



AUDA-NEPAD
AFRICAN UNION DEVELOPMENT AGENCY

AUDA-NEPAD KNOWLEDGE SERIES: POST COVID-19

THE CRITICAL ROLE OF DIGITAL TRANSFORMATION IN AFRICA IN THE POST COVID-19 ERA

*How to Accelerate Application
of Practical Digital Solutions
at Scale with Impact on Jobs
and Livelihoods*

On the Margins of the 75th United Nations General Assembly 2020

8 October 2020



OUTCOMES REPORT



Link to Dialogue recording

<https://www.youtube.com/watch?v=PV3laFBUvGM&feature=youtu.be>

Organised by

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Stellenbosch University

Office of the Special Adviser on Africa, UNOSAA

South African Council for Scientific and Industrial Research (CSIR)

University Cheikh Anta Diop

Messanine, Vodacom Africa

World Economic Forum

Keynote Speakers



Dr Ibrahim A. Mayaki
CEO ~ AUDA-NEPAD



Ms Christina Duarte
Under-Secretary-General ~
Special Adviser on Africa to
the United Nations Secretary
General (UNOSAA)

Moderator



Mr Talla Kebe
Ag. Director: Knowledge
Management Programme
Evaluation ~ AUDA-NEPAD,
United Nations

Members of the Panel



Prof Yaye Kène-Gassama
Professor in Plant biotechnology
at University Cheikh Anta Diop
Dakar; Chair of the African
Union High level Panel on
Emerging Technologies; Vice
Chair of the National Science
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Ms Nokuthula Lukhele
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Prof Fulufhelo Nelwamondo
Executive Cluster Manager of
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Mr Brandon Paschal
VP of Innovation ~ LaunchLab,
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Table of Content

Keynote Speakers.....	i
Moderator.....	i
Members of the Panel.....	i
Table of Content.....	ii
Executive Summary.....	iii
Key Policy Recommendations.....	1
Takeaway Messages.....	4
Specific Focus.....	7
Implementation Roadmap.....	8

Executive Summary

The COVID-19 pandemic has brought and continues to bring about unprecedented disruptions at all levels in economies. In Africa, additional to derailing key socio-economic growth factors, the pandemic threatens to undo several decades of developmental gains.

While emergency measures to curb the spread of the disease were required, they also triggered unintended impacts on trade, including on global and regional supply chains for essential goods such as medical supplies and food products. Restrictive border measures have aggravated intra-African trade and created multiple ripple effects to already strained food and agriculture systems.

African countries are devising scenario planning with individual and collective actions, and, where necessary, with the international development community to reach a rapid and sustainable exit from the pandemic. To mitigate the collateral damages inflicted to the economy and to some extent to the social fabric of the continent, a selection of priorities that have enough commonalities across African member states have been identified. They are clustered into three categories: i) Intra-African Trade & Food Systems; ii) Health System; and iii) Education.

The pandemic has highlighted the critical role of digital technologies to solve some of the challenges in these three priority-clusters. However, although new online tools have become available in the context of the pandemic, most government-to-individual transactions are still carried out in person. Furthermore, the pandemic has laid bare structural weaknesses in how prepared African member states should be for the digital post-pandemic era.

As part of its contribution to address the challenges and opportunities in the post-COVID-19, the African Union Development Agency-NEPAD recently convened on 8th October 2020 a multi-stakeholder knowledge series: **“The critical role of digital transformation in Africa in the Post-COVID-19 era: How to accelerate practical digital solutions at scale with impact on jobs and livelihoods.”**

The first knowledge series was organised by AUDA-NEPAD in collaboration with the South African Council for Scientific and Industrial Research (CSIR), Mezzanine, the Universities of Stellenbosch and Cheikh Anta Diop, and the United Nations Office of the Special Adviser on Africa (UNOSAA). It was held on the margins of the 75th United Nations General Assembly.

Experts discussed what it will take to harness the potential of digital transformation.

Participants noted that digital transformation is not a new phenomenon in Africa. A whole new wave of African scientists, businesses and governments are leveraging innovation and technology to solve problems around access to healthcare, food, education and finance. In just a few months, the COVID-19 crisis had a transformational impact on companies, industries and governments, accelerating the use of digital technology and new innovations.

Adopting a digital transformation agenda is no longer a policy option but a policy obligation for many African governments, demonstrating its value add towards realising Africa’s Agenda 2063 and the global Sustainable Development Goals (SDGs). At the same time, emerging technologies are creating new risks and challenges, including widening inequalities and the digital divide.

Key Policy Recommendations

Four key policy recommendations have emerged from the discussions to frame Africa's digital transformation agenda and harness the potential of digital technology.

