Bridging the Technological Divide: Expanding Investment Horizons in Africa to Foster Technological Development



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The World Bank emphasizes the importance of ambitious digital development in Africa, but the continent faces challenges in keeping pace with global technological advancements. This study examines the efforts of both Africa and the United States to narrow this technological gap, focusing on the role of foreign

investment as a catalyst for progress. The paper explores explicitly the significant potential of Africa's youth population in driving economic and technological advancements, highlighting key investment opportunities.

Relationship between Africa and the USA: Historical Context

The historical relationship between Africa and the United States dates back to the 1500s when trade involved exchanging weapons, alcohol, and other goods for Africans, marking the beginning of a complex history. The legacy of slavery, which persisted until the 1900s, disrupted Africa's economic and technological progress as many Africans were displaced from traditional trade routes. The consequences of this historical exploitation continue to impact the developmental gap between Africa and the United States.

Sanctions imposed by the United States on specific African countries further complicate the relationship. For example, Zimbabwe faced sanctions due to its land reform project, negatively affecting trade relations and deterring investors. Other African nations, such as Eritrea, Sudan, Somalia, Libya, and the Democratic Republic of Congo, have also been subjected to sanctions for various reasons, including human rights abuses and political instability. These sanctions can impede foreign direct investment (FDI), leading to economic challenges, increased borrowing fees, and high interest rates.

Exploring Technological Opportunities in Africa

Despite these historical and geopolitical challenges, Africa is an investment frontier with vast untapped potential. Currently, only 37% of Africa is connected to the internet, presenting significant opportunities for technological development. The continent's youth population, exceeding 60%, is pivotal in driving economic growth and technological advancement. Investments in education are crucial to harnessing the potential of this youthful workforce, as evidenced by the record-breaking $2 billion in start-up funds acquired by African youth in 2021.

Moreover, Africa's rich natural resources, including crude oil, lithium, and cobalt, attract foreign investment, particularly in the mining sector. American tech companies are increasingly recognizing the potential of the African market and establishing partnerships or aiding the continent's development. Examples include [insert specific examples of American tech companies operating in Africa,

fostering relationships, or contributing to Africa's technological advancement]. These collaborations signify the growing recognition of Africa's significance in the global technological landscape.

American tech companies in Africa	Their African Markets (countries or regions)	Their role of business model in Africa
Google	South Africa, Nairobi, Kenya	A multinational tech company focusing on search engine technology. In Africa, they aid in the localisation of applications and improve access options for customers.
Cummings	South Africa, Ghana, Morrocco,	Designer and, manufacturer of diesel engines.
Apple	East Africa, Ghana, Egypt	Multinational tech company
Amazon	South Africa, West Africa.	It aims to increase access to computer science education for children, and young adults from underrepresented communities in Africa.
Nvidia	Kenya, Nigeria	AI and Data Programming company that develops integrated circuits used in electronic game consoles and personal computers.
Tesla	Kenya, South Africa, and Nigeria	Electric vehicles help accelerate the world's transition to sustainable energy through affordable vehicles- renewable energy generation and storage.
Ford	South Africa, West Africa, Sub-Saharan Africa	Automobiles/electric motor bikes- working with several African initiatives to improve access to education and health care.

Future Collaborations and Opportunities

Education is a critical catalyst for global youth development, aiming to enhance lives and align with international development goals. It is pivotal in eradicating poverty and hunger and fostering economic growth and sustainable development. A vital aspect of this is digital education for youth, which enhances their educational experience, addresses unemployment issues, and promotes socio-economic development. Equipping youths with technological skills and ensuring connectivity is essential for realizing these benefits. The African Union's (AU)

digital transformation initiative is innovative and highly beneficial for youths, facilitating access to digital technology and vocational skills (Youth Education, 2013).

The African Continental Free Trade Area (AfCFTA), established in 2018, emerges as a strategic instrument to boost trade within Africa. It aims to enhance intra-regional trade in manufactured goods, reduce tariffs among member states, and address various policy areas related to trade facilitation and services. Overcoming historical barriers, such as outdated border and transport controls, is crucial for effective trade integration. The AfCFTA implements measures to streamline trade processes, including sanitary standards and technical barriers to trade in services. This initiative addresses the challenges of trade barriers and aims to make trading with neighbouring countries more cost-effective (The Promise of the African Continental Free Trade Area (AfCFTA), 2020).

Aligned with the AfCFTA, the AU's Digital Transformation Strategy for 2030 strategically focuses on innovation, inclusive growth, and sustainability. This comprehensive strategy aims to create jobs, reduce poverty and inequality, facilitate the delivery of goods and services, and contribute to the achievement of Agenda 2063. Leveraging existing frameworks and initiatives, such as the Policy and Regulatory Initiative for Digital Africa (PRIDA), Programme for Infrastructure Development in Africa (PIDA), and the African Continental Free Trade Area (AfCFTA), the AU Digital Transformation Strategy envisions a Digital Single Market for Africa. Collaborative ICT regulatory measures and tools will be crucial to maximizing the opportunities presented by digital transformation across industries (The Digital Transformation Strategy for Africa 2020-2030). The strategy also emphasizes building inclusive digital skills, including technical and vocational skills, to empower the youth and position Africa advantageously in the global digital economy.

Conclusion

Several recommendations emerge to bridge the technological gap in Africa and harness the potential of foreign direct investment (FDI). Education is a key priority, particularly in STEM fields, as it lays the foundation for technology development. Encouraging entrepreneurship and innovation through initiatives like incubators and accelerators and funding support for start-ups can drive technological advancements. Infrastructure development supports technology

growth, including roads, power, and internet access. Promoting foreign investment is equally vital, involving favourable conditions such as tax breaks and streamlined regulations. These recommendations, supported by insights from the World Bank, the African Union, and Edziah et al. (2022), can collectively contribute to narrowing the technological gap and fostering sustainable development in Africa.

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