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REPUBLIC OF KENYA

AGENTIC AI AND HOW IT IS SHAPING AFRICA'S OPERATIONS

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9 TAKE AWAY

ISSUES: UNPRECEDENTED PRESSURES



EXPECTIONS 01.

Increasing citizen expectations for government to operate operate openly, efficiently, and ethically

SOCIAL 02

Complex societal challenges

SERVICES 03

Delivering complex services.

DATA 04

Managing vast amounts of data

THREATS 05

Combating sophisticated threats like security, corruption, misinformation and disinformation

THE AI CAPABILITY CURVE IS RISING

1. Today's AI can analyse information, recognise patterns, generate content and support decisions.
2. It remains fallible, dependent on data and unable to replace accountable human judgement.
3. Future systems will be more capable.
4. That is why governance must be designed before high-impact deployment becomes routine.
5. Kenya's task is to prepare deliberately: to build the capability to benefit from AI while protecting people, institutions and national interests.

Africa stands at the threshold of an agentic revolution

The region's history of digital leapfrogging provides a unique foundation for autonomous AI adoption.

- Africa has a storied history of bypassing traditional infrastructure to adopt cutting-edge technology, from mobile money to decentralised energy.
- As we enter 2026, the continent is no longer just consuming AI; it is poised to leading agentic operations.
- By moving beyond simple automation to systems that can reason and act, African enterprises can overcome legacy infrastructure gaps.
- This shift represents the next phase of regional innovation, where digital agility becomes a primary competitive advantage.

Legacy complexity remains the primary barrier to innovation

Fragmented systems and manual intervention cycles are slowing down regional digital progress.

Fragmented Integration

Disconnected API and identity silos create friction that prevents real-time data flow.

High Operational Overhead

Too much engineering time is spen on maintenance rather than building new value.

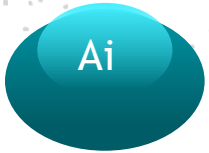
Latency in Decision-Making

Human-in-the-loop dependencies cause delays that are costly in fast-moving African markets.

Security Vulnerabilities

Managing identity across disparate platforms increases the risk of data

Technologies driving the 4th Industrial Revolution



Artificial intelligence (AI) is the software engine for the industrial revolution. It will soon be controlling the way we travel, manufacture, and care for the young and elderly. Advances in machine learning (ML) are accelerating AI's deployment in every aspect of daily life.



Blockchain

- is a powerful methodology for tracking and transactions that will impact commerce in a wide variety of ways.
- Cryptocurrencies are one example; other use cases are being explored in almost every sector, ranging from energy to shipping to media.



Cloud computing

- data storage and management, analytics and machine learning, remote monitoring and control, and collaboration.
- but accessing and using these data creates new demands on energy and education.



Internet of Everything (IoE)

- devices projected to exceed 20 billion, driven by continued technological advances and the plummeting costs of computing, storage and connectivity.
- In an interconnected world, electric grids, public infrastructure, vehicles, homes and workplaces create fundamentally new capabilities.

Artificial Intelligence



The next transformation is not about adding AI to the workflow.
It is about redesigning the workflow around intelligence.

Artificial intelligence (AI) is the ability of machines to perform tasks that would normally require human intelligence, such as visual perception, speech recognition, decision-making, and language translation

2014

Generative Artifi… Intelligence (GAI)

- are algorithms that generate new outputs based on the data they have been trained on.
- Unlike traditional AI systems that are designed to recognize patterns and make predictions, create new content in the form of images, text, audio, and more.**2022**

Artificial General Intelligence (AGI), or General AI,

- is a theoretical form of AI where a machine would have an intelligence equalled to humans.
- It would have a self-aware consciousness that has the ability to solve problems, learn, and plan for the future1.
- AGI would allow machines to comprehend, learn, and perform intellectual tasks much like humans. AGI is also called strong AI or deep AI.

5-TIER EVOLUTION OF AUTOMATION AND AI CAPABILITIES

from rigid, rules-based tasks to autonomous, collaborative digital workforces

• L1: Traditional Automation

How it works: hardcode strict logic: *"If X happens in App A, then do Y in App B."* - zero intelligence and **cannot handle unexpected changes**.

L2: Generative AI (Thinkers)

How it works: raw Large Language Models (LLMs) in a chat interface.
-possess massive knowledge and brainstorms, writes, or analyzes data, **- cannot take action in the real world on their own.**

L3: Modern Robotic Process Automation (RPA) (The Hybrid Workers)

