

# THE SMARTPHONE FOR AFRICA SUMMIT: INCREASING LOCAL SMARTPHONE MANUFACTURING

## Report



**Hosted by Qhala, GSMA, Smart Africa, and Africa Continental Free Trade Area - with funding support from Bill & Melinda Gates Foundation**

**21st - 22nd November 2024**

**Fairmont the Norfolk Hotel, Nairobi- Kenya**

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# 1.0 Introduction

Qhala, GSMA, Smart Africa, and the African Continental Free Trade Area (AfCFTA), with funding support from the Bill & Melinda Gates Foundation, hosted the Smartphone for Africa Summit to Increase Local Smartphone Manufacturing on 21st and 22nd November, 2024, at Fairmont the Norfolk Hotel, Nairobi, Kenya. This summit was a high-level gathering designed to accelerate the growth of local smartphone production across Africa. It brought together key stakeholders from across the continent, including government officials, business leaders, mobile network operators, local manufacturers, and international development partners. The event aimed to promote dialogue, collaboration, and partnerships to drive the production and adoption of affordable smartphones to support Africa's digital transformation.

At the time, less than 44% of Africans owned smartphones, significantly limiting access to digital services, economic opportunities, and socio-economic development. Key barriers such as high production costs, complex tax structures, and limited manufacturing capacity prevented smartphones from being more affordable and accessible. Local manufacturing had the potential to create jobs, diversify economies, and enhance digital inclusion, but challenges such as low economies of scale and regional trade barriers needed to be addressed.

The summit offered a unique opportunity for stakeholders to explore strategies for overcoming these challenges and designing actionable solutions. Participants debated opportunities to create an integrated smartphone manufacturing ecosystem that would address the continent's growing demand for affordable devices.

Moreover, the African Continental Free Trade Area (AfCFTA) and its trade and digital protocols were positioned to transform Africa's economic landscape by promoting a unified digital market. With a combined GDP of \$3.4 trillion, AfCFTA provided a solid foundation for leveraging digital technologies to enhance trade and economic integration. Aligning regulatory frameworks and promoting cross-border collaboration through AfCFTA was seen as a means to spur the development of regional manufacturing hubs and reduce the cost of smartphone production across the continent.

Through collaboration, innovative solutions, and strong partnerships, the summit aimed to lay the groundwork for a thriving local smartphone manufacturing industry that would support Africa's digital and economic growth for years to come. A total of 1,160 participants attended the summit, comprising 300 in-person attendees from 8 countries and 860 virtual participants.

## 1.2 Summit Objectives

The primary objectives of the Smartphone for Africa Summit were:

- To explore strategies to boost local smartphone manufacturing across Africa by addressing key barriers such as high production costs, regulatory hurdles, and limited access to components.
- To facilitate regional collaboration in smartphone manufacturing, distribution, and innovation by creating regional hubs and promoting cross-border partnerships.

- To share best practices and lessons from countries that led in digital transformation, such as Rwanda and Egypt, which had pioneered progressive policies and public-private partnerships to spur local manufacturing and digital growth.
- To harmonize policies and regulatory frameworks across African nations to reduce trade barriers, simplify customs procedures, and streamline cross-border trade for locally manufactured smartphones.

### 1.3 Key Themes of the Summit

The discussions at the summit revolved around the following core themes:

- **Affordable Component Sourcing:** Coordinating bulk purchasing of smartphone components among African countries to lower costs and make local manufacturing more affordable. This involved exploring partnerships with global suppliers and promoting collaboration between African nations to increase economies of scale.
- **Inter-country Collaboration:** Creating regional hubs for smartphone component production and assembly. By allowing countries to specialize and support each other, this approach aimed to build a more integrated manufacturing network across the continent, enabling Africa to become more competitive in the global smartphone industry.
- **Harmonizing Regulatory Frameworks:** Aligning tax policies, standards, and regulations across African nations to simplify cross-border trade and the distribution of locally manufactured smartphones. This harmonization was intended to reduce the cost of smartphones and increase access to digital devices for millions of Africans.
- **Sharing Lessons from Forward-thinking Nations:** Countries like Rwanda and Egypt had made significant strides in digital transformation, promoting innovation, and attracting investments in local manufacturing. The summit provided a platform for these nations to share their experiences and insights on scaling local smartphone production, promoting innovation, and building sustainable partnerships between the public and private sectors.

### 1.4 Expected Outcomes

The *Smartphone for Africa Summit* aimed to achieve the following outcomes:

- **A roadmap for increasing local smartphone manufacturing** across Africa, addressing challenges related to production costs, component sourcing, and regulatory harmonization.
- **Concrete policy recommendations** on how African nations can align their regulations, trade policies, and tax structures to facilitate the production and distribution of locally manufactured smartphones.
- **A network of regional partnerships** that can work together to build integrated manufacturing hubs across Africa, encouraging specialization and cross-border collaboration.

- **Commitments from governments and industry players** to support local manufacturing, promote digital inclusion, and make smartphones more affordable and accessible to all Africans.

## 2.0 Day 1: 21st November 2024

### 2.1 Overview of the Smartphone for Africa Project Objectives and Expected Outcomes of the Convening

#### 2.1.1 Dr. Shikoh Gitau, CEO, Qhala



Dr. Shikoh began by expressing concerns regarding the planned maandamano (demonstrations). Despite these fears, she commended the resilience of Africa, as evidenced by the participants' commitment to attending the event. She reflected on Qhala's two-year journey dedicated to understanding the state of smartphone manufacturing in Africa. This extensive research has been driven by a critical question: "How do we provide a cutting-edge smartphone for Africa's young population?" She emphasized that this question

remains central to shaping initiatives and strategies aimed at addressing the unique challenges and opportunities in the African smartphone ecosystem.

She outlined Qhala's work over the past two years to bring smartphone manufacturing into the African market. The focus of the session was to explore how local manufacturers could play a crucial role in providing cutting-edge devices to Africa's young population, who are eager to "connect, learn, and earn" through digital platforms. She emphasized the importance of understanding the context, with 60% of Africa's population under the age of 25 and an average age of 19 years. By 2050, one in three people working globally will be from Africa, and these individuals will likely be heavily engaged in digital economies. Dr. Shikoh noted that African youth want more than just basic mobile phones for sending money; they want smartphones that can help them thrive in an increasingly digital world.

She posed the critical research question: "How do we provide cutting-edge devices to African people?" Dr. Shikoh identified local manufacturers as key players in meeting this demand. She stressed the need for Africa to move beyond 4G and leap into 5G, enabling more than just financial transactions. This shift would allow Africans to harness the full potential of digital technologies, from education to entrepreneurship. Qhala's research across several African countries—Egypt, Kenya, Zambia, Rwanda, and South Africa—showed that, among these nations, Egypt has made the most progress in local manufacturing, producing at least 30% of the smartphones used domestically. She urged that lessons be



learned from Egypt's success. Despite this, many manufacturers across the continent, including in Kenya, are operating well below their production capacities or have already shut down. The local manufacturing landscape is fraught with challenges, but there are also significant opportunities to reverse the trend. He joked about how Westerners often view Africa as a single entity and suggested that, for the "Smartphone for Africa" dream to become a reality, Africa might need to start acting as if it truly were one big country with a unified market of 1.4 billion people. She pointed out that countries like India, with its 1.4 billion population, and Chinese 1.4 billion population, as well as the United States 300 million population, function as large, unified markets, which allows them to thrive economically. In contrast, Africa's division across borders and fragmented markets increases costs and limits its collective potential.

Addressing the vision's challenges, Dr. Shikoh pointed to high taxation as a major obstacle. She shared an example of the high costs involved in manufacturing smartphones in Africa, using the example of shipping phones from China to Kenya, which yields a profit margin of just 5%. However, if the phones are manufactured in Kenya, the margins would drop to negative 10%, because all the imported components would be taxed separately. Another challenge is fragmentation within the African manufacturing industry. OEMs (Original Equipment Manufacturers) control more than 45% of the smartphone market, but they operate in isolation, which prevents the continent from realizing the benefits of economies of scale. Dr. Shikoh highlighted the importance of sharing ideas and learning from each other to move the industry forward.

To remedy these issues, Dr. Shikoh proposed several strategies, with a particular focus on collaboration. She suggested fostering international and local partnerships and expanding contracting manufacturing, where Africa's many underutilized assembly plants could begin producing phones at scale. Currently, three main smartphone manufacturing plants exist in Africa, but they are underperforming or shutting down due to the lack of investment and capacity. Dr. Shikoh noted that more than 30% of the components used in phones made in Egypt are sourced locally, and this model could be replicated across Africa. However, she acknowledged that resistance to change is a major barrier. She also pointed to opportunities for innovation through white labeling (where manufacturers produce phones under different brands) and operator-branded phones, where mobile network operators (MNOs) set up their own manufacturing plants. She highlighted Public-Private Partnerships (PPPs) as a potential model to reduce risk, citing examples in Rwanda, South Africa, and Egypt. In these countries, governments and local organizations have worked together to create favorable environments for manufacturing and innovation.

Another opportunity lies in the refurbishing and upgrading of phones from the black market, which accounts for 80% of smartphone sales in Africa. Dr. Shikoh suggested taking advantage of existing manufacturing plants to refurbish and upgrade these phones, rather than relying on new imports. Africa is rich in valuable minerals like cobalt, which could be used to produce phone components locally. She pointed to initiatives in the Democratic Republic of Congo (DRC), where the government is developing a smart city focused on tech manufacturing, and Zambia, which is investing in battery production. Additionally, countries like Kenya, Uganda, and Rwanda are beginning to explore semiconductor development, which could create a more sustainable supply chain for smartphones. However, Dr. Shikoh also noted the irony that while Africa produces plastics and paper, it still imports packaging for smartphones—a clear area for local industry to fill.

Dr. Shikoh called for an investment in Africa's manufacturing capacity. She pointed out that while some countries, like Zambia and Kenya, are already making or have the potential to make strides in battery production and energy solutions (for example, through Eveready), more needs to be done to bridge the continent's technological and industrial gaps. However, one of the biggest challenges remains high production costs in Africa, which make it difficult to compete with imports from China. To address this, Dr. Shikoh stressed the importance of tackling taxation policies, as the financial burden on local manufacturers remains a significant barrier. She emphasized that investing in local talent and fostering Pan-African collaboration would be more cost-effective than importing expertise. She called for a united approach across the continent to overcome these challenges and unlock Africa's full manufacturing potential.

In her conclusion, she reinforced the vision of a self-sustaining smartphone manufacturing industry in Africa, which could reduce production costs by up to 30% and create significant economic opportunities for the continent's youth. By working together, Africa can not only provide high-quality smartphones at affordable prices but also create jobs and stimulate growth within the digital economy. She called for a Pan-African approach that brings together stakeholders from across the continent, including governments, private sector players, and international partners. Additionally, Dr. Shikoh emphasized the need for equitable financing models to promote gender equality in smartphone ownership, ensuring that women are not left behind in the digital revolution. The future of smartphone manufacturing in Africa depends on collaboration, innovation, and a commitment to addressing the continent's unique challenges while leveraging its immense potential.

### 2.1.2 Ms Angela Wamola, Head of Sub-Saharan Africa, **GSMA**



Angela Wamola expressed her appreciation for Dr. Shikoh's presentation, describing it as a lovely one and emphasizing the importance of partnerships to make meaningful progress. She highlighted the feasibility of the objectives discussed and underscored the need for collaboration and unity across Africa. Angela began her remarks by framing her presentation with Sub-Saharan Africa as the focal point, reassuring the audience that it was an African-wide perspective. She invited the audience to follow her explanation to see the connections she would draw.

Angela pointed out that the presentation revolved around the challenges of smartphone adoption and Africa's potential to achieve its developmental goals. She noted that Africa is not short of strategies, policies, or national development plans and mentioned Agenda 2063—a clear 50-year roadmap for achieving "The Africa We Want." She drew a parallel to the Sustainable Development Goals (SDGs) for 2030, noting that 2030 is fast approaching and questioning the continent's progress. She emphasized the importance of monitoring and

evaluating progress to prevent small deviations from leading to significant failures over time.

Angela elaborated on the Sub-Saharan challenge and linked it to the broader African vision. She referred to Goal Four of Agenda 2063, which focuses on transforming economies through three pillars: sustainable and inclusive growth, leveraging technology, and economic diversification. She stressed that economic growth must be equitable across all regions, enabling Africa to function cohesively as one continent, leveraging its population of 1.5 billion. Angela identified technology as an essential enabler for leapfrogging development and highlighted the need for economic diversification to move away from dependence on traditional industries like agriculture and mining. She advocated for inclusivity, ensuring all demographics—rural, urban, men, and women—are active participants in the economic growth of the continent.

Angela proposed that the industry must act as a collaborative partner in achieving these goals. She emphasized the importance of public-private partnerships and the need to attract and grow private capital. Relying solely on governments, she argued, would not suffice to deliver the desired outcomes. Angela encouraged the audience to consider the connections between policy, technology, and inclusivity in achieving smartphone adoption and financial inclusion.



She cited a significant achievement: Africa's contribution to global financial transactions through mobile money, which constituted 70% of global transactions, amounting to \$913 billion. Angela juxtaposed this with Africa's total export contribution of \$1 trillion, illustrating the immense untapped potential of digital financial tools. She explained that this success was driven by the use of basic technologies like SMS and USSD, highlighting their accessibility to African populations. However, she also pointed out the gap in inclusive connectivity,

which relies on advanced technologies like 3G, 4G, and 5G, and explained the correlation between connectivity and broader economic inclusion.

Angela discussed the challenges in advancing connectivity, noting that only 30% of Africans are leveraging mobile internet despite significant investments in network infrastructure. She argued that the barriers to mobile internet adoption, rather than coverage gaps, were the primary challenges to address. Angela presented the three focus areas of GSMA's strategy for the next decade: enabling other sectors through digitalization, fostering a green digital future to reduce investment costs, and facilitating investments to bridge the digital divide. She emphasized the need for collaboration across industries and sectors to realize these goals.

Angela detailed the significant costs associated with network infrastructure in urban areas, where 48% of expenses are for building towers, 12% for the radio network, 10% for the backhaul, and 30% for energy. These costs escalate by 37% in rural areas, making it difficult to attract investment. She highlighted the disparity in mobile internet usage between rural and urban areas and noted that 58% of people in rural areas and 36% of women are less likely to use mobile internet. Despite Kenya achieving a gender gap of less than 1% in financial inclusion, Angela pointed out that the same success had not been replicated in digital connectivity across the continent.



Angela illustrated the challenges of underutilized infrastructure by highlighting the 710 million people in Sub-Saharan Africa who live within 3G or 4G coverage but do not use mobile internet. She stressed the need to unlock barriers preventing these individuals from becoming active digital participants and noted the potential for peer learning across regions. Central, East, and Southern Africa each face unique challenges, and Angela emphasized the importance of leveraging these differences to support one another.

In conclusion, Angela reiterated the urgency of addressing the usage gap and enabling widespread participation in Africa's digital transformation. She highlighted the potential of technology as a driver of inclusive growth, urging all stakeholders to collaborate, de-risk investments, and unite efforts to propel the continent toward "The Africa We Want."

### 2.1.3 Hon. Eng. John Tanui, PS, Ministry of Information, Communications and the Digital Economy, Kenya



Hon. Eng. John Tanui, PS, Ministry of Information, Communications, and the Digital Economy, Kenya, began by acknowledging the data presented by Dr. Shikoh and Angela, emphasizing its call for action. He highlighted that the data aligns with Kenya's Vision 2030, which is centered on driving transformation across the social, political, and economic spheres.

He then spoke about the [Bottom-Up Economic Transformation Agenda](#) (BETA) initiative, which is built on five key principles. A crucial point he raised was that smartphones are not only enablers of economic growth but also an industry in themselves.

Although the data presented by earlier presenters at the Summit were somewhat discouraging to PS Tanui, he nevertheless expressed optimism, noting that over the past two years of BETA's implementation, there has been significant transformation. This progress demonstrates Kenya's capacity to plan and execute effectively. He emphasized the immense potential both Kenya and the broader African continent possess.

PS Tanui also mentioned key achievements, including the local manufacture of 17,000 kilometers of fiber infrastructure and 2.6 million smartphones. To build on this, Kenya is actively engaging global partners to accelerate growth. Notably, during the recent U.S. State Visit, Kenya was designated as a technology partner, reinforcing the country's commitment to advancing its digital economy.

Looking to the future, PS Tanui stressed that technology is set to become a leading contributor to Kenya's economy. With 66 million phones currently in use in Kenya, there is a clear opportunity to create demand for at least 15 million additional devices.

He also highlighted the importance of leveraging the African Continental Free Trade Area (AfCFTA), stressing the need for collaboration across the continent. He pointed to the success of the Asian Tigers as a model for what Africa can achieve with more dialogue and collective effort.

Finally, PS Tanui called for a shift in mindset, urging the need to start producing with export markets in mind. He concluded by affirming that with the right strategies, Kenya and the continent as a whole are well-positioned to lead in the digital economy.

#### 2.1.4 Amb Isaiya Kabira - Director General International Conferences, Media Events and Public Communications -Ministry of Foreign Affairs, Kenya



Ambassador Isaiya Kabira warmly extended his gratitude to the distinguished dignitaries gracing the occasion, acknowledging the presence of Permanent Secretaries, the CEO of Qhala, Dr. Shikoh Gatau, and representatives from prominent organizations, including the Bill and Melinda Gates Foundation, Smart Africa, GSMA, and various private sector manufacturers.

In his opening, Ambassador Kabira expressed his regret over the absence of Ms. Roslin Njogu, the Permanent Secretary for Diaspora Affairs, who was attending to parliamentary duties. He emphasized her valuable contributions to the agenda and conveyed her support for the summit's goals. The ambassador set a collaborative tone for the event, highlighting the importance of partnerships between governments, international organizations, and private sector players in shaping Africa's smartphone and digital future. He underscored the role of such alliances in driving innovation, fostering inclusivity, and bridging the digital divide for Africa's young and dynamic population.

