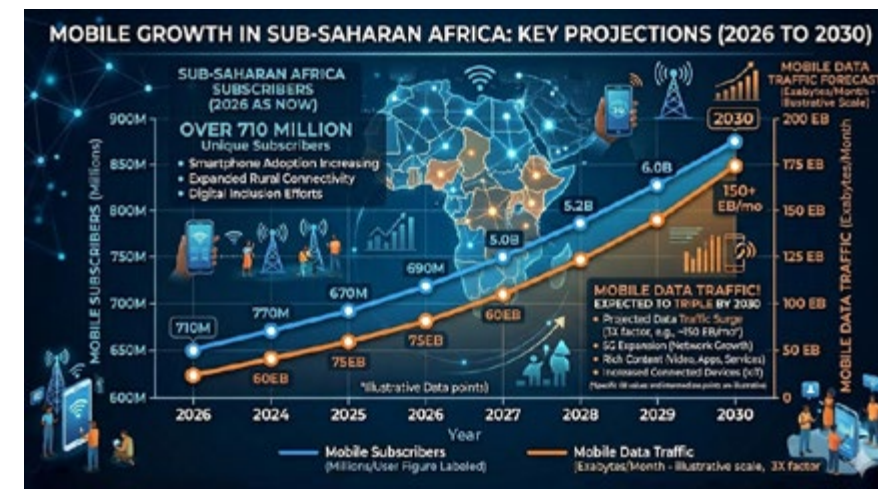
African Operators at a Strategic Crosspoint

The dominant narrative on AI in Africa oscillates between two reductive stances: the fatalism of a "technological lag" and the enthusiasm for "Africa will leapfrog." The reality is more nuanced—and richer.

The continent now has over 650 million mobile subscribers. Mobile traffic in sub-Saharan Africa is expected to triple by 2030. The penetration of mobile money has generated exceptionally rich ecosystems of behavioral data—data that most European operators simply do not have.

What standard analyses fail to capture is that African operators work under conditions of constraint that create a particularly favorable context for AI. Managing a heterogeneous network where 2G, 3G, 4G, and 5G coexist over thousands of kilometers—with extreme energy constraints and sometimes lean teams—is precisely the type of complexity for which autonomous AI systems were designed and where they create the most value. Africa's constraints are not a handicap for AI; they are precisely the context that reveals its full power.

However, this opportunity comes with real structural challenges. Energy costs can account for 30% to 40% of operational costs. Pricing pressure is structurally more intense than elsewhere. In markets where the average revenue per user (ARPU) can be less than USD 3 per month, AI is not a luxury; it's an economic necessity. As for data quality, it remains the most underestimated challenge: AI is only as good as its foundations, and this foundational work has not yet been truly undertaken by the majority of operators.



Finally:

- Young and fast-growing population
- Increasingly connected and digitally skilled
- Both the primary market and primary talent pool for transformation

Which constitutes both the primary market and the primary talent pool for this transformation. This is a strength that few other regions in the world can claim on this scale.

What AI Truly Changes

1. From Reactive Supervision to Network Autonomy

The dominant paradigm for the last 30 years has been reactive supervision: an anomaly is detected, escalated, and addressed. This model has reached its limits—too slow, too costly, and too dependent on scarce skills.

AI opens the door to a radically different paradigm: the autonomous cognitive network. A network that self-diagnoses, anticipates its own failures, and adapts in real time. SMO-RIC architectures, which combine service orchestration and intelligent radio control, will enable the implementation of autonomous control loops on radio parameters. The goal is not to automate what engineers do today, but to enable what they structurally cannot do: simultaneously process millions of interdependent variables in real time, at the scale of a national network. This is a difference in kind, not just degree.

