



Africa ²⁰²⁴ *Business Forum*

BOOSTING THE TRANSFORMATION OF AFRICA THROUGH EDUCATION, SCIENCE, TECHNOLOGY AND INNOVATION



CONCEPT NOTE

19 FEBRUARY 2024,
ADDIS ABABA



United Nations
Economic Commission for Africa



INTRODUCTION

The seventh Africa Business Forum will be convened on 19 February 2024 in Addis Ababa alongside the thirty-seventh ordinary session of the Assembly of Heads of State and Government of the African Union.

The Forum will be co-convened by the Economic Commission for Africa (ECA), Google Africa and the African Union Commission. The event will focus on ways to leverage science, technology and innovation in Africa with a view to enhancing the quality of education, mitigating the negative impact of climate change, strengthening productive capacity, creating jobs through the establishment of globally-competitive industrial firms and promoting a more inclusive and prosperous Africa, in line with the 2030 Agenda for Sustainable Development and Agenda 2063: The Africa We Want, of the African Union.

To accelerate progress in the areas of science, technology and innovation, a multi-stakeholder approach is required. The adoption of a multi-stakeholder approach will support efforts by African countries to establish strong research and development systems, foster collaboration and develop the technical skills and practical knowledge required to make optimal use of innovative green technologies and technologies developed in the context of the fourth industrial revolution. The adoption of that approach will require engagement with a wide range of stakeholders, including government policymakers, representatives of higher education and financial institutions, researchers and entrepreneurs, captains of industry, small and medium-sized business owners, young people and representatives of private sector business groups in African countries. A multi-stakeholder approach will, moreover, support implementation of the Science, Technology and Innovation Strategy for Africa 2024, the aim of which is to accelerate the transition of the African continent to an innovation-led, knowledge-based economy and support the fourth industrial revolution in African countries.

¹ African Union Commission, Science, Technology and Innovation Strategy for Africa 2024 (Addis Ababa, 2014).



TECHNOLOGY, INNOVATION AND EDUCATION IN AFRICA

In recent years, Africa has witnessed significant human capital development, the adoption by African firms of innovative technologies, and significant investment in technological research and development. The technology sector, which is among the fastest-growing sectors on the continent, has been driven, primarily, by digital transformation and, more specifically, the rapid adoption of mobile telephone-based technologies, which have facilitated access by Africans to financial, logistics and transport services and promoted trade across the continent.

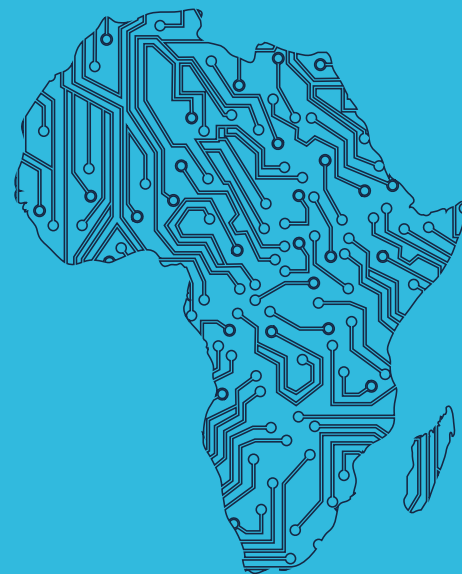
Despite the considerable progress made, however, a number of serious challenges continue to impede economic transition in Africa. For example, only 1 per cent of mobile phone subscribers in Africa use fifth generation mobile networks, compared with approximately 30 per cent of subscribers in China and 36 per cent in countries in North America. Furthermore, Africa continues to lag behind the United States of America and China in terms of technological development, with firms in the United States and China owning some 70 per cent of global patents on frontier technologies and holding a controlling stake in some 90 per cent of major digital platforms, including Amazon, eBay and Alibaba. Moreover, the adoption and integration of artificial intelligence platforms remains limited in Africa, relevant technical skills are lacking among young people and many Africans remain sceptical of technology or unaware of the benefits that can stem from its adoption. Research has shown, however, that an additional \$136 billion could be generated between 2024 and 2030 through the adoption of artificial intelligence platforms by just four African countries, namely Ghana, Kenya, Nigeria and South Africa.² Other factors compounding the problems faced by African countries include weak data systems, ethical considerations, incoherent government policies, excessive red tape and infrastructure and network connectivity challenges. As such, investment in advanced digital infrastructure, skills and devices, and the adoption and implementation of technology-supportive policies, are all urgently needed if African countries are to provide effective support for the development of the digital economy and accelerate the continent's transformation.