Ambassador Isaiya Kabira opened his speech by highlighting the significant role of Kenyans in the Diaspora, who have become Kenya's largest source of foreign exchange remittances. He noted that the remittances sent by Kenyans abroad now exceed the total earnings from all of Kenya's traditional exports combined, including tourism, coffee, tea, and floriculture. This remarkable success, he emphasized, has been largely driven by mobile phone innovations, which have simplified global money transfers. Without mobile phones, transferring money through traditional banking methods would have been far more difficult, if not unfeasible.

Shifting to the central theme of the summit, smartphones and their future role in Africa, the Ambassador outlined Africa's immense potential. He emphasized that with a projected population of 2.5 billion by 2050 and one billion people entering the middle class, the continent represents a tremendous market opportunity for smartphones. While other regions such as Europe, Asia, and the Americas already enjoy widespread smartphone access, it is now Africa's turn to capitalize on this potential by producing and selling smartphones tailored to its growing demand.

The Ambassador posed a key question: What does Africa truly need from smartphones? He acknowledged that the audience, comprising ICT experts and stakeholders from across Africa, already had a deep understanding of the market. However, he stressed the importance of revisiting fundamental needs to prompt actionable change.

### **Affordability, Accessibility, and Durability**

Ambassador Isaiya underscored the importance of creating smartphones that are affordable, accessible, and durable. He noted that for many Africans, smartphones serve as the primary means of accessing the internet. However, high device and data costs, coupled with the need for reliable hardware, remain significant barriers. He highlighted the necessity of producing smartphones designed to withstand Africa's diverse environments, with long battery life and resistance to water and harsh conditions. For areas with limited electricity access, he envisioned phones capable of lasting up to a week, which would be essential for critical services such as healthcare and education.

### **Transforming Healthcare**

The Ambassador identified healthcare as a critical sector that could benefit from smartphone adoption. He explained how smartphones could support the digitization of medical records and enable platforms for telemedicine. Envisioning smartphones as personal health assistants, he suggested they could track diseases, monitor health trends, and provide instant access to medical consultations, especially in remote areas with limited healthcare services.

### **Empowering Agriculture**

Addressing agriculture, Ambassador Isaiya highlighted how smartphones could empower farmers by offering real-time weather updates, market information, and agricultural advice. This, he said, would enable farmers to make informed decisions, increase productivity, and contribute to food security. Smartphones could also help connect small-scale farmers to larger markets, furthering Africa's economic development goals.

### **Facilitating Intra-Africa Trade**

The Ambassador emphasized the role of smartphones in advancing the goals of the African Continental Free Trade Area (AfCFTA). He explained how improved connectivity and reduced communication costs could make regional trade easier. He noted that it is often more expensive to make a call across African borders than to the United States, and that smartphones could reduce these costs, fostering greater economic integration and growth across the continent.

### **Supporting Young Innovators and Entrepreneurs**

Ambassador Isaiya highlighted the potential of smartphones to empower young African innovators and entrepreneurs. He noted that smartphones provide access to digital platforms, tools, and training, enabling youth to create solutions to local challenges. He commended initiatives like Qhala, which are equipping communities with digital skills and driving Africa's digital transformation. He also stressed the importance of bridging the urban-rural digital divide through investments in digital infrastructure, ensuring that all Africans can benefit from the opportunities smartphones offer.

### **The Role of the Diaspora**

Ambassador Isaiya highlighted the significant role of the African diaspora in smartphone demand. He noted that Africans living abroad are some of the largest consumers of mobile phones, often gifting them to family members back home. He encouraged researchers to consider the diaspora's preferences when designing smartphones, given their role as major purchasers of these devices.

### **Smartphones and Financial Inclusion**

The Ambassador concluded by emphasizing the transformative role of smartphones in financial inclusion. He highlighted how mobile apps are revolutionizing access to banking services, enabling easier remittances and investment opportunities. Through these apps, members of the diaspora can send money home, support local businesses, and invest in community projects, contributing to financial empowerment and economic growth.

### **Call to Action**

In closing, Ambassador Isaiya reiterated the importance of creating affordable, durable, and transformative smartphones to enable Africans to thrive in the digital age. He urged stakeholders to focus on making smartphones that empower every African, ensuring that the continent moves closer to becoming a digital-first economy.

## **2.1.5 Mr. Zachary Kazzaz, Senior Program Officer, Digital Connectivity Gender Equality Division, Bill & Melinda Gates Foundation**



Mr. Zachary Kazzaz, Senior Program Officer at the Bill & Melinda Gates Foundation, leads efforts in digital inclusion, focusing on closing the gender digital divide. In his presentation, he outlined the barriers hindering widespread access to digital technologies, such as affordability, digital literacy, relevancy, safe usage and security, and social norms. He emphasized the progress made in understanding these challenges, noting that his team is collaborating with The World Bank to incorporate phone ownership and usage data into the Global Index Survey, with results expected next year.

The Foundation is also conducting in-depth country-level analyses to examine the factors that enable or delay digital adoption across different regions. In terms of digital literacy, Mr. Kazzaz highlighted their efforts to develop scalable solutions, particularly by leveraging female peer trainers and existing networks of self-help groups. This approach is helping to create a more accurate measurement of digital literacy and its impact.

### **Key Challenges in Digital Inclusion**

Despite the progress, significant barriers remain. One of the most pressing issues is that smartphones are unaffordable for many people, particularly the 860 million unconnected Africans. Mr. Kazzaz stressed that smartphones are critical tools for unlocking economic opportunities. When designed inclusively, these

devices provide access to essential services such as healthcare, education, income generation, and enable active participation in communities and economies. However, these opportunities are often out of reach for the majority of the population, and as technological advancements accelerate, the digital divide is only set to widen, exacerbating inequalities in access to information and opportunities.

A major driver of the high cost of smartphones in Sub-Saharan Africa is the combination of limited supply of key inputs, high shipping costs, foreign exchange fluctuations, and unfavorable tariff regimes. These factors push the price of basic imported smartphones into the \$100-\$150 range, which amounts to 4-6 months' worth of wages for over 30% of Kenya's population living below the poverty line. This underscores the need for innovative solutions to lower the cost of devices and increase accessibility.

### **Story of Mary: A Representation of the Unconnected**

Mr. Kazzaz shared the story of Mary, a 28-year-old woman from Kangemi, Nairobi, who epitomizes the struggles faced by many unconnected individuals in Africa. Mary, a vegetable hawker with three children and no formal education, became familiar with phones by borrowing them from friends. Through her work as a domestic helper, she saved enough money to buy her first feature phone, and later, a smartphone to access WhatsApp. Unfortunately, both smartphones broke within a year, and without the funds to replace them, she reverted to using a feature phone. Both smartphones were bought through the secondary market, which often offers low-quality, non-durable phones. Despite her interest and capability to use digital technologies, Mary's financial constraints prevent her from obtaining a more reliable smartphone, illustrating the broader issue of device affordability.

### **Disparities in Smartphone Access**

He noted that research conducted on adolescent girls and young women between the ages of 15 and 24 reveals significant gaps in smartphone ownership across different regions in Africa. In Nairobi County, 75% of adolescent girls have access to smartphones, while in Narok County, this figure drops to 40%. The gap is even more pronounced in Nigeria, with 72% of girls in Lagos having smartphone access, compared to just 30% in Kaduna State.

The study also highlighted that a substantial percentage of young women access smartphones via shared devices—11% in the broader region, with 20% in Kenya. Sharing a device with a single profile limits users' privacy and agency in their digital lives. This lack of personal access to smartphones exacerbates digital inequality.

### **Addressing Device Economics**

The data shared by GSMA aligns with these findings, revealing that those who are least connected are often the poorest. To address this, Mr. Kazzaz emphasized the need to change the underlying economics of devices. He argued that making smartphones more affordable for low-income women would ultimately benefit the entire population. Reducing the cost of smartphones could lead to a 2% increase in annual GDP growth for low-income countries, contributing to the African Union's goal of a single digital market by 2030.

Mr. Kazzaz also pointed out that women are more price-sensitive than men. If the affordability issue can be solved for low-income women, it could provide a scalable solution for the broader population.



Innovative Solutions: From Syringes to Smartphones. In an anecdote about the health sector, Mr. Kazzaz shared how the foundation addressed a shortage of auto-disabled syringes during the COVID-19 pandemic. The lack of supply due to closed borders and shipping delays led to a delay in immunizations, including COVID-19 vaccinations. Recognizing this gap, the foundation partnered with Revital, a company specializing in less complex syringes. By 2021, Revital adapted its production to manufacture auto-disabled syringes, and the company is now on track to produce 3 billion syringes this year, becoming the first African company to receive WHO supplier designation.

This story served as a reminder of the potential for local manufacturing to address critical gaps in supply chains—whether for syringes or smartphones—and underscored the need for industrial policy reforms to promote high-tech manufacturing in Africa.

### **Conclusion: Exploring Opportunities for Better Smartphones**

Mr. Kazzaz concluded by expressing his optimism about the future of smartphone technology in Africa. He emphasized the importance of exploring innovative solutions to create more affordable, durable, and inclusive smartphones for African users – such as smartphone sharing. Such efforts could help bridge the digital divide, empowering individuals, particularly women and marginalized communities, to access the opportunities offered by the digital economy.

## **2.2 Opening Address: Vision for Smartphones for Africa**

### **2.2.1 Mr. Lacina Kone, Director General and Chief Executive Officer, Smart Africa**



Mr. Lacina Koné, Director General and CEO of Smart Africa, delivered a compelling address at the Smartphone for Africa Summit, emphasizing the pivotal role of digital empowerment in shaping Africa's future. He began by recognizing the importance of the summit as a critical platform for exploring innovative avenues for Africa's digital transformation. Although unable to attend in person, Mr. Koné expressed his unwavering support for the summit's objectives, aligning himself with stakeholders in the shared vision of building a digitally empowered, knowledge-driven

Africa. He highlighted smartphones as transformative tools capable of bridging gaps in education, healthcare, financial services, and entrepreneurship, thereby connecting Africans both locally and globally.

Despite the opportunities smartphones offer, Mr. Koné noted that accessibility remains a significant challenge for many Africans. With only 54% of the continent benefiting from smartphone access, over 690 million people either rely on feature phones or lack connectivity entirely. This digital divide hampers access to essential services and opportunities, isolating many Africans from the rapidly evolving global digital

economy. He called on summit participants to collectively address this disparity and work toward ensuring that digital inclusion reaches every corner of the continent.

To achieve this, Mr. Koné proposed three strategic pathways:

1. **Regional Collaboration:**

He emphasized that no single country can revolutionize Africa's digital landscape independently. Mr. Koné advocated for establishing regional manufacturing hubs that capitalize on individual nations' competitive advantages. He stressed the importance of leveraging the African Continental Free Trade Area (AfCFTA) to eliminate trade barriers, promote specialization, and streamline smartphone production and distribution across the continent.

2. **Harnessing Economies of Scale:**

He underscored the potential of Africa's 1.4 billion-strong population as a massive market. Coordinated bulk purchasing of components and continent-wide negotiations could significantly reduce production costs, making smartphones more affordable for all Africans.

3. **Regulatory Harmonization:**

While acknowledging the importance of regulation, Mr. Koné emphasized the need for policies that foster innovation, attract investment, and empower businesses. He noted that Smart Africa is actively working with stakeholders to align regulatory frameworks, policies, and standards, thereby creating a cohesive and thriving digital market.

Mr. Koné also highlighted Smart Africa's ongoing initiatives to increase smartphone affordability. He discussed the "Affordable Devices for All" initiative, which aims to lower device costs through bulk purchasing and strategic partnerships with organizations like KaiOS and Kpay. This program seeks to distribute at least 300,000 devices by 2025, focusing on underserved communities in Smart Africa member states, particularly small and medium-scale merchants. Future phases will expand to other groups, including farmers and teachers.

He also outlined innovative financing models, such as "Pay As You Go" and "Buy Now, Pay Later" options, which allow individuals to acquire smartphones through staggered payments. These models have proven sustainable and scalable, enabling more citizens to access devices while benefiting from the economic opportunities smartphones unlock.

In his closing remarks, Mr. Koné urged government officials, private sector leaders, and development partners to embrace this vision with urgency and determination. He emphasized that ensuring affordable and accessible smartphones is not merely about technology but about driving a broader transformation of African societies and economies. By making smartphones available to every African, the continent can unlock unprecedented opportunities for economic growth, innovation, and social inclusion.

Mr. Koné's address was a powerful call to action, rallying all stakeholders to join forces in creating a connected, inclusive, and transformative future for Africa.

## 2.2.2 H.E. Wamkele Mene, Secretary General of the African Continental Free Trade Area Secretariat



Through a pre-recorded video, H.E. Wamkele Mene addressed the audience at the Smartphone Manufacturing in Africa Summit, delivering a strong message of support and solidarity for this critical initiative. He began by expressing his honor and pleasure in being part of the summit, emphasizing its importance as a milestone in advancing Africa's industrial and technological future.

Acknowledging the rapid growth of Africa's smartphone market, Mr. Mene highlighted projections showing smartphone penetration in Sub-Saharan Africa will surpass 65% by 2025. He noted that this growth represents a transformative shift in the global tech industry. He emphasized Africa's wealth of critical minerals like cobalt, titanium, and lithium, which are essential for smartphone production. However, he lamented the reality that more than 90% of smartphones sold in Africa are manufactured outside the continent. This reliance on imports, he explained, perpetuates trade imbalances, raises costs for African consumers, and limits opportunities for job creation.

H.E. Mene urged immediate action to address these issues, stating that boosting local smartphone production is key to fostering economic growth. He commended the summit's focus on this goal, emphasizing that increasing local production will enhance trade balances, retain wealth within African economies, and contribute to industrial development. He noted that initiatives such as those in Rwanda and South Africa demonstrate Africa's potential in the tech sector but stressed that true progress requires moving beyond assembly to fully local production. This approach, he argued, would create jobs, build technical expertise, and result in affordable smartphones tailored to Africa's needs.

While expressing optimism, Mr. Mene also acknowledged the significant challenges that must be addressed to realize this vision. He identified infrastructure gaps, limited access to raw materials, and financing constraints as barriers to scalable smartphone manufacturing. However, he expressed confidence that these obstacles can be overcome through collective determination, political leadership, and collaboration with private sector and development partners.

He closed his remarks with a resounding endorsement of the initiative and a call to action, encouraging stakeholders to work together to unlock Africa's manufacturing potential. He thanked the summit organizers for inviting him to share his observations and extended his best wishes for productive discussions and meaningful outcomes.

His Excellency's speech was a rallying call, urging all involved to seize this opportunity to transform Africa's tech landscape and drive inclusive economic growth.

### 2.2.3 Hon. Dr. John Mukhwana, CBS, PS for Investments, Trade and Industry (MITI), Kenya



Hon. Dr. John Mukhwana, CBS, Principal Secretary for Investments, Trade, and Industry (MITI), Kenya, delivered an insightful address regarding the country's initiatives to foster smartphone manufacturing and job creation within its economy. His remarks focused on Kenya's digital infrastructure and industrialization efforts, underscoring the critical role these sectors play in driving economic growth and enabling Kenya's Vision 2030.

Dr. Mukhwana began by posing an important question: *How do we create an environment that encourages smartphone manufacturing and job creation?* This question set the stage for his discussion on the broader context of Kenya's economic development, particularly in the realms of digital technology and local manufacturing. He referenced the Kenya Kwanza manifesto, which emphasizes the creation of a Digital Superhighway, positioning ICT as a foundational pillar for the nation's economic transformation.

#### **Key Initiatives to Support Economic Growth**

Dr. Mukhwana highlighted several key government initiatives that are aimed at transforming Kenya's economy through digitization:

- The construction of 100,000 km of fiber optic cables to expand internet access and enhance digital connectivity across the country.
- The installation of 25,000 public Wi-Fi hotspots to increase accessibility to affordable internet for all citizens.
- The development of three new data centers to support the country's growing digital infrastructure and data management needs.

These initiatives are designed to create a robust digital ecosystem that will support the broader digitization of both the economy and government services.

#### **Mobile Money as a Catalyst for Financial Inclusion**

He then turned to mobile money, recognizing it as one of the most significant enablers of financial inclusion in Kenya. Dr. Mukhwana emphasized how mobile money has revolutionized the country's financial landscape by enabling people, regardless of geographic location, to access banking services. This, he noted, is a prime example of disruptive technology that has propelled Kenya to the forefront of financial inclusion in Africa.

## **Vision for Silicon Savannah**

Dr. Mukhwana reaffirmed Kenya's commitment to the Silicon Savannah vision, describing it as a flagship initiative that is continuing to drive Kenya's technological growth. He pointed out that the government has successfully digitized 16,000 government services, including key services like birth certificates, through platforms such as E-Citizen. This digital shift has simplified access to government services and helped move public administration into the digital era.

## **Mobile Network Expansion and Coverage**

The PS also discussed the state of mobile network coverage in Kenya, noting that 80% of the population is now covered by 4G networks, with 5G coverage being more limited but expanding. This growing mobile network infrastructure is essential for improving connectivity and access to digital services, facilitating the wider adoption of smartphones across the country.

## **Addressing the Importation of Phones and the Need for Local Manufacturing**

Dr. Mukhwana highlighted a critical issue: Kenya's heavy reliance on imported smartphones, which accounts for 90% of the phones in the market. This dependency is mirrored across the African continent. He noted that while Africa missed out on the earlier waves of industrialization, the continent now stands at the cusp of the 4th industrial revolution, which will be driven by ICT. He underscored the importance of local manufacturing to reduce imports and build a self-sustaining digital economy.

