



# Qhala



Catalysing Africa's  
Digital Future

# **Creating an Economy on Supersonics: The Role of Digital Transformation**

*Public Lecture by Dr. Shikoh Gitau, October 12, 2023*





## Dr. Shikoh Gitau

CEO, Qhala.

Dr. Shikoh Gitau is CEO of Qhala, a digital innovation firm that specializes in building digital solutions and guiding African organizations in their digital strategies. She played a crucial role in setting up Safaricom Alpha, Africa's pioneering corporate innovation hub, where she served as Head of Products – Innovation, and acted as the Chief Innovation Officer. Shikoh's leadership led to the creation of innovative products and strategies in areas like Payments, Social Commerce, Health, Education, and Agriculture. She also spearheaded Safaricom's transformation into a digital company.

Prior to this, she worked with the Africa Development Bank (AfDB), advising African governments on ICT adoption for improved service delivery. Her contributions include the Digital Government Blueprint, adopted by Smart Africa. She has experience with Google and Microsoft in their emerging markets teams.

Dr. Shikoh Gitau, with a PhD and MSc in Computer Science from the University of Cape Town, brings 15 years of experience in Research, Design, Implementation, and Management of Digital Technologies. Her expertise spans solving problems in Agriculture, Education, Health, Commerce, and Payments in both African and Emerging Markets. She's recognized for her influence in Business, Government, and Technology, with a track record of receiving prestigious awards for her contributions. She actively serves on boards in ICT companies and participates in numerous committees and think tanks focused on Africa's development.



# qhala *verb*

*/'kʌlə(r)'*

Zulu word Qhala means to **launch**, to **provoke**, to **begin**, to **start**, to **initiate**, to **set off**

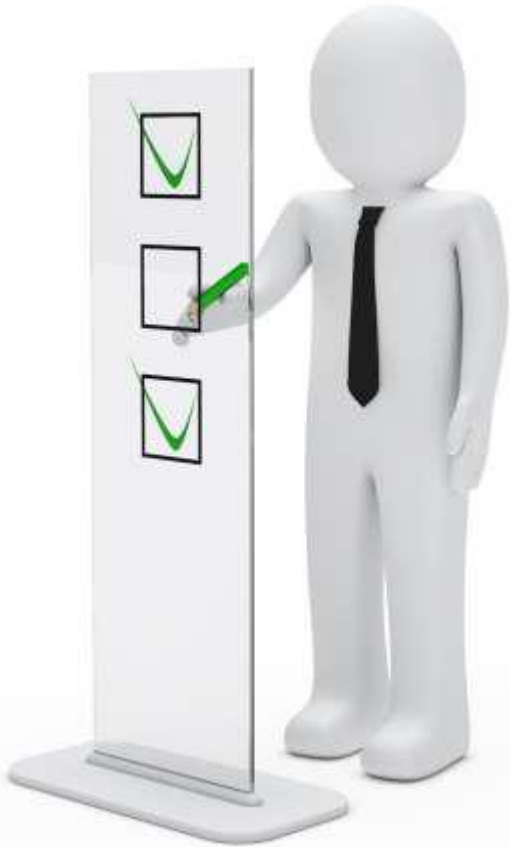
**How to pronounce it?**

Just like **COLOR** but in **BLACK** and **WHITE**.

We are a team of problem solvers driven by a passion to lead Africa's digital transformation. We combine rigorous methodologies with cutting-edge digital tools to build a new generation of **products, services, experiences** and **business models** that address current needs and invoke future growth.



