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# Countering the Digital Silk Road: Kenya

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## About the Technology and National Security Program

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# Project Overview

This year marks the 10th anniversary of the Digital Silk Road (DSR), China's ambitious initiative to shape critical digital infrastructure around the world to advance its geopolitical interests and technology leadership. A decade after its launch, digital infrastructure and emerging technologies have only grown more vital and contested as demand for connectivity, digital services, and emerging technologies like artificial intelligence (AI) expand. Against this backdrop, the DSR has become increasingly central to China's broader strategy to challenge and ultimately supplant the U.S.-led digital order, and in doing so, reap potentially vast security, economic, and intelligence advantages. To assess the DSR's impact 10 years after its inception—and explore how the United States and its allies can offer a more compelling and coherent alternative—the Center for a New American Security (CNAS) Technology and National Security team has undertaken a major research project that produces in-depth case studies of four diverse and geostrategically critical nations—Indonesia, Brazil, Kenya, and Saudi Arabia—and culminates in a full-length report.

The third case study focuses on Kenya. For the study, researchers from the CNAS Technology and National Security team spent a week in the country interviewing U.S. and Kenyan policymakers, journalists, technology firms, civil society, and academics. Drawing on these interviews and desk research, this case study seeks to shed light on the current dynamics and stakes of the U.S.-China competition to shape Kenya's digital ecosystem. It assesses the effectiveness of China's DSR campaign vis-à-vis U.S. and allied efforts to align Kenya's digital ecosystem with theirs in a way that advances U.S. security, economic interests, and values.



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## Executive Summary

In the escalating U.S.-China technology competition, policymakers too often overlook Africa. By midcentury, Africa's digital economy could hit \$712 billion.<sup>1</sup> The continent holds a third of the world's critical mineral reserves, which are vital for semiconductors, batteries, and other advanced technologies.<sup>2</sup> Africa's fast-growing workforce and digital economy offer significant market opportunities and first-mover advantages, comparable to Southeast Asia at the turn of the century.

Within Africa, Kenya stands out for its strategic importance. Kenya is East Africa's political and economic leader, its finance and logistics hub, and the regional headquarters for major international organizations and foreign technology companies. The country's relative macroeconomic stability, robust democracy, internet connectivity, and business climate have all drawn significant foreign direct investment and venture capital. Kenya's economy is now projected to exceed Ethiopia's in 2025, despite having less than half the population.<sup>3</sup> The country's digital sector, although small compared with established sectors such as agriculture and tourism, shows great promise. Kenya rightly touts its "Silicon Savannah," given the breakout success of M-PESA, a mobile payments platform, along with other homegrown tech successes like Semiconductor Technologies Limited, Odoo, and Kyosk.<sup>4</sup>

Kenya's technology potential and geopolitical importance have caught the attention of both the United States and China, which now vie to become Nairobi's preferred partner. Both countries have ties dating back to Kenya's independence in 1963.<sup>5</sup> The United States held the early edge with more active development assistance and security cooperation following the 1998 embassy bombings in Nairobi.<sup>6</sup> An early focus on counterterrorism expanded to intelligence-sharing and maritime security, and in 2024, Kenya became the only African country Washington has designated as a "Major Non-NATO Ally." Rare among African countries, the United States remains Kenya's largest export market.<sup>7</sup>

For its part, Kenya has resisted outright alignment with either Washington or Beijing. With that said, China made clear inroads with signature infrastructure projects and high-level political engagement. When Kenyan presidents Daniel arap Moi, Mwai Kibaki, and Uhuru Kenyatta pursued a "Look East" policy for alternatives to Western development financing, they found a willing partner in Beijing.<sup>8</sup> Chinese Premier Li Keqiang visited Nairobi in 2014, and Kenya joined the Belt and Road Initiative (BRI), China's state-backed



global infrastructure project, four years later.<sup>9</sup> Through the BRI, Beijing has financed major projects, such as the Nairobi Expressway and the Standard Gauge Railway.<sup>10</sup> China is now Kenya's largest trading partner, with bilateral trade rising more than 40-fold between 2000 and 2023.<sup>11</sup> Deepening investment and economic ties helped Chinese officials and firms learn local regulations, build relationships, and close key bids, bestowing powerful market advantages.

China made technology and telecommunications an early focus of its engagement with Kenya. Indeed, Kenya helped launch Beijing's Digital Silk Road in Africa. Huawei's very first project on the continent was a mobile network in Kenya it started in 1998.<sup>12</sup> Today, Huawei is the dominant provider for Safaricom, the country's national telecommunications network. Generous state support has since extended China's Digital Silk Road from telecommunications into Kenya's smart cities, fiber-optic cables, and data center ambitions.<sup>13</sup>

Growing Chinese investment and infrastructure has undoubtedly benefited many Kenyans, but it has also sparked controversy over allegations that it fueled corruption and an unsustainable debt burden. Against this backdrop, Kenyan President William Ruto has signaled greater openness to deepening partnerships with the United States, embracing market-friendly reforms and courting American tech firms.<sup>14</sup> Although Chinese companies built much of Kenya's physical digital infrastructure, U.S. firms continue to dominate the software and platforms Kenyans use every day, from WhatsApp to ChatGPT. Now, U.S. companies are expanding their footprint to meet Kenya's surging demand for digital services. Google, Microsoft, Amazon, and Cisco have ramped up investments, including a \$1 billion geothermal-powered data center, expanded cloud services, and skilling opportunities for AI, cybersecurity, and more.<sup>15</sup> Washington has reinforced these efforts diplomatically—President Joe Biden invited President Ruto to the White House for the first official state visit by an African leader in 16 years, where the leaders touted “a new era of technology cooperation.”<sup>16</sup> Until her departure in 2024, former U.S. Ambassador to Kenya Meg Whitman actively championed U.S. tech partnerships with Kenya.<sup>17</sup>

The Trump administration has an opportunity to build on this progress, and it has little time to waste. Beijing has sought to capitalize on backlash to Washington's tariff and trade policies to cast itself as a more reliable partner.<sup>18</sup> In April 2025, President Ruto made his first official visit to China, during which both countries pledged to upgrade ties to “a new level” and touted nearly \$1 billion in new investments in Kenya.<sup>19</sup>

President Ruto has said he looks neither East nor West, but “forward.”<sup>20</sup> To move forward, Kenya will need strong and reliable partners to bridge connectivity gaps, strengthen cybersecurity, and support its transition to the cloud and emerging technologies like AI. In each of these domains, the United States offers formidable strengths that, if properly harnessed, can loosen Beijing's grip on this strategic gateway to sub-Saharan Africa.

To that end, this case study offers the following recommendations for U.S. government officials and technology companies:

- **Strengthen commercial diplomacy with a focus on technology.** The White House should nominate an ambassador with private sector tech experience, following the model of former Ambassador Whitman. The U.S. Embassy in Nairobi should expand tech “road shows” that bring senior Kenyan officials and business leaders to U.S. tech hubs and expand working-level, tech-focused trade missions to and from Kenya. At the same time, the Foreign Service Institute should provide deeper technology training so diplomats can identify and win strategic digital projects abroad, and the Foreign Commercial Service should add staff in Kenya to match China's active presence on the ground.
- **Seize the short-term opportunity in Kenya's cloud migration.** Kenya's 2024 Cloud Policy mandates that all public entities adopt cloud-based solutions for information and communications technology (ICT) investments, creating an opportunity for U.S. hyperscalers to secure key public sector bids.<sup>21</sup> U.S. Embassy Nairobi should support by proactively engaging Kenyan policymakers and business leaders to emphasize the security, reliability, and long-term AI advantages of U.S. cloud services.
- **Surge partnership for Kenya's Digital Superhighway Initiative.** As Kenya seeks to connect every home to the internet with 62,000 miles of new fiber and 25,000 Wi-Fi hotspots, the Trump administration should prioritize diplomatic and other support for U.S. and allied firms to secure bids and loosen Huawei's current dominance.<sup>22</sup>
- **Prepare for Kenya's telecommunications modernization.** Aging Huawei-built telecommunications infrastructure will eventually require replacement. The United States and its allies should lay the groundwork to offer more secure and trusted alternatives by working now to connect key Kenyan government

and industry leaders with U.S. and allied vendors to explore viable alternatives, like Open Radio Access Networks (Open RAN) and low Earth orbit satellites, as well as financing options from the U.S. Trade and Development Agency, the Export-Import Bank of the United States, and the U.S. International Development Finance Corporation.