Dr. Mukhwana also pointed out that currently, only 10% of smartphones in Kenya are locally assembled, while 80% of goods in general are imported. He stressed the need for the country and the continent to ramp up manufacturing efforts in order to not only meet local demand but also tap into global markets.

## **Africa's Manufacturing Deficit and the Path Forward**

Drawing comparisons with other regions, Dr. Mukhwana noted that Africa, despite its population of 1.4 billion people (17% of the world's total), contributes just 2.8% of global manufacturing output. In contrast, Europe, with only 9% of the world's population, produces 14% of global manufactured goods. He pointed out that Africa's intra-regional trade is still low, with only 15% of goods traded within the continent, while the remaining 85% are imported. He called on AfCFTA and ECOWAS to step up efforts to boost intra-African trade and industrialization.

## **Supporting Local Smartphone Manufacturing**

To address these challenges, Dr. Mukhwana described the Kenyan government's efforts to create a supportive policy environment for local smartphone assembly. Through the East African Community (EAC) Common Market Protocol, Kenya has introduced a favorable tax structure:

- 0% duty on raw materials used for assembly.
- 10% duty on intermediate products.
- 35% duty on fully assembled smartphones.



In addition, local manufacturers like EA Dark and Mkopa are benefiting from duty remission on imported parts used for phone assembly. Dr. Mukhwana also highlighted that products made for export are exempt from duties, providing an additional incentive for local assembly.

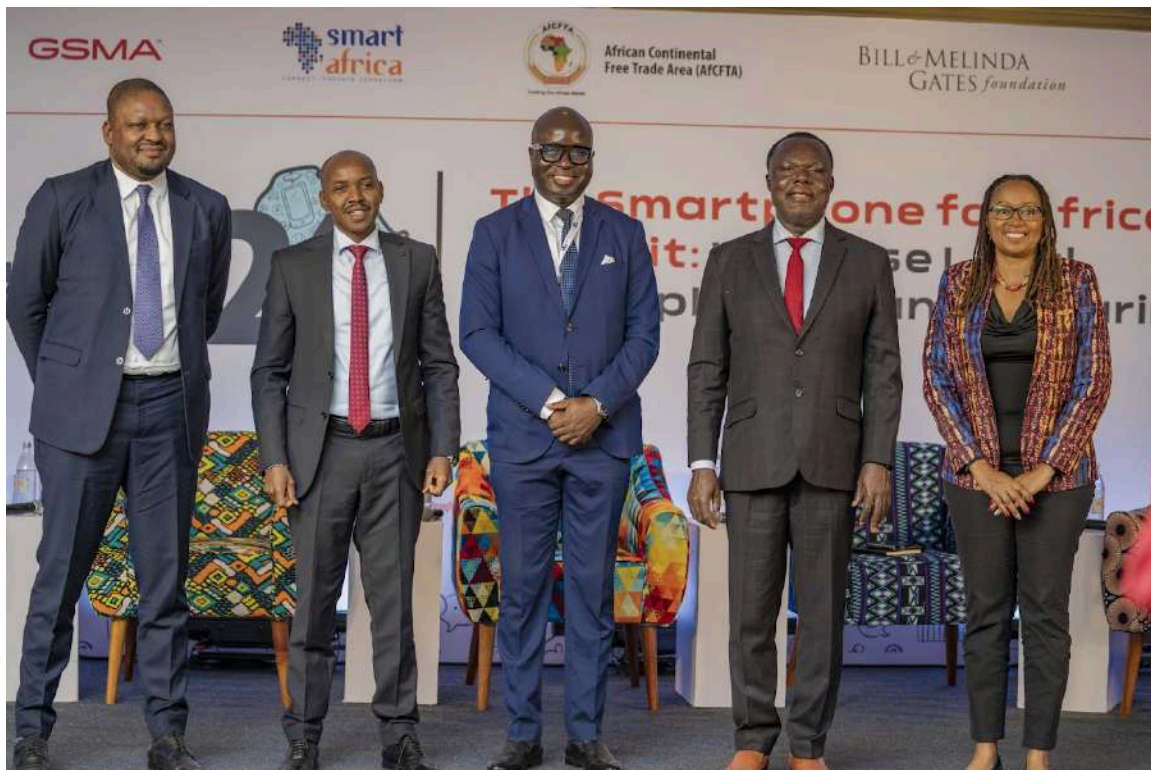
### Encouraging Investment and Meeting the Demand for Affordable Phones

Given the high demand for affordable smartphones, which currently exceeds supply, Dr. Mukhwana reiterated that it makes more economic sense to assemble phones locally rather than importing fully assembled devices, which are subject to high import duties. The government continues to promote an investment-friendly environment to encourage more manufacturers to set up operations in Kenya, where there is a significant market for affordable smartphones.

### Conclusion

Dr. Mukhwana concluded his address by emphasizing the importance of creating a conducive environment for local smartphone manufacturing and job creation. He called for a collective effort across the continent to ramp up industrialization and self-reliance, ensuring that Africa plays an active role in the global digital economy. With the right policies and investments, Dr. Mukhwana expressed confidence that Kenya and Africa as a whole could become key players in the 4th industrial revolution, generating not only local jobs but also contributing to global markets.

## 2.3 Ministerial Panel: State of Smartphone Penetration in Africa and why local manufacturing is important



**Moderator:** Angela Wamola, Head of Sub-Saharan Africa, GSMA

- Mr. Stanley Kamanguya, **CEO, ICT Authority of Kenya**
- Mr. Themba Khumalo, **Principal Advisor to the Secretary General, AfCFTA Secretariat**
- Dr. Nkundwe Mwasaga, **Director General of ICT Commission. Tanzania**
- Dr. Juma Mukhwana **PS, Ministry of Investments, Trade, and Industry.**

The session began with Angela posing the question to Dr. Juma on policies that attract investment in smartphone manufacturing in Kenya. Dr. Juma emphasized that Kenya has placed the digital economy at the core of its reform agenda. Key initiatives include expanding internet access beyond Nairobi by introducing free WiFi in public spaces and educational institutions to drive demand for digital devices. Kenya is also developing infrastructure through the Konza City "Silicon Savannah" project, including the establishment of the Konza Data Centre to store government and critical data locally. Additionally, the government has enacted an ICT policy and act to secure and streamline its digital transformation, migrating 18,000 government services to digital platforms. These efforts aim to create robust infrastructure, foster innovation, and balance policy-making with demand creation to attract investments in the digital economy and smartphone manufacturing.

Mr. Stanley proceeds to expound on what other African countries can learn from Konza City. Konza City was established under the economic pillar of Vision 2030, with the goal of driving Kenya towards industrialization by advancing research in science and technology to fuel innovation. The initiative promotes special economic zones to support trade and industry. Africa possesses critical elements and minerals essential for manufacturing, but much of these resources are exported, only to be re-imported at high costs, including taxes. To address this, the government is encouraging local assembly and manufacturing. Stanley emphasized the need for African countries to identify their niche in manufacturing specific components, fostering collaboration across nations by breaking trade barriers. Digital products, he noted, could accelerate this process. He also highlighted Kenya's strong base in soft skills like programming but acknowledged the country's lag in technology manufacturing skills. This presents an opportunity to strategically develop capabilities and promote cross-border trade within Africa.

Dr. Nkundwe then proceeded to share some statistics of Tanzania. Tanzania has achieved significant penetration in mobile technology, with 3G at 93%, 4G at 84%, and 5G at 15%. Two years ago, Tanzania established a smartphone manufacturing factory, focusing initially on semi-manufacturing, where components are imported and assembled locally. The long-term goal is to achieve complete manufacturing capability. Dr. Mwasaga stressed the importance of addressing energy challenges, as some manufacturing components require specialized energy solutions, and noted that taxation, while significant, is not the sole issue. He advocated for a long-term strategy for Africa, emphasizing that not all countries can or should engage in full-scale manufacturing. Regional collaboration is crucial, with a need for strategies within regional blocs to optimize resources. For example, establishing one or two semiconductor factories across Africa would require pooled investment due to the high costs involved. Tanzania, with 22 million smartphones in use, is also considering the broader scope of digital device manufacturing, including laptops and tablets. Dr. Mwasaga highlighted the need for coordinated efforts across African countries to create sustainable, regionally integrated manufacturing ecosystems.



Mr. Themba discussed and emphasized the need for mechanisms to monitor and support the implementation of policies under the African Continental Free Trade Area (AfCFTA) and the African Union (AU) agenda, particularly in advancing industrialization and local smartphone manufacturing. Key strategies include ensuring accountability for countries' contributions, enforcing the AfCFTA's 60% local production rule to reduce import dependency, and fostering investment through supportive policies like guaranteed markets for locally produced

devices. He then mentioned that the high cost of imports, which also exports jobs, underscores the importance of local production. Regional collaboration, streamlined trade protocols, and financing mechanisms are crucial to creating a conducive environment for cross-border trade and industrial growth. Political commitment and structured implementation are vital to achieving these shared goals.

The discussion concluded by Dr. Juma highlighting significant challenges in facilitating trade within Africa particularly regarding transport and logistics. Interoperability issues across customs systems in multilingual trade corridors, such as the Abidjan-Lagos corridor, contribute to high costs and delays. To address this, partnerships with organizations like Trademark Africa are being leveraged to streamline cross-border processes. However small and medium-sized enterprises (SMEs) are disproportionately affected by these challenges due to limited resources. Structural issues, including inadequate road and rail infrastructure, further exacerbate trade inefficiencies. For instance, exporting goods across the continent often takes longer and costs more than exporting to other continents like Asia or Europe. These logistical barriers undermine intra-African trade potential, with limited connectivity between countries making trade cumbersome and expensive. Another issue raised was the smartphone manufacturing target. While the goal of achieving 60% local content is ambitious, it may not be immediately feasible for countries starting from a low manufacturing base. Flexibility in implementation was suggested to prevent continued reliance on imports while fostering gradual progress toward regional industrialization.

Addressing these barriers requires a coordinated approach, including investments in infrastructure, streamlined regulations, and realistic targets to promote meaningful intra-African trade.



## 2.4 Directors Panel: Pan African Policy and Practice Africa must rise together



**Moderator: Dr. Shikoh Gitau, CEO, Qhala**

- Mr. Michael Mutiga, Chief Business Development & Strategy Officer, **Safaricom PLC**.
- Mr. Aaron Mwandia - Deputy Director - Digital Technology & Innovations, Ministry of ICT **Zambia**
- Mr. Yasser AbdelBary, Executive Director of Electronics Industry, Information Technology Industry Development Agency, ITIDA, **Egypt**
- Dr Talkmore Chidede, Senior Digital Trade Expert, **AfCFTA**
- Ms. Pauline Kimotho, Director Legal Services and Corporation Secretary, **ICT Authority**

The panel discussion, moderated by Dr. Shikoh Gitau, CEO of Qhala, addressed the key challenges and opportunities in unlocking the smartphone market for Africa. The conversation focused on the role of government policy, private sector innovation, and regional collaboration to make smartphones affordable and accessible across the continent, with the goal of fostering digital inclusion and economic transformation.

Dr. Shikoh opened the discussion by asking about how organizations and governments can work backwards from the vision of a unified digital economy and what concrete steps are needed to implement this vision. She emphasized the importance of a single digital market that can reach underserved areas and drive Africa's digital economy.

Dr. Talkmore Chidede, Senior Digital Trade Expert at AfCFTA, responded by highlighting the binding protocol adopted by AfCFTA to harmonize digital markets across Africa. This legal framework aims to

bridge the gap between countries with differing digital policies and regulations. He underscored the challenge of harmonizing policies and ensuring affordable and locally-manufactured digital devices to support the digital economy.



Dr. Chidede emphasized the importance of leveraging digital technologies to address Africa's missed tech opportunities and close the digital divide. He noted that smartphones, despite being critical for digital trade and inclusion, are often not manufactured within Africa. To address this, AfCFTA aims to reduce the cost of devices and promote local manufacturing. He also mentioned the need for cross-border cooperation, citing recent studies on small traders using smartphones for mobile money and digital payments. The vision for

affordable smartphones could drive job creation and stimulate Africa's industrialization through a regional value chain.

Dr. Shikoh next posed a question on how private sector players, such as Safaricom, are fostering technological advancements to support Africa's digital transformation. Specifically, she asked about the role of Safaricom's mobile payment platform, M-Pesa, in promoting smartphone use and app integration.

Mr. Michael Mutiga, Chief Business Development & Strategy Officer at Safaricom, discussed the challenges in making smartphones accessible and transitioning people from traditional forms of mobile communication, such as USSD, to apps like M-Pesa. He explained that while the app is embedded in smartphones, the real challenge lies in reducing the cost of the device itself and encouraging users to adopt smartphone-based transactions.

With over 40 million Safaricom subscribers, 30 million of whom have access to M-Pesa, only a small percentage (4-5 million) actually transact via the app. He stressed that while the availability of apps is not an issue, the real question is how to increase smartphone penetration and push for greater usage of apps, especially through mobile money platforms. To achieve this, the focus must shift toward increasing smartphone ownership and ensuring that apps such as M-Pesa are more accessible and practical for users.

Dr. Shikoh raised a question about Zambia's collaboration with the Democratic Republic of Congo (DRC) in smartphone manufacturing and the lessons learned from these initiatives, particularly in the context of fostering regional synergies for digital inclusion.

Mr. Aaron Mwandia, Deputy Director at Zambia's Ministry of ICT, explained that Zambia is focusing on digital inclusion through internet penetration and mobile money usage. He discussed the country's efforts to promote smartphone use by moving government services online, which has led to increased internet



adoption and smartphone usage. He highlighted Zambia's ambition to increase internet penetration from 21% to 80% by 2026.

Mr. Mwandia also spoke about Zambia and DRC's cooperation on lithium battery production, an essential component for smartphone manufacturing. He emphasized the need for African countries to add value to raw materials, such as lithium, rather than exporting them and losing out on potential economic benefits. He further noted that African nations must work together to reduce trade barriers, increase regional synergies, and improve the value chain within the continent. By doing so, they could avoid the issue of exporting raw materials and instead manufacture products locally, creating jobs and boosting industrialization.

Dr. Shikoh then turned to Egypt's success in smartphone manufacturing and asked how other African countries could learn from Egypt's experience, particularly in terms of producing phones at scale.

Mr. Yasser AbdelBary, Executive Director of ITIDA in Egypt, highlighted Egypt's long-standing history in electronics manufacturing, dating back to the 1960s, and its more recent success in the smartphone industry. He shared that Egypt has been a leader in phone production since 2015, producing millions of smartphones annually. He noted that African countries should collaborate to harness their respective competitive advantages, such as Zambia's lithium deposits or Egypt's manufacturing capacity.

Mr. AbdelBary stressed that Africa's future in smartphone manufacturing lies in collaboration and knowledge-sharing. Countries should not compete, but rather complement each other's strengths. He suggested that African nations work together to establish manufacturing hubs and improve local capacity. He emphasized the importance of upskilling talent and building industries through practical experience. He also advocated for localization efforts, which would lead to sustainable industrial development in the region.

Dr. Shikoh then asked how the Kenyan government could help harmonize smartphone standards to ensure they are both sustainable and scalable across the continent.

Ms. Pauline Kimotho, Director of Legal Services at the ICT Authority in Kenya, addressed the regulatory and policy frameworks needed to support smartphone manufacturing and digital inclusion. She pointed out that policies should be market-friendly and ensure local participation, with a focus on reducing barriers to digital adoption. For instance, she mentioned the need for a more favorable taxation system that supports local industries and encourages innovation.

She also discussed the role of public-private partnerships in creating policies that facilitate digital transformation. She stressed the importance of a robust legal framework for cybersecurity, digital literacy, and taxation. Ms. Kimotho called for more collaboration between the private sector and government to create a digital ecosystem that is conducive to growth and job creation.

Finally, Dr. Shikoh asked the panelists what specific policy changes or initiatives would unlock the smartphone market for Africa, particularly in making smartphones affordable and of high quality.

Dr. Chidede pointed to the need for AfCFTA to support local manufacturing and industrialization. He mentioned that AfCFTA is working to remove import duties on goods produced within Africa to make products more affordable. He emphasized that high-quality products should not be compromised, and the focus should be on reducing costs through supportive policies and removing tariff barriers.

Mr. AbdelBary noted that quality should not be a concern for African manufacturers, as Egypt's local production already meets international standards. He emphasized that to compete globally, African manufacturers must meet these high-quality standards and certify their products. He also mentioned that logistics and transportation within Africa need improvement, as shipping goods from Africa to other parts of the continent can take too long and cost too much.

Mr. Mwandia emphasized the need for African countries to collaborate and drive digital transformation. He urged countries to foster partnerships and focus on long-term transformation rather than just growth. He noted that digital transformation requires building capacity and aligning efforts across sectors.

Mr. Mutiga discussed the importance of tax incentives, particularly VAT and customs, to reduce the cost of local manufacturing. He argued that these tax incentives could help level the playing field and create a favorable environment for local industries. He also highlighted the issue of power fluctuations, noting that reliable energy is crucial for the tech industry to thrive.

### Conclusion

The panel discussion highlighted the critical role of collaboration—between governments, the private sector, and regional bodies—in unlocking Africa's smartphone market. The key to success lies in creating policies that support local manufacturing, reducing trade barriers, improving infrastructure, and ensuring that smartphones are affordable and accessible to all. The insights shared by the panelists emphasized the importance of a collective effort to make digital technologies, including smartphones, an integral part of Africa's digital transformation.

## 2.5 Smartphones: What does Africa want? Presenting results from Qhala Research and Insights from African OEMs



Dr. Wanjiru presented the findings of a research study aimed at understanding the factors hindering smartphone adoption across Africa. The research was conducted in several African countries, starting with Kenya, Rwanda, and Zambia. The study aimed to identify the reasons why, despite significant growth in mobile subscriptions and network coverage, smartphone adoption has lagged behind in these regions.