# Lecture Introduction and Agenda



01

We will be talking about digital landscape and transformation that has taken place in Kenya over the last 25 years

02

Explore the insights and lessons learned on technological advances as way to mobilize tax base expansion and revenue generation for KRA

03

Explore best practices for other African countries to capture tax revenue collection opportunity from digital transformation

04

Discuss Kenya's current tax design and administration and the opportunities to leverage digital transformation to improve processes and tax compliance

- What reforms are required for the tax administration
- ICT as an enabler for service delivery
- The role of technology

## Instructions on how to use Mentimeter



**Step 1:** Take out your phone.

**Step 2:** Go to [menti.com](https://www.menti.com)

**Step 3:** Enter the code [4323 4801](#)

**Step 4:** Proceed to answer the question

**Step 5:** Enter submit.

# Kenya's Digital Journey

# A look back over the last 25 years: Technology and its Role in Kenya's Transformation and Growth

1998

Kenya Communications Act (KCA) restructures telecommunications sector.

2000

Kencel launches in partnership with Vivendi and Kenyan investors.

**October 2000:** Safaricom is established.

2006 - 2007

**2006:** Birth of mobile money (M-Pesa).

**April 2007:** Mpesa has 19,671 customers.

Digital financial services access has since grown from **26.7% in 2006** to **83.7% in 2022**.

2007 - 2009

**2007:** Kenya ICT Board is formed to promote digital technology and innovation.

**2009:** iHub launches, marking the start of the "Silicon Savannah" era.

**2009:** Arrival of undersea cable internet in Kenya by The East Africa Marine Systems (TEAMS).



# A look back over the last 25 years: Technology and its Role in Kenya's Transformation and Growth

2011 - 2012

**2011:** MPesa APIs launch, sparking the fintech revolution.

**2012:** Agency banking extends financial services to rural areas. Mobile banking grows to become the most preferred form of banking

2014

Launch of e-Citizen and KRA e-filing.

2019

Microsoft Development Center is established in Kenya.

2023

Google Development Center and Amazon Web Services Development Center launch in Kenya, further enhancing the tech ecosystem.