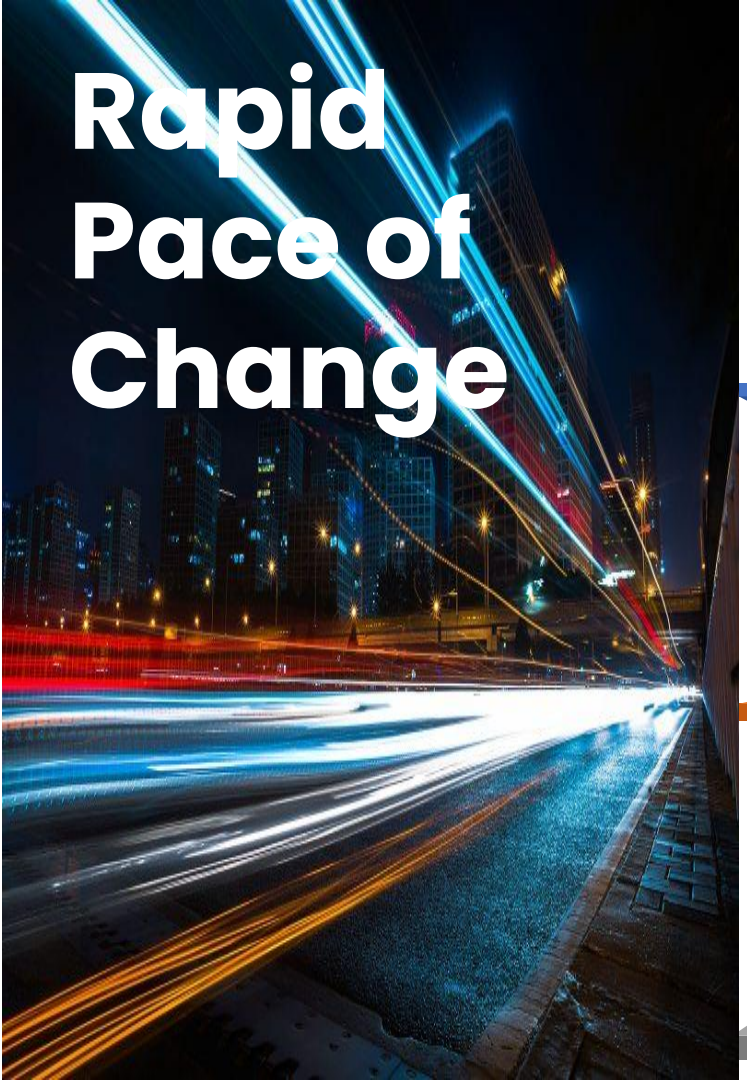
How it works: RPA mimics human clicks and data entry. "Modern" RPA injects Machine Learning (ML) into this process—**follows a strict workflow but hand off complex tasks to an AI model before continuing**

L4: AI Agents (The Autonomous Solvers)

How it works: give the AI a goal and a set of tools - AI creates its own plan, executes it, checks for errors, and loops until the job is done.

L5: Agentic AI (The Digital Enterprise)

How it works: This is a multi-agent system. Instead of one agent trying to do everything, multiple specialized AI agents .A "meta-agent" or manager orchestrates them over a shared memory space, using self-reflection to critique and improve their own work.



Rapid Pace of Change

DISRUPTIVE TECHNOLOGIES

01 Disruptive technologies and trends such as the Internet of Things (IoT), Robotics or Intelligent Robots, Mobile, Supercomputing, Virtual Reality (VR) and Artificial Intelligence (AI) shape human interactions.

4IR

02 The Fourth Industrial Revolution is changing how we **live, work, and communicate.**

RESHAPING

03 It's reshaping government, education, healthcare, and commerce—almost every aspect of life.

GLOBAL SHIFTS IN THE ERA OF 4IR



- **Digitization:** Everything is expressed in terms of **data,** leading to an economy of unlimited mobility.
- **Integration:** Data becomes integrated into platforms, thereby **disintermediating economic interactions.**
- **Smart-ization:** Artificial Intelligence transforms data platforms into **intelligent systems**, which will impact all aspects of life.
- **Virtualization:** Platforms and systems migrate to the cloud, with **cyberspace** serving as the catalytic enabler.
- **Designation:** Systems move from being just analytical to becoming **predictive and prescriptive**, creating the need for clear ethical rules and guidelines.

Investments in Inter-dependent foundations



Energy



Data



Internet



Skills

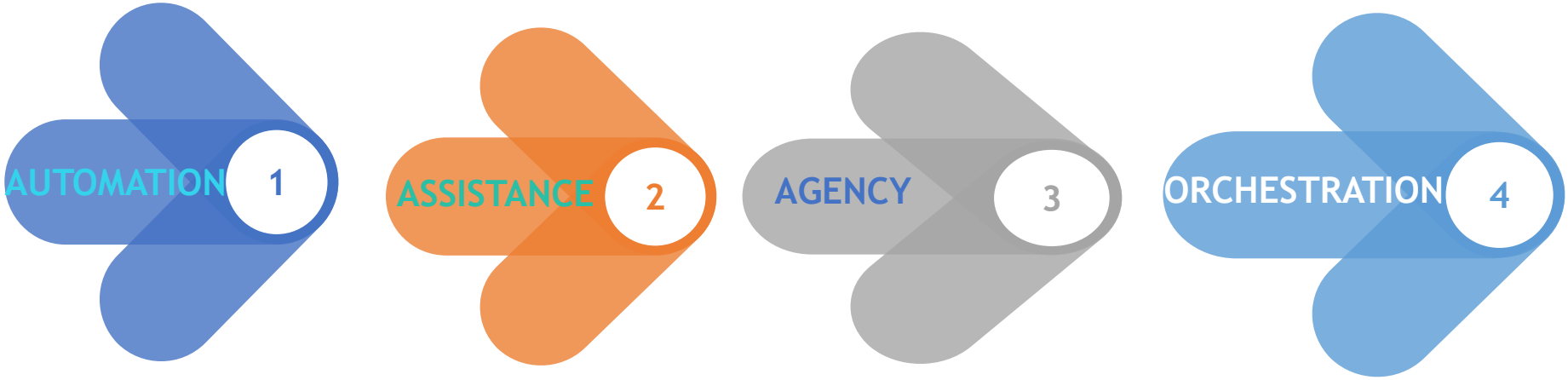


Agile Governance



Sustainable Finance

From software that waits for instructions → software that pursues authorised outcomes