1 Ensure an Enabling Environment and a Strong Regulatory Framework



Ensure a comprehensive and integrated approach looking at policy priorities, legal requirements, market conditions, investment opportunities and technology choices that interact at national, regional, and global levels



Strengthen capabilities of regulators (at national, regional, continental and global levels) to develop and implement strong legal regulatory frameworks to accelerate innovation adaption while containing trade-offs and negative consequences of digital transformation (e.g. illicit financial flows)



Create an enabling environment for investment in innovation (e.g. tax incentives/waivers, and skills transfer) and infrastructure (e.g. energy, telecommunication) in strategic sectors including health, agriculture, education and finance, to support adaption and upscaling of indigenous technology



Apply contextualised research, analysis and tools to benchmark, define and review strategies, policy, and legal and regulatory frameworks for evidence-informed decision-making



Ensure regulatory frameworks are aligned with national connectivity and network capacity, and appropriate regulatory frameworks for enabling technology

2 Scale up of indigenous innovation and technologies to address socio-economic development priorities



Connect digital solutions to national development strategies and essential service delivery in sectors such as food, agriculture, health, education, energy and finance



Leverage mobile technology to link enterprise solutions providers to SMEs, governments and industries as a “win-win” for both consumers and solutions providers



Equip SMEs, women, youth and techpreneurs with the necessary digital skills, tools and finance to bring indigenous solutions to scale with positive impacts on job creation and livelihoods

3 Enhance digital capabilities and skills – both human and institutional



Enhance digital capabilities of governments and deploy digital infrastructure and platforms to accelerate service delivery



Up-skill and re-skill Africa’s workforce, especially techpreneurs, youth and women should be at the heart of digital transformation strategies



Integrate a robust digital curriculum in education frameworks, followed by adequate financing for entrepreneurs and incubators

Takeaway Messages



Dr Ibrahim Assane Mayaki, CEO ~ African Union Development Agency-NEPAD

Dr Ibrahim Mayaki, CEO of AUDA-NEPAD stated that, “Innovation is happening now but is not always captured. Our main intention as the continent’s development agency is to harness this knowledge and channel it through critical junctures that will produce the greatest value”. He emphasised that the COVID-19 pandemic revealed structural weaknesses, including the digital divide. “We were counting on our existing solutions in health, education, energy and finance to face the pandemic, but that is not enough. Let us look at the different ways in which we can do be better,” Dr Mayaki stated. “On the healthcare front, digital solutions such as M-Pesa and Money, paved the way for enhanced access to and quality of financial services. On the Education front, several schools and universities across Africa are moving some of their learning programmes to remote learning through online platforms. In South Africa, for example, the MTN SA Foundation invested in the e-learning platform Siyavula; a platform that offers textbooks, practice software and exam preparation content to learners. In terms of access to finance, we see increasing application of digital solutions directly enhancing financial services. In Uganda, mobile technology is leveraged to support local businesswomen in selling their goods and produce through online markets. These are a few examples of how the continent is already capitalising on emerging IT ecosystems and the vast opportunities presented by the 4th Industrial Revolution. The question is: How can we enable an optimal eco-system to integrate, connect and accelerate these indigenous solutions to scale. There is need to build partnerships, both public-public and public-private, to better understand and capitalise on the new innovations of the 4th Industrial Revolution.”

Ms Cristina Duarte, Under-Secretary-General, Special Adviser on Africa to the United Nations Secretary-General, OSAA



Ms Cristina Duarte, Under-Secretary-General and Special Adviser on Africa to the United Nations Secretary-General, remarked that COVID-19 did not bring digitalisation to Africa. “Before COVID-19, it was already recognised that digitalisation is key to promoting inclusive development. We knew that digitalisation could be a game changer in driving economic transformation, increasing efficient production and distribution of goods and services, and opening up new opportunities for income generation. We also knew before COVID-19 that Africa is still the least connected region, with about 28.2% internet coverage and 34% mobile broadband penetration. Digital adoption is still more the exception than the rule.” Ms Duarte underlined that if internet access reaches the same level as mobile penetration, Africa’s GDP could get a boost of up to 300 billion USD. “Then the pandemic came, and it forced the greater adoption of technologies by policy makers to face the health and education crisis brought by COVID-19. For instance, telecom-based applications for contact tracing in Kenya. Drones spreading messages in rural areas in Côte d’Ivoire and delivering medical samples to laboratories in Ghana and Rwanda.” She emphasised that the COVID-19 pandemic has underlined the critical role of connectivity and digital solutions across the world. “In fact, the UN Secretary-General has emphasised that the future will be much more digital than the past before COVID-19.” She further pointed out that digitalisation could also be leveraged for domestic resource mobilisation and combatting illicit financial flows, among others. “Digitalisation is no longer a policy option but a policy obligation! We need to build strong state regulatory frameworks, we need to prepare our children with education, we need strong legal frameworks and we need to build strong and balanced private sector partnerships.”