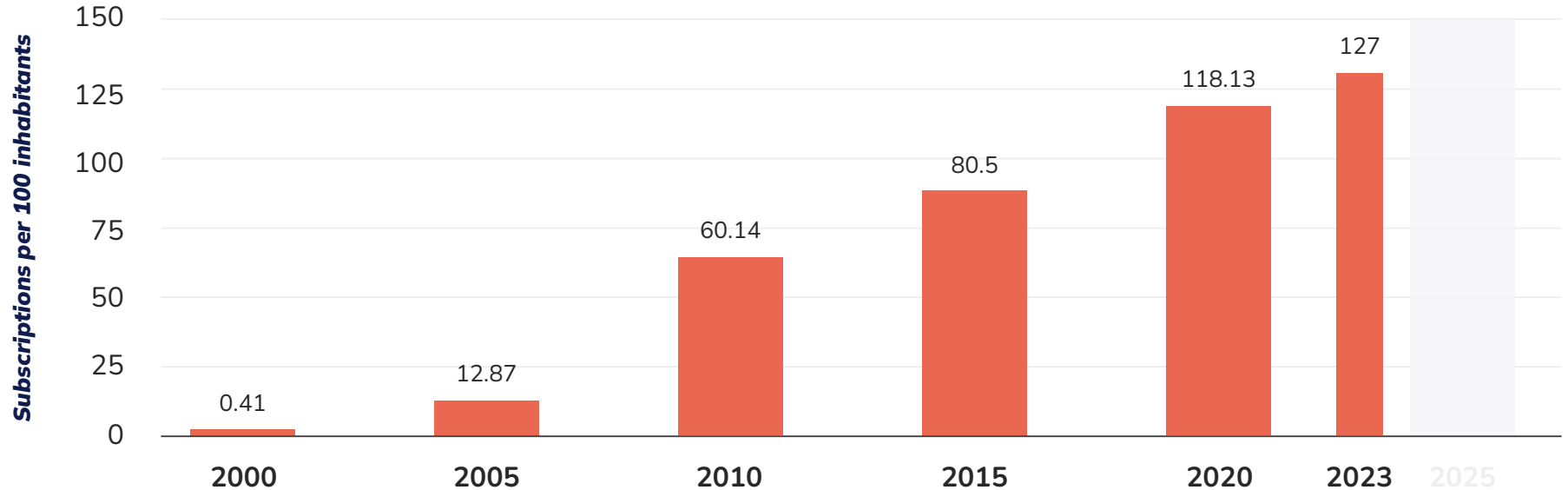


# Internet users growth

**2023:** 17.86M users

**63.94** mobile cellular users.

**32.7%** internet penetration.



**Trends in cellular mobile subscriptions in Kenya**



# Social Media Usage

## Kenya Takes the Lead in Global TikTok Usage

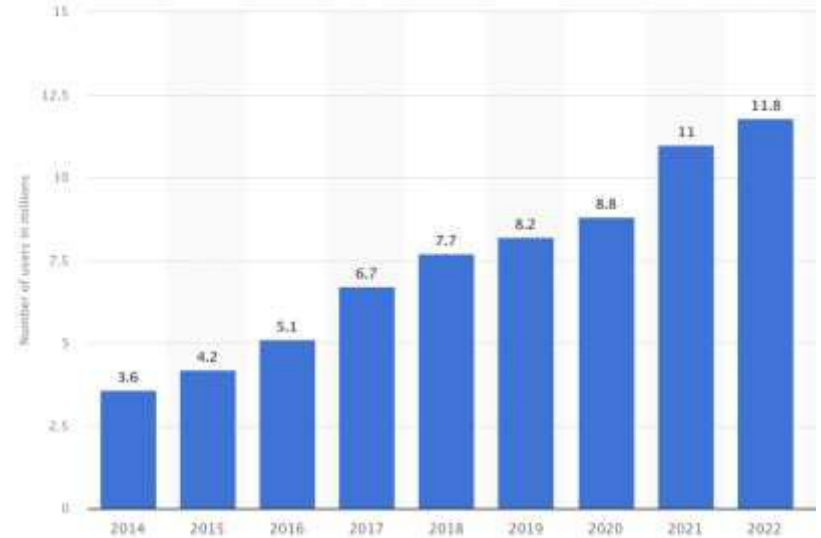
According to a report by Reuters Institute, the East African nation spends more time on the video sharing app than any other country.

### WhatsApp's market penetration, by country

According to the Global Web Index's 2020 Social Media User Trends Report—a survey of consumer statistics for the biggest social media platforms—the following are the countries with the highest percentages of WhatsApp users.

Monthly WhatsApp users in 2021 as a percentage of total internet users aged 16-64:

Position	Country	% of WhatsApp users
1.	Kenya	97%
2.	South Africa	96%
3.	Nigeria	95%
4.	Argentina	93%
5.	Malaysia	92%
6.	Colombia	92%



# The Digital Transformation opportunity globally



The digital transformation market is expected to grow from **USD 695.5 billion** in **2023** to **USD 3,144.9 billion** by **2030**, at a CAGR of **24.1%**.

Gartner predicts the global digital transformation market to reach USD 2.3 trillion by **2032**, driven by the adoption of digital technologies, data analytics, CX improvement, and new business models.

Rwanda prioritizes digital transformation and boasts advanced digital infrastructure in Africa.

Singapore's success is attributed to policy, leadership, and technology focus.

Colombia in Latin America is a digital transformation "sprinter" with a growing internet user population.

Kenya's digital economy has seen significant growth, with ICT value added increasing by **7.2%** from **2020** to **2021**.



**SO...What is Digital Transformation ?**

# Define digital transformation and its characteristics

## Digitization

Doing the same things differently.

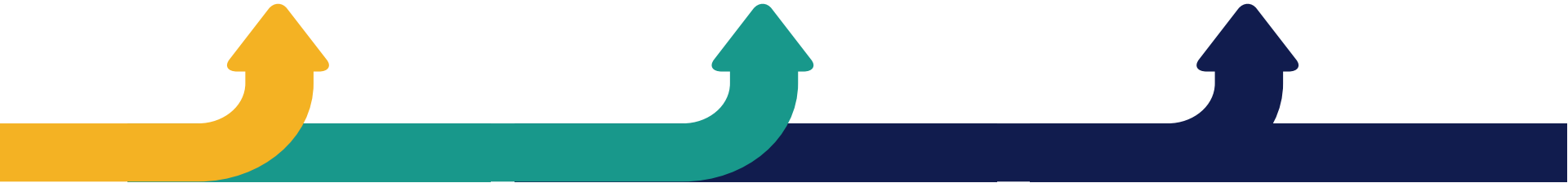
Analog to Digital: tech improves operational efficiency.