Execute a rule

Recommend an action

Plan + execute tasks

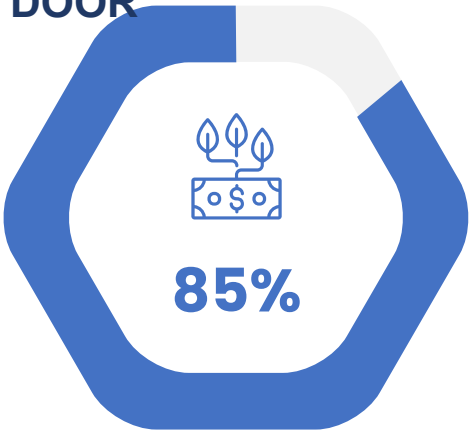
Coordinate across systems

Agentic ≠ autonomous everywhere.
Agentic = outcome-oriented, bounded, permissioned action.

Africa has digitized the front door. The next challenge is the back office.

A portal can be digital while the operation behind it remains fragmented.

THE DIGITAL FRONT DOOR

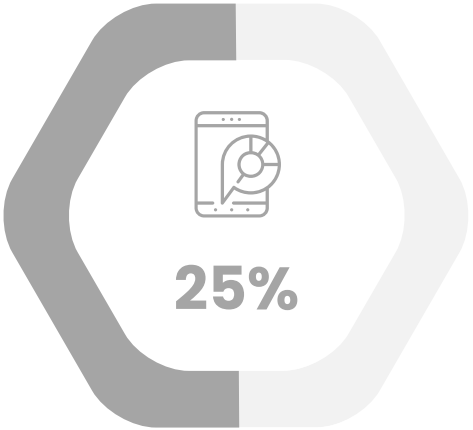


15%

Apps • Portals • Chatbots
Online forms • Digital payments

VS

THE OPERATING CORE

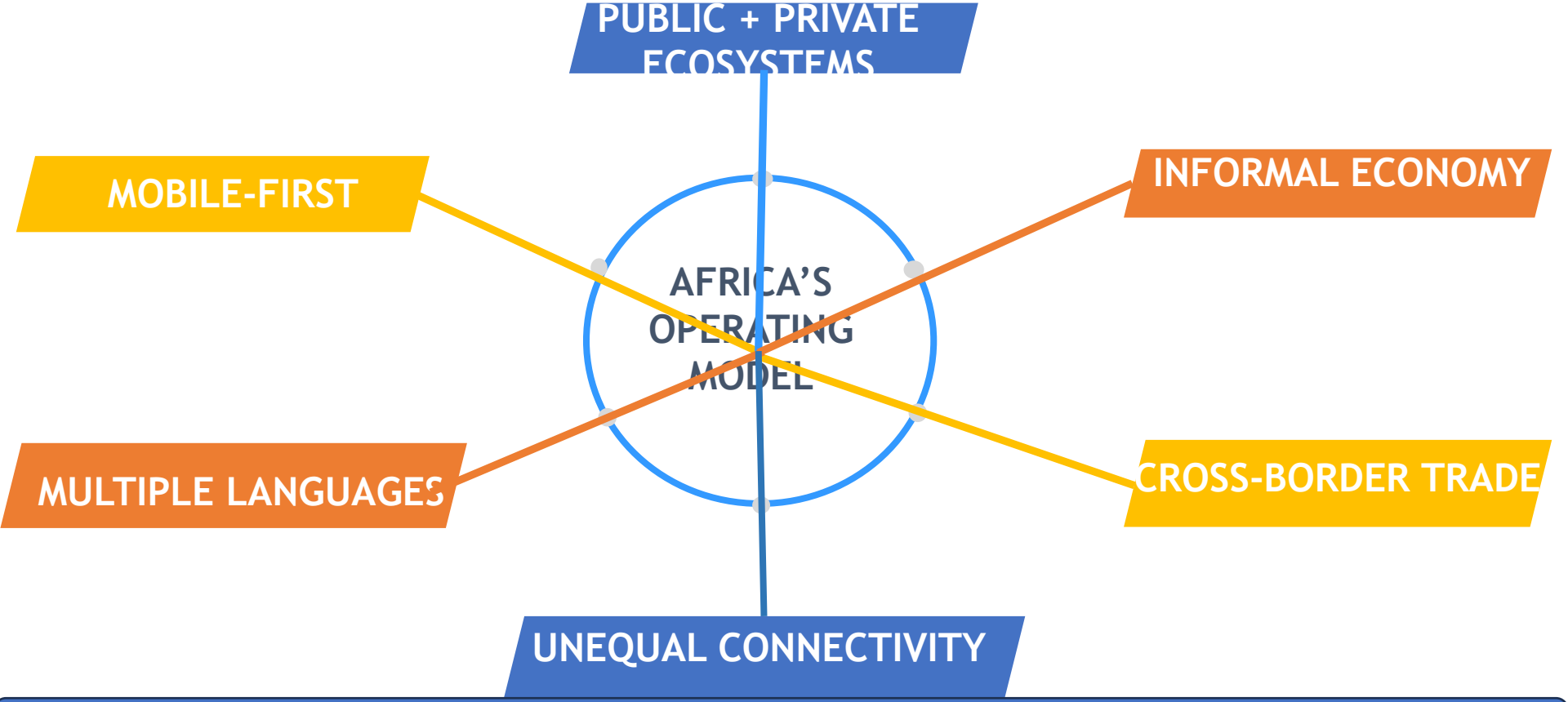


75%

Data silos • Legacy systems
Manual hand-offs • Repeated checks

Agentic AI enters here.

Our complexity is not a disadvantage. It is the design problem.



Agentic systems must be designed for context — not merely deployed into context.

What makes AI 'agentic'?

Goal, not prompt

Users define the outcome; the agent works out the steps at runtime.

Tools & memory

Agents call APIs, query systems, and retain context across a task.

Bounded autonomy

Developers set guardrails, permissions, and escalation paths.

Continuous action

Agents monitor, decide, and act — often without waiting for a human trigger.

Agentic AI changes how work moves through an organisation

FROM	TO	ACTION
FROM TASKS	OUTCOMES.	The system starts with the goal, then plans the work.
SILOS	ECOSYSTEMS	Agents coordinate across APIs, data and institutions.
HAND-OFFS	ORCHESTRATION	Work moves dynamically instead of queue by queue.
DOERS	SUPERVISORS	People set intent, rules and exceptions; agents execute bounded work.
FROM PROJECTS	OPERATIONS	AI becomes part of the operating fabric, not a side experiment.