Mr Talla Kebe, Ag. Director: Knowledge Management Programme Evaluation ~ AUDA-NEPAD, United Nations

“Our social fabric, our nation’s economic performance, regional cooperation framed by multilateralism and productivity are undergoing catalytic disruptions right now,” Mr Talla Kebe said. He emphasised that alongside these changes, digital transformation is poised to convert our economies and improve our societies. We must leverage transformative 4IR technologies to optimise industrial development in Africa. Mr Kebe stated, “To leverage these positive outcomes, we must move well beyond our current activities and be at the forefront as change agents of our nation’s prosperity and competitiveness”. Subsequently, increasing African countries competitiveness will be consequential to more infra-African trade and peace and security, among others. Investment and improvement in digital transformation should be catalytic to the well-being of African citizens, with the potential to transform all sectors and forms of economic activity. “We should not miss this opportunity,” he emphasised.

Mr Jacques de Vos, CEO ~ Mezzanine, Vodacom Africa

Mr Jacques de Vos, CEO Mezzanine, Vodacom Africa, shared concrete experiences in leveraging the reach and power of mobile technology and building fit for purpose digital solutions in partnership with African countries. He highlighted the use of mobile tech platforms in providing access to quality, cost-effective and scalable innovations for governments, development agencies and the private sector in health, agriculture, humanitarian relief, social services, financial inclusion and education. He emphasised on the need for local solutions finding by capitalising on indigenous innovations and uplifting African entrepreneurs. He further remarked that while there was an uptake in mobile technology for financial services and banking prior to the pandemic, COVID-19 has accelerated the use of digital technology solutions for increased productivity in Africa. “This has changed our thinking on the role of mobile in growing economies and supporting critical functions in government. But deploying these digitally enabled services into markets and regions has a different return on investment in different countries. The building block is therefore the enabling environment for investment, mobile penetration especially in rural areas, the e-readiness of consumers to use these services, and especially supporting entrepreneurs to connect ideas to investment and markets.”



Prof Yaye Kène Gassama, Professor in Plant biotechnology at University Cheikh Anta Diop Dakar; Chair of the African Union High level Panel on Emerging Technologies; Vice Chair of the National Science Academy of Senegal

Prof Yaye Kène Gassama from the University Cheikh Anta Diop de Dakar pointed out that technologies are not enough. “It is only through partnerships across sectors that the right model can be realised for practical solutions that benefit people in communities,” Prof Gassama said. As the backbone of many economies, she further highlighted the critical role of small-and medium enterprises and the African youth in developing business models conscious of local contexts. She stressed that accelerating the application of practical solutions would require: i) Upskilling and reskilling of the right workforce; ii) Harnessing Africa’s youthful population; iii) Leveraging Public-Private-Partnerships; and iv) Creating and enabling environment and strong regulatory framework.

Prof Fulufhelo Nelwamondo, *Executive Cluster Manager CSIR Next Generation Enterprises and Institutions*

Prof Fulufhelo Nelwamondo, Executive Cluster Manager of the CSIR's Next Generation Enterprises and Institutions, highlighted that 4IR tech innovation is providing vast opportunities for cross-border partnerships between African countries to learn from best practices and exchange solutions that could accelerate digital transformation across the continent. He emphasised the need for pan-African knowledge and data centres to connect applied research, analysis and tools to strategies, policy, legal and regulatory frameworks for evidence-informed decision-making.



Nokuthula Lukhele, *Lead - Data and Digital Transformation, Digital Economy and New Value Creation, World Economic Forum, Geneva*



Ms Nokuthula Lukhele, Lead Data and Digital Transformation, Digital Economy and New Value Creation, World Economic Forum, emphasised that strategies and actions are needed to upscale infrastructure in ICT and related to financing. She remarked that a lot of stimulus has been provided to recover from the pandemic to ensure greater resilience. "We need to ensure that the portion of this stimulus is used to digitise industries," she highlighted. "Technology needs to underpin national strategies and be at the core of national development priorities. This could be achieved by optimising the right mix of technologies speaking to the needs of African citizens, leveraging public-private partnerships for implementation, as well as building and harnessing Africa's youth dividend.

Mr Brandon Paschal, *VP of Innovation LaunchLab, Stellenbosch University*

Mr Brandon Paschal, Director of Innovation at LaunchLab, Stellenbosch University, added that government incentives such as tax reduction or waivers could spur investment in local digital solutions. In terms of enhancing human and institutional capabilities, he highlighted that immigration reforms, such as in Rwanda, Kenya or Ethiopia, could help bridge skills gaps.



Specific Focus

The discussions centred around the following key questions.