## Digitalization

Changing existing business models and deliver a digital experience for the digitally savvy customer

## Digital Transformation

Radical rethink of how an organisation uses technology, people and processes to radically change business performance and customer experiences.



# What does digital transformation mean for the tax administration system

## Customer Centric

Is the experience and are the touchpoints **delightful**, and are the processes **clear** and **accessible** online and offline?

## Staff are tech-aware and tech skilled

Ongoing skilling, upskilling, and reskilling initiatives, ensuring their proficiency and adaptability in a rapidly evolving technological environment.

## Technology and data adoption

The adoption of technology and data integration to change enhances and optimizes operational processes and service delivery



# Mentimeter Poll

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# Customer-centric digital transformation in tax administration



Customer-centric tax administration emphasizes delightful user interactions.

Automation and knowledge tools aid in policy navigation.

Clear understanding of the tax system is essential for compliance.

Leveraging auto/chatbot services and awareness campaigns ensures accessibility.

Effective communication through channels like WhatsApp and text messages significantly boosts engagement and compliance, as seen in Madagascar's success with text message reminders.

## Inspiration from Singapore's IRAS

- Singapore's Inland Revenue Authority (IRAS) utilizes automated systems and knowledge management tools.
- They provide taxpayers with user-friendly online platforms for tax-related tasks, increasing compliance and streamlining tax collection.

# Tech and Data: Minimum standards for achieving tax system digitization



## Key Areas for Digitization and Their Benefits

- **Digital Registration:** Online registration and numbering of each taxpayer ensure efficient taxpayer identification and management.
- **E-Filing:** The digital submission of tax returns simplifies the process, reducing errors and processing time.
- **E-Payment:** Payment of taxes through online banking, mobile payment, or electronic bank transfer allows for convenient and secure payment.
- **E-Invoicing:** Digital generation and transmission of invoices from businesses to the tax portal help with data reconciliation and accuracy, eliminating manual data entry errors.
- **E-Accounting:** The use of digital accounting software and systems streamlines tax record-keeping and reporting, enhancing data integrity and auditing capabilities.

Together, these digitization initiatives boost efficiency, compliance, and significantly lower tax administrative costs.





# Mentimeter Poll

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## Comparative overview: Kenya, South Africa, and Rwanda



Digitalization Of Tax System	Rwanda	South Africa	Kenya
Digital registration	No (Registration and issuance of a Tax Identification Number is done at a Rwanda Revenue Authority office.)	Yes	Yes
E-filing	Yes	Yes	Yes
E-Payment	Yes	Yes	Yes
E-invoicing	Yes	Yes	Yes
E-accounting	No	Partially	Yes



## Staff's tech awareness and skills



- In this digital era, it's crucial that staff serving in tax administration are tech-savvy.
- We're not asking employees to become coders, but we do expect them to be proficient in technology.
- Job security remains intact as the focus is on re-skilling and upskilling when necessary.
- With the majority of Kenyans communicating online, it's imperative to meet the customers where they are.
- KRA staff should undergo a transformation to align with digital demands.
- Staff can develop three tiers of skills: basic, intermediate, and advanced, ensuring they adapt to evolving technological needs.

# Success stories from harnessing digital transformation initiatives to improve tax collection

## Case Study 1: Rwanda's Digital Tax Filing Transformation

### Background:

Rwanda Revenue Authority (RRA): In 2015, Rwanda made significant strides in digitizing its tax filing process through the E-tax platform and the M-declaration application.

Mandatory E-Filing and E-Payment: The government mandated electronic filing and payment of taxes, embracing digital solutions to streamline tax collection.