■ **Expand models like the Microsoft-G42 partnership to strengthen U.S. technology offerings in Kenya.**

The United Arab Emirates has become a valuable if imperfect partner for expanding U.S. influence in African markets. While taking precautions to safeguard sensitive U.S. technology, Washington should expand vetted partnerships like the Microsoft-G42 deal that leverage foreign capital, networks, and derisking to help U.S. firms scale in Kenya and beyond.<sup>23</sup>

■ **Pilot a network of “Silicon Savannah Incubators” to support tech entrepreneurs and startups.**

These U.S.-backed tech incubators would play to America’s strengths in innovation, entrepreneurship, and fair competition. The U.S. Embassy could partner with U.S. technology firms to provide not only financial support, but also mentoring, hardware, compute access, and opportunities for tech upskilling. Alternatively, the U.S. Embassy could help scale existing incubators from American tech companies in Kenya, such as the Google for Startups Accelerator.<sup>24</sup>

■ **Scale support for market-driven ICT skilling.**

The U.S. Embassy should partner with the U.S. International Trade Administration and private sector to conduct detailed forecasts of the tech sector and expand support for tech skilling initiatives that align with market trends, the needs of U.S. and allied companies, and U.S. interests, such as diversifying its supply chain for legacy chips.

■ **Support Kenyan cybersecurity.** In response to surging cyber threats, the Trump administration should foster partnerships between U.S. cybersecurity companies and the Kenyan government, critical infrastructure operators, and other key sectors. The United States and Kenya should also continue the U.S.-Kenya Cyber and Digital Dialogue, prioritizing capacity building, joint efforts to combat cybercrime, and the exchange of best practices.

■ **Promote transparency in dealmaking through enforcement of the FCPA and support for Kenyan procurement reform.** Competing with China on bribery is a losing game. The United States should double down on transparency and fair procurement. At the same time, the United States should encourage procurement reforms, fund capacity-building programs for Kenyan regulators, attach stronger transparency conditions to U.S. development financing, and leverage U.S. technology solutions where appropriate.



## The Importance of Kenya

In the escalating U.S.-China technology competition, Washington overlooks Africa at its peril. By 2040, one in three working-age people will be Africans.<sup>25</sup> By 2050, the continent's digital economy could reach \$712 billion as millions of new internet users drive up demand for mobile payments, cloud services, and e-commerce.<sup>26</sup> The continent also holds a third of the world's critical mineral reserves, including cobalt, lithium, and rare earth elements essential for semiconductors, batteries, and other advanced technologies.<sup>27</sup> Former U.S. Ambassador to Kenya Meg Whitman captured the stakes: "Africa is the last, and largest, emerging market . . . with opportunities like Southeast Asia presented 20 years ago."<sup>28</sup>

Within Africa, few countries are more strategically important than Kenya. The country is East Africa's economic and political leader and has emerged as the region's finance and logistics hub, owing to its relative macroeconomic stability, economic diversification, and business-friendly climate.<sup>29</sup> Kenya also stands out in the region for its relatively strong democracy, which has combined with the attributes above to draw significant foreign investment and operations.<sup>30</sup> The World Bank and International Monetary Fund (IMF) both have regional headquarters in Nairobi, and the UN is expanding its presence. Kenya has also become a top destination for foreign direct investment and venture capital. Indeed, Kenya receives more venture capital funding than any African country, when adjusted for GDP.<sup>31</sup> In 2025, the IMF forecasts that Kenya's economy will surpass Ethiopia's, even though it has a population less than half the size.<sup>32</sup>

Kenya also holds strategic value as an entry point into the fast-growing East African market of 500 million consumers, with the port in Mombasa processing four-fifths of the region's trade.<sup>33</sup> Notably, Kenya also maintains deep economic ties to the United States, which remains its largest export market.<sup>34</sup> Furthermore, Kenya is an important U.S. security partner: In 2024, it became the first African nation Washington designated a "Major Non-NATO Ally," opening the door to receive advanced U.S. military assets and participate in large-scale joint exercises.<sup>35</sup> The country's technology leadership, detailed in the next section, has burnished Kenya's reputation as the "Silicon Savannah." All these qualities have attracted growing attention, investment, and competition from the great powers to become Kenya's preferred partner.

Both the United States and China have maintained strong relations with Kenya since its independence in 1963. Washington's early engagement centered on

development assistance, with a focus on health and food security. Several developments at the turn of the 21st century strengthened bilateral relations. Passage of the African Growth and Opportunity Act in 2000 improved Kenya's market access to the United States, boosting exports.<sup>36</sup> The 1998 embassy bombings in Nairobi, along with the September 11, 2001, terrorist attacks in the United States, led to deeper bilateral counterterrorism cooperation against al-Shabaab, al Qaeda, and other violent extremists.<sup>37</sup> Kenya also hosts joint military infrastructure, like the expanded Manda Bay Airfield, and participates in intelligence-sharing programs such as Operation Gallant Phoenix.<sup>38</sup> Maritime security and antipiracy operations also have grown as the Kenyan Coast Guard helps safeguard international shipping lanes across the Indian Ocean.<sup>39</sup> Following Kenya's political transition in 2002, Washington also began touting shared democratic values.<sup>40</sup> Through it all, a market-driven approach strengthened economic ties through a combination of organic, private sector investments and strategic loans through bodies like the U.S. International Development Finance Corporation (DFC), which had over \$1 billion of exposure in the country as of May 2024.<sup>41</sup>

## Large infrastructure investments by Chinese firms provided not only tactical advantages for navigating the Kenyan market, but also powerful economic and political leverage over Nairobi.

China was slower to deepen its relations with Kenya, upgrading its bilateral relationship to a "Comprehensive Co-operative Partnership" in 2013 after decades of limited engagement. But Beijing quickly made up for lost time with high-level political attention, alignment with Nairobi's economic priorities, and generous state-backed infrastructure projects. In Kenya, early projects focused on technology and telecommunications, spearheaded largely by Huawei and ZTE. Indeed, Kenya was home to Huawei's very first project in Africa: a cellular network launched in 1998.<sup>42</sup> In 2004, Huawei also struck a landmark deal with Kenya's largest telecommunications provider, Safaricom, to develop its national network—sealing a critical partnership that shaped connectivity for years to come.<sup>43</sup>

Beijing's early engagement in Kenya bore fruit. The administrations of Presidents Daniel arap Moi, Mwai Kibaki, and Uhuru Kenyatta pursued a "Look East" policy to attract infrastructure financing from Beijing

as an alternative to Western development assistance.<sup>44</sup> Projects through the Belt and Road Initiative (BRI) also deepened Beijing's influence. Chinese Premier Li Keqiang visited Nairobi in 2014, signing 17 multimillion-dollar deals with President Kenyatta to fund various infrastructure projects, including the establishment of a China-Africa Development Bank.<sup>45</sup> Four years later, Kenya formally joined the BRI.<sup>46</sup> Between 2000 and 2023, trade between China and Kenya expanded more than 40-fold, rising from \$106 million to \$4.9 billion.<sup>47</sup> Large infrastructure investments in roads, rail, ports, and telecommunications helped Chinese firms learn local regulations, cultivate relationships, and secure key contracts in both the public and private sectors. These investments provided not only tactical advantages for navigating the Kenyan market, but also powerful economic and political leverage over Nairobi. Today, China remains Kenya's largest trading partner.<sup>48</sup>