The citizen should not have to understand our architecture

TODAY'S MENTAL MODEL



"Which ministry do I need?"

- Find the right institution
- Submit information
- Wait for hand-off
- Follow up
- Repeat

AGENTIC MENTAL MODEL



Here is what I need."

- Establish identity
- Understand the outcome
- Coordinate authorised actions
- Escalate exceptions
- Return the result

One citizen. One journey. Many government capabilities.

KENYA'S FOUNDATION-AI STRATEGIC PLAN

Agentic operations will depend on the foundations we are building now

AI POLICY IS UNDERWAY

RESTS ON THREE STRATEGIC PILLARS SUPPORTED BY FOUR CROSS-CUTTING ENABLERS

AI DIGITAL INFRASTRUCTURE

connectivity ,compute capacity, Platforms.

DATA & AIGOVERNANCE

The standards, rules, and safeguards that ensure A robust, sustainable data ecosystem for contextual AI.
Trust • rules • responsible use

RESEARCH &COMMERCIALIZATION

Moving beyond consumption to develop local solutions
Local R&D, models, solutions and commercialisation.

Talent • solutions • markets

NATIONAL ENABLERS

Governance
Establish an agile governance and adaptable legal framework

Talent development
Build a robust pipeline of competent and agile AI workforce for Kenya

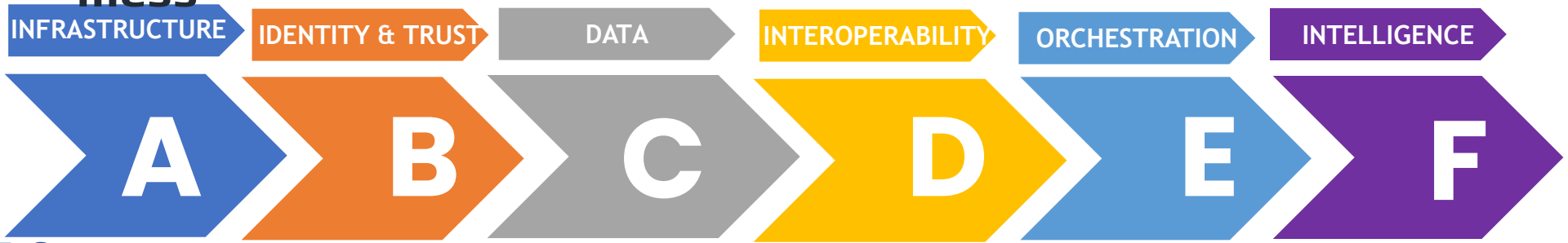
Investment to sustain the ecosystem

Ethics, equity & inclusion

- The opportunity now is implementation: turning foundations into operational capability.
- A strong domestic ecosystem gives Kenya greater resilience, creates enterprise opportunity and makes our international partnerships more balanced and productive.