Dr. Wanjiru highlighted the significant growth in mobile network coverage across Africa. Currently, 87% of Africans have access to mobile network services. This is a result of the heavy investments made by Mobile Network Operators (MNOs) to expand broadband services across the continent. The mobile

subscription rate is currently at 44%, and it is expected to reach 50% by 2030. However, Dr. Wanjiru pointed out that, despite this growth in mobile subscriptions, smartphone adoption remains behind, with Sub-Saharan Africa having the lowest smartphone adoption rate, currently at 51%. She also emphasized the usage gap, with over 70 million people in Sub-Saharan Africa having access to mobile network services but not using them.

In the study, Dr. Wanjiru and her team sought to identify the underlying reasons for this gap. She explained that the research included interviews with customers, mobile network operators, and phone sellers in the three countries. Several barriers to smartphone adoption were identified, which were grouped into two categories: factors affecting the ability to pay and factors affecting willingness to pay.

### **Ability to Pay**

Dr. Wanjiru noted that device affordability was the most significant barrier to smartphone adoption. Many participants in the study reported that the cost of smartphones was too high for most people in these regions. To address this, Dr. Wanjiru shared suggestions made by participants. In Kenya, device financing services are commonly used by people who cannot afford to pay the full cost of a smartphone upfront. However, she pointed out that these services were not well-known in Rwanda and Zambia. She recommended that MNOs and governments should promote the benefits of device financing through digital ambassadors to help raise awareness in these countries.

Another solution identified in the study was the use of refurbished phones. Many participants, particularly in Zambia, expressed that refurbished smartphones were a more affordable alternative to new devices. Dr. Wanjiru highlighted a key concern among participants: the regulation in some African countries that prohibits the sale of refurbished phones. She suggested that policymakers consider revising these regulations to allow for the sale of high-quality refurbished smartphones at lower prices, making them more accessible to the general population.

In Rwanda, the Connect program, which helps people, particularly in rural areas, own smartphones, was recognized as a successful initiative. Dr. Wanjiru mentioned that participants in Rwanda suggested the implementation of similar programs in other countries, potentially using the Universal Service Fund to support such initiatives. The program's success in helping people own smartphones and share them within households was noted as a potential model for other regions.

Dr. Wanjiru also discussed smartphone insurance as another possible solution. Many participants reported that the high cost of repairing or replacing a damaged or lost smartphone prevented them from adopting one. She explained that participants across all three countries expressed interest in smartphone insurance services, where they could pay between 1% and 5% of the total cost of the device for insurance coverage. This would make smartphones more accessible to those who are concerned about the cost of repairs or replacement.

### **Data Affordability**

In terms of data affordability, Dr. Wanjiru emphasized that high data costs were a significant barrier to smartphone adoption. Even among people who own smartphones, many do not use them regularly due to

the high cost of data. Some participants suggested that the expiration period for data bundles should be extended, making them more affordable and accessible to a broader range of people.

Promotions were also seen as a way to increase internet usage. Dr. Wanjiru cited that, in Rwanda, many people take advantage of promotions to use the internet more frequently. She noted that participants in the study suggested that more frequent data promotions would encourage greater internet usage.

Although device financing has been successful in Kenya, Dr. Wanjiru pointed out that it is not as widely adopted in Rwanda and Zambia. In Kenya, participants reported a lack of transparency in device financing services. She recommended that MNOs improve the transparency of these services to build trust with customers. In Rwanda, participants suggested that phones should be offered through social groups rather than just through MNOs, as people tend to trust group-based initiatives more than corporate offerings.

## Willingness to Pay

Dr. Wanjiru also addressed factors that influence willingness to pay for smartphones. She noted that one of the most significant factors was the connectivity experience. Many participants, particularly in rural areas, reported poor internet quality, which discouraged them from using their smartphones. Dr. Wanjiru emphasized the need for MNOs to improve network coverage and internet quality, especially in rural areas.

Another issue affecting willingness to pay was digital literacy. Dr. Wanjiru mentioned that many people in rural areas are unaware of the benefits of using a smartphone. She suggested that MNOs and governments could collaborate with local influencers or digital ambassadors to provide community-based digital literacy programs. This would help raise awareness of the advantages of smartphone usage and encourage more people to adopt these devices.

Social and cultural factors also played a significant role in hindering smartphone adoption. Dr. Wanjiru shared that in some communities, cultural or religious beliefs discourage smartphone use. For example, some people believe that smartphones are tools of evil. She suggested that working with community leaders, such as religious leaders, could help change these perceptions and demonstrate the benefits of smartphone usage.

Dr. Wanjiru also pointed out that content relevance was a critical issue. Many participants said that they could not understand content that was primarily in English. In Kenya, where Safaricom collaborated with Google to provide information in Swahili, people expressed a preference for Sheng, a local dialect. Dr. Wanjiru recommended that content be made more relevant by including locally relevant topics, such as agriculture, and pre-installed applications like weather forecasts and farming tips.

In terms of smartphone features, Dr. Wanjiru highlighted that many young people in Zambia expressed a desire for smartphones with good cameras and large storage capacity. In Zambia, where power outages are frequent, people also requested smartphones with long battery life. Dr. Wanjiru emphasized that these features should be considered when manufacturing smartphones for the African market.

## Conclusion and Recommendations

Based on the findings, Dr. Wanjiru provided several key recommendations to improve smartphone adoption in Africa. These included:

1. Extending the expiration period for data bundles to make internet access more affordable.
2. Implementing community-based digital literacy programs to educate people on the benefits of smartphones.
3. Promoting device financing and smartphone insurance services to reduce the financial burden of owning a smartphone.
4. Legalizing and establishing a market for refurbished smartphones to provide affordable options for consumers.
5. Improving network quality, particularly in rural areas, to ensure a better connectivity experience.
6. Offering more relevant content in local languages and dialects to make smartphones more appealing to diverse communities.

Dr. Wanjiru concluded by stressing the importance of understanding local needs and challenges when designing and manufacturing smartphones for the African market. She also emphasized the potential of leveraging community-based initiatives, such as the Connect program in Rwanda, to increase smartphone adoption across the continent.

## 2.6 Africa's manufacturing and Assembly Capability: Lessons from Rwanda

Mr. Fidel Karenzi, Sr. Technologist, Digital Age Infrastructure & Platforms Interoperability, Rwanda Ministry of ICT and Innovation, highlighted key insights into Africa's manufacturing and assembly ecosystem. He began by acknowledging the efforts of the organizers, particularly Qhala, for facilitating the presentation of research findings on this critical topic. He emphasized the timeliness of the discussion, as African governments are prioritizing digitization to drive their digital economies. Rwanda, he noted, has made digitization a central focus, recognizing the importance of electronic devices in ensuring citizens can access and utilize online services effectively. With a population of 1.4 billion people, Africa presents a significant potential market for homegrown solutions. However, he pointed out that for a manufacturing company to be profitable on the continent, it must produce at least 5 million devices annually, a scale that requires regional collaboration to establish a common market. He stressed the need for governments to work together through platforms like the African Continental Free Trade Area (AfCFTA) to unlock this potential and address market fragmentation.

Mr. Karenzi underscored the importance of strategic partnerships with Electronic Manufacturing Services (EMS) and Original Equipment Manufacturers (OEMs). Such partnerships, he explained, are vital for technology transfer, knowledge sharing, and capacity building. Currently, Africa's manufacturing ecosystem is heavily dominated by imports from countries like China. By attracting these manufacturers to establish operations within Africa, production costs could be reduced, devices would become more affordable, and local capacity would be enhanced. He also emphasized the critical role of telecom companies in this ecosystem, noting their large subscriber bases. Telecom companies, he argued, could



play a transformative role by committing to the uptake of locally manufactured devices, thus ensuring consistent demand. Some manufacturers, he added, have requested governments to implement minimum uptake agreements as part of their manufacturing support strategies.

Highlighting Rwanda's progress, Mr. Karenzi shared the success of the Connect Rwanda initiative, which focuses on affordability and accessibility. In its first phase, smartphones were distributed free to individuals who lacked access to such devices. The second phase leveraged partnerships, such as one with Netflix, to provide affordable smartphones priced at just \$16 per device. Since the end of last year, the initiative has distributed over 1.1 million smartphones, proving the impact of affordability on penetration. He noted that citizens at the bottom of the pyramid are primarily concerned with functionality over brand names, making affordability a critical factor in driving adoption. In addition to smartphones, Rwanda has advanced in the automotive sector with the establishment of a Volkswagen assembly plant, which produces electric vehicles for local use and export to African markets. The Rwandan government has introduced measures to support electric vehicle adoption, including reducing electricity tariffs and removing VAT and excise duties on imports.

In his conclusion, Mr. Karenzi reiterated the importance of addressing barriers such as market access, production challenges, and affordability to unlock Africa's manufacturing potential. He stressed the need for collaborative efforts between governments, manufacturers, and telecom companies to create a sustainable and inclusive ecosystem. Furthermore, he emphasized the role of research and development (R&D) in creating solutions tailored to Africa's unique needs, such as devices with longer battery life for regions with limited electricity, agriculture-specific tools, and accessible technologies for persons with disabilities. He called on all stakeholders to leverage Africa's untapped potential and build a robust manufacturing ecosystem that empowers its citizens and contributes to its digital transformation.

## 2.7 The Egyptian Experience in creating a conducive environment for Sustainable Local electronics manufacturing



Mr. Yasser AbdelBary shared Egypt's comprehensive strategy to position itself as a leading destination for design and innovation, particularly in the electronics manufacturing sector. He emphasized that research and development (R&D), along with design and innovation, are central to Egypt's industrialization efforts. These pillars are driving the country's push to become a competitive hub for electronics production and to increase its share in the global market.

### Strategic Focus Areas

AbdelBary outlined Egypt's focus on two critical domains: design and ICT sector development. He highlighted that the ICT sector now contributes 3.2% to Egypt's GDP and is growing at an annual rate of 17%. The country is particularly aiming to boost its ICT exports, with a target of reaching \$9 billion by 2027.

## Key Pillars of Egypt's Electronics Manufacturing Strategy

The strategy relies on several key pillars:

1. **Attracting Focus Areas/Products:** Egypt seeks to identify products that can be produced locally and have a strong demand in both local and regional markets.
2. **Investing in Human Capital:** With a population of over 108 million, Egypt's most valuable asset is its people. AbdelBary stressed the importance of upskilling talent, especially in the ICT sector, which produces 50,000 ICT graduates annually from a pool of 730,000 graduates in total.
3. **Empowering R&D and Innovation:** Fostering innovation and providing the necessary support for research in electronics manufacturing is crucial for building a competitive industry.
4. **Enabling Local Manufacturing:** Egypt is focusing on creating an enabling environment for local manufacturing, which includes resilient policies and regulations that support the industry.

## Identifying Opportunities and Market Demand

Egypt's approach to identifying opportunities for electronics manufacturing includes analyzing local and regional market demands. AbdelBary stressed the need to understand existing gaps and leverage them to boost local manufacturing capabilities. For example, Egypt's local demand for electronics is substantial, with over 300 million units consumed annually, including smart meters. By focusing on products that meet local demand, such as mobile phones and telecommunication devices, Egypt is building a solid foundation for a thriving electronics manufacturing industry.

## Pushing Local Providers and International Brands

A major part of Egypt's strategy is encouraging local providers to start production domestically, while also pushing international brands to assemble their products in Egypt. This move has resulted in the completion of manufacturing lines for mobile phones and telecommunication devices. Egypt has attracted significant brands to assemble and produce locally, including Nokia, Infinix, Xiaomi, Oppo, Vivo, Samsung, and Micromax, producing over 8 million units per year.

## The Role of Export and Local Manufacturing

AbdelBary highlighted that Egypt's electronics export sector is growing, with exports of electronic goods increasing from \$1.32 billion in 2017 to a projected \$3 billion by 2026. The country's local manufacturing capacity, bolstered by production plants for smart meters and mobile devices, positions Egypt as a major player in the electronics market, especially in North Africa.

## Challenges and Successes

Mr. AbdelBary spoke candidly about the challenges of attracting international brands to manufacture locally. Initially, international companies were hesitant, so Egypt decided to prove its capabilities by starting local production on its own. This proof of concept has paid off, as Egypt now produces for global brands, and local facilities for international companies like Vivo have been established.

## Egypt's Role as a Regional Hub

Egypt is emerging as a regional hub for electronics manufacturing, particularly for consumer electronics and home appliances. AbdelBary mentioned that companies from South Korea, Germany, and other

countries, such as Sumitomo, Yazaki, Beko, and Bosch, have established manufacturing facilities in Egypt. These partnerships help build a strong local ecosystem and provide opportunities for local talent development, with Egypt qualifying 15,000 people annually through vocational training programs.

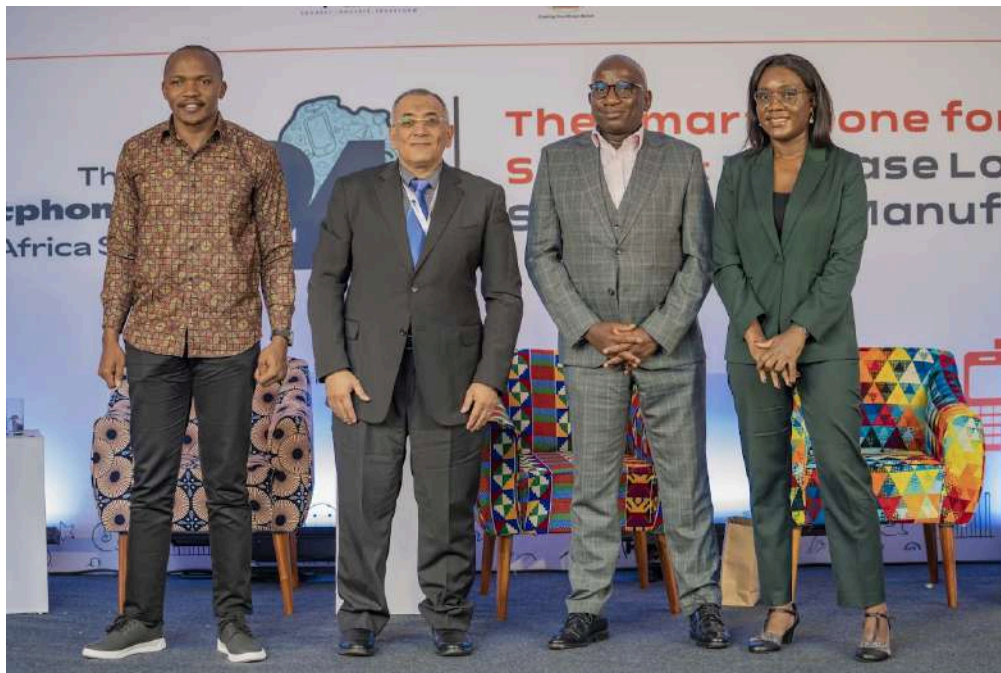
#### Export Success and Investment Opportunities

AbdelBary also noted that over 75 companies in Egypt are exporting designs to global markets, highlighting the country's growing prominence in electronics manufacturing. He mentioned that there is significant investment potential in the ICT sector, with opportunities for \$400,000 investments over a three-year period in various ICT domains. Furthermore, Egypt is committed to investing in design training, with 5,000 design professionals trained yearly.

#### Conclusion

Mr. AbdelBary's presentation underscored Egypt's strategic vision for becoming a competitive hub for local electronics manufacturing. By focusing on R&D, innovation, and local capacity building, Egypt is laying the foundation for a robust electronics industry. Through a combination of fostering local production, attracting international brands, and investing in human capital, Egypt is positioning itself as a key player in the regional electronics manufacturing market, with the potential to drive economic growth and industrialization across Africa.

## 2.8 Panel: Smartphone Manufacturing in Africa: Opportunities and Challenges



**Moderator:** Dr. Rachel Sibande, Gates Foundation

- Mr. Michael Mutiga, Chief Business Development & Strategy Officer, **Safaricom PLC**
- Mr. Lucas John Omollo, HSC – Chief Manager, ICT & Smart City Solutions, **Konza Technopolis**
- Mr. Yasser AbdelBary, Executive Director of Electronics Industry, Information Technology Industry Development Agency, ITIDA, **Egypt**
- Mr. Aaron Mwandia - Deputy Director - Digital Technology & Innovations, Ministry of ICT **Zambia**

The panel discussion on advancing smartphone manufacturing in Africa, moderated by Dr. Rachel Sibande from the Gates Foundation, brought together prominent experts from diverse sectors. Panelists included Mr. Michael Mutiga, Chief Business Development & Strategy Officer at Safaricom PLC; Mr. Lucas John Omollo, Chief Manager of ICT & Smart City Solutions at Konza Technopolis; Mr. Yasser AbdelBary, Executive Director of Electronics Industry at ITIDA, Egypt; and Mr. Aaron Mwandia, Deputy Director of Digital Technology & Innovations at Zambia's Ministry of ICT. The session provided valuable insights into Africa's potential to harness its resources and capabilities for smartphone production while addressing key challenges.

### Highlighting the Current Landscape

Less than 44% of Africans own smartphones, leaving millions excluded from digital services, economic opportunities, and the vision of a connected continent. Panelists emphasized that increasing smartphone production and adoption is not only about bridging the digital divide but also about unlocking economic growth and technological advancement.

Egypt was highlighted as a rising electronics hub, producing 7 million smartphones annually, a figure projected to reach 30 million by 2027. With the ICT sector contributing 5.8% to GDP, Egypt has created 280,000 jobs, supported by 730,000 annual university graduates, 28% of whom are STEM graduates. Egypt's strategy also includes producing complementary electronics like lithium batteries, semiconductors, and smart meters, diversifying its economy.

