



Africa's Digital Opportunity

LINDSAY MARK LEWIS
PROGRESSIVE POLICY INSTITUTE

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INTRODUCTION

Africa stands at a remarkable crossroads of opportunity. Over the past two decades, the continent has not only experienced impressive economic growth but has also emerged as a global leader in digital transformation. Since the advent of the smartphone in 2007, Africa has made extraordinary strides in connectivity, innovation, and technological adoption. In 2007, fewer than 50 million Africans had mobile internet access; today, that number exceeds 600 million. Mobile money services, pioneered in Africa, now facilitate over \$800 billion in transactions annually, transforming commerce and financial inclusion.

Africa's economic trajectory further reinforces its promise. Led by Niger, African nations accounted for eleven of the world's fastest-growing economies in 2024,¹ with continent-wide GDP growth exceeding the global average by about one percentage point. Demographically, Africa is also the fastest-growing region, with the U.N. projecting that an additional one billion people will inhabit the continent by 2050.² This growth presents both challenges and immense opportunities — particularly in the technology sector. By strategically investing in digital infrastructure, skills development, and regulatory frameworks that foster innovation, Africa can not only sustain its economic growth but also become a global technology powerhouse. But regulators and policymakers across Africa must foster this opportunity for growth with the right mix of regulatory frameworks and not make the mistakes others are making, such as the European Union.

INFRASTRUCTURE INVESTMENT: DIGITAL & PHYSICAL

Africa has made substantial progress in digital connectivity in just a few years. Between 2019 and 2022, 160 million Africans gained access to the internet.³ Yet, significant gaps remain; only about 24% of the population in Eastern and Southern Africa currently uses the internet.⁴ Additionally, much of the continent relies primarily on cellular networks, which can limit business operations that require high-speed connectivity.

New technologies offer promising solutions. Starlink and Amazon's Project Kuiper are deploying thousands of satellites to provide internet access across the continent. While these services can be more affordable than traditional broadband, their costs remain prohibitive for many. For example, in Ghana, Starlink costs about 4% of the average person's salary,⁵ compared to just 2% in the United States.⁶ The World Bank estimates that achieving universal, affordable, and high-quality internet access by 2030 will require a \$100 billion investment.⁷

Another transformative project is the 2Africa underwater fiber cable, the world's largest subsea cable system. This ambitious initiative, connecting North and Sub-Saharan Africa with Europe and Asia, has the potential to double data capacity to the continent.⁸ By significantly reducing latency and increasing bandwidth, 2Africa will provide a foundation for expanded digital services, economic opportunities, and enhanced global connectivity. This investment needs to be combined with a commitment to skills, startup investment, and, most important, a set of rules from policymakers that embrace the opportunity and do not hinder it.

Beyond digital connectivity, basic infrastructure remains a priority. Reliable electricity, clean water, paved roads, and railways are critical for economic development. Enhanced infrastructure supports trade, accelerates business operations, and facilitates technology-driven innovation.

DIGITAL SKILLS AND EDUCATION INVESTMENT

A strong technology sector requires a skilled workforce. Africa is well-positioned to meet this demand, but additional investment is needed. UNESCO estimates that Africa will need 23 million additional STEM graduates by 2030.⁹ The digital skills gap is a pressing challenge: over 60% of African companies cite a lack of skilled talent as a barrier to business growth.¹⁰ Meanwhile, the World Bank projects that Sub-Saharan Africa alone will generate 230 million digital jobs by 2030.

Education and vocational training initiatives are already making an impact. Tanzania, with support from the World Bank, has established an ICT training hub focused on software development, cybersecurity, and digital fabrication.¹¹ Malawi's Digital Foundations Project has connected schools to the internet and trained 19,000 youth in IT skills as of 2024.¹² These programs serve as models for expanding digital education across the continent.

Nigeria is already seeing the benefits of digital job creation. According to the Progressive Policy Institute's 2024 estimate, Nigeria has 45,000 App Economy jobs.¹³ Other African nations are also emerging as digital workforce hubs: Egypt has 51,000 App Economy jobs, South Africa 15,000, and Morocco 9,000. Expanding digital education and investment in tech hubs can further accelerate job creation across the continent.

TABLE 1: SELECTED NORTH AFRICAN AND SUB-SAHARAN COUNTRIES, APP ECONOMY JOBS, MAY 2024 (THOUSANDS)

	TOTAL APP ECONOMY	IOS ECOSYSTEM	ANDROID ECOSYSTEM
EGYPT	51	41	41
NIGERIA	45	36	36
SOUTH AFRICA	15	11	11
MOROCCO	9	7	7

Data: PPI, Indeed, ILO

Morocco

- As of early 2024, Indatacore, a user authentication software company, was seeking an iOS mobile developer in Casablanca to contribute to its mobile team.
- Majjane, a Rabat-based web agency, was looking for an iOS/Android mobile app developer.
- E@sy Solutions is a Moroccan company that designs software for the agriculture industry. It was seeking an Android Developer to maintain its mobile apps.