THE AFRICAN AGENTIC STACK

If the foundation is weak, the agent will only automate the mess



- Connectivity
- Compute
- cloud
- energy

- Identity
- permissions
- security
- audit

- Quality
- Context
- provenance

- Standards
- Trusted exchange

- APIs
- Workflow
- events

- Models
- Agents
- reasoning

ENABLEMENT ZONE → ENGAGEMENT ZONE

If the bottom is weak, the top cannot safely scale.

TRUST CHANGES WHEN SOFTWARE CAN ACT

The new governance question is not only "What can AI see?"

It is also: "What can AI do?"



WHO?
Identity



WHY?
Purpose



WHAT?
Permissions



WITH WHAT?
Data



UNDER WHICH RULE?
Policy



WHAT HAPPENED?
Audit

HUMAN ESCALATION

High-risk decisions • exceptions • appeals • ambiguity

FOUNDATIONS

Three things must be true before an agent is allowed to act

01 A data foundation an agent can reason over

- Secure connectors, not scraping
- Harmonised schemas across systems
- Compliance in every transform step
- One customer record, not eleven

02 An identity layer that covers non-humans

- Agents get their own identity
- Scoped, revocable, least privilege
- Every action authorised and logged
- Audit trail: who asked, what ran

03 APIs designed to be called by machines

- Governed gateways, not point links
- Explicit tool permissions per agent
- Rate limits, contained blast radius
- Versioning — agents are literal

"Zero-trust is not a security upgrade; it's the operating system for autonomous AI." — Nathan Ateya, Accelera Digital Group

Source: TechCabal

Autonomy amplifies capability and risk by exactly the same factor

Privilege creep

Without scoped permissions an agent can escalate its own access, reach sensitive data, or trigger actions nobody authorised.

Cross-border exposure

One agent pulling data in Kenya, reconciling inventory in Nigeria and triggering a workflow in South Africa answers to three regimes at once.

Adversarial agents

Attackers are adopting agents too. Perimeter models cannot police software that legitimately talks to many clouds and partners.

Unexplainable action

If you cannot tell a customer or a regulator why the agent did that, you do not have a product — you have an exposure.

Design rule: permissioning and boundaries go in on day one, never retrofitted after the pilot succeeds.

Before you deploy an agent, ask seven questions



If we cannot answer these, we are not ready to scale the agent.

Securing the autonomous enterprise at scale

Trust and identity are the most critical components of an AI-driven operational model.



Zero Trust Architecture

Treating every agent action as a potential risk that must be verified.



Auditability

Maintaining clear records of why an agent made a specific decision.



Access Control

Granular permissions that limit what an agent can and cannot do.



Compliance

Meeting regional data protection regulations (like Kenya's Data Protection Act) automatically.

BEFORE YOU DEPLOY:FIVE FOUNDATIONS EVERY AGENTIC OPERATION NEEDS

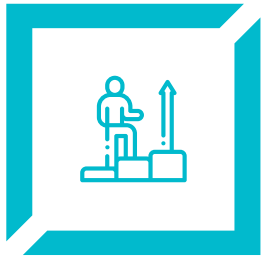
Reliable data



01

An agent is only as good as the information it can access and trust.

System access



02

Integration is the circulatory system connecting agents to real workflows.

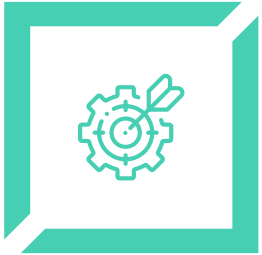
Verifiable identity



03

Every agent needs an identity, permissions, and an audit trail — zero trust by design.

Clear boundaries



04

Defined authority: what the agent may decide, and where a human stays accountable.

Monitoring & exception paths



05

A way to observe agent decisions and intervene when something goes wrong.

WHERE AFRICA CAN CREATE VALUE

Eight operational arenas – not Eight AI demos

PUBLIC SERVICES	Coordinate citizen journeys across institutions
MSMEs & E-COMMERCE	Turn intent into transactions, compliance and market access
AGRICULTURE	Coordinate information, inputs, markets and logistics
HEALTH	Support information flows, scheduling and operational coordination
TRADE & LOGISTICS	Coordinate documents, approvals, payments and movement

Start with the operation. Then decide where AI belongs.

WHERE AFRICA CAN CREATE VALUE

Five operational arenas – not five AI demos



DIGITAL IDENTITY & DPI

agents that verify, authenticate, and reconcile records across siloed government systems in real time.