### Outcomes:

**Surge in Registered Taxpayers:** Following the implementation of e-filing and e-payment systems, Rwanda witnessed a substantial increase in registered taxpayers. The number nearly doubled, soaring from **144,000** to **242,000** by **2020**.

**Electronic Billing Machine (EBM):** In 2017, Rwanda Revenue Authority (RRA) introduced the Electronic Billing Machine (EBM), a device designed for generating electronic invoices or receipts for business transactions.

**Administrative Efficiency:** EBM automation significantly reduced administrative burdens for businesses. Filing VAT returns, which previously took **45 hours**, now takes just **5 hours**.

**Revenue Growth:** The adoption of EBM contributed to a remarkable **48% increase** in VAT collection, demonstrating the positive impact of digitalization on tax revenue.



# Success stories from harnessing digital transformation initiatives to improve tax collection

## Case Study 2: South Africa's Digital Tax Compliance Initiatives

### Background:

- **South African Revenue Service (SARS):** South Africa invested in digital platforms and data analytics to boost tax compliance and combat tax fraud.
- **Innovations in Tax Return Process:** SARS automated the tax return process by incorporating third-party data, enhancing the functionality of the e-filing portal and the SARS mobile app.
- **Partnerships with Third Parties:** SARS partnered with various third parties, including financial institutions, pension funds, healthcare insurance providers, and more.

### Outcomes:

**Enhanced Taxpayer Convenience:** These initiatives aimed to improve taxpayer convenience by automating processes and integrating data from multiple sources.

**Reduced Non-Compliance:** Third-party partnerships helped detect non-compliance, ultimately enhancing tax collection efforts.





# **What does Digital Transformation for KRA Mean?**




# KRA's digital journey: A look back and ahead

Here's what the KRA journey looks like in summary:

2003  Introduction of the VAT agent system.

2005  Automated customs system called Simba

2007  Introduction of Integrated Management System (ITMS)

2010  New modules on ITMS, which is now the i-Tax system



# Using Human Centered approach to enable digital transformation of people, tech and processes at KRA

## Design Principles for KRA

### Simple

The system should cater for all people, regardless of the level of their tech skills.

### Delightful

At the end of their user journeys, customers should be glad that they used the system.

### Inclusive

Can the system cater for all people, even those abled differently?

### Transparent

The rules, rates, and procedures are clearly stated.

### Secure

effectively protects sensitive taxpayer information and minimizes the risk of fraud or data breaches.



# How do we make this real?

## Customer Obsession

Prioritizing and tailoring services to meet the specific needs and expectations of taxpayers.

Simple, Delightful

## Data Driven

Using accurate and relevant data to make informed decisions and enhance tax collection and compliance.

Transparent, Secure

## Collaborative Partnerships

Working closely with other stakeholders to continuously improve the overall efficiency and effectiveness of tax processes.

Inclusive

## Being customer obsessed



### **To drive digital transformation, it's essential to be customer-obsessed.**

Prioritize ensuring accessibility and delight with existing digital tools available to the public.

Complexity and unclear services can lead to taxpayer confusion, increasing errors in tax compliance, with the UK losing USD 11.4 billion annually due to such errors.

Understanding customer behavior patterns aids in predicting usage, removing barriers, promoting adoption, effective communication, and enhancing compliance.

An inclusive digital tax system should pay special attention to customer segments, such as women, rural residents, and those with lower incomes, who may face challenges in accessing and meeting their tax responsibilities.



## Being data driven



A data-driven approach is transforming tax systems globally. For instance, in the United States, data analytics are used to predictively identify tax refunds, streamlining the process and reducing paperwork and phone calls.