STARTUP AND SME SUPPORT

An educated workforce needs access to capital and job opportunities. Government support for startups and small-to-medium enterprises (SMEs) has been crucial to the success of technology sectors in North America, Asia, and Europe. Germany's High-Tech Gründerfonds, for example, has supported more than 700 startups since 2005 through public-private partnerships.¹⁴ In the United States, Silicon Valley benefited from early investments by the Department of Defense and ARPA.¹⁵

African governments are beginning to implement similar initiatives. Rwanda's Innovation Fund,

backed by a \$30 million loan from the African Development Bank, is expected to support 150 companies and create over 2,000 direct tech jobs over a decade.¹⁶ Expanding credit guarantee schemes, small seed grants, and government-backed venture funds could further accelerate the growth of Africa's startup ecosystem.

Additionally, fostering tech hubs can stimulate innovation. CcHUB in Lagos and iHub in Nairobi have helped launch numerous successful companies. Expanding similar clusters across Africa could create environments where startups thrive, benefiting from mentorship, networking, and access to investors.

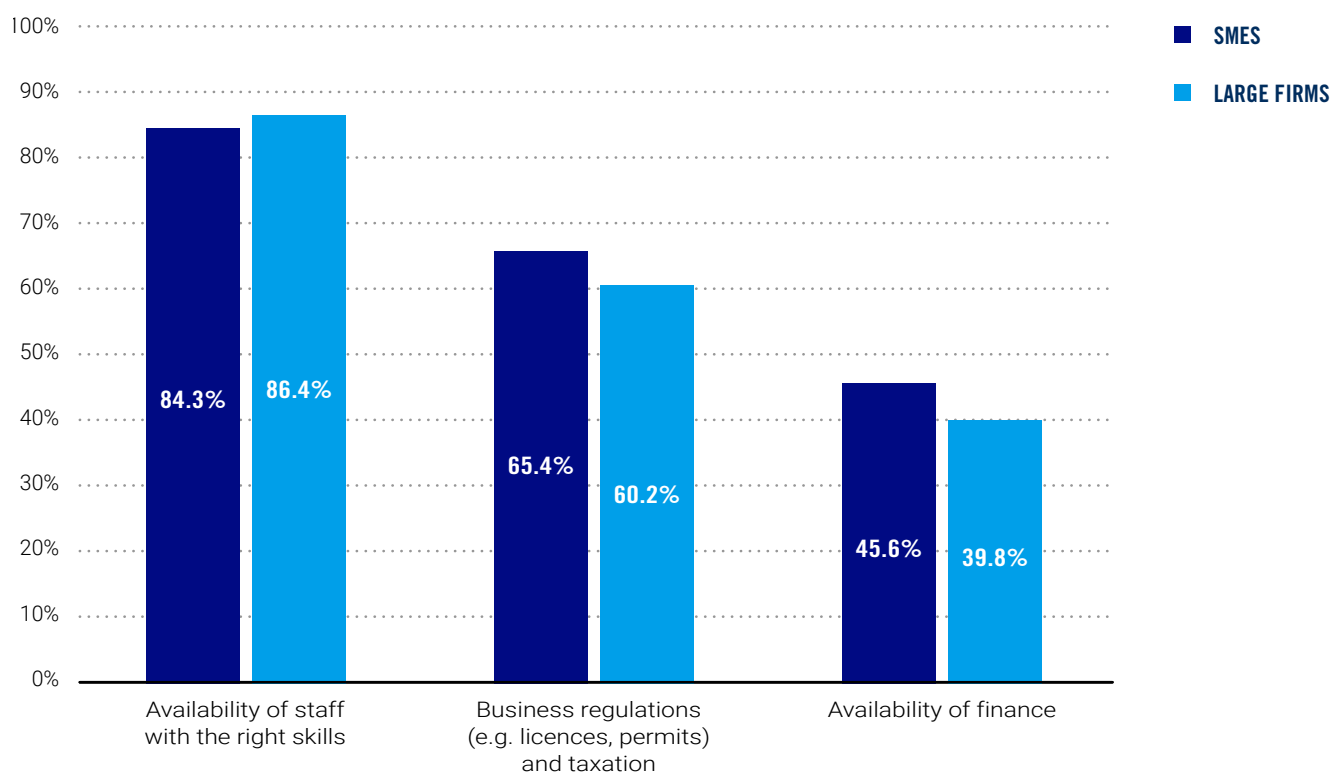
REGULATION AND TRADE REFORM

Africa has an opportunity to attract global investment by adopting business-friendly regulations that foster innovation. In contrast, regulatory overreach in North America and Europe has sometimes hindered growth.¹⁷ The EU's Digital Markets Act (DMA) and Digital Services Act (DSA), for example, impose strict limitations on tech companies, which some fear may stifle innovation and create compliance burdens for startups. These regulatory frameworks introduce heavy-handed enforcement mechanisms that could deter investment, reduce competition, and limit growth opportunities for smaller players in the tech space.