DISASTER & RISK MANAGEMENT

gents that continuously monitor sensor and weather data and trigger alerts



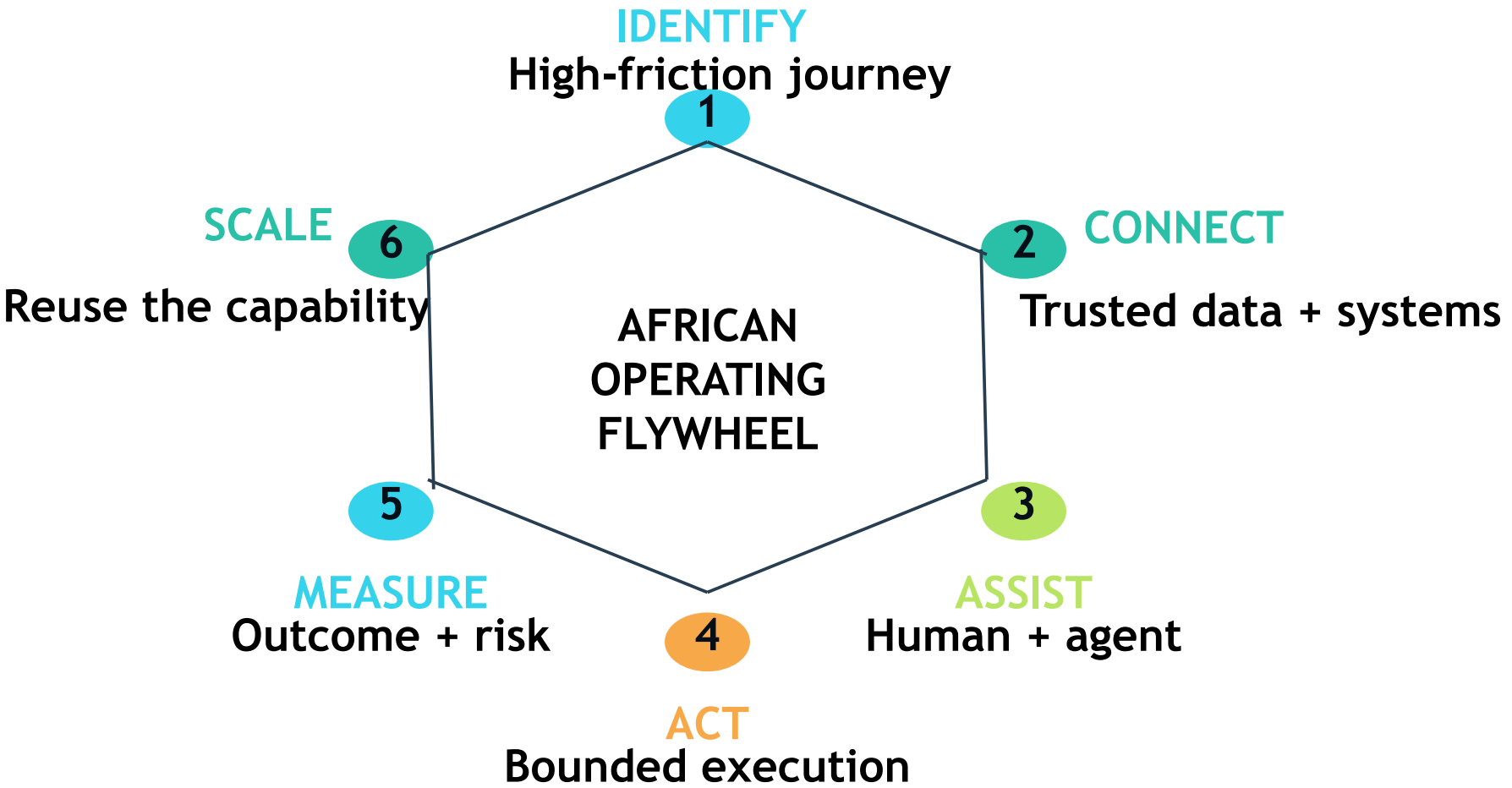
REVENUE & COMPLIANCE

automating risk assessment, underwriting-style decisioning, and fraud detection
in public finance.

Start with the operation. Then decide where AI belongs.

THE AFRICAN OPPORTUNITY

Build once. Connect many. Learn continuously.



Africa should not only adopt the next digital wave. We should build for it.

LEAPFROG

Mobile money showed that Africa can skip legacy stages.

LOCALISE

Our languages, markets and infrastructure realities require context-aware solutions.

SCALE

Build once, connect many, and take solutions across borders.

The strategic question is no longer “Can Africa use AI?”
It is “What will Africa build with AI — and at what scale?”

THE TAKEAWAY

Africa's agentic future will be won in the operating layer



Not AI for AI's sake. AI that makes Africa work better.

THE RIGHT QUESTION

THE QUESTION IS NOT



THE QUESTION IS:



"WILL AI CHANGE AFRICA?"

IT ALREADY IS.

"WHO WILL SHAPE HOW AFRICA OPERATES WITH IT?"

Africa doesn't need to catch up to agentic AI.

It needs to govern it well enough to lead.

Thank you | Mary Kerema | Kenya

Governance is the gap, not the technology

01

Only 13% of surveyed businesses have fully integrated AI into core processes — most are still exploring or piloting.

02

As of mid-2026, only Cameroon has a formally launched national AI strategy on the continent — governance frameworks lag adoption.

03

Agent sprawl is real: without identity and control-plane governance, autonomous agents multiply risk as fast as they multiply productivity.

The question for leaders isn't 'should we deploy agents' — it's 'who is accountable when the agent decides, and how do we prove it.'

Africa is uniquely positioned to lead the agentic revolution

The continent's digital economy is leapfrogging traditional automation in favour of autonomous,

Leapfrogging Legacy

Moving directly from manual processes to AI-driven autonomous operations.

Economic Growth

Digital infrastructure is now a core driver of GDP across East Africa and beyond.