## Collaborative partnerships



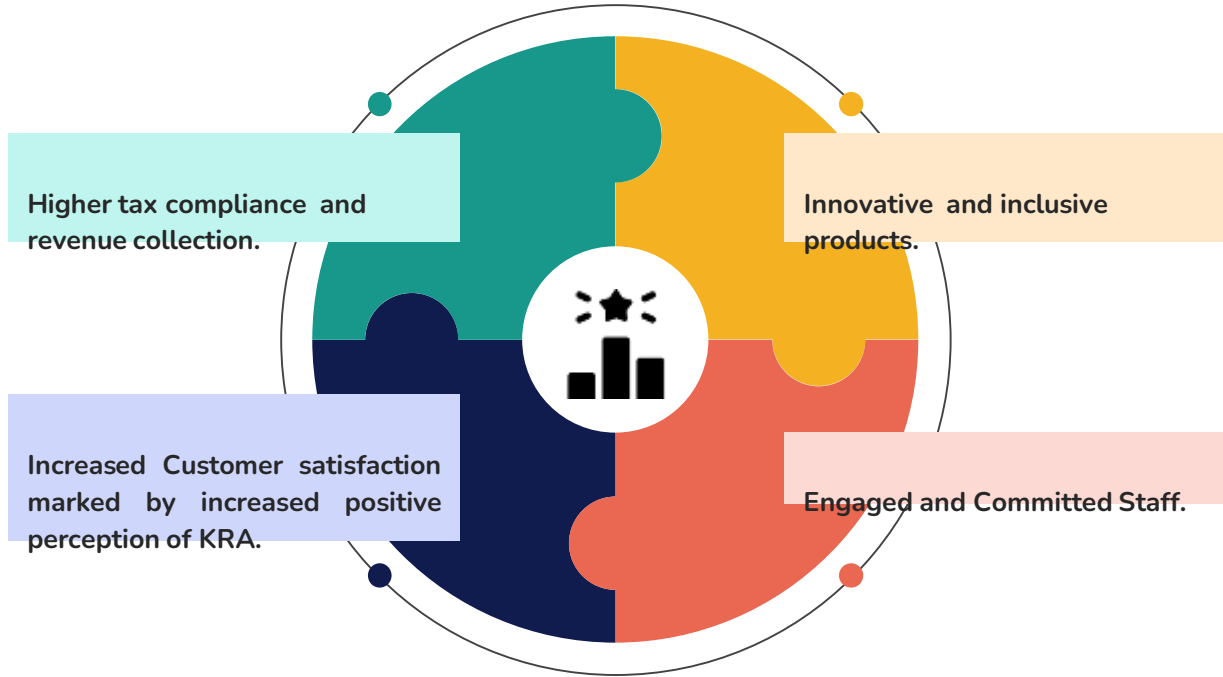
**Strengthening collaborative partnerships with state agencies and the private sector is a cornerstone of effective tax administration.**

Denmark's acclaimed tax system relies on three pillars: data matching, trust, and comprehensive taxpayer education and support. These mechanisms enhance efficiency and user-friendliness.

Data records from diverse sources are interconnected for the sole purpose of cross-referencing, contributing to efficient tax assessment.

A robust taxpayer education and support system ensures taxpayers understand their tax obligations and know where to seek assistance when needed.

# What does success look like?





# Qhala

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## Impact and successes from KRA's journey

**Cost Savings:** Significant reduction in in-person servicing requests, resulting in cost savings.

**Enhanced Data Integration:** The system effectively retrieves data from third parties, prepopulating tax information, reducing tax evasion.

**Revenue Growth:** Notably, KRA's revenue collection in *FY 2021/2022* increased by **21.7%**, outpacing the **5.9% economic growth**. Over five years, revenue collection surged from *KShs. 1.58 Trillion* in *FY 2018/2019* to *KShs. 2.166 Trillion* in *FY 2022/23*.

**Simplified Tax Collection:** Tax digitization simplified the tax collection process, contributing to increased revenue.

## Focus areas for the future

**Continued Adaptation:** Embracing technological advances and simplifying processes for taxpayers.

**Enhancing Data Analytics:** Exploring opportunities for more sophisticated data analytics to detect tax evasion and inconsistencies.

**Improved Tax Compliance:** A focus on transparency and tax compliance to ensure sustainable revenue growth.