Kenya is set to produce its 1 millionth smartphone this year and plans to roll out a locally produced 5G smartphone next year. Similarly, Rwanda is producing smartphones annually and implementing initiatives like the Connect Rwanda Program, which distributes devices to underserved populations.



Zambia is emerging as a global player in the lithium battery supply chain, with significant spodumene deposits—a lithium-rich mineral critical for batteries. Investments in Zambia's mining sector are positioning it as a supplier for smartphone batteries, electric vehicle batteries, and renewable energy storage solutions.

Additionally, the Democratic Republic of Congo (DRC) plays a critical role in global smartphone manufacturing, producing approximately 70% of the world's cobalt, a key

component in lithium-ion batteries.

### Exploring Collaborative Opportunities

Mr. Yasser AbdelBary began identified key industries for partnerships in smartphone manufacturing, such as housing, plastics, cables, and chargers. He stressed the importance of Public-Private Partnerships (PPPs) in providing infrastructure and incentives to attract investment. He noted that Africa's local talent pool is a vital factor for manufacturers considering investments.

Mr. Michael Mutiga of Safaricom highlighted recommendations for successful PPP models between mobile network operators (MNOs) and governments, emphasizing the need to collaborate with Original Equipment Manufacturers (OEMs) and leverage local distribution networks. He also advocated for device financing models like pay-as-you-go schemes to enhance affordability, especially in rural areas.

Special Economic Zones and Skills Development

Mr. Lucas John Omollo shared Kenya's success story with Konza Technopolis, a special economic zone designed to attract technology manufacturers. The zone offers tax waivers, a one-stop shop for investors, and access to utilities like power and water, reducing production costs. He revealed plans to admit 500 students to the Kenya Advanced Institute of Technology next year to develop skilled professionals for technological innovation.

The panel also addressed the need to align university curricula with industry needs. Representatives from Konza stressed that educational reforms are critical to producing skilled professionals who can drive innovation in software development and commercialization.

### **Empowering Women in Smartphone Production**

The discussion highlighted that women form the majority of factory workers in smartphone manufacturing, showcasing the industry's potential to empower women through job creation. As smartphone production scales, women's economic participation in the sector is expected to grow.

### **Leveraging Data for Growth**

The panel also explored how data analytics can drive smartphone adoption. Mr. Mutiga described how Safaricom analyzes network connectivity data (e.g., 4G and 5G device usage) to develop solutions tailored to rural areas and support credit-scoring mechanisms for device financing.

### **Future Outlook for Smartphone Manufacturing**

Panelists outlined a vision for the future of smartphone manufacturing in Africa:

- Safaricom plans to improve battery life, explore local chip manufacturing, and launch a 5G-compatible smartphone and tablet by 2025.
- Egypt is investing in local value addition and R&D to strengthen its position as an electronics hub.
- Zambia's lithium mining investments are expected to support global smartphone and electric vehicle battery supply chains.
- Mr. AbdelBary concluded by emphasizing the need to increase local value addition and invest more in research and development to make Africa a competitive hub for smartphone manufacturing.



## 2.9 Panel: Regulatory and Taxation Challenges Faced by African Manufacturers



The panelists included Mr. Sebastien Codeville, CEO and Founder of KaiOS; Mr. Zachary Kazzaz, Senior Program Officer for Digital Connectivity at the Bill & Melinda Gates Foundation; and Mr. Yasser AbdelBary, Head of the National Strategy for the Electronics Industry in Egypt. Moderated by Ms. Maureen Amakabane, representing The Tony Elemelu Foundation, the discussion delved into regulatory, technological, and financial challenges faced by African manufacturers while exploring actionable solutions.

### Mr. Sebastien Codeville, CEO and Founder, KaiOS



Mr. Sebastien Codeville introduced himself as the founder and CEO of KaiOS, a small technology company that has connected 175 million people to the internet, primarily in South Asia. He explained that KaiOS specializes in creating "smart feature phones," devices that bridge the gap between basic 2G phones and smartphones.

Mr. Sebastien explained that the cost of a basic 2G phone today is around \$5–\$6, while entry-level smartphones cost approximately \$50. He highlighted the significant price gap between these options, emphasizing the need for innovative solutions to address this disparity. He stated, "We can bring the smartphone a little cheaper, but it becomes increasingly difficult. Alternatively, we can make feature phones smarter and 4G-enabled to bridge the gap."

He elaborated on KaiOS's successful partnership with Jio in India, which resulted in the production of a 4G-enabled phone costing only \$15. This phone includes features such as NFC, internet access, YouTube, social media, mobile payments, and even TV broadcasts. Mr. Sebastien noted that 140 million units of this device have been sold in India. He then stressed the importance of replicating this model in Africa, stating, "If there is willingness and scale, we are very open to creating a similar platform with local manufacturers."

Mr. Sebastien further explained the scalability of the model. In India, the involvement of a single operator, one government, and multiple manufacturers enabled rapid growth. He emphasized that KaiOS provides turnkey software solutions, working with local developers and manufacturers to meet specific regional needs.

When asked about addressing upfront capital challenges, Mr. Sebastien confirmed that KaiOS already has a comprehensive range of applications and hardware compatibility in place. "The platform is ready for production once a partnership is established," he stated.

To connect with KaiOS, Mr. Sebastien directed attendees to their website, **kaiOS.com**, or through the event organizers. He concluded with a call for partnerships in Kenya, where KaiOS plans to launch a large-scale pilot project aimed at connecting 300,000–500,000 people to the internet and financial services through subsidized devices.

### **Mr. Zachary Kazzaz, Senior Program Officer, Digital Connectivity, Bill & Melinda Gates Foundation**



Mr. Zachary Kazzaz began by introducing his role at the Gates Foundation, highlighting his focus on digital connectivity. He noted that local manufacturing requires a collaborative effort involving private and public sectors, as well as multilateral and development organizations. He explained that investments in manufacturing infrastructure, such as battery production and PCB development, require tens of millions or even billions of dollars. "These levels of funding go beyond philanthropy and require access to capital markets, multilateral institutions like the World Bank, and private investment," he noted.

Mr. Kazzaz emphasized the Gates Foundation's role as a convener, facilitating connections and amplifying expert voices. He said, "It's inspiring to see the diverse expertise present at this event and its potential to accelerate manufacturing development on the continent."

In response to a follow-up question on how local manufacturers can engage in the philanthropy space, Mr. Kazzaz called for a "coalition of the willing" and urged manufacturers to align their vision with initiatives like the African Continental Free Trade Area (AfCFTA). He added, "We need manufacturers who are willing to adapt, for example, shifting from producing general screws to specialized screws required for smartphones."

Mr. Kazzaz concluded with a crucial reminder: "As we focus on smartphone manufacturing, we must address the needs of the 70% of Sub-Saharan Africans who do not have access to smartphones, rather than marginally reducing costs for those who already have them."

### **Mr. Yasser AbdelBary, Head of National Strategy of Electronics Industry, Egypt**



Mr. Yasser AbdelBary introduced himself as the Executive Director of Electronics Industry Programs under Egypt's Ministry of ICT. He highlighted his 30 years of experience in electronics manufacturing and research and development.

When asked about lessons Kenya could learn from Egypt's journey, Mr. AbdelBary emphasized two key areas: capacity building and collaboration in innovation. "These are areas where immediate action and cooperation can take place," he said. He also stressed the importance of developing 'feeding industries,' which support the electronics sector by creating robust supply chains.

Mr. AbdelBary highlighted the need to revisit customs regulations and trade agreements between Egypt and Kenya to enhance collaboration. He stated, "Adjusting these frameworks can significantly benefit both nations."

In his concluding remarks, Mr. AbdelBary warned against the dangers of the black market and smuggled goods, stating, "These issues can undermine local initiatives and destroy legitimate operations. We must collectively protect the local industry from such threats."

### **Mr. Linus Melly - Senior Policy Manager, GSMA**

Mr. Linus Melly began by outlining GSMA's core mission, which is to identify and communicate opportunities for expanding broadband use while addressing barriers to technology adoption. He emphasized the significant digital divide in Africa, where 40% of the population does not use broadband, and 20 million individuals resist adopting new technology. Only 500 million Africans are broadband users, leaving a vast untapped market.



GSMA works to demonstrate to governments the economic potential of targeting these underserved groups, advocating for alignment with digital transformation goals embedded in many

governments' bottom-up economic plans. To encourage smartphone adoption, GSMA conducts studies to provide data-driven insights, highlighting opportunities to transition the 57% of mobile users still reliant on feature phones. However, Mr. Melly warned that phasing out 2G must be approached cautiously to avoid marginalizing these users.

He also discussed the need for investments in local assembly and manufacturing to foster competitiveness. This would ensure consumers have access to affordable, high-quality devices, enhancing digital inclusion across the continent.

Mr. Melly provided an overview of GSMA's origins and operations. GSMA was established to address the need for harmonized communication systems across borders, facilitating roaming and billing among member countries. Over time, it expanded to support mobile technology by helping vertical tower companies and other stakeholders make informed decisions.

GSMA operates as a membership organization but also engages non-members through workshops that provide value to all stakeholders. These workshops are designed to promote collaboration and equip participants with practical tools and insights for engaging in the mobile technology space.

GSMA supports its members by offering a robust pool of data collected from field engagements and making publications publicly available to inform policy and business strategies. Mr. Melly also highlighted Africa's untapped potential in smartphone manufacturing, noting that one-third of the world's raw materials for components are sourced from the continent. He stressed the need for Africa to harness these resources and align them with global technological trends.

Mr. Melly concluded by underscoring the urgency of reducing the digital usage gap. He advocated for a global focus on transitioning everyone to 4G while preparing for the rollout of 6G, ensuring no one is left behind in the digital transformation journey.



## 3.0 Day 2: 22nd November 2024

### 3.1 Ms. Aneliya Muller, Senior Digital Development Specialist, World Bank



Ms. Aneliya Muller provided detailed insights on expanding consumer financing schemes for customers, which is a key action item highlighted during the summit. She began by introducing the World Bank's areas of operation and its capacity to facilitate this initiative.

Ms. Muller emphasized the critical challenge of development, pointing out that many areas remain disconnected from the internet or suffer from extremely poor connectivity. She highlighted

factors affecting device affordability, including the high prices of entry-level smartphones, which are often measured against a country's GDP.

She outlined the World Bank Group's focus areas and its various branches, detailing the roles they play in addressing this issue. Specific focus areas include:

1. Subsidies:

- Providing subsidies to financial institutions and end-users at the “bottom of the pyramid,” who face difficulties accessing mobile devices or related services.
- Offering devices at reduced costs, particularly when purchases are made directly through Internet Service Providers (ISPs).
- Facilitating bulk equipment purchases for schools, healthcare workers, and civil servants to enhance access to mobile devices in key sectors.

2. Guarantee Mechanisms:

- Introducing guarantee windows for risk-sharing in consumer lending, aimed at encouraging financial institutions to offer more favorable terms.

3. Policy and Regulation:

- Advocating for reduced taxation and import duties through policy dialogue.
- Supporting Universal Service Funds (USFs) to enable innovative business models.

Ms. Muller further elaborated on The GSMA Handset Affordability Coalition, an initiative dedicated to closing the digital usage gap through collaborative efforts among stakeholders in the device ecosystem. This coalition emphasizes partnerships, consultations, and data analytics to foster innovative financing and accessibility models.

She noted that device financing pilots are gaining momentum across Africa, citing two examples:

- Mozambique's Digital Acceleration Project, which provides subsidies to low-income groups.



- Rwanda's Digital Acceleration Project, led by the Development Bank of Rwanda (BRD) and the Rwanda Information Society Agency (RISA), which includes a Smart Device Subsidy Window designed to enhance digital accessibility.

Ms. Muller also discussed the initial design considerations for subsidies, which involve:

- Targeting specific groups through social protection programs.
- Determining appropriate subsidy levels.
- Assessing co-payment requirements for beneficiaries.

Budgets are structured to support a reasonable number of beneficiaries, focusing on entry-level smartphones or smart feature phones to maximize affordability.

These initiatives aim to foster greater smartphone ownership, bridge the digital divide, and enable inclusive connectivity, ultimately driving participation in the digital economy.

Ms. Muller concluded by acknowledging that while substantial results from these projects are yet to materialize, she remains optimistic about the potential for greater collaboration among stakeholders at the summit to advance these critical initiatives.

### 3.2 Panel Discussion: Increasing Smartphone Access in Africa: the nuts and bolts



The panel discussion, moderated by **Dr. Wanjiru Mburu**, Head of Research at Qhala, centered on ensuring that African consumers receive devices that meet their needs while maintaining quality and safety.

Panelists included:

- **Linas Melly:** Senior Policy Manager at GSMA
- **Dr. Nkundwe Mwasaga** - Director General of the ICT Commission, Tanzania.
- **Sebastian Codeville:** Representative from KaiOS Technologies
- **Adam Lane:** Deputy CEO of Government Affairs, Huawei Kenya
- **Bruce Onchere:** Device Financing Lead, Safaricom PLC

During the panel discussion, moderated by Dr. Wanjiru, head of research at Qhala, a diverse group of experts convened to address the pressing issues surrounding local manufacturing and consumer needs in Africa's mobile device market. The panel featured notable figures, including Bruce Oncher from Safari Com PLC, Adam Lane from Huawei, Sabastian Codeville from KOICTech, Linas Mwere from GSMA, and Dr. Nkundwe Maasaga from the ICT Commission in Tanzania.

The discussion commenced with an emphasis on the importance of ensuring that smartphones manufactured for the African market are not only affordable but also equipped with features that meet the specific needs of consumers. Linas Mwere highlighted the significant opportunity within the African market, noting that while there are approximately 1.2 billion people in sub-Saharan Africa, only about 500 million are currently using some form of connectivity. He pointed out that a substantial number of individuals are still reliant on feature phones, which presents a challenge and an opportunity for the industry to innovate and expand access to mobile broadband.

Sebastian Codeville contributed to the conversation by discussing the essential features of entry-level smartphones, emphasizing the need for devices that support 4G technology while maintaining backward compatibility with older networks. He also underscored the importance of battery life and the integration of financial services into the operating system, aiming to enhance financial inclusion and education among users. Codevill argued that to encourage consumers to transition from 2G to 4G smartphones, it is crucial to demonstrate the tangible benefits of upgraded devices.



Dr. Mwasaga provided insights into the regulatory landscape in Tanzania, announcing the imminent launch of a type approval lab designed to certify devices for safety and quality. This initiative aims to ensure that smartphones meet the necessary standards before entering the market, thereby enhancing consumer trust and safety.

Linus Melly from GSMA emphasized the transformative impact of smartphones, particularly during the COVID-19 pandemic. He highlighted the need for user-friendly features such as mobile payments and mapping to enhance user experience. Dr. Mukumwe Maasaga, Director General of the ICT Commission in Tanzania, discussed the evolving digital landscape in Africa and the role of smartphones in supporting digital public infrastructure. He emphasized the importance of addressing the specific needs of rural populations, including the need for affordable devices with long battery life.

The panelists also discussed the challenges of affordability and the need for innovative solutions to make smartphones accessible to a broader audience. They explored the potential of subsidized data plans and tiered taxation on data usage as strategies to alleviate the financial burden on consumers. The importance of localized content and applications was also emphasized, with panelists agreeing that creating relevant and engaging content could drive higher usage rates among users of simpler devices.

As the discussion progressed, audience members posed questions regarding the balance between cost and functionality in smartphone design. They expressed concerns about the limitations imposed by low-cost devices, which often restrict access to a wider range of applications and services. The panelists acknowledged these challenges and reiterated the need for collaboration among stakeholders to develop solutions that cater to the diverse needs of African consumers.

In conclusion, the panel highlighted the critical role of collaboration, innovation, and regulatory support in advancing smartphone adoption in Africa. The discussion underscored the potential for growth in the mobile device market, driven by a commitment to understanding and addressing the unique needs of consumers across the continent. The session ended with a call to action for all stakeholders to work together to create a more inclusive and accessible digital landscape for Africa.



### 3.3 Panel 1: State of electronics manufacturing in Africa



The session, moderated by Mr. Ben Roberts, Chair of the ICT Sector Board at the Kenya Private Sector Alliance (KEPSA), began with an introduction to the agenda, focusing on the challenges and opportunities in electronics manufacturing and innovation in Africa. Mr. Roberts provided the audience with an explanation of key terms, such as surface mount technology (SMT) and printed circuit boards (PCBs), emphasizing their significance in the manufacturing process. To illustrate his point, he used examples of Kenyan-made products, including beaded lanyards and bracelets, to highlight the blend of local creativity and imported components. He noted that while the design and assembly were done locally, some of the materials, such as beads, were sourced from the Czech Republic, demonstrating the interdependence of global and local resources in manufacturing.

Mr. Roberts explained the inner workings of a PCB, which serves as the backbone of most electronic devices. He described how components, like connectors and chips, are assembled on these boards using methods such as soldering and SMT. He stressed that components for PCBs often come from various countries, such as Japan and Indonesia, reflecting the complexity of the supply chain in the electronics industry. By unpacking these details, Mr. Roberts set the stage for the panel discussion, aiming to equip the audience with a better understanding of the technical jargon and the challenges faced by African manufacturers.

The panel discussion featured insights from industry leaders and government representatives, each shedding light on the hurdles and opportunities in their respective regions. Their observations ranged from

the need to build local competencies and supply chains to fostering collaborations across borders and improving government policies.

### Ahmed Alaa, Managing Director, Sudotechs (Egypt)



Mr. Ahmed Alaa began by introducing Sudotechs, a technology development and consultancy company specializing in PCB design and feature development. He highlighted that one of the biggest challenges facing local developers in Africa is the lack of trust in homegrown solutions. This dependency on imported technology limits the market size for locally developed products and hinders the growth of domestic innovation. Mr. Alaa noted that African economies often fail to support local developers, which undermines efforts to localize technology solutions.