- i** Prioritize and leverage 4IR in Africa and leveraged in the African context to better address COVID-19 and other similar pandemics/disasters? What tools can be used and how?
- ii** Drivers in the region for digital service delivery
- iii** Mechanisms to engage local entrepreneurs and start-ups
- iv** Policies required to stimulate local solutions, rather than dependency on big multinational solutions
- v** Embed digital transformation in African governments' capacity building
- vi** Effective approaches or modalities for public-private partnerships in the area of digital transformation that are emerging prior to and during the COVID-19 outbreak
- vii** Technology partnerships enabler to support and enhance the efficiency, usage and resilience of government services in Africa
- viii** Public-private partnerships to acceleration digital transformation in Africa
- ix** Incentives to create locally indigenous digital solution
- x** Short and medium-term actions needed for Africa achieve affordable access to technologies
- xi** Strategies and actions needed for rapid upscaling of Africa's ICT infrastructure

Implementation Roadmap

Framing and delivering Africa’s digital transformation provides several quality options for multi-stakeholder cooperation. Leveraging on these partnerships cutting across the public and private sectors, industries, inter-governmental institutions as well as cross-country cooperation will ensure greater coherence, coalition building and acceleration of Africa’s digital transformation agenda. Furthermore, the African Union and United Nations systems provide unique opportunities to foster public-private partnerships aligned with business and development interests to connect policy formulation with implementation. The following actions are proposed:

Intervention Area	Outcomes	Area for Collaboration	Partners
Enabling Environment and Strong Regulatory Framework	<ul style="list-style-type: none"> A comprehensive and integrated approach looking at policy priorities, legal requirements, market conditions, investment opportunities and technology choices that interact at national, regional, and global levels; 	<ul style="list-style-type: none"> Stakeholder and country needs analysis; engagement with African Member States, research institutions and industry to define national and stakeholder priorities Strategic research to benchmark, define and review strategies, policy, legal and regulatory frameworks Solutions and best practice mapping Cross-country and stakeholder experience (business, research, civil society) sharing and engagement, starting with 10 pilot African countries Development of a demand-driven solutions portfolio and multi-stakeholder knowledge compendium of good and innovative practices, recommendations and strategies and connecting these to relevant Government departments Advocacy on a comprehensive Ms-driven digital transformation agenda to UN and AU system (e.g. through General Assembly and executive decision-making structures, AU themes) 	UN system Stellenbosch University LaunchLab WEF University of Dakar
	<ul style="list-style-type: none"> Strengthened capabilities of regulators (at national, regional, continental and global levels) to develop and implement strong legal regulatory frameworks to accelerate innovation adaption while containing trade-offs and negative consequences of digital transformation (e.g. illicit financial flows); 		
	<ul style="list-style-type: none"> A regulatory environment that is more conducive for investment in innovation (e.g. tax incentives/waivers) to support adaption and upscaling of indigenous technology; 		

Intervention Area	Outcomes	Area for Collaboration	Partners
Enhancing digital capabilities – both human and institutional	<ul style="list-style-type: none"> Enhanced digital capabilities of governments and deploying digital infrastructure to accelerate service delivery; 	<ul style="list-style-type: none"> Exposure of development planners and member states' technical advisory experts to new development thinking and emerging development decision making tools Brokering technical and financial support to build digital skills and infrastructure Documentation of best practices and innovations Establishing and deploying of digital training platforms 	UN system Stellenbosch University LaunchLab WEF University of Dakar
	<ul style="list-style-type: none"> Up-skilled and re-skilled African workforce, especially techpreneurs, youth and women to be at the heart of digital transformation strategies; 		
	<ul style="list-style-type: none"> Connected enterprise solution providers with SMEs to unlock maximum potential; 		
	<ul style="list-style-type: none"> Integrated digital curriculum in education frameworks. 		
Scaling up of indigenous innovation and technologies to address socio-economic development priorities	<ul style="list-style-type: none"> Developed ecosystem for innovation in Africa Conducive environment for the development of indigenous and ground-breaking solutions in the following possible areas: <ul style="list-style-type: none"> Health <ul style="list-style-type: none"> eLab solution Pathology solution Digitised vaccination services for improved immunisation coverage Education <ul style="list-style-type: none"> School management Digital education curriculum Agriculture <ul style="list-style-type: none"> Connected Farmer – Enterprise & Consume solution Finance <ul style="list-style-type: none"> Mobile-financing for SMEs Natural Resources and Environment 	<ul style="list-style-type: none"> Exposure of development planners and member states' technical advisory experts to new development thinking and emerging tech solutions Brokering technical and financial support to build digital skills and infrastructure Documentation of best practices and innovations Providing digital Training Platforms 	UN system Stellenbosch University LaunchLab WEF University of Dakar



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