China's growing influence also sparked controversy. Although Kenyans appreciate the economic and quality-of-life improvements of some BRI projects, concerns grow about links to corruption and the country's debt burden. The Nairobi Expressway, developed by the

state-owned China Road and Bridge Corporation, remains heavily underutilized due to high toll costs (the \$3 toll is half of Kenya's average daily wage).<sup>49</sup> The Chinese-financed Standard Gauge Railway (SGR) has developed a reputation as "the crown jewel of corruption."<sup>50</sup> Constructed to pass through Nairobi's National Park, the railway became the target of several lawsuits and corruption-related investigations. In 2018, three Chinese railway workers were charged with attempting to bribe Kenyan detectives to influence an anti-corruption investigation tied to the project.<sup>51</sup> Although the Expressway and SGR have reduced traffic and enjoy support from many Kenyans, the railway has failed to attract sufficient cargo volume to meet its projected revenue, burdening the country with additional debt.<sup>52</sup>

Kenya's ballooning debt—not only to China but also the IMF and World Bank—have become domestic political issues. By the end of 2022, Kenya owed at least \$6.7 billion to China, and interest payments alone consumed 27 percent of tax revenue.<sup>53</sup> In 2022, President Ruto conceded, "We are hurting from paying the Chinese debt."<sup>54</sup> Public sentiment mirrors his frustration: A 2020 Afrobarometer poll found that, among Kenyans aware



*Once heralded as a symbol of progress, the Chinese-financed Standard Gauge Railway has brought both benefits and controversy—reducing traffic while increasing Kenya's debt and spurring criminal investigations for corruption. (YASUYOSHI CHIBA/AFP via Getty Images)*

of Chinese loans, 87 percent believed their government had borrowed too much.<sup>55</sup> In part to service the debt, the government introduced a finance bill to raise taxes by \$2.7 billion on a population already suffering from high inflation and unemployment.<sup>56</sup> The move sparked mass protests, led largely by young, tech-savvy Kenyans who saw the bill as out of touch with their economic realities.<sup>57</sup> Demonstrators breached parliament, and police met them with a violent crackdown, resulting in the deaths of nearly two dozen people.<sup>58</sup> President Ruto withdrew the bill.

Kenya's rising debt burden also became an issue for Beijing as concerns grew over Nairobi's ability to meet its financial obligations. In 2023, Reuters reported that a China-linked cyber espionage group, Backdoor Diplomacy, had targeted Kenyan government institutions for years, including the Ministry of Finance and the Office of the President. Sources assessed the cyber operations were intended to gain information about Kenya's ability to meet debt obligations to Beijing.<sup>59</sup> China's foreign ministry stated it was "not aware" of any such operations, while the Chinese embassy in the United Kingdom dismissed the allegations as "baseless."<sup>60</sup>

Mounting tensions over debt, corruption, and espionage somewhat cooled the relationship between Nairobi and Beijing. Since taking office in 2022, President Ruto has openly criticized the previous administration's heavy borrowing from China and campaigned on economic reform and reducing Kenya's debt dependence.<sup>61</sup> Against this backdrop, both Nairobi and Washington saw an opening to deepen ties.

In May 2024, President Joe Biden invited Ruto to the White House in the first state visit for an African leader in 16 years.<sup>62</sup> The two leaders pledged new partnerships on technology, security, anticorruption, and debt relief.<sup>63</sup> Both leaders also heralded, "a new era of technology cooperation" with a focus on cybersecurity, artificial intelligence (AI), and semiconductors.<sup>64</sup> To jumpstart the new technology partnership, the Biden administration chose Kenya as the first African country to receive funding through the International Technology Security and Innovation Fund, an initiative of the 2022 CHIPS and Science Act to diversify global semiconductor supply chains.<sup>65</sup>

Even as Washington has stepped up efforts to court Nairobi, it would be a mistake to imagine that Kenya, like many emerging markets, will "choose" either the United States or China as a preferred partner. Indeed, President Ruto has explicitly rejected this binary in media interviews: "We're facing neither East nor facing West; we're facing forward."<sup>66</sup> Washington's increased activity did not go unnoticed by Beijing, which has also redoubled

efforts to woo Nairobi. Underscoring this, President Ruto made his first state visit to China in April 2025, and the two countries agreed to upgrade their ties and issued a joint statement indirectly criticizing unilateral tariffs and technology export controls from Washington. During the visit, China also pledged over \$950 million in support for construction, agriculture, and tourism.<sup>67</sup>

In short, although the United States had an early edge in Kenya—anchored in longer development assistance, security partnerships, and America's enduring appeal as an innovation hub—China has more than closed the gap with major infrastructure investments and high-level political attention. Washington must now build on recent progress to recover lost ground, and America's superior technology offerings in AI and cloud services, cybersecurity, next-generation telecommunications, and digital upskilling may be the key.

## Kenya's Technology Landscape

**K**enya is East Africa's technology leader and one of Africa's most advanced digital economies.<sup>68</sup> Strong internet connectivity, a young and largely English-speaking workforce, and a thriving startup ecosystem all power Kenya's "Silicon Savannah." Former U.S. Commerce Secretary Gina Raimondo lauded Kenya's "leadership in the digital transformation," calling it Africa's digital hub.<sup>69</sup> This reputation is well earned. Kenya pioneered mobile money in 2007, and its example has been copied across the developing world.<sup>70</sup> Kenyans widely use U.S. software and applications from Google, Microsoft, Meta, and OpenAI—the country even has the third-highest share of ChatGPT users in the world.<sup>71</sup>

Google, Visa, IBM, Pfizer, and Huawei all have regional headquarters in Nairobi.<sup>72</sup> They all see opportunity in Kenya's information and communications technology (ICT) market, which has grown by an average of 10.8 percent annually since 2016 and could reach \$15 billion by 2030.<sup>73</sup> Kenya's digital economy is expected to contribute up to 9.25 percent of the country's GDP this year, compared with about 5.2 percent for the African continent broadly.<sup>74</sup>

The crown jewel of Kenya's tech sector is M-PESA, a mobile payments platform with more than 50 million customers across seven countries launched with engineering support from Huawei. A staggering 70 percent of all transactions in Kenya route through the platform.<sup>75</sup> Beyond M-PESA's blockbuster success, homegrown tech companies like Semiconductor Technologies Limited, Odoo, Kyosk, Market Force, and more suggest the Silicon Savannah is not just a slogan but reality.



Kenya's innovations in digital governance have also set an example for Africa. Launched in 2014, Kenya was the first to introduce digital IDs with its “eCitizen” platform, a one-stop portal for Kenyans to access more than 5,000 digital government services, from immigration processing to tax filing.<sup>76</sup> In 2019, Kenya flexed its role as Africa's tech leader with its Digital Economy Blueprint, a framework drawing on its experience with digital development for other countries to adopt.<sup>77</sup>

Kenya's tech ecosystem has benefited from relatively strong government frameworks, business-friendly policies, and connectivity. Kenya's National Digital Master Plan 2022–2032 provides a blueprint for leveraging ICT to accelerate economic growth.<sup>78</sup> Kenya also released a draft National AI Strategy for 2025–2030 to harness AI for public services, address AI skills and capacity gaps, and build three high-performance computing data centers to host and train AI models locally.<sup>79</sup>

Kenya boasts a thriving startup scene, which receives more capital than any other African country.<sup>80</sup> In 2022, Kenyan entrepreneurs attracted \$1.1 billion, the majority flowing to clean technology, e-commerce, and financial technology.<sup>81</sup> For foreign investors, Kenya consistently ranks among the top African countries in the World Bank's Ease of Doing Business Index, placing third in sub-Saharan Africa in 2020.<sup>82</sup> In August 2023, Kenya made its climate even more attractive by repealing a 30 percent domestic equity requirement for technology companies, a long-standing policy that had deterred U.S. investors.<sup>83</sup> Since then, foreign companies such as Amazon Web Services (AWS) have committed large investments, including a new development center to support jobs in software development, cloud services, and software engineering.<sup>84</sup>

## **Kenya first “looks West” for technology but turns East when Western offerings are neither convenient nor affordable.**

Kenya is also one of Africa's best-connected countries. In 2024, the country had almost 20 percent more mobile connections than people.<sup>85</sup> As of 2025, six major submarine fiber-optic cables have landing points at Mombasa—including the TEAMS, SEACOM, EASSy, LION-2, DARE-1, and PEACE cable systems.<sup>86</sup> These cables have transformed Kenya's connectivity, spurring startups and foreign investment. When the first fiber-optic cables landed in 2009, they cut internet latency in the region by 400 percent and connectivity costs by more than 50

percent.<sup>87</sup> Kenya's connectivity will strengthen further with new routes like Google's Umoja subsea cable, announced in 2024, which will establish the first direct fiber link between Africa and Australia.

Despite impressive strides, connectivity gaps persist—particularly in rural areas. To bridge them, Nairobi is investing heavily to expand coverage. In 2023, President Ruto unveiled the Digital Superhighway Project, which aims to connect every home, school, and hospital to the internet, create 25,000 public Wi-Fi hotspots, and digitize 80 percent of public services.<sup>88</sup> A signature initiative is the National Optic Fiber Backbone Infrastructure (NOFBI) project from Kenya's Ministry of Information and Communication, which has received substantial support from Beijing.<sup>89</sup> In 2007, China's Export-Import Bank committed a \$37 million loan for the first phase of NOFBI, followed by a \$72.5 million concessional loan for Phase II in 2016.<sup>90</sup> Backed by Beijing's state financing, NOFBI offers subsidized rates for internet services to promote digital penetration across the country. Proactive private and state-backed investments have allowed Chinese companies to dominate Kenya's digital infrastructure at the layer of physical networks and end-user devices, even as U.S. companies maintain an edge at the application and software layers.

Kenya's rapid digitization has also exposed glaring gaps in cybersecurity. As connectivity expanded, so did the attack surface for malign cyber actors who exploit the country's relatively low cyber hygiene. The country's National ICT Policy now lists cybercrime and cybersecurity vulnerabilities as major challenges to achieve its digital ambitions.<sup>91</sup> A wave of cyberattacks in July 2023—attributed to the hacker group Anonymous Sudan—laid bare the country's cyber vulnerabilities, disrupting internet access, M-PESA transactions, and public services on eCitizen.<sup>92</sup>

These cyberattacks underscored an increasingly dangerous cyber landscape in Kenya, which endures among the highest rates of cyberattacks in Africa. In 2023, attempted cyberattacks in the country surged by 37 percent compared with the previous year.<sup>93</sup> The trend continued in 2024, with Kenya's communications regulator recording a 28 percent increase in cyber incidents between the third and fourth quarters.<sup>94</sup>

Kenya now searches for foreign partners to improve not only cybersecurity, but tech skilling, digital infrastructure, AI applications, and more. In interviews with Kenyan technology experts, CNAS researchers from the Technology and National Security Program repeatedly heard that Kenya first “looks West” for technology but turns East when Western offerings are neither

convenient nor affordable.<sup>95</sup> To date, this is why much of Kenya's physical infrastructure—including fiber backbone networks and telecommunications equipment—remains sourced from China, whose companies typically provide integrated solutions and competitive financing backed by state subsidies. Huawei, for example, typically provides comprehensive offerings from routers to cloud computing to “safe city” hardware and software solutions, which Western competitors like Ericsson struggle to match. As a partner, Huawei has also developed a reputation for speed, cost, quality, and ease of partnership.<sup>96</sup>

**Although the United States enjoys a qualitative and reputational advantage in software, cloud computing, cybersecurity, and AI, China retains significant leverage as Kenya's clear partner for physical infrastructure and telecommunications.**

China's integrated offerings also explain how its companies came to be entrenched in Kenya's “safe city” infrastructure. In 2014, Huawei partnered with Kenya's largest telecom provider, Safaricom, to deploy the country's first smart city surveillance system. The project installed 1,800 CCTV cameras across Nairobi, linking them to police command centers and equipping patrol vehicles with video and communications technology.<sup>97</sup> Billed as a public safety initiative, the system also provided Kenyan authorities with expanded monitoring and facial recognition capabilities. Following Nairobi's rollout, the project expanded to Mombasa and became a model for Huawei's smart city offerings across the continent.<sup>98</sup> These integrated surveillance networks—often bundled with financing and maintenance services—have become a key tool for Beijing to draw African governments into its closed digital ecosystem and encourage long-term dependency.<sup>99</sup>

Beijing has deepened Kenya's reliance on Chinese digital infrastructure by shrewdly courting key government institutions and officials. In 2011, Huawei appointed Kenyan engineer John Tanui as Deputy CEO of its Nairobi office. He later became CEO of the Konza Technopolis Development Authority, overseeing Kenya's \$14.5 billion flagship technology hub.<sup>100</sup> Under Tanui's leadership, Chinese financiers and contractors

secured all major construction bids, ensuring a dominant Chinese role in the project's development.<sup>101</sup> Huawei is constructing the city's data center, the China Aerospace Construction Group is building its electricity substation, and China's Export-Import Bank is financing its transmission lines.<sup>102</sup> Tanui has since left the Konza Authority and now leads Kenya's Ministry for Information, Communications and the Digital Economy, where he makes critical decisions determining the country's digital infrastructure, partnerships, and policy.<sup>103</sup>

At times, Beijing has wielded its economic leverage and government relationships to protect its tech presence in Kenya. In 2004, Huawei and Safaricom held a grand signing ceremony to celebrate Huawei's selection to reconstruct the Kenyan mobile operator's network.<sup>104</sup> Three years later, the contract had made no progress. In an interview with *The Washington Post* reporter Eva Dou, Safaricom's then-CEO, Michael Joseph, recalled his effort to cancel the Huawei contract and secure a refund.<sup>105</sup> When Joseph returned to Nairobi, Kenya's ICT Minister warned him that canceling the contract had imperiled Chinese foreign assistance to Kenya. The minister of immigration also insinuated that, as a foreigner, Safaricom's CEO might have work-permit problems if he canceled Huawei's contract.<sup>106</sup>

Neither Huawei nor Safaricom publicly commented on the allegations, but when asked about the incident years later, Joseph rushed to Huawei's defense: “[Huawei] succeeded in winning back Safaricom and had gone on to become a key partner.”<sup>107</sup> In 2021, Nairobi again backed Huawei, dismissing U.S. government warnings that deploying the Chinese firm's technology in Kenya's 5G rollout could open the door to Chinese espionage. At Safaricom's 5G launch event, then-ICT Secretary Joe Mucheru argued that “questions about suppliers and technology . . . are just more political postures.”<sup>108</sup>

Downsides to Safaricom's dependence on Huawei have already emerged. In a private interview, a Safaricom representative lamented that Huawei's contract prices had grown consistently, at one point rising 7 percent over the previous year.<sup>109</sup> Given Safaricom's reliance on Huawei's closed technology stack, it has few viable alternatives in the short term. At the same time, much of Huawei's telecommunications infrastructure is aging—with some network infrastructure dating back to 2007—presenting potential opportunities for the United States and its allies to offer alternatives, like Open Radio Access Networks (Open RAN), low Earth orbit satellites, and other next-generation telecommunications technologies when the time comes for modernization.<sup>110</sup>

Kenya's relatively strong digital economy, business-friendly policies, and connectivity have made it an attractive market for U.S. and Chinese tech firms, which now compete aggressively to become the Silicon Savannah's partner of choice. Although the United States enjoys a qualitative and reputational advantage in software, cloud computing, cybersecurity, and AI, China retains significant leverage as Kenya's clear partner for physical infrastructure and telecommunications. In the following sections, this case study will review three key domains of U.S.-China competition to shape Kenya's digital trajectory: commercial diplomacy, cloud services, and tech upskilling.

## Key Domains of Competition

### Commercial Diplomacy

Commercial diplomacy is a vital if underappreciated tool in helping U.S. businesses compete in foreign markets. Commercial diplomacy may gain new focus under the Trump administration, which has embraced a more business-minded, interest-based approach to foreign policy. For clarity, this case study will define commercial diplomacy as government activities to advance the interests of its private sector abroad. Done well, commercial diplomacy can help level the playing field for U.S. firms by advocating for a more open and competitive procurement, regulatory, and investment climate, while also helping to identify and secure market opportunities.

America's commercial diplomacy is led by the U.S. Foreign Service within the Department of State, supported by the U.S. Foreign Commercial Service, based in the Department of Commerce. Foreign Service officers are America's frontline interlocutors with foreign officials for commercial and economic policy, helping to monitor, analyze, and shape relevant policies on the ground.<sup>111</sup> The U.S. Commercial Service, which is much smaller, helps American companies identify and secure market opportunities abroad, effectively serving as expert liaisons for foreign markets. The U.S. Trade and Development Agency (USTDA), the DFC, and the Export-Import Bank of the United States (EXIM) also play essential roles in commercial diplomacy, with tools ranging from feasibility studies, low-interest loans, equity investments, and political risk insurance.<sup>112</sup> These tools can be essential to identify, mature, finance, and derisk strategic projects.

Commercial diplomacy ultimately rests with frontline personnel. The tenure of former Ambassador Whitman offers a promising model for how to elevate commercial diplomacy with a focus on technology.<sup>113</sup> As the former

CEO of eBay and Hewlett-Packard, Whitman leveraged her deep contacts and expertise with Silicon Valley to forge stronger commercial ties, rooted in technology partnership, between the two nations.<sup>114</sup> Under Ambassador Whitman, the Embassy helped lobby the Kenyan government to remove a tax on stock-based compensation for startup employees and a rule requiring tech companies to have a 30 percent share of local ownership, arguing both would limit deeper investment and partnership from U.S. technology companies.<sup>115</sup>

With funding from Prosper Africa, an initiative launched under the first Trump administration to connect U.S. and African businesses, Embassy Nairobi also organized a week-long U.S.-Kenya "business roadshow" in September 2023.<sup>116</sup> As part of the roadshow, President Ruto and other top Kenyan officials traveled to San Francisco, New York, and Chicago to visit with the CEOs of Apple, Google, and Intel to court investment and forge connections.<sup>117</sup> Whitman also personally pitched Kenya's appeal as a compelling option for U.S. companies interested in supply chain diversification that also supported their climate and clean energy goals.<sup>118</sup>

Since the visit, Microsoft announced a \$1 billion investment—its largest yet in Kenya—to build its data center in partnership with the Emirati company G42, Cisco launched a Cybersecurity Technology Experience Center in Nairobi, and IBM announced plans to train 10,000 Kenyans in cutting-edge technology skills.<sup>119</sup>



*Then-U.S. Ambassador to Kenya Meg Whitman and Kenyan President William Ruto attend the U.S. Kenya Business Roadshow on September 15, 2023, in San Francisco. Organized by the U.S. Embassy in Nairobi, the initiative highlights the investment potential of Kenya's growing tech sector to U.S. firms and showcases U.S. innovation to Kenyan leaders. (Photo by Kimberly White/Getty Images for Kenya Business Roadshow)*



America's high-level commercial diplomacy continued in April 2024 when Secretary Raimondo chose Kenya as her first official visit to Africa. During the visit, Raimondo announced private-sector deals on digital transformation, along with bilateral agreements to promote data protection, digital upskilling, and connectivity.<sup>120</sup> The two countries also committed to partner on the safe development and deployment of AI, the first agreement of its kind between Washington and an African government.<sup>121</sup> After years of regular Chinese activity in Kenya, Ambassador Whitman increased high-level engagement from leaders in both Washington and Silicon Valley. In an interview with Bloomberg, she reflected, "Half the battle is showing up, and I don't think America showed up quite as much as we might have in the last 20 years. . . . We left an open running room for China."<sup>122</sup>

Showing up is necessary but insufficient; Washington must pair face time with investment. In Kenya, the USTDA and DFC have made strategic investments to deepen U.S.-Kenya technology ties. Coinciding with the Biden-Ruto meeting in May 2024, the USTDA provided \$1 million to Semiconductor Technologies Limited, a Kenyan technology company, to study the feasibility of developing a new semiconductor fabrication facility in the country.<sup>123</sup> It also funded a feasibility study for Poa Internet, a Nairobi-based internet service provider, to expand affordable internet connectivity via fixed wireless technology to one million households.<sup>124</sup> In 2024, the DFC provided Kenya with \$250 million in loans and grants to enhance digital infrastructure and connectivity.<sup>125</sup> As Kenya's connectivity and digital economy expands, so will opportunities for the USTDA and DFC to promote closer ties with the United States.

Proactive U.S. commercial diplomacy that combines high-level outreach, strategic investment, and the innovative reputation of U.S. technology products will remain essential to offset China's influence in Kenya. It will also be vital to mitigate one of China's most significant structural advantages in closing key deals: the ability to offer nonmarket incentives. Chinese firms often offer cash bribes, luxury gifts, vacations, and other inducements to box out foreign competitors.<sup>126</sup> A prominent Kenyan lawyer alleged that Chinese companies routinely offer kickbacks amounting to 10–30 percent of a contract's total value to sway tender decisions.<sup>127</sup> In another interview for this report, a Kenyan business advisor explained, "[U.S. companies] are missing out big time. . . the U.S. government isn't at the table in the way the Chinese government is."<sup>128</sup> The U.S. Trade Representative's Office concurred in a 2024 report: "U.S.

firms have had very limited success bidding on Kenyan government tenders, with corruption being a significant concern."<sup>129</sup> Multiple industry analysts interviewed for this report also said that U.S. companies struggle to win major Kenyan contracts due to entrenched corruption in procurement, along with the inability to match superior prices and state backing from Chinese counterparts.<sup>130</sup>

## **Proactive U.S. commercial diplomacy that combines high-level outreach, strategic investment, and the innovative reputation of U.S. technology products will remain essential to offset China's influence in Kenya.**

Against this backdrop, the temptation to loosen anti-corruption rules is understandable but short-sighted. The United States should not engage in a race to the bottom with Beijing that abandons its historic commitment to curb corruption and promote the rule of law. In February 2025, President Donald Trump signed an executive order pausing enforcement of the Foreign Corrupt Practices Act (FCPA), which prohibits U.S. companies from engaging in bribery abroad.<sup>131</sup> This is a mistake. Advocating for anti-corruption rules upholds U.S. credibility and builds goodwill among local populations who often bear the downstream costs of corruption. It also benefits U.S. businesses by reducing costs and shielding them from bribes. As the U.S. Trade Representative's 2024 report noted, "U.S. firms routinely report direct requests for bribes from all levels of the Kenyan Government."<sup>132</sup> This not only deters American investment but reinforces a system in which successful bids hinge on connections instead of quality, playing to China's advantage. If Washington wants to compete effectively, it should double down on proactive commercial diplomacy without compromising the values that distinguish U.S. firms.

Stronger commercial diplomacy will also require doing more to harness partnerships with technology-leading foreign governments and companies. The United Arab Emirates (UAE), for instance, has emerged as a key player in Kenya. It is Kenya's sixth-largest export market and second-largest source of imports.<sup>133</sup> With strong diplomatic and business ties, it is now a strategic hub for foreign investors expanding into Africa. As one analyst from a prominent U.S. technology company put it, "If you want to do business in Africa,

open a location in Dubai.”<sup>134</sup> The United States should leverage its ties with the UAE to strengthen its foothold in Kenya and beyond.

The G42-Microsoft partnership offers a potential, albeit imperfect, model. Under the partnership, Microsoft tapped the Emirati company’s networks and know-how in the Global South to announce a \$1 billion investment in Kenya’s digital ecosystem. The core of the investment is a planned 1-gigawatt (GW) data center outside Nairobi. Set to be operational within two years, the facility will launch with 100 megawatts (MW) of capacity, with plans to scale to 1 GW over time, supporting a new East Africa Cloud Region for Microsoft Azure.<sup>135</sup> Central to the project’s appeal is its proximity to Olkaria’s geothermal fields, enabling the data center campus to run entirely on renewable energy.<sup>136</sup>

Beyond this “state-of-the-art green data center,” Microsoft and G42 outlined ambitions to develop an open-source Swahili-language AI model, expand AI skilling, promote connectivity, and improve access to secure cloud services across East Africa.<sup>137</sup> In exchange for Washington’s blessing, G42 agreed to strict security controls and other measures, including divestment from Chinese holdings and removal of Huawei equipment. Proactive monitoring to ensure compliance

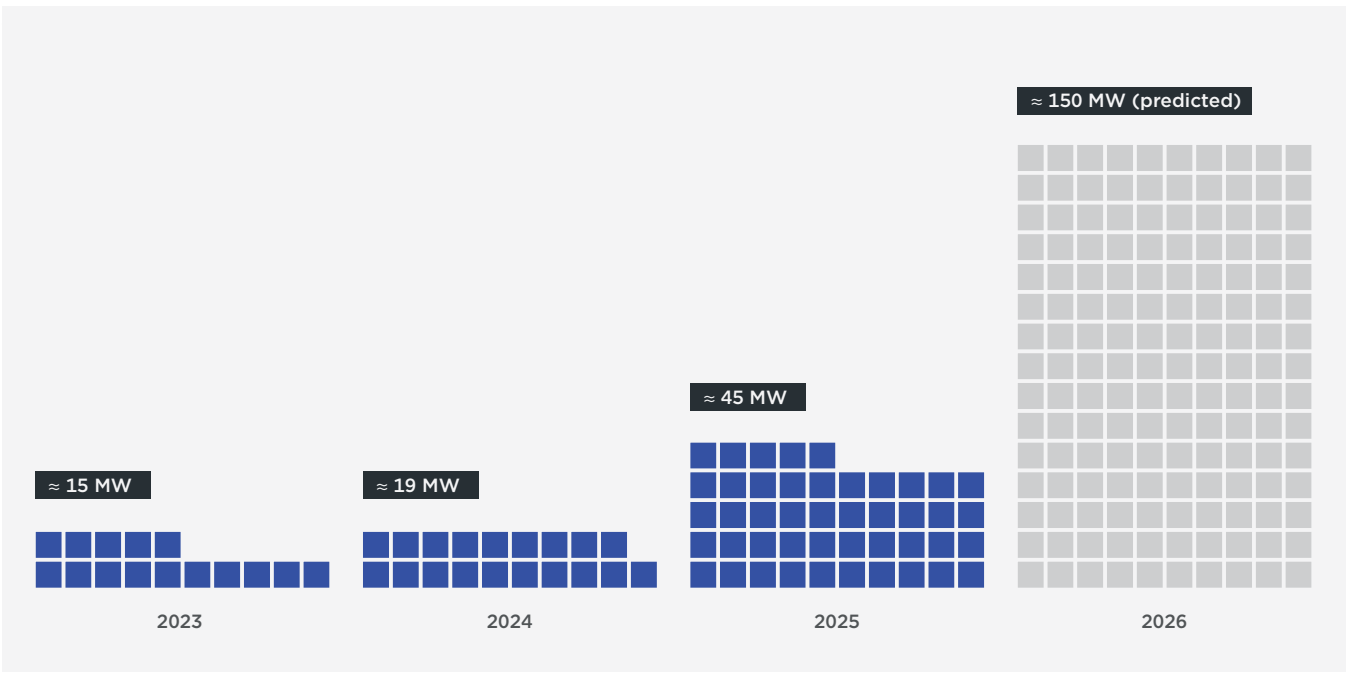
will remain critical, and Washington should insist on similar arrangements should other U.S. companies seek partnerships with Emirati firms related to sensitive AI technology in exchange for support in third countries. With that said, Washington should be clear-eyed about the Microsoft-G42 partnership in Kenya, given G42’s past ties to Huawei and the UAE’s controversial role in supporting paramilitary forces in neighboring Sudan.<sup>138</sup>

Cloud Services

Microsoft and G42 are not alone in looking to Kenya as a regional hub for AI infrastructure, drawn by its growing digital economy, relatively strong connectivity, clean energy grid, and beachhead for the East African market.<sup>139</sup> Foreign hyperscalers also see surging demand for cloud services across the continent, which is expected to nearly triple by 2030.<sup>140</sup>

Together, these dynamics could produce a boom in data center construction. In 2023, Kenya had just 15 MW of operational capacity.<sup>141</sup> As of March 2025, that figure has grown to nearly 20 MW across 11 data centers, with another 25 MW expected by the end of the year.<sup>142</sup> By 2026, total data center capacity is projected to reach 150 MW, driven by seven new facilities—including the 100 MW Microsoft-G42 data center.<sup>143</sup>

FIGURE 1: KENYA’S DATA CENTER CAPACITY GROWTH (2023–2026)<sup>144</sup>



The figure illustrates Kenya’s data center capacity year by year from 15 megawatts (MW) in 2023 to roughly 150 MW in 2026. The steep growth curve highlights how quickly Kenya is becoming a regional hub for cloud and artificial intelligence workloads.

Government policy is also accelerating cloud uptake in Kenya. The country's Cloud Policy, released in December 2024, mandates that all public entities transition to cloud-based solutions when making ICT investments, with private firms following closely behind.<sup>145</sup> The policy's rationale is straightforward: By reducing reliance on physical hardware, cloud adoption can cut costs for Kenyan small and medium enterprises by an average of 36 percent.<sup>146</sup> This builds on Kenya's 2019 Data Protection Act, which introduced local data storage requirements, further fueling demand for domestic data centers.<sup>147</sup> In concert, these measures have spurred rapid construction and investment: Kenya's cloud computing sector is projected to grow nearly 20 percent annually, generating a market of roughly \$2 billion by 2029.<sup>148</sup>

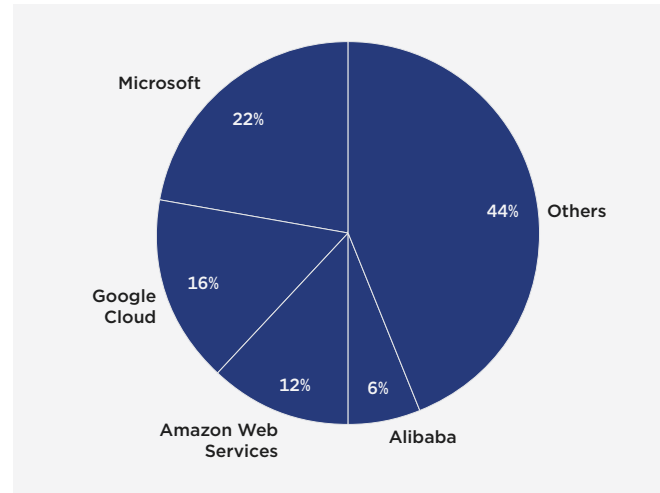
As government and private firms migrate to the cloud, Kenyan agencies and industries are making a generational choice with long-term implications for their digital future. Once a business or agency migrates its data to a particular cloud service provider (CSP), they may face significant switching-costs down the road. Their choice of a CSP could also shape future access to advanced AI services. Neither Kenyan companies nor the government are currently able to build large-scale computing clusters to train frontier AI models; their access to advanced AI models will likely come virtually through the cloud and partnership with foreign technology companies. For all these reasons, Kenya's short-term cloud partnership decisions could shape its long-term ties to the U.S. or Chinese AI ecosystem.

For now, U.S. firms dominate Kenya's cloud market, even if they run on an infrastructure of telecommunications networks and mobile devices linked to Chinese companies like Huawei, Tecno, Infinix, and Xiaomi.<sup>149</sup> For cloud services, Microsoft leads with 22 percent market share, followed by Google Cloud at 16 percent, AWS at 12 percent, and Alibaba at just 6 percent.<sup>150</sup> Chinese CSPs have yet to establish a meaningful foothold in Kenya—Alibaba, for instance, has no data center in Africa and operates exclusively through local partnerships.<sup>151</sup> But that may soon change.

Despite the current dominance of U.S. firms in Kenya's cloud market, Chinese competitors are making inroads and securing key government contracts. Huawei Cloud is building the data center in Konza Technopolis with Chinese concessional loans, and Alibaba Cloud has partnered with Kenya's Ministry of Tourism to promote AI-driven wildlife conservation and expand opportunities for staff training.<sup>152</sup> Along with U.S. cloud providers, Huawei partners with Kenya's National Computer and Cybercrimes Coordination Committee, the country's

oversight body for critical infrastructure. This provides Huawei an important node of influence, as several major sectors consider future cloud providers.<sup>153</sup> Given China's strong connections at the government level, the United States must redouble its efforts to seize on its strong market position to win strategically important cloud contracts across both the public and private sectors.

**FIGURE 2: CLOUD SERVICE PROVIDER MARKET SHARE<sup>154 \*</sup>**



*This figure breaks down Kenya's cloud market: Microsoft leads with 22 percent of the market share, Google with 16 percent, AWS with 12 percent, and Alibaba with just 6 percent. Local and regional providers account for the remaining 44 percent. While U.S. firms still hold the advantage, Alibaba's foothold and more recent Kenyan government contracts with Huawei Cloud signal that the presence in the market of Chinese cloud service providers stands to grow further.*

\* "Others" are smaller cloud service enterprises largely based in East Africa.

## Tech Upskilling

A consequential yet underappreciated front in the U.S.-China rivalry is the race to shape the tech workforce in emerging markets. Kenya's young population—with a median age of 20—is especially tech-savvy and eager for ICT training.<sup>155</sup> The Kenyan government has also made digital upskilling a priority. As Kenya's Ministry of ICT and the Digital Economy outlines, "development of quality ICT human resources is a prerequisite to the development of a viable ICT sector," and the government aspires to train 20 million Kenyans in digital skills over the next decade.<sup>156</sup> It also announced a nationwide AI training program for public servants, set to launch in July 2025.<sup>157</sup>

Both the United States and China have invested in training Kenyan ICT talent through programs ranging from basic digital literacy to advanced AI. They understand that cultivating local tech talent not only creates

goodwill but familiarity with their respective digital ecosystems. U.S. and Chinese tech companies now compete for loyalty and lock-in. A Kenyan engineer trained on Huawei products may be more likely to advocate for them later in their career—whether at a startup, large company, or government agency.

Both Chinese and U.S. technology companies have built extensive upskilling programs for Kenyans. Microsoft, Google, IBM, and Cisco have all established research and training hubs in Kenya.<sup>158</sup> Google's Research Africa Centre in Nairobi offers Google Career Certificates, while Microsoft plans to train one million Kenyans in AI and cybersecurity by 2027.<sup>159</sup> Kenyan youth also regularly turn to American platforms like Coursera and edX for further training.<sup>160</sup>

Although U.S. technology firms have a longer presence in Kenya, Chinese counterparts have actively closed the gap to cultivate local tech talent. Huawei (along with Microsoft) provides mentorship support for the government's Presidential Digital Talent Program.<sup>161</sup> Huawei has also invested extensively in ICT training for Kenyan students through its "Seeds for the Future" program and academies in more than 50 Kenyan universities and voca-

**Both Chinese and U.S. companies have built extensive upskilling programs in Kenya, but neither has sufficiently addressed the core challenge—ensuring that training translates into sustainable, well-paying jobs.**

tional colleges.<sup>162</sup> For instance, Huawei's ICT Academy offers short courses across Kenyatta University's network of campuses for students and working professionals to provide training and certification in a range of areas from data storage to AI.<sup>163</sup> Huawei is not only funding expansive opportunities for tech skilling; it is helping write Kenya's tech skilling playbook. The company coauthored the Kenyan ICT Authority's 2022 white paper on "ICT Talent Cultivation for Kenya's Digital Economy."<sup>164</sup>

Nairobi's upskilling ambitions overlook a deeper problem: There are not enough jobs to absorb the fast-growing pool of skilled workers. Although Kenya's tech sector continues to grow at a rapid clip, it remains small as a share of the economy compared with established sectors such as agriculture and tourism. As of 2023, the country's tech sector employed only 300,000 people.<sup>165</sup>

With an oversupply of qualified candidates chasing too few jobs, youth unemployment in Kenya hit a staggering 67 percent.<sup>166</sup> Without a corresponding increase in jobs, digital training initiatives risk producing a surplus of qualified workers with high expectations for their careers but no opportunities to meet them.

With limited full-time opportunities, many Kenyans have turned to gig work. A 2020 study by the Kenya Private Sector Alliance found that 1.2 million Kenyan adults engage in gig work, relying on platforms like Uber, Fiverr, and DoorDash to make ends meet.<sup>167</sup> Kenya's online gig economy was valued at over \$350 million in 2022 and is expected to grow at 33 percent annually.<sup>168</sup> But while gig work provides short-term relief, it does not offer long-term career growth, benefits, or stability.

Certain online gig opportunities have generated backlash. U.S. data annotation firms such as Sama have leveraged Kenya's workforce to provide content moderation services for leading U.S. technology companies like Meta and OpenAI. But these jobs have a dark underbelly. Through Sama, OpenAI paid Kenyan workers just \$1.50 per hour for content moderation, a task workers described as traumatic, disturbing, and even "torture."<sup>169</sup> The backlash led Sama to terminate its contract with OpenAI in February 2022, eight months ahead of schedule. OpenAI said its labeling work sought to make its AI systems safer and that it "never intended for any [illegal] content . . . to be collected." A Sama spokesperson said the company was not initially informed that OpenAI's material might include illegal content. Once staff raised concerns, Sama immediately ended the project.<sup>170</sup>

Both Chinese and U.S. companies have built extensive upskilling programs in Kenya, but neither has sufficiently addressed the core challenge—ensuring that training translates into sustainable, well-paying jobs. To make a lasting impact on Kenya's digital workforce, the United States should both help Kenyan workers access skills and promote a business environment to put those skills to use. This means accelerating the expansion of Kenya's Silicon Savannah by encouraging U.S. private investment, helping the government promote a fair and competitive regulatory environment, and promoting Kenya's tech entrepreneurship.

In some cases, this could include targeted U.S. investments that align tech upskilling with market needs and American interests—such as promoting diversified supply chains for U.S. companies. A May 2024 initiative provides a potential model: It directed nearly \$32 million toward STEM education with curricula tailored for industry needs.<sup>171</sup> Through partnerships with Microsoft

and the Mastercard Foundation, the initiative also allocated \$6.5 million to place STEM graduates in high-growth sectors like ICT.<sup>172</sup> While the initiative remains nascent, it models the integrated approach needed to bridge the gap between education and employment.

The competition for tech talent is an often-overlooked front in the U.S.-China competition to shape digital ecosystems in emerging markets. Efforts to boost tech upskilling are not charity, but strategic investments to build long-term relationships, technological influence, and U.S.-aligned digital ecosystems.

## Recommendations for Policymakers

**K**enya has become an important if underappreciated front in the U.S.-China technology competition in the Global South. As a key economic, security, and technology partner in East Africa with significant potential, Washington has a direct interest in ensuring Kenya does not become further wrapped in China's Digital Silk Road. Kenya's role as a leading African tech hub only raises the stakes, as developments in the Silicon Savannah could echo across the continent.

Although U.S. technology has long enjoyed advantages in software, applications, and brand reputation, China has leveraged concessional financing, low-cost hardware, and elite political ties to embed Huawei in Kenya's telecommunications backbone, safe city infrastructure, and talent pipeline. As President Ruto signals openness to deeper partnership with the West, it is imperative that he find a willing partner in Washington that recognizes Kenya's potential—and the dangers of allowing it to slip back into Beijing's orbit.

Looking ahead, the United States has powerful advantages that, if effectively leveraged, could help break the grip of Chinese firms and recover lost ground. U.S. firms lead in cloud computing, AI, cybersecurity, and digital skilling, offering high-quality alternatives to Chinese offerings. U.S. and allied companies have compelling offerings in subsea cables, Open RAN networks, low Earth orbit satellites, and other next-generation telecommunications as Kenya considers whether to double down or diversify from Chinese-linked networks. Washington also aligns more closely with Kenya's desire for a more cybersecure and democratic digital infrastructure. Capitalizing on these advantages, however, will require a more sustained and strategic approach. There is a pivotal but narrow window for Washington to strengthen its partnership for Kenya's Silicon Savannah and set a model for countering China's Digital Silk Road across Africa.

To that end, this case study offers the following recommendations for U.S. government officials and technology companies:

### *Strengthen commercial diplomacy with a focus on technology.*

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The Trump administration should identify priority markets for the U.S.-China technology competition and nominate ambassadors with significant private sector tech experience, following the model of former Ambassador Whitman. In addition, the administration should significantly expand tech “road shows” in priority markets that bring high-level leaders to U.S. tech hubs to forge connections with industry. For similar reasons, the administration should also expand working-level trade missions to Kenya, and “reverse” trade missions from Kenya, focused on technology. At home, the State Department should scale opportunities for Foreign Service officers to receive technology training to improve their effectiveness at identifying and securing opportunities for strategic U.S. technology projects abroad. The Trump administration should also expand the U.S. Foreign Commercial Service to support those efforts and match China's presence on the ground.

### *Seize the short-term opportunity in Kenya's cloud migration.*

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Kenya's 2024 Cloud Policy mandates that all public entities adopt cloud-based solutions for ICT investments.<sup>173</sup> This policy creates an immediate opportunity for U.S. hyperscalers to secure their position as the cloud provider of choice for Kenyan government and industry. U.S. Embassy Nairobi can help by proactively engaging Kenyan policymakers and business leaders to emphasize the security, reliability, and long-term AI advantages of U.S. cloud services.

### *Surge partnership for Kenya's Digital Superhighway Initiative.*

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As Kenya seeks to connect every home to the internet with 62,000 miles of new fiber and 25,000 Wi-Fi hotspots, the Trump administration should prioritize diplomatic and other support for U.S. and allied firms to secure bids and loosen Huawei's current dominance.



*Prepare for Kenya's telecommunications modernization.*

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Aging Huawei-built telecommunications infrastructure will eventually require replacement. The United States and its allies should anticipate this window and lay the groundwork to offer more secure and trusted alternatives. Displacing Huawei outright is unlikely; instead, Washington should help Nairobi diversify the vendors in any new telecommunications infrastructure. U.S. officials should work now to connect key Kenyan government and industry leaders with American and allied vendors to explore viable alternatives, like Open RAN and low Earth orbit satellites, as well as financing options from the USTDA, EXIM, and DFC.

*Expand models like the Microsoft-G42 partnership to strengthen U.S. technology offerings in Kenya.*

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The UAE has become a valuable if imperfect partner to expand U.S. influence in African markets, with deep trade and investment ties to Kenya in particular. While taking precautions to safeguard sensitive U.S. technology, Washington should expand vetted partnerships like the Microsoft-G42 deal that leverage foreign capital, networks, and derisking to help U.S. firms scale in Kenya and beyond.

*Pilot a network of "Silicon Savannah Incubators" to support tech entrepreneurs and startups.*

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These U.S.-backed tech incubators would play to America's strengths in innovation, entrepreneurship, and fair competition. The U.S. Embassy could partner with American technology firms to provide not only financial support but mentoring, hardware, compute access, and opportunities for tech upskilling. It could offer U.S. technology entrepreneurs and venture capitalists the opportunity to stay in-residence as full-time mentors, as well as invite a regular cadence of visiting U.S. tech professionals to strengthen ties between the two countries' tech sectors. Alternatively, the U.S. Embassy could help scale existing efforts from American tech companies in Kenya, like the Google for Startups Accelerator or Meta's Llama Impact Accelerator.<sup>174</sup>

*Scale support for market-driven ICT skilling.*

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The U.S. Embassy should partner with the U.S. International Trade Administration and private sector to conduct detailed forecasts of the tech sector and expand support for tech skilling initiatives that align with market trends, the needs of U.S. and allied companies, and U.S. interests, such as diversifying its chip supply chain.

*Support Kenyan cybersecurity.*

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Surging cyber threats highlight the urgency of stronger U.S.-Kenya cybersecurity partnerships. The Trump administration should foster partnerships between U.S. cybersecurity companies and the Kenyan government, critical infrastructure operators, and other key sectors, underscoring U.S. firms' superior cloud-based and AI-enabled solutions and capitalizing on the mandate in Kenya's 2024 Cloud Policy. The United States and Kenya should also continue the U.S.-Kenya Cyber and Digital Dialogue, prioritizing capacity building, joint efforts to combat cybercrime, and the exchange of best practices.

*Promote transparency in dealmaking through enforcement of the FCPA and support for Kenyan procurement reform.*

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The Trump administration's 180-day pause on FCPA enforcement risks becoming a quiet death sentence for the law. Letting it wither would erode U.S. credibility and raise business costs. Competing with China on bribery is a losing game. Instead, the United States should double down on transparency and fair procurement, a stance that resonates in Kenya, where citizens resent entrenched graft and nepotism. At the same time, frontline U.S. personnel should continue to promote transparency and procurement reforms with Kenyan counterparts. Specifically, the United States should fund capacity-building programs for Kenyan regulatory bodies, attach stronger transparency conditions to U.S. development financing, and leverage U.S. technology solutions