Mr. Alaa further elaborated on the inefficiencies within the supply chain, which make it difficult for smaller-scale developers to achieve economies of scale. Without the benefits of large-scale production, costs remain high, and competitiveness is compromised. He emphasized that these structural challenges discourage innovation and reduce the effectiveness of local manufacturing industries. The reliance on imported components adds complexity and costs to production, further weakening the potential for regional

growth.

To address these challenges, Mr. Alaa recommended prioritizing localization in both development and manufacturing processes. He stressed the importance of building robust local supply chains and fostering trust within domestic markets. Additionally, he called for investments in infrastructure and policies that would support small and medium enterprises (SMEs) in scaling their operations. With the right ecosystem, Mr. Alaa believes that African countries can reduce their dependence on imports and unlock the potential of local innovation.

### Latif Cherono, CEO, Gearbox Europlacer (Kenya)



Mr. Latif Cherono introduced Gearbox Europlacer as an Electronics Manufacturing Services (EMS) company that serves both local and international clients. He emphasized that 80% of the company's revenue comes from international markets, demonstrating their ability to compete globally. Mr. Cherono noted that Gearbox specializes in surface mount technology (SMT), a key process in electronics manufacturing. He held up a complex product designed by a Kenyan firm and manufactured by Gearbox to international



standards, challenging the perception that Africa cannot produce high-quality electronics.

Mr. Cherono discussed three primary challenges: competency, capacity, and collaboration. He shared that, initially, he was the only person with the expertise to run the SMT line due to his experience abroad. Building a skilled local workforce required significant investment in training, as there were no readily available SMT engineers in Kenya. He also pointed out that scaling operations was hindered by limited access to investment and government inefficiencies, such as delays in receiving tax reimbursements for imported equipment. These hurdles put startups at a disadvantage compared to more established international competitors.

To overcome these challenges, Mr. Cherono emphasized the need for collaboration among African manufacturers and the adoption of policies from successful models like India's National Policy on Electronics. He advocated for the establishment of localized supply chains to reduce dependency on imports and ensure just-in-time delivery systems.

### **Anthony Muthungu, CEO, TotoSci (Kenya)**



Mr. Anthony Muthungu introduced TotoSci as a Kenyan startup that manufactures USB chargers and cables, primarily serving industrial clients. He revealed that in the past year, the company produced 52,000 USB cables, with 70% supplied to industrial customers such as Gearbox Europlacer. Mr. Muthungu explained that TotoSci's long-term vision is to manufacture mobile phones, but they chose to start with accessories to better understand the market and build their capacity.

Mr. Muthungu highlighted two key challenges: consumer perception and taxation policies. He explained that many customers have a preconceived notion that locally manufactured products are inferior. This perception discourages purchases, despite the high quality of TotoSci's products. Additionally, he pointed out that Kenya's taxation framework imposes a 16% VAT on all businesses, regardless of their size or age. For startups, this creates a significant financial burden, making it harder to scale operations sustainably.

To address these challenges, Mr. Muthungu suggested implementing a progressive taxation system where tax rates increase as businesses grow. He also emphasized the importance of collaboration within the ecosystem, proposing that companies specialize in different components and work together to build complete products. By fostering partnerships, Mr. Muthungu believes that the industry can accelerate its growth and collectively achieve significant milestones.

### **Gideon Mojolaoluwa, Founder, Tapready Limited (Nigeria)**

Mr. Gideon Mojolaoluwa presented his company, Tapready Limited, which focuses on enabling contactless payments through software that works with NFC-enabled devices. He explained that Tapready bridges the gap between international and local payment systems, allowing merchants to accept payments using phones, terminals, and other devices. Mr. Mojolaoluwa highlighted the importance of integrating software with hardware to enhance digital payment systems, particularly in Africa, where unique challenges demand tailored solutions.



Mr. Mojolaoluwa cited a tollgate project in Nigeria to illustrate hardware limitations. The project required devices that supported both international and local card systems, but existing devices were incompatible with the latter, causing delays. He emphasized that such challenges demonstrate the need for localized hardware solutions to complement software innovations. Without suitable hardware, the potential of software to drive digital transformation remains underutilized.

To address these issues, Mr. Mojolaoluwa called for greater collaboration between hardware and software developers across Africa. He also stressed the importance of involving innovators in regulatory discussions to ensure policies are supportive of innovation. By creating an ecosystem that integrates hardware and software effectively, he believes Africa can lead in developing impactful and scalable digital solutions.

#### **Aaron Mwandia, Deputy Director, Digital Technology & Innovations, Ministry of ICT (Zambia)**



Mr. Aaron Mwandia represented Zambia's Ministry of ICT and discussed the government's efforts to boost electronics manufacturing through regional collaborations. He highlighted Zambia's partnership with the Democratic Republic of Congo to produce lithium-ion batteries, leveraging the region's abundant mineral resources, including cobalt, copper, and lithium. Mr. Mwandia noted that this initiative aims to support the growing demand for batteries in electric vehicles and energy storage solutions.

Mr. Mwandia identified several challenges, including the lack of manufacturing infrastructure in Zambia, which has historically been structured as a raw material exporter. He explained that this limits the country's ability to add value to its natural resources. Additionally, he pointed out that limited access to capital and skilled manpower further hampers the development of the manufacturing sector. These challenges are not unique to Zambia but are shared across many African nations.

To overcome these barriers, Mr. Mwandia emphasized the need for deliberate government policies to attract investment and build local competencies. He advocated for aligning national policies with regional frameworks like the African Continental Free Trade Area (AfCFTA) to create a more integrated and efficient manufacturing ecosystem. By addressing these issues, Zambia can unlock its potential and contribute to Africa's broader industrialization goals.

### **Karanja Gichiri, Head of Venture Management, Safaricom PLC (Kenya)**



Mr. Karanja Gichiri provided insights into Safaricom's East Africa Device Assembly Kenya (EADAK) plant, which focuses on assembling entry-level mobile devices. He reported that the plant has produced nearly one million devices in its first year, scaling from 2,000 to 6,000 devices per day. Mr. Gichiri explained that the company aims to address the digital divide by offering affordable smartphones tailored to local conditions.

Mr. Gichiri identified two primary challenges: market demand and supply chain inefficiencies. While there is significant interest in entry-level smartphones, affordability remains a barrier for many potential users. On the supply chain side, he noted that logistical delays and the need to maintain high inventory levels increase costs, making local assembly less competitive compared to global manufacturing hubs like China.

To address these challenges, Mr. Gichiri stressed the importance of long-term policy stability to attract further investment. He highlighted the role of favorable tax incentives in Safaricom's decision to establish its assembly plant in Kenya and called for consistent policies to support the industry. With the right framework, Mr. Gichiri believes Kenya can lead the region in electronics manufacturing and bridge the digital divide.

### 3.4 Panel 2: Remedies to boost local manufacturing - incentives and a business model perspective



**Moderator:** Ben Roberts, Chair of ICT Sector Board, at **Kenya Private Sector Alliance (KEPSA)**

**Panelists:**

- Mr. Ahmed Alaa, Sudotechs, **Egypt**
- Mr. Latiff Cheron, CEO Gearbox Europlacer, **Kenya**
- Mr. Anthony Muthungu, TotoSci, **Kenya**
- Mr. Gideon Mojolaoluwa, Founder, Tapready Limited, **Nigeria**
- Mr. Aaron Mwandia - Deputy Director - Digital Technology & Innovations, Ministry of ICT **Zambia**
- Mr. Karanja Gichiri - Head of Venture Management at East Africa Device Assembly Kenya (EADAK), **Safaricom PLC**



The session commenced with Mr. Karanja Gichiri - Head of Venture Management at East Africa Device Assembly Kenya (EADAK), **Safaricom PLC**, highlighting the pivotal role of governments in creating an enabling business environment for the technology sector. He emphasized the importance of implementing favorable fiscal policies, which have led to the successful establishment and maintenance of



local mobile phone assembly plants. According to Mr. Karanja, stability in government policies is essential for long-term investments in the sector. He also underscored the need for enhanced collaboration among stakeholders to further innovation and sustainability in mobile device development across the region.



Mr. Ahmed Alaa from Sudotech, Egypt, advocated for prioritizing localization in technology manufacturing. He stressed that robust supply chain value systems must be developed to support local industries at every stage. To achieve this, he called for increased financial support and facilitation from local governments. Mr. Alaa argued that innovation thrives when governments actively invest in and nurture supply chains, enabling the creation of locally produced

technology that meets the needs of their populations.



Kenya's policy landscape and its evolving approach to technology innovation were highlighted by Mr. Latiff Cherono, CEO of Gearbox Europlacer. He noted Kenya's significant progress in shifting from event-based policymaking to policy implementation. However, he pointed out the need for fast-tracking tax clearance processes for innovators and manufacturers to facilitate seamless operations. Mr. Cherono emphasized the importance of inter-agency collaboration in mobile device and product

manufacturing, as well as the scalability of systems that transcend political regimes. He also underlined the necessity of integrating intellectual property (IP) considerations into the scaling of manufacturing processes to protect and promote innovation in Africa.



Mr. Anthony Muthungu, Founder of TotoSci, reinforced the importance of supporting local manufacturing through initiatives like "Buy Kenya, Build Kenya," which encourages the consumption of domestically produced goods. He



advocated for product manufacturers to focus on creating high-value products tailored to local markets, which could strengthen the domestic economy. Mr. Muthungu also called for human-centered policies to support local innovators and proposed progressive taxation structures that align with the scale of operations of businesses. To foster a culture of innovation, he urged innovators to engage in mentorship programs that could inspire and empower the next generation of entrepreneurs.



The regional perspective was further elaborated on by Mr. Aaron Mwandia, Deputy Director of Digital Technology & Innovations at the Ministry of ICT in Zambia. He stressed the importance of public-private partnerships (PPPs) in balancing social and economic priorities. As citizens often prioritize social sector needs, integrating these

demands with digital technology is essential to demonstrate tangible benefits across communities. Mr. Mwandia also highlighted the necessity for African governments to align national policies with regional, continental, and global standards to ensure coherence and competitiveness. Furthermore, he emphasized investing in skilled manpower to build capacity for sustainable product manufacturing within African countries.



Lastly, Mr. Gideon Mojolaoluwa, Founder of Tapready Limited, addressed the misalignment between government regulations and the innovation value chain process. He noted that governments often fail to fully understand the intricacies of the value chain when developing regulatory frameworks. Mr. Mojolaoluwa urged policymakers to adopt a more nuanced approach by considering the specific socio-economic and demographic needs of their populations. He proposed a "Know Your Citizen (KYC)"

approach to guide product development and ensure that regulations and innovations address the realities of local communities effectively.

### 3.5 Panel 3: Regulatory Sandbox with AfCFTA for a one Africa approach. What regulatory agreements are required?



Moderator: Dr. Talkmore Chidede - Senior Digital Trade Expert at the AfCFTA Secretariat.

- Ms. Pren-Tsilya Boa-Guehe - Government Affairs & Public Policy Manager, Google.
- Dr. Nkundwe Mwasaga - Director General of the ICT Commission, Tanzania.
- Mr. Yasser AbdelBarry - Head of National Strategy for the Electronics Industry, Egypt.
- Ms. Evalyn Oloo - Technical Advisor on Trade, Ministry of Trade & Investment, Kenya.

The session, moderated by Dr. Talkmore Chidede, Senior Digital Trade Expert at the AfCFTA Secretariat, began with an introduction to the rationale behind creating a regulatory sandbox within the African Continental Free Trade Area (AfCFTA). Dr. Chidede emphasized the necessity of such an initiative, stating, “As a continent, if we need money, and also the need for a regulatory sandbox necessitated the creation of this panel. Once the idea of the smartphone materializes, we can use it as a pilot project for the regulatory sandbox within the free trade area—not only for smartphones but for any other technologies or

innovations coming up within the continent of Africa.” This framing set the tone for the panel's discussion on fostering innovation and addressing regulatory challenges.

Ms. Pren-Tsilya Boa-Guehe, Government Affairs & Public Policy Manager at Google, elaborated on the benefits regulatory sandboxes could bring to the smartphone and tech industries. She highlighted the versatility of technologies such as AI, noting, “The technology is similar in many use cases—for example, AI used for a photo library in the phone is the same one used for catching eye cancer in patients. Hence the need for regulatory sandboxes to assess and mitigate risks across different technologies.” She emphasized Google’s efforts to collaborate with governments to create frameworks that balance innovation and risk mitigation, underlining the potential of sandboxes to enhance the adoption of emerging technologies across Africa.

Dr. Nkundwe Mwasaga, Director General of the ICT Commission in Tanzania, addressed the tension between innovation and regulation. He pointed out that excessive government intervention can suppress innovation, proposing that regulatory sandboxes could provide a middle ground. “We need to have this regulatory sandbox, which will enable us, from the point of view of the government, to learn what innovators are doing and also give innovators a platform to test what they come up with.” He also stressed the importance of considering cultural and ethical differences in designing sandboxes at the continental level, reflecting on past mistakes in Tanzania where overly centralized frameworks lacked sufficient input from diverse sectors.

Mr. Yasser AbdelBarry, Head of the National Strategy for the Electronics Industry in Egypt, shared insights from his country’s approach. He stressed the need for strategies to protect local manufacturing in telecoms, maintain health standards for market products, and combat smuggling and counterfeit goods. He proposed the inclusion of an accreditation system within the sandbox to validate technologies and test incentives for private-sector participation, particularly in cybersecurity policies.

Ms. Evalyn Oloo, Technical Advisor on Trade at Kenya’s Ministry of Trade & Investment, suggested practical recommendations for a continental regulatory sandbox. She advocated for incentivizing private-sector participation and establishing clear communication channels with the public to build trust and understanding. Additionally, she recommended using the sandbox to test cybersecurity regulations and policies, fostering greater cohesion among African nations.



The panel collectively agreed on the transformative potential of regulatory sandboxes to advance AfCFTA’s digital trade goals. Sandboxes were recognized as controlled environments that facilitate collaboration between governments, innovators, and private-sector actors while balancing risk mitigation with innovation. Key design considerations included incorporating sectoral input to avoid pitfalls of centralization, focusing on critical areas like cybersecurity and ethics, and ensuring quality through accreditation systems. The panel also emphasized the importance of incentivizing

private-sector engagement and reducing taxation and import duties to support the ecosystem.



Dr. Chidede concluded by highlighting the potential of regulatory sandboxes to unify Africa's approach to technology and innovation within the AfCFTA framework. He called for collaboration among all stakeholders to realize this vision, ensuring the successful implementation of sandboxes to foster innovation and manage risks across the continent.

### 3.6 Moving Forward and Summary: Vision of the future for a Single African Digital Market powered by locally manufactured Smartphones



Moderator: Mr. Zachary Kazzaz, Senior Program Officer, Digital Connectivity, Bill & Melinda Gates Foundation

Panelists:

1. Dr. Shikoh Gitau, CEO, Qhala Limited
2. Mr. Themba Khumalo, Principal Advisor to the Secretary General, AfCFTA Secretariat

The discussion, moderated by Mr. Zachary Kazzaz, revolved around the feasibility and vision of producing smartphones entirely within Africa. To engage the audience, Mr. Kazzaz asked for their projected timelines for realizing this goal. Both Dr. Shikoh Mr. Kazzaz projected 2027. Audience members offered additional projections, with some extending the timeline to 2040. This diversity of opinions showcased varying levels of optimism and ambition among the stakeholders present.

Mr. Kazzaz elaborated on Qhala's work in addressing the technical functionality and necessary trade-offs to make an entry-level African smartphone feasible. He observed a strong spirit of collaboration and openness among summit attendees, emphasizing this as a crucial step toward addressing the complex technical, political, and economic challenges. He expressed optimism about the potential to provide affordable smartphones to 70% of Sub-Saharan Africa's population.

To ensure we manufacture Africa manufactures a smartphone in the not so distant future, Dr. Shikoh asked the pertinent question, "What do we need, what do we have, and where do we have it?" To start with, she deconstructed a smartphone to show its different components.

These are the components we need to manufacture a smartphone - having in mind we need 40% of these components locally sourced from the continent. Battery is already 20%, display glass is 25%, plating casing is 10%. We can find 45% of all the smartphone raw materials in Africa. DRC and Zambia can give us the 20% we need for the battery. Egypt and South Africa can give us glass display manufacturing, with and Ghana and Mozambique supplying Aluminum and Graphite. Egypt and South Africa, already market leaders, can give us 25%. To achieve our vision (say of 2027), we need to give ourselves a year to ensure our idea of a Sandbox is well received, designed and implemented. Our business model is working with established colleagues like Egypt and South Africa to start getting things done, as the continent grows its capability.



She emphasized that Africa already possesses the foundational resources to meet the summit's 40% local content goal. By 2027, she foresees the establishment of cross-border relationships and value addition processes among African states, ensuring the success of the continent's smartphone manufacturing initiative.

Dr. Shikoh also celebrated the collaborative energy at the summit, highlighting a shift from siloed national efforts to a unified vision for intra-African trade. She stressed the importance of leveraging this

partnership-driven approach to kickstart the manufacturing process and trade within the continent.

In addressing the key next steps, Mr. Khumalo stated that there is a need for the continent to finance innovation. He mentioned that there is a critical need for financing innovation to make locally-produced smartphones a reality. He proposed offering tax rebates for research and development as one avenue to stimulate innovation. "The more we increase our R&D as a continent, the more we are on a path to development," he observed.

Additionally, he called for measures to create demand for locally-manufactured goods. He suggested looking into procurement policy (especially by state organs) as a level to industrial policy.

He further suggested creating collaborative platforms for sustained engagement. AT AFCFTA level, he mentioned they have Biashara Afrika as well as AFCFTA Business Forum.