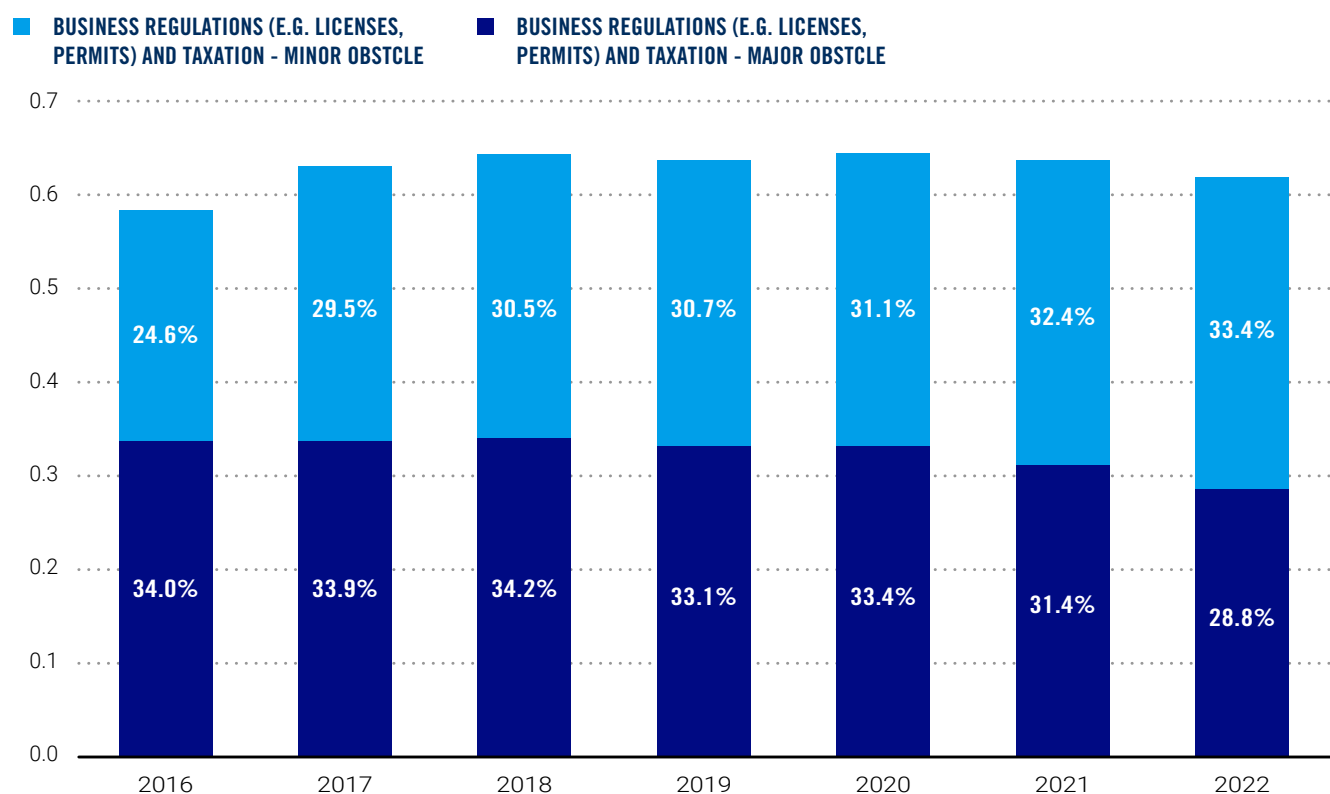
In contrast, the United States has generally taken a more market-driven approach, allowing technology firms to scale rapidly, attracting venture capital,

and fostering a thriving startup ecosystem. The consumer welfare standard used in U.S. antitrust law provides a model: it ensures companies can grow without harming competition or consumer choice.¹⁸ Africa's regulatory framework should aim to protect consumers while enabling startups and businesses to scale efficiently. Leveraging global digital platforms to boost the digital economy is a great driver of economic value, they have generated millions of jobs in Europe, the U.S., and beyond, as well as tens of thousands of startups. African developers and creators have an incredible opportunity to reach the world through these global platforms. The same goes for African artists, musicians, and movie makers through our media platforms. The focus should be on nurturing and directing these talents to create and publish on the platforms.

FIGURE 1: KEY IMPEDIMENTS TO INVESTMENT (2022)



Source: Centre for a Digital Society¹⁹

FIGURE 2: EVOLVING SME PERCEPTIONS OF REGULATION AND TAX AS AN IMPEDIMENT TO INVESTMENT (2016-2022)

Source: Centre for a Digital Society²⁰

CONCLUSION

Africa is poised to be a leader in the global digital economy. Since the introduction of the smartphone in 2007, the continent has made incredible strides in connectivity, innovation, and entrepreneurship. With continued investment in infrastructure, education, startup ecosystems, and regulatory

reforms, Africa has the potential to drive global economic trends in the coming decades. By learning from the successes and mistakes of other regions, African nations can unlock unprecedented growth and opportunity for their people and the world.

ABOUT THE AUTHOR

Lindsay Mark Lewis is the Chief Executive Officer at the Progressive Policy Institute (PPI) and has been a Board Member of PPI since 2010.

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PROGRESSIVE POLICY INSTITUTE
1919 M Street NW,
Suite 300,
Washington, DC 20036

Tel 202.525.3926
Fax 202.525.3941

info@ppionline.org
progressivepolicy.org