The poor learning outcomes and limited participation and retention of girls and women in science, technology, engineering and mathematics education and careers are also a matter of concern. Indeed, even when girls attend school, many fail to complete their secondary education. Challenges are also posed by the very limited resources earmarked for science, technology, engineering and mathematics education, the low number of teachers qualified to teach those subjects, and the lack in many countries of effective teacher training programmes. This is particularly the case in unstable or conflict-affected countries. Those challenges exacerbate inequality and exclusion at all levels of education and undermine the capacity of African countries to leverage science, technology, engineering and mathematics education to foster peace and promote sustainable development.

Science, technology and innovation in Africa have been strengthened in the past decade by the establishment of a number of key technology and innovation hubs. Very few individuals in Africa have start-up experience, however, and the mobilization of financial resources by business start-ups remains challenging. Indeed, some 80 per cent of African business start-ups struggle to gain access to funding in their initial stages and only seven African start-ups in the field of technology have a market capitalization of more than \$1 billion. To achieve the objectives articulated in the Science, Technology and Innovation Strategy for Africa 2024, financial institutions should facilitate the access of innovators to financial resources, thereby enabling them to scale up their business operations and compete effectively in global markets.

Moreover, the adoption of innovative data technologies and access to new sources of data could spur significant economic growth among technology-focused enterprises. It is therefore critical that relevant stakeholders understand fully how to gain access to and leverage relevant data so as to address data gaps and strengthen decision-making. It should be emphasized, however, that improved access to accurate data will benefit the continent only if African countries can

² Access Partnership: AI in Africa: Unlocking Potential: Igniting Progress (Washington, D.C.: September 2023). Available at: cdn.accesspartnership.com/wp-content/uploads/2023/09/Access-Partnership-AI-in-Africa-A-working-paper-Single.pdf



depend on individuals with the skills required to interpret that data, and it is likely that the production and interpretation of high-quality public-sector data will require close collaboration with private sector stakeholders.

While the continent's technology sector has continued to develop rapidly, the higher education sector in Africa has also improved, particularly since 2000, despite facing a number of challenges, including inadequate investment. For example, the number of African universities included in the Times Higher Education World University Rankings increased from only 4 in 2012 to 97 in 2023,³ reflecting the fact that Africa is becoming a generator of ideas, knowledge and innovation of global economic importance. Investment in research and development by African countries remains low, however, and currently stands at only 0.42 per cent of gross domestic product (GDP), well below the target of 1 per cent of GDP articulated in the Science, Technology and Innovation Strategy for Africa 2024 and far lower than the global average of 1.7 per cent of GDP. The investment gap between Africa and the rest of the world may explain, at least in part, why the continent contributes only 0.3 per cent of the world's high-technology exports, receives only 0.6 per cent of payments due under global intellectual property right regimes, generates only 1.1 per cent of global scientific knowledge, and has an average of only 79 scientists per million people. Given those statistics, it is clear that a combination of both public and private sector investment will be needed if African countries are to expand and strengthen access to postgraduate education and, more broadly, to provide world-class infrastructure for learning and research and support scientific reforms that can underpin the economic transformation of the continent, as called for in aspiration 1 of Agenda 2063.