Moreover, he mentioned that there is a need for countries to consider provision of tax rebates for imported inputs for local manufacturing. The government should proactively encourage local manufacturing capabilities by offering duty-free imports on raw materials and components for smartphone manufacturers.

Finally, he talked about the work the AFCFTA needs to do in coordinating the regulatory sandbox. He observed that they are better placed, at least currently, to convene state parties on intra-Africa trade. He mentioned that they will recommend to the Secretary General of the AFCFTA so that he would in turn communicate to state actors on the same. He observed the primacy of the private sector in all this, for "countries sign agreements, but they don't trade. It's the private sector which trades."

He suggested that "Qhala smartphone" would be an ideal name for an African smartphone, symbolizing the continent's shared vision and progress. Dr. Shikoh, laughing heartily at this remark, suggested the phone should instead be named an "African smartphone."

Dr. Shikoh then invited Mr. Rodrigue Ruhashya, the Director General of Digital Transformation at Rwanda's Ministry of ICT and Innovation to share best practices in smartphone manufacturing, having manufactured Mara Phones in the past. Mr. Rodrigue mentioned that setting up Mara Phones manufacturing plant was very deliberate on the part of the government as a way of bridging the digital divide, and making sure the Rwandese have smart devices. The government also educated the people and raised their digital literacy. He called upon the summit participants to reduce the cost of smartphones in the continent, and for that to be realized, then having local smartphone manufacturing plants is essential. Collaborating with all stakeholders across the continent is crucial.

Dr. Shikoh announced that the next step is to present the idea of local smartphone manufacturing to African heads of state at the African Union Summit in February 2025. To ensure the project's success, both Dr. Shikoh and Mr. Khumalo urged participants to fulfill their commitments.

The panel discussion reflected the shared ambition and commitment of stakeholders to the vision of locally-produced African smartphones. With robust collaboration, strategic use of resources, and private-sector engagement, the dream of affordable African smartphones could transform the technological and economic landscape of the continent.

### 3.7 Gearbox Visit Report



As part of the Smartphone for Africa Summit, stakeholders participated in a site visit to Gearbox Europlacer, a plant that bridges hardware manufacturing and innovation with startup incubation. The visit was divided into two main areas of focus: hardware and manufacturing and tech startups, showcasing a comprehensive ecosystem driving technological advancement in Africa.

#### **Gearbox Europlacer Overview**

The session began with an overview of Gearbox Europlacer's operations, vision, and contributions to the tech ecosystem. The plant is positioned as a leader in hardware manufacturing, emphasizing scalability and innovation tailored to local and regional needs. Key points included:

#### **Vision and Value Proposition:**

Gearbox Europlacer strives to provide cost-effective, scalable, and innovative solutions that enhance accessibility to advanced hardware and manufacturing services in Africa. Its operations prioritize

proximity to markets, affordability, and logistics support to ensure solutions meet the unique challenges of the region.

**PCBA (Printed Circuit Board Assembly):**

Stakeholders were shown examples of high-quality PCBAs produced at the plant. These assemblies are integral to various electronic devices and represent Gearbox’s commitment to precision and technological advancement.

**Partnership with Raspberry Pi:**

A strategic collaboration with Raspberry Pi highlighted Gearbox’s role in promoting affordable and versatile technology solutions for education, innovation, and industry. This partnership positions the plant as a key player in tech democratization.

**Revenue Overview and Ecosystem Partnerships:**



Stakeholders were provided an overview of Gearbox’s revenue projections, underscoring its growth trajectory. Ecosystem partners, including startups and corporations, were also highlighted, showcasing Gearbox’s role in nurturing innovation across industries.

**2. Insights into Startups Supported by**

**Gearbox**

The visit featured a showcase of several startups associated with Gearbox. These startups demonstrated the diverse and innovative applications of technology tailored to address local and global challenges.



Gearbox Kenya is the plant’s flagship initiative, serving as an incubation hub for innovators to transform their ideas into scalable solutions. Its approach is rooted in three core functions:

### 1. Surface Mount Technology (SMT) Lab:

The lab focuses on prototype manufacturing of microcontrollers and other advanced electronic components.

This capability allows startups to develop functional prototypes efficiently, accelerating product development timelines.

### 2. Mechanical Design Services:

This unit supports precision mechanical processes, enabling innovators to produce high-quality hardware components.

### 3. The Academy:

The Academy, established in 2014, offers comprehensive training in digital and physical design processes, ranging from virtual reality to robotics.

Through a partnership with Autodesk, participants learn coding, assembly, and programming techniques.

Over 350 companies have been incubated through Gearbox, including:

- **KunjaBot:** A CNC (Computer Numerical Control) pipe bender that revolutionizes mechanical precision.
- **Smart Glove:** An AI-powered device interpreting sign language, developed by Roy Allela.
- **Gjenge Makers:** A startup by Nzambi Matee that transforms waste plastic into durable construction materials.
- **CNC Hybrid Plasma/Wood Cutter:** A versatile tool for industrial applications.

### Geviton



- Geviton focuses on designing and programming software solutions for both local and international markets.

- Their close collaboration with Gearbox ensures that software and hardware integration is



seamless, enabling robust and innovative solutions.

**Ubuntu Waterhub Africa:**



- Ubuntu Waterhub specializes in digital water meter technology with advanced sensors capable of differentiating between salty and fresh water.

- Key features include:

- An MPESA-integrated payment system for easy transactions.
- The ability to manage up to six taps, with two taps costing approximately KES 170,000.
- This solution addresses water management challenges in areas with limited infrastructure, enhancing access to clean water.

**Veno Autobotics:**



- Veno Autobotics develops IoT-based solutions designed for efficiency in resource management.

- Their products include:

- Motherboard trackers for monitoring LPG levels.
- ATMs for water, milk, and cooking oil, enabling automated dispensing systems.
- Solar power consumption monitors integrated with MPESA, NFC cards, and customizable web platforms for business clients.

**Lectrotel Micro Systems:**



- Operating in Kenya, Tanzania, and Rwanda, Lectrotel specializes in IoT systems for analysis-based management and operations.

- Key innovations include:

- Smart Biogas Monitors: Tracking biogas output from biodigesters, crucial for agricultural applications.
- Solar Charge Controllers: Providing off-grid solar solutions for remote areas.
- Genset IoT Controllers: Monitoring diesel-powered generators for optimized performance.
- Portable Vaccine Fridges: Addressing health sector needs with reliable storage solutions for vaccines.

## Manufacturing Plant Tour



Stakeholders toured the hardware and firmware manufacturing facility, gaining insights into the entire lifecycle of technology production.

### Design Process:

The manufacturing plant employs a human-centered design approach, prioritizing usability, affordability, and scalability. From the initial design of motherboards to their

embedded design stages, Gearbox ensures that its products meet both functionality and cost-effectiveness standards.

### Scalability Model:

Gearbox's manufacturing processes are designed to be scalable, with careful consideration of proximity to markets, efficient logistics, and ongoing support to end-users.

### Production Phases:

Stakeholders observed the transition of components through the melting and embedding processes, integral to producing functional hardware.

Examples of practical applications included:

- **Fishing Technology:** Tools and devices designed to support sustainable fishing practices.

- **Insect Attraction Technology:** Solar-powered systems utilizing UV rays to manage pests in farms, contributing to improved agricultural yields.

### **Key Takeaways and Recommendations**

This visit provided a comprehensive understanding of Gearbox's ecosystem and its impact on technological development in Africa. Key takeaways include:

#### **The Role of Collaboration:**

There is a need for increased partnerships between innovators, startups, and manufacturers to scale production and address Africa's unique challenges.

#### **Competency Mapping:**

To foster collaboration and knowledge-sharing, stakeholders emphasized the importance of competency mapping within the tech sector. This will allow industry players to identify who is doing what across Africa, enabling more streamlined partnerships.

#### **African-Centric Solutions:**

Gearbox's focus on creating affordable, effective, and scalable solutions highlights the potential for African tech ecosystems to address local challenges while competing globally.

The visit to Gearbox Europlacer underscored its vital role in fostering innovation, enabling startups, and advancing manufacturing in Africa. It serves as a blueprint for leveraging technology to solve regional challenges while contributing to the global tech landscape.

## 4.0 Appendices

### 4.1 Agenda

#### Day 1

Time	Item	Speakers
0900 – 0910	Welcome & Opening Remarks	<ul style="list-style-type: none"> <li>MC - Baraka Mwaura</li> </ul>
0910 – 0940	Overview of the Smartphone for Africa Project Objectives and Expected Outcomes of the Convening	<ul style="list-style-type: none"> <li>Dr. Shikoh Gitau, CEO, <b>Qhala</b></li> <li>Ms. Angela Wamola, Head of Sub-Saharan Africa, <b>GSMA</b></li> <li>Hon. Eng. John Tanui, PS, Ministry of Information, Communications and the Digital Economy, <b>Kenya</b></li> <li><b>Amb Isaiya Kabira – Director General International Conferences, Media Events and Public Communications –Ministry of Foreign Affairs, Kenya</b></li> <li>Mr. Zachary Kazzaz, Senior Program Officer, Digital Connectivity Gender Equality Division, <b>Bill &amp; Melinda Gates Foundation</b></li> </ul>
0940 – 1020	<b>Opening Address:</b> Vision for Smartphones for Africa	<ul style="list-style-type: none"> <li>Mr. Lacina Kone, Director General and Chief Executive Officer, <b>Smart Africa</b></li> <li>H.E. Wamkele Mene, Secretary General of the African Continental Free Trade Area Secretariat <b>AfCFTA</b></li> <li>Hon. Salim Mvurya, Cabinet Secretary for Investments, Trade and Industry (MITI), <b>Kenya</b></li> </ul>
1020 – 1100	<b>Ministerial Panel</b> State of Smartphone Penetration in Africa and why local manufacturing is important	<ul style="list-style-type: none"> <li>Mr. Stanley Kamunguya, <b>CEO, ICT Authority of Kenya</b></li> <li>Mr. Themba Khumalo, Principal Advisor to the Secretary General, <b>AfCFTA Secretariat</b></li> <li>Hon. Salim Mvurya, EGH, Cabinet Secretary for Investments, Trade and Industry (MITI), <b>Kenya</b></li> <li>Dr. Nkundwe Mwasaga, Director General of ICT Commission. <b>Tanzania</b></li> <li>Mr. Thabiso Thukani, Chief Director: Strategy Department of Communications and Digital Technologies, <b>South Africa - (Remotely)</b></li> </ul> <p><b>Moderator:</b> Angela Wamola, Head of Sub-Saharan Africa, <b>GSMA</b></p>





1100 - 1115	<b>Tea Break</b>	
1115 - 1145	<p><b>Directors Panel:</b></p> <p><b>Pan African Policy and Practice Africa must rise together</b></p>	<ul style="list-style-type: none"> <li>○ Mr. Michael Mutiga, Chief Business Development &amp; Strategy Officer, <b>Safaricom PLC.</b></li> <li>○ Mr. Aaron Mwandia - Deputy Director - Digital Technology &amp; Innovations, Ministry of ICT <b>Zambia</b></li> <li>○ Mr. Yasser AbdelBary, Executive Director of Electronics Industry, Information Technology Industry Development Agency, ITIDA, <b>Egypt</b></li> <li>○ Dr Talkmore Chidede, Senior Digital Trade Expert, <b>AfCFTA Secretariat</b></li> <li>○ Ms Pauline Kimotho, <b>ICT Authority of Kenya</b></li> </ul> <p><b>Moderator: Dr. Shikoh Gitau, CEO, Qhala5</b></p>
1145 - 1215	<p><b>Smartphones: What does Africa want?</b></p> <p>Presenting results from Qhala Research and Insights from African OEMs</p>	<ul style="list-style-type: none"> <li>○ Dr. Wanjiru Mburu, Head of Research, Qhala</li> </ul>
1215 - 1235	<p><b>Africa's manufacturing and Assembly Capability: Lessons from the electronics and vehicle industry</b></p>	<ul style="list-style-type: none"> <li>○ Fidel Karenzi, Sr. Technologist, Digital Age Infrastructure &amp; Platforms Interoperability, <b>Rwanda Ministry of ICT and Innovation</b></li> </ul>
1235 - 1300	<p><b>The Egyptian Experience in creating a conducive environment for Sustainable Local electronics manufacturing</b></p>	<ul style="list-style-type: none"> <li>○ Mr. Yasser AbdelBary, Executive Director of Electronics Industry, Information Technology Industry Development Agency, ITIDA, <b>Egypt</b></li> </ul>
1300 - 1400	<b>Lunch break</b>	



1400 - 1500	<p><b>Panel: Smartphone Manufacturing in Africa: Opportunities and Challenges</b></p>	<ul style="list-style-type: none"> <li>○ Mr. Michael Mutiga, Chief Business Development &amp; Strategy Officer, <b>Safaricom PLC</b></li> <li>○ Mr. Lucas John Omollo, HSC – Chief Manager, ICT &amp; Smart City Solutions, <b>Konza Technopolis5</b></li> <li>○ Mr. Yasser AbdelBary, Executive Director of Electronics Industry, Information Technology Industry Development Agency, ITIDA, <b>Egypt</b></li> <li>○ Mr. Aaron Mwandia - Deputy Director - Digital Technology &amp; Innovations, Ministry of ICT <b>Zambia</b></li> <li>○ <b>Moderator:</b> Dr. Rachel Sibande, Gates Foundation</li> </ul>
1500 - 1630	<p><b>Breakout room 1</b></p> <p><b>Panel 1:</b> Rules of the game: Financing Local Smartphone Manufacturing</p> <p><b>Panel 2:</b> Regulatory and Taxation Challenges faced by African manufacturers</p>	<p><b>Panel 1. Moderator:</b> Dr Kirori Mindo, Project Design Team Lead, Development Program Specialist (Digital Development) <b>USAID</b></p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>○ Mr. Sebastien Codeville, CEO and Founder at <b>KaiOS</b></li> <li>○ Mr. Michael Mutiga, Chief Business Development &amp; Strategy Officer, <b>Safaricom PLC</b></li> <li>○ Ms. Maureen Amakabane, <b>Tony Elumelu Foundation</b></li> <li>○ Ms. Uyoyo Edidio, Principal ICT and Innovation Expert at <b>AfDB (virtually)</b></li> <li>○ Mr. Zachary Kazzaz, Senior Program Officer, Digital Connectivity at the <b>Bill &amp; Melinda Gates Foundation</b></li> <li>○ Mr. Yasser AbdelBary, E.E.M.Sc. /DBA. Head of National Strategy of Electronics Industry in Egypt</li> </ul> <p><b>Panel 2, Moderator:</b> Mr. Linus Melly, Senior Policy Manager, GSMA</p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>○ Ms. Thelma Quaye, Chief Digital Infrastructure, Skills and Empowerment Officer at <b>Smart Africa (remotely)</b></li> <li>○ <b>Mr Franklin Ombaka -Chief Manager - Corporate Policy Unit - KRA</b></li> <li>○ Ms. Immaculate Kassait - Data Commissioner at <b>ODPC</b></li> </ul>
1630	<p><b>Tea Break and departure</b></p>	

## Day 2

Time	Item	Speakers
0900 - 0910	<b>Welcome &amp; Opening Remarks</b>	<ul style="list-style-type: none"> <li>MC - Baraka Mwaura</li> </ul>
0910 - 0930	<b>Expanding consumer financing schemes for devices</b>	<ul style="list-style-type: none"> <li>Ms. Aneliya Muller, Senior Digital Development Specialist, <b>World Bank</b></li> </ul>
0930 - 1030	<b>Increasing Smartphone Access in Africa: the nuts and bolts</b> <ul style="list-style-type: none"> <li>What does an African consumer want?</li> <li>Standardization and Certification</li> <li>Streamlining Import and Export Regulations</li> <li>Creating an offtaker market</li> </ul>	<b>Moderator:</b> Dr. Wanjiru Mburu, <b>Qhala</b> <b>Panelists:</b> <ul style="list-style-type: none"> <li>Mr. Bruce Onchere, Device Financing Lead, <b>Safaricom, Kenya</b></li> <li>Mr. Adam Lane, Deputy CEO, Government Affairs, <b>Kenya Huawei</b></li> <li>Mr. Sebastien Codeville, <b>KaiOS Tech</b></li> <li><b>Mr Osayi Izedonmwen - Founder Imose Technologies, Nigeria</b></li> <li>Mr. Linus Melly, Senior Policy Manager, <b>GSMA</b></li> <li>Dr. Nkundwe Mwasaga, Director General of ICT Commission. <b>Tanzania</b></li> </ul>
1030 - 1100	<b>Break</b>	
1100 - 1200	<b>Panel:</b> State of electronics manufacturing in Africa <ul style="list-style-type: none"> <li>What are the incentives for local manufacturing</li> <li>How can we source smartphone components from within the continent?</li> </ul> <b>Topic 2:</b> Remedies to boost local manufacturing - incentives and a business model perspective	<b>Moderator:</b> Ben Roberts, Chair of ICT Sector Board, at <b>Kenya Private Sector Alliance (KEPSA)</b> <b>Panelists:</b> <ul style="list-style-type: none"> <li>Mr. Ahmed Alaa, Sudotechs, <b>Egypt</b></li> <li>Mr. Michael Waititu, JKUAT Assembly, <b>Kenya (Virtually)</b></li> <li>Mr. Latiff Cheronu, CEO Gearbox Europlacer, <b>Kenya</b></li> <li>Mr. Anthony Muthungu, TotoSci, <b>Kenya</b></li> <li>Mr. Karanja Gichiri, Head of Venture Management</li> <li>Mr Gideon Mojolaoluwa, Founder, Tapready Limited, Nigeria East Africa Device Assembly Kenya (EADAK), <b>Safaricom PLC</b></li> </ul>