Urban Innovation

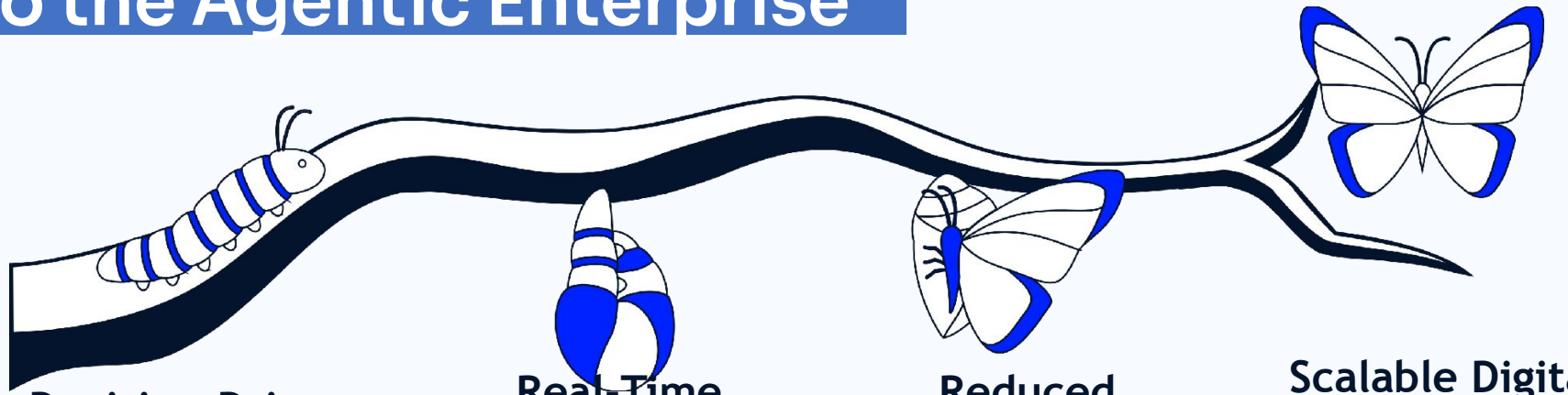
Nairobi, as a regional hub, is setting the standard for enterprise architecture in the Global South.

Operational Need

The demand for systems that adapt to local market volatility in real-time.

Moving from static automation to the Agentic Enterprise

Traditional workflows are too rigid for the dynamic pace of modern African business operations.



Decision-Driven

Systems that analyze data to make informed choices without human intervention.

Real-Time Adaptability

Responding to market shifts, supply chain disruptions, or consumer behaviour

Reduced Complexity

Abstracting away the "how" so businesses can focus on the "what."

Scalable Digital Experiences

Delivering intelligent services to millions of users with minimal operational overhead.

SIX IMPERATIVES

What African technology leaders should do now

01 BUILD THE FOUNDATIONS

Connectivity, cloud, compute, identity and cybersecurity.

02 MAKE DATA USABLE

Quality, standards, provenance, access and sovereignty.

03 DESIGN FOR INTEROPERABILITY

Open standards and trusted exchange, not silos.

04 GOVERN THE AGENT

Permissions, auditability, human oversight and red lines.

05 BUILD AFRICAN CAPABILITY

Engineers, architects, researchers, product leaders and policy talent.

06 DESIGN FOR SCALE

Move from demonstration to repeatable national and regional infrastructure.

THE LEADERSHIP QUESTION

What should we stop doing, start doing and do differently?

STOP

Building isolated digital projects
Measuring activity instead of outcomes
Treating integration as an afterthought

STAR T

Designing around citizen/business outcomes
Treating data as strategic infrastructure
Building reusable digital capabilities

DO DIFFERENTLY

Architect for agents from the beginning
Embed governance into the stack
Partner across government + industry + academia

This is an operating-model conversation — not an AI procurement conversation.