Although there is significant potential in African countries in the areas of science, technology and innovation, a regulatory environment that fosters innovation and the responsible development and adoption of artificial intelligence will also be critical in the years ahead. In fact, despite the enactment of legislation on information and communications technology in most African countries, ECA has emphasized that the continent continues to face formidable challenges in the area of cybersecurity, including in connection with the protection of personal data and intellectual property.

REASONS WHY PRIVATE SECTOR STAKEHOLDERS, INCLUDING INVESTORS, SHOULD ATTEND THE SEVENTH AFRICA BUSINESS FORUM

By attending the Forum, private sector investors and other stakeholders will deepen their understanding of untapped opportunities for investment in science, technology and innovation in Africa. The population of the African continent is projected to reach 2.5 billion people by 2050, when Africans will comprise the world's largest workforce. To harness the opportunities offered by the world's youngest continent, where the median age is only 20 years and 60 per cent of the population is under 25 years of age, it is now critically important to mobilize resources to ensure that Africans acquire the skills sets they need, both in today's job market and for the future.

Given the high proportion of young people in Africa, the continent requires robust public and private sector-led investment in education to ensure that young people acquire skills in science, technology, engineering and mathematics, which can support the continent's economic development. Despite that pressing need, the International Labour Organization reports that approximately 72 million young people (a quarter of all young people in Africa), the majority of whom are women, are not in employment, education, or training.⁴ Furthermore, Africa has the highest rates of education exclusion and almost 60 per cent of young people between the ages of 15 and 17 are not in school.⁵ That education gap further aggravates the education quality divide. As a result, there are significant investment opportunities in education and research, especially in human capacity-development in science, technology, engineering and mathematics and in digital infrastructure development, which, as emphasized in Agenda 2063, can spur economic development and reduce youth unemployment.

³ Times Higher Education World University Rankings database. Available at: www.timeshighereducation.com/world-university-rankings (accessed on 21 December 2023).

⁴ Vipasana Karkee and Niall O'Higgins "African youth face pressing challenges in the transition from school to work". ILOSTAT International Labour Organization. ¹⁰ August 2023. Available at: ilostat.ilo.org/african-youth-face-pressing-challenges-in-the-transition-from-school-to-work/



Africa also has a burgeoning middle class, which forms a growing market for high-tech products. Indeed, the middle class, which in the past three decades has tripled in size to some 313 million people, now comprises some 34 per cent of the population of Africa. An expanding middle class means that growth opportunities for technology start-ups are likely to be significant, with those opportunities for growth increasing the attractiveness for technology-sector investors. Moreover, the establishment of the African Continental Free Trade Area is creating a continental-wide market for advanced technology and innovative products to address the needs of the 1.4 billion people living in Africa, a continent with an aggregate GDP of some \$3.4 trillion. The establishment of the African Continental Free Trade Area will undoubtedly boost intra-African trade and improve access by business enterprises to much larger markets, strengthening business fundamentals and helping technology start-ups to expand their operations. It has, for example, been suggested that the artificial intelligence market could experience annual growth of almost 20 per cent between 2023 and 2030. By exploiting opportunities stemming from the launch of the African Continental Free Trade Area, investors in frontier technologies, including artificial intelligence, could reap high returns on their investments, particularly given the very high growth potential of many of those technologies.

OBJECTIVES AND EXPECTED OUTCOMES OF THE FORUM

The specific objectives of the Forum are as follows:

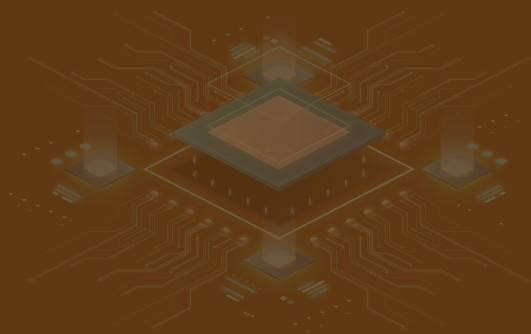
1. To provide a multi-stakeholder platform for the candid exchange of views among public and private sector stakeholders, including financial institutions, on challenges, opportunities and actions that must be taken to accelerate the transformation of Africa through education, technology and innovation and prepare young people in Africa for the future;
2. To facilitate the sharing of knowledge and good practices to support science, technology and innovation in Africa;
3. To discuss how to attract capital from investors with a view to scaling up innovations developed by technology start-ups and innovation hubs and to showcase digital innovations spearheaded by African start-ups and innovators;
4. To encourage the formulation of policy recommendations and partnerships that bring together business enterprises, research institutions, governments, development partners and financial institutions with a view to supporting robust science, technology and innovation initiatives that ensure that no one is left behind and that promote implementation of the 2030 Agenda and Agenda 2063.
5. The formulation of recommendations will inform preparations for the Summit of the Future, a high-level event scheduled to be held on 22 and 23 September 2024 that will bring together world leaders to forge a new international consensus on how to deliver a better present and safeguard the future.

TARGET PARTICIPANTS

- African leaders participating in the thirty-seventh ordinary session of the Assembly of Heads of State and Government of the African Union
- Representatives of the African Union Commission
- Representatives of private sector enterprises operating in the areas of education science, technology and innovation
- Representatives of multilateral development banks, investors and venture capitalists interested in supporting initiatives in science, technology and innovation
- Policymakers and thought leaders
- Researchers and representatives of non-profit organizations
- Youth representatives and representatives of small and medium-sized enterprises
- Media representatives

⁵ United Nations Educational, Scientific and Cultural Organization Institute for Statistics: "Education in Africa". Available at: uis.unesco.org/en/topic/education/africa

PROGRAM



9.00 – 9.15 **OPENING OF THE FORUM**

SEGMENT 1 – PRESIDENTIAL PANEL

Session title: Setting the scene - Boosting Africa's Transformation Through Education, Science, Technology, and Innovation

9.15 – 10.30

In this segment eminent leaders will (i) reaffirm the role and their commitment to education, science, technology, and innovation to drive Africa's transformation; (ii) share their views the existing untapped opportunities that must be harnessed; (iii) the important role that private sector plays in this ambition; & (iv) to briefly share strides or key milestones their administrations are making/achieving.

SESSION TITLE: TRAIL BLAZERS IN ACTION

10.30 – 11.05

This session will showcase examples of transboundary initiatives representing the 5 regions that are operational and making an impact. Presenters will pitch the potential impact their initiatives have and highlight bottlenecks including financing, investment challenges they face to scale up.

11.05 -11.25 **HEALTH BREAK & SPEED NETWORKING**

11.25 – 12.30 **SEGMENT 2 SESSION TITLE: REIMAGINING AFRICA'S TECH AND STEM FUTURE**

In this segment, panelists will share their views on reimagining Africa's Tech and STEM future highlighting what it will take to realise the "Africa We Want".

12.30 -2.30 **NETWORKING LUNCH AND A GUEST ADDRESS**

2.30 -3.30 **SEGMENT 3 SESSION TITLE: SCALING – UP TRANSFORMATIVE INITIATIVES FOR IMPACT**

This segment will examine some key transformative initiatives for Africa, the role that education, science, technology and innovation will play in them to heighten their impact and highlight the key challenges faced in being able to scale them up for the impact needed including crowding in the investment needed.

3.30 -4.00 **HEALTH BREAK**

4.00 – 5.00 **SEGMENT 4 SESSION TITLE: MAKING DEVELOPMENT INVESTABLE**

This segment will focus on the opportunities available to scale private capital mobilization at speed and in the process how we must ensure no one is left behind.

5.00- 5.30 **CLOSING AND TAKE-AWAYS**

5.30 – 7.00 **RECEPTION**