2. Energy: The Game-Changing Telco Use Case

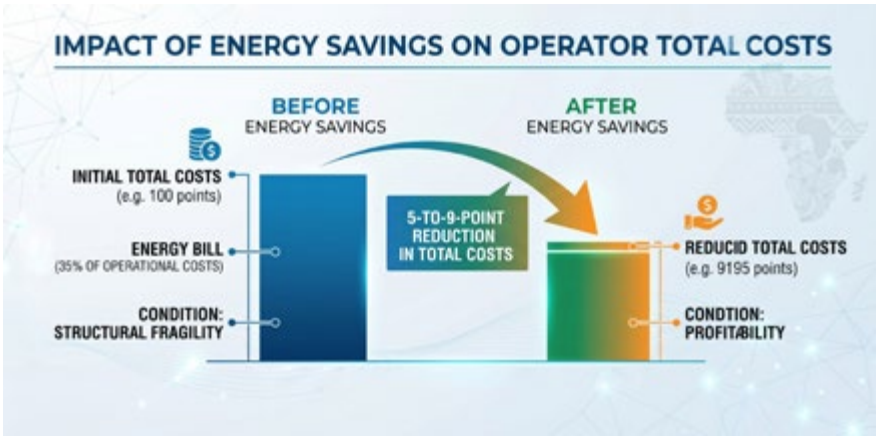
The most advanced AI systems:

- Weather forecasts
- Traffic predictions
- Battery status
- Real-time energy prices
- Quality of service constraints across thousands of sites

No human engineer can solve this problem at this scale. A well-designed AI system can.

The first documented deployments in African contexts report energy consumption reductions of 15% to 25%. For an operator whose energy bill represents 35% of its operational costs, this translates into a 5-to-9-point reduction in total costs. In a market under intense pricing pressure, this is the difference between profitability and structural fragility.

4. FinOps and Token Governance: The Hidden Cost of AI at Scale
The enthusiasm around generative AI often obscures an economic reality that operators discover when they scale up: the use of AI has a variable, direct, and potentially uncontrollable cost. Every call to a language model, every inference, every agentic interaction consumes tokens—and these tokens have a price.



3. Behavioral Data as a Strategic Asset
African operators hold mobile money, geolocation, and consumer behavior data, and its value will only grow. With the right AI models, an operator can significantly improve its prediction capabilities—for local economic dynamics, population flows, and consumption behaviors—with a granularity and responsiveness that no other data source can achieve.

The telecom operator of tomorrow is not just a connectivity provider; it becomes a producer of territorial intelligence. This is a business model shift, not just another AI use case.

To be accepted and sustainable, these capabilities must be part of a rigorous, transparent data governance framework that respects user rights—which is precisely the issue of digital sovereignty.

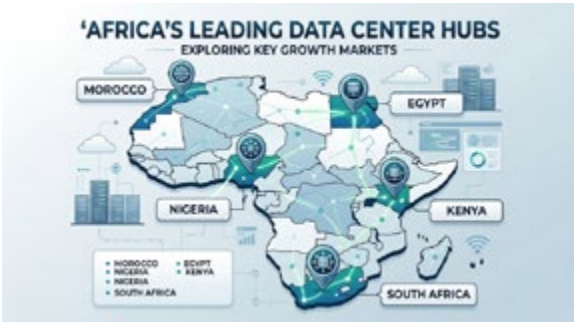
In the context of a large-scale deployment, where thousands of AI agents continuously process network data, customer tickets, and operational alerts, the bill can grow non-linearly and surprise finance departments that did not anticipate this new cost item. This is precisely the purpose of FinOps applied to AI: governing token consumption just as one governs bandwidth or energy consumption—with metrics, thresholds, and trade-offs between performance and cost.

For African operators, whose margins are structurally under pressure, this discipline is not optional. Mastering the cost per inference, choosing the right models for the right use cases, and optimizing agentic architectures are new but now indispensable skills in any serious AI strategy.

5. Data Center Infrastructure: The New Ground for Sovereignty
AI runs on physical servers in data

centers that consume significant amounts of energy. Several African countries have launched ambitious strategies to develop these infrastructures, leveraging their own energy assets.