		<ul style="list-style-type: none"> <li>Mr. Aaron Mwandia - Deputy Director - Digital Technology &amp; Innovations, Ministry of ICT <b>Zambia</b></li> </ul>
1300 - 1400	<b>Lunch Break</b>	
1400 - 1500	<b>Panel Sessions</b> <ul style="list-style-type: none"> <li>Regulatory Sandbox with AfCFTA for a one Africa approach. What regulatory agreements are required?</li> </ul>	<b>Speakers</b> Moderator: Dr. Talkmore Chidede, Senior Digital Trade Expert, <b>AfCFTA Secretariat</b> <ul style="list-style-type: none"> <li>Ms. Pren-Tsilya Boa-Guehe, Government Affairs &amp; Public Policy Manager, <b>Google</b></li> <li><b>Dr. Nkundwe Mwasaga, Director General of ICT Commission. Tanzania</b></li> <li><b>Mr Yasser AbdelBarry, Head of National Strategy of Electronics Industry, Egypt</b></li> <li><b>Evalyn Oloo - Technical advisor of trade - Ministry of trade &amp; investment</b></li> </ul>
1500 - 1545	<b>Vision of the future for a Single African Digital Market powered by locally manufactured Smartphones</b>  <b>Moving Forward and Summary</b> <ul style="list-style-type: none"> <li>Key takeaways and recommendations</li> <li>Roadmap for implementing pilot programs and refining policies</li> <li>Next steps for the Digital Trade Sandbox framework</li> </ul> <b>Summary &amp; Closing Remarks by Host Representative</b>	<b>Mr Rodrigue Ruhashye, Director General for Digital Transformation, Rwanda</b>  <b>Moderator:</b> Mr. Zachary Kazzaz, Senior Program Officer, Digital Connectivity at the <b>Bill &amp; Melinda Gates Foundation</b>  <b>Panelists:</b> <ul style="list-style-type: none"> <li>Dr. Shikoh Gitau, <b>Qhala Limited</b></li> <li>Dr. Talkmore Chidede, Senior Digital Trade Expert, AfCFTA Secretariat <b>AfCFTA</b></li> </ul> <b>smartphone.qhala.com</b>
1600 - 1700	<b>Travel to Gearbox</b>	



## 4.2 Photo Gallery









## 4.3 Recording

Day 1 Recording: <https://www.youtube.com/live/eld633MWpRk?feature=shared>

Day 2 Recording: <https://www.youtube.com/live/xtc-6vFiT2M?feature=shared>

Day 1 Photos:

<https://photos.google.com/share/AF1QipPhL1yMsrGBel5wk-EibwXbQmLdnCR8UMbvvgH6cO2oUYC9ykUYIffDEHqI0DFKA?key=aHdwOUVUNTINTnBJWiIMZXZkYkxUOVhVMHVISE53>

Day 2 Photos:

[https://photos.google.com/share/AF1QipOyz6gyRuRjJGMhkg0Xs4z\\_QSepfrbvNs2fY2fVTA59YjLhi-WhfvE3BKvCGg7dHg?key=RFh1b2xYaHNhZzFkNnFoa3RWX3U3WEEdXNFJsNOdn](https://photos.google.com/share/AF1QipOyz6gyRuRjJGMhkg0Xs4z_QSepfrbvNs2fY2fVTA59YjLhi-WhfvE3BKvCGg7dHg?key=RFh1b2xYaHNhZzFkNnFoa3RWX3U3WEEdXNFJsNOdn)

Highlight video:

[https://drive.google.com/drive/folders/1BBnvXsMayd5In\\_SPWwQ-ZkprfiXBdxG2](https://drive.google.com/drive/folders/1BBnvXsMayd5In_SPWwQ-ZkprfiXBdxG2)

Smartphone for Africa website: <https://smartphone.qhala.com/>



## 4.4 Speaker Presentations

1. Dr. Wanjiru Mburu's presentation (Qhala):  
[https://docs.google.com/presentation/d/1cTqTQ2YxmYezfgETd3l1jEfhHqZxOKQ/edit?usp=drive\\_link&oid=116688772809955799199&rtpof=true&sd=true](https://docs.google.com/presentation/d/1cTqTQ2YxmYezfgETd3l1jEfhHqZxOKQ/edit?usp=drive_link&oid=116688772809955799199&rtpof=true&sd=true)
2. Ms. Aneliya Muller's presentation (World Bank):  
[https://drive.google.com/file/d/1lk6NzjRZ1YxytB31uXPmJBRWYKJx5rnt/view?usp=drive\\_link](https://drive.google.com/file/d/1lk6NzjRZ1YxytB31uXPmJBRWYKJx5rnt/view?usp=drive_link)
3. Ms. Angela Wamola's presentation (GSMA):  
[https://docs.google.com/presentation/d/1FNcRDuVjp3ZYCsfccPmtTere1uOFTsLb/edit?usp=drive\\_link&oid=116688772809955799199&rtpof=true&sd=true](https://docs.google.com/presentation/d/1FNcRDuVjp3ZYCsfccPmtTere1uOFTsLb/edit?usp=drive_link&oid=116688772809955799199&rtpof=true&sd=true)
4. Dr. Shikoh Gitau's presentation (Qhala):  
[https://docs.google.com/presentation/d/1kslasJ1BCUUPcMbUQ-3SWn2PkygRnEeYlw4w1tmQiTI/edit#slide=id.g315f29631a7\\_1\\_546](https://docs.google.com/presentation/d/1kslasJ1BCUUPcMbUQ-3SWn2PkygRnEeYlw4w1tmQiTI/edit#slide=id.g315f29631a7_1_546)
5. Mr. Yasser AbdelBary's presentation:  
<https://drive.google.com/file/d/1ZegBvBQV1oyWRZIKlh8EQN7dk2uYIK6q/view?usp=sharing>

### 4.5 Media Mentions

1. <https://www.youtube.com/watch?v=psepQDCc3I4>
2. <https://www.youtube.com/watch?v=30TB5KGFS9E>
3. <https://www.thecitizen.co.tz/tanzania/news/national/africa-needs-unified-efforts-in-smartphones-production-to-unlock-digital-economy-potential-4837668>
- 4.

# Dkt. Mwasaga ahimiza nguvu ya pamoja uzalishaji simu janja Afrika

Na MWANDISHI WETU -NAIROBI, KENYA

**MKURUGENZI** Mkuu wa Tume ya TEHAMA Tanzania (ICT), Dkt. Nkumbao Mwasaga amesema, Afrika ina nafasi kubwa zaidi ya kufanya vema katika Uchumi wa Kidigitali iswapo itazunguashwa nguvu katika uzalishaji wa simu janja kwa ajili ya soko la Afrika na kwanza.

Dkt. Mwasaga ameyasema hayo ikiwa karibuni katika Rikie cha Kongamano la Simu za Mkononi kwa Ajili ya Afrika ambalo lililenga kuelezea kazi umuhimu wa kiolezi uzalishaji wa simu za kwanza za mkononi ndani ya Afrika, Kongamano hilo lilifanyika Novemba 21 hadi 22, 2024 katika Hali ya Nzerifi, jijini Nairobi nchini Kenya.

Dkt. Mwasaga aliwafesha washiriki wa kongamano hilo kuwa, uzalishaji wa simu ndani ya Afrika licha ya kuwepo wa wanaoishi wengi kutimiliki simu kutokana na uzafu wa gharama. Pia utafungua furaha nyingi za ajira, kupanua uhamu wa kidigitali ikiwemo kustawisha mapato ya Taifa.

Kongamano hilo lilianzishwa na Qhala, GSMA, Smart Africa na eneo la Biashara Huru la Afrika (AfCFTA) kwa utafidhi wa Taasisi za Bill & Melinda Gates. Aidha, hilo lilikuwa ni kongamano la hadithi ya juu ambalo linaandaliwa ili kuharukusha ukwaji wa uzalishaji wa simu za mkononi za ndani kote Afrika.

Kielele cha kongamano hilo kilivotea pamoja wadau muhimu kutoka barani Afrika ikiwa ni pamoja na maafisa wa Serikali, viongoji wa biashara, wamendaji wa mitandao ya simu, wamendaji wa ndani na washiriki wa maendeleo ya kimataifa. Tukiyo hilo lilikuwa kukua marumumizi, ushirikiano, na ushiki ambao utawezesha uzalishaji wa matumizi ya simu za mkononi zeyo gharama nafasi ili kuandaa mabadiliko ya kidigitali barani Afrika.

Kwa sasa, inakadiriwa chini ya ziemia 44 ya Wafrika wanamiliki simu za mkononi, jambo ambalo linadhibiriisha ukosefu wa ufikaji wa huduma za kidigitali, furaha za kiuchumi, na maendeleo ya kijamii na kiuchumi. Vikwazo kama vile gharama za juu za uzalishaji, changamoto

za kikodi na uwezo mdogo wa uzalishaji vinamua simu za mkononi kuwa za gharama nafasi na kupatikana kirahisi. Pia, inahitajiwa kuwa, uzalishaji wa ndani una uwezo wa kuandaa ajira, utohumi jamaishi na kuimarisha ushiriki wa kidigitali, lakini changamoto kama vile uwezo wa kiwango cha chini na vikwazo vya biashara katika kanda vinapaswa kuchepushwa.

Kielele hiki kinata furaha ya kipokeo kwa wadau kuchunguza mkahati ya kuhinda changamoto hizi na kuhani ufumbuzi wenyewe vitando. Washiriki watapeleka mawazo kuhusu furaha na kuandaa mafanuzi wa uzalishaji wa simu za mkononi unaoashirikiana ambao unataji maitaji yatayoongezeka barani Afrika ya vitafu vinyo gharama nafasi ya simu.

Aidha, eneo la Biashara Huru la Afrika (AfCFTA) na irifiki raka za biashara na kidigitali zinazuhiri kuandaa mabadiliko katika mazingira ya kiuchumi ya Afrika kwa kuandaa soko la kidigitali lililo na umoya.

Kwa Pato la Taifa la pamtia la dola trilioni 3.4, AfCFTA inata mwingi thabiti wa kutamua teknolojia za kidigitali ili kuimarisha biashara na usungurishaji wa kiuchumi. Aidha, kutunguashwa mifumo ya kuharika na kukua ushirikiano wa mipaka kupitia AfCFTA kusawazwa kuhimua maendeleo ya vituo vya uzalishaji katika kanda na kupunguza gharama za uzalishaji wa simu za mkononi barani Afrika.

Kapita ushirikiano, ufumbuzi bunifu, na ushirikiano imara, kielele hiki kinakusudia kuweka mwingi wa sekta ya uzalishaji wa simu za mkononi za ndani inayofidhi ikiwemo vya kidigitali na kiuchumi wa Afrika kwa miaka ijayo. Miongoni mwa malengo ya kongamano hilo ilikuwa ni kuchunguza mkahati ya kuongeza uzalishaji wa simu za mkononi za ndani kote Afrika kwa kuhugulikia vikwazo muhimu kama vile gharama za juu za uzalishaji, vikwazo vya kuharika, na upatikaji mdogo wa vifa.

Vile vile, kuwepo ushirikiano wa kikanda katika uzalishaji wa simu za mkononi, usambazaji, na utambuzi na kuandaa vituo vya kikanda na kukua ushirikiano wa mipaka. Malengo mwingine ni kuandaa

kuhadilishana maarifa na mafanuzi kutoka nchi zinazopiga furaha katika mabadiliko ya kidigitali, kama vile Rwanda na Mliri, ambao zimeanzisha sera za kwanza na ushirikiano

wa umma na binafsi ili kuimarisha uzalishaji wa ndani na utafuji wa kidigitali. Samuhamia na kuonguashwa sera na mifumo ya kuharika kati ya mataifa ya Afrika ili ku-

pongua vikwazo vya biashara, kurahisisha taratibu za furudha, na kuwazeha biashara ya mpakani kwa simu za mkononi zilizotengenezwa ndani.



## Vyama vyaminyana lala salama Serikali za Mitaa

Inetoka UK 4

zi wa mara wa muawaziano ya simu na miadi mingine mingi. Wanaoishi walijalibwa kwamba, kwa ujumla katika kipindi cha miaka mne, Kata ya Mbegeji imepokea mungu yoye (hamu) ya zaidi ya shilingi milioni nane kutokana na juhudi za viongoji wa serikali za Vijiji, Diwani na Mbugu. Kutokana na mataniko hayo ya muda mrefu, Mbugu Nkandani aliwafesha wanaoishi kuhugulikia kwa wengi kuandaa kupigita kuta za ndizo za kuhindoli wamendaji wanaoashikiana na CCM wambende na wao ndio watakuwa damu la kuandaa kero zao na kuifikisha kwenye mamfaka busika.

**M A R A**  
Mbugu wa Vijiji Taifa wa Chamacha Mapinduzi (CCM), Juliano Dada Masabuni alimta katika kuharika kutunguashwa wa Serikali za Mitaa ndio uchaguzi wa kutunguza kutokutengya mabashara. Hivyo ni wabubwa wanachama wote wa CCM kuhakikisha mwa-ka huu watawajipanga kupiga kuta kuharika kutunguashwa wa Serikali za Mitaa ndio uchaguzi wa Serikali za Mitaa, kati-ka Kata ya Matuuze, Jimbo la Ushungu, jijini Dar es Salaam.

Wanachi wa Mji darajani kati ya kibwaha ikiwa ni maendeleo wa mkutano wa Uchaguzi wa Serikali za Mitaa, Vijiji na Vitongoji unatarajia kuhanyika Jimbo Alimta uchaguzi wa serikali za mitaa unatunguwa ama kwa kuwazi moja ya rija ya kujakum-aidia rai katika utendaji wake wa hapo baadaye, hivyo amewa-ataka wanachi kuhany maama-zi saba wakati wa kupiga kuta. "Tunatarajia mwaka huu katika vitongoji vya mazingira vitawapigita kuta zote wagonbea B wa CCM ili baadaye wawaze kutungu-ka kauli moja ni vyema kuta zote zote za CCM ili kuharika ushindi wa kuhindoli," alimta M A K A L L A Kwa upande wake Kanbo wa Halmashauri Kuu ya CCM Taifa (NCC), Jikadi, Uereri na Mahama, CPA Amos Makalla amesema vyama vya upinzani haviamini, wala viongoji wao hawamiamini, hivyo wamgamba wala hawatahili kuchaguliwa. Makalla amesema hayo wakati alikuwambia wanachi katika mkutano wa kampeni za Uchaguzi wa Serikali za Mitaa, kati-ka Kata ya Matuuze, Jimbo la Ushungu, jijini Dar es Salaam.

CPA Makalla alimta wito kwa wanachi kuhachunguwa wagonbea wa CCM katika uchaguzi wa serikali za mitaa, vijiji na vitongoji unatarajia kuhanyika Novemba 27 mwaka huu. "Hawamini kwa kote na wao wenyewe hawamiamini Mwaka 2020 walipata wabunge w wa viti maafan, lakini wakawamta, rna uhakika gani hawo wenyewi-tili wakichuguliwa kama hawakawamta? Wabunge wao wakawapa jina haya COVID w lakini licha ya kuwapa jina haya lakini itakuwa wama-chohwa," alimta CPA Makalla M B O W E Wakati joto la kampeni za uchaguzi wa Serikali za Mitaa 2024 likimdelele kupanda na kufika tamati hoo, Mwenyekiti wa Chadema Taifa Freeman Mbowe amesema viongoji wa chama hicho watakuandaa kwenye uchaguzi huo kuhakikisha wanakuwa wanyenyekivu na kutenda haki kwa wanachi wanaoamunguza, kinyume cha hapo watang'olewa kwenye nafasi zao bila hata kusabiri miaka mitano.

## 4.6 Summit Partners



We are a team of problem solvers passionately driven to lead Africa's digital transformation and innovation. At Qhala we tie together strategy, research, design and technology. We create products, services and new business models that meet today's needs and future goals.

Our team of strategists, researchers, designers and engineers solve problems and create solutions that help organizations improve operational efficiency and deliver value to customers. We achieve this through a co-creative approach with the businesses, customers and other stakeholders.



**African Continental  
Free Trade Area (AfCFTA)**

The African Continental Free Trade Area (AfCFTA) is one of the Flagship Projects of Agenda 2063 Africa's development framework. The AfCFTA was approved by the 18th ordinary Session of Assembly of Heads of State and Government, held in Addis Ababa, Ethiopia in January 2012 which adopted the decision to establish an African Continental Free Trade Area and the Action Plan for Boosting intra-African trade as a key initiatives whose implementation would promote socio-economic growth development . The AfCFTA aims at accelerating intra-African trade and boosting Africa's trading position in the global market by strengthening Africa's common voice and policy space in global trade negotiations.

# GSMA™

The GSMA (Global System for Mobile Communications Association) is a global organization that represents the interests of mobile network operators and the broader mobile ecosystem. It works to advance mobile technology and connectivity worldwide, uniting industry players, governments, and regional organizations to foster innovation, drive digital inclusion, and promote sustainable growth in the mobile sector.



Smart Africa is a pan-African initiative aimed at driving sustainable socio-economic development across the continent through the adoption of technology and innovation. Launched in 2013, the

initiative brings together African governments, private sector leaders, and global organizations to promote digital transformation, increase connectivity, and foster tech-driven industries. By supporting projects in areas like e-governance, digital infrastructure, and ICT skills development, Smart Africa aspires to accelerate Africa's journey toward becoming a fully integrated, knowledge-based economy.

## BILL & MELINDA GATES foundation

The Bill & Melinda Gates Foundation is a global philanthropic organization renowned for its commitment to reducing poverty, enhancing healthcare, and fostering sustainable development, particularly in underserved regions.

As part of their vision to create a more equitable world, the Bill & Melinda Gates Foundation focuses on supporting innovative solutions that empower communities through access to critical resources like health, education, and technology. For the Smartphone for Africa initiative, the foundation's extensive experience in driving impactful development programs aligns with the project's mission to expand digital access across Africa.

### **For Contacts and Inquiries**

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