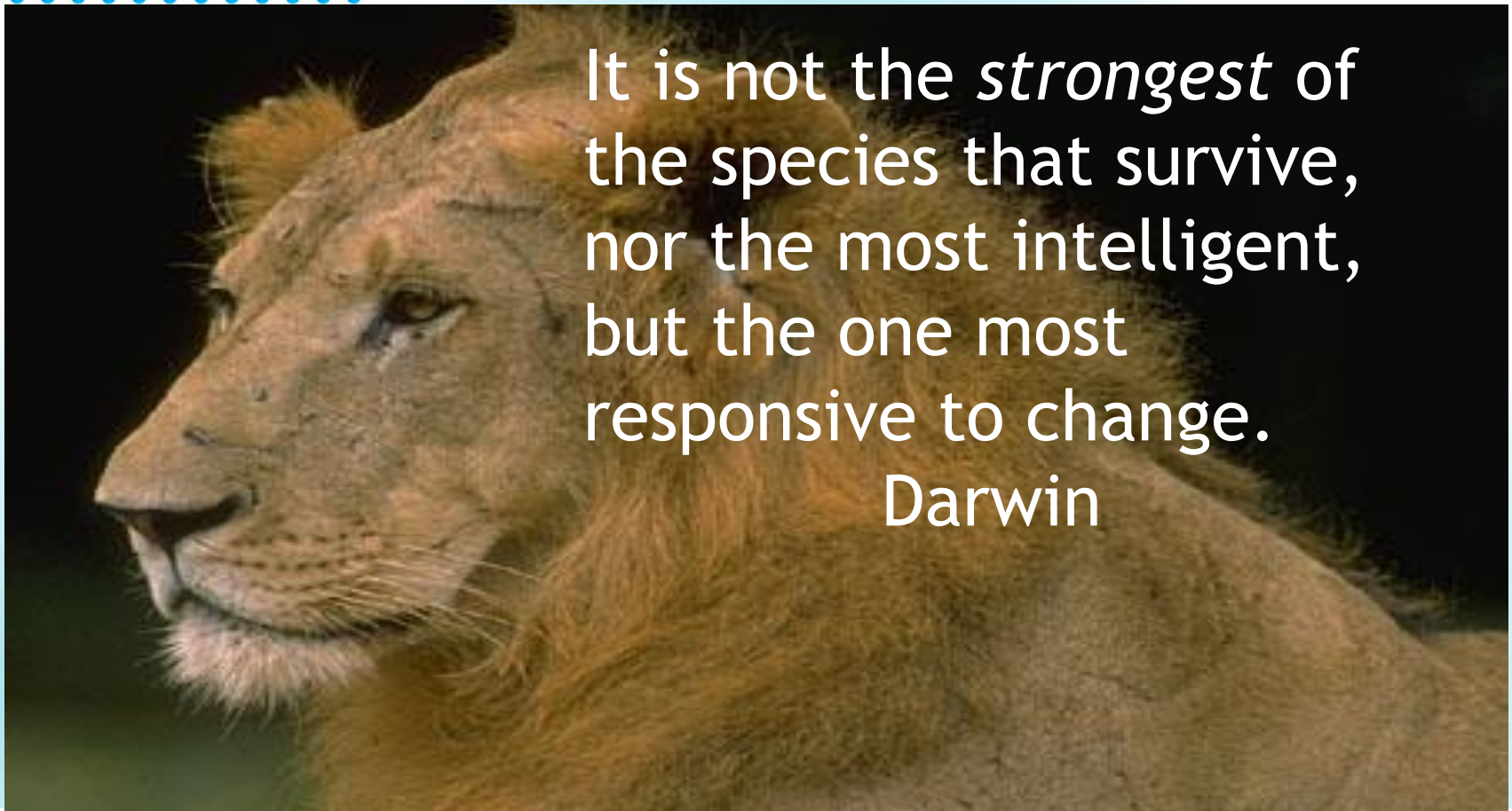
Harvard Business Review

“Every week provides ample reminders that, as leaders, you cannot control the degree of change, uncertainty, and complexity we face.

We need to improve our **ability to continually learn, grow,** and more effectively navigate the increasing complexity of our world. – Adaptive leadership.”

REBECCA ZUCKER ON ADAPTIVE LEADERSHIP

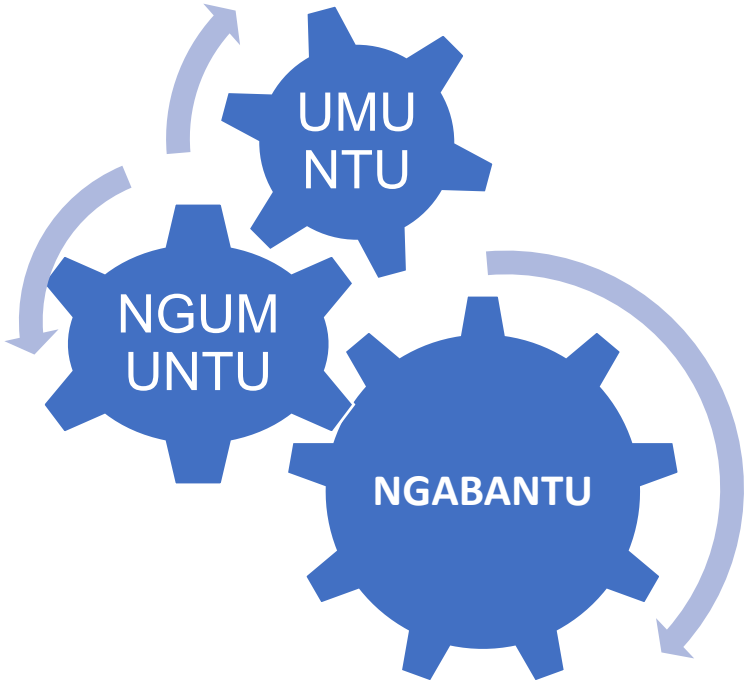
CHANGE IS INEVITABLE, GROWTH IS OPTIONAL



UBUNTU AND THE INTELLIGENT ECONOMY: AFRICAN WISDOM

A PERSON IS A PERSON THROUGH OTHER PEOPLE- I AM BECAUSE WE ARE

The Digital Age Interpretation



An economy prospers through connected economies.

A nation advances through connected nations.

Africa succeeds when Africans succeed together.

- No government.
- No regulator.
- No bank.
- No fintech.

Can build Africa's future alone.

THANK YOU FOR LISTENING