Morocco is a prime example: with a rapidly growing renewable energy mix and a strategic geographic position between Europe and sub-Saharan Africa, the Kingdom is positioning itself as a leading regional data center hub. South Africa, with its existing infrastructure and mature tech sector, also plays a key role for all of southern Africa. Other markets—Kenya, Egypt, Nigeria—are developing their own capacities, driven by growing demand from international hyperscalers.



This dynamic paves the way for concrete computational sovereignty: hybrid AI architectures combining lightweight models deployed close to the networks, heavier models hosted in sovereign regional data centers, and occasional calls to global clouds for specific use cases. This is the pragmatic response to the dual constraints of performance and sovereignty.

6. The Transformation of Job Roles and Skills
AI doesn't just reduce effort across the delivery chain; it redistributes it:

- Compresses code generation, testing, and documentation
- Increases upstream requirements: quality of specifications and context engineering
- Increases downstream requirements: security review and

technical debt management (in terms of security review and technical debt management).

This shift in value is at the heart of the transformation of job roles. The question is no longer just how many engineers use AI. It becomes: How many know how to transform their expertise into an operable system? A consultant who merely uses third-party tools is delaying the problem without solving it. One who knows how to design agentic systems:

- Defining data sources
- Setting rules and logic
- Building controls and guardrails
- Establishing human validation points

Creates a sustainable structural advantage.

The Excel analogy illuminates this concept. Excel did not turn finance professionals into developers. It taught them how to make their reasoning executable, modifiable, and transferable. Agentic AI operates the same shift, but on infinitely more complex objects. The risk of partial adoption is real: local gains can be offset by hidden costs in integration, technical debt, and security vulnerabilities. The answer is not to slow down; it is to redesign the entire business process with AI as the organizing principle.

Digital Sovereignty: A Strategic Imperative
African governments are experiencing a collective and accelerated awakening: the digital transformation of their economies cannot indefinitely rely on infrastructures controlled by external actors, data hosted off the continent, and opaque algorithms. This conviction is not ideological. It is strategic. And it is legitimate.

Deploying AI solutions with opaque code, unknown training data, and servers located on the other side

of the world is not an acceptable strategic option—either for operators nor for regulators. This is a position that the most advanced players have already adopted in Kenya, Nigeria, Senegal, Morocco, Egypt, and South Africa, where several telecom actors have made significant AI investments; and in Ethiopia, where the recent liberalization of the telecom market creates a particularly fertile ground for innovation.

The answer must be built from within: locally deployable AI platforms, models whose biases are known and governed, total transparency on algorithms and their limits, and data governance that respects local regulatory frameworks—not as a constraint to be endured, but as an asset of trust. Digital sovereignty is not a brake on innovation. It is the condition for its sustainability.

What AI Transformation Demands from Operators
Faced with these challenges, telecom operators cannot transform alone. They rely on an ecosystem of



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partner strategic consulting firms, technology integrators, solution vendors, engineering and service companies—whose roles are often segmented and rarely articulated around an end-to-end vision.

This segmentation is precisely what AI transformation challenges:

- A firm that advises without deploying
- An integrator that deploys without mastering business processes
- A service operator that maintains without anticipating future developments

This sequencing creates discontinuities that agentic AI—by nature cross-functional, continuous, and iterative—cannot tolerate.

What AI transformation demands is continuity between business expertise, systems design, and industrialized execution capability. It is on this articulation that Sofrecom differentiates itself:

- Strategic diagnosis and advisory
- System design and deployment of operational AI agents
- Long-term support with measurable results
- With a level of telecom expertise that few generalist players can claim.

This is how Sofrecom frames its positioning: telecom expertise built on long-term support for African and international operators, combined with an engineering and delivery capability industrialized by agentic AI. Our consultants and engineers do not just diagnose or recommend; they design, deploy, and operate systems—adapted to local contexts, sovereign in their architecture, and measurable in their results.

It is not consulting on one side and execution on the other; it is an integrated approach where value is created over time, in contact with operational realities, with a commitment to results that are co-developed and co-validated with each partner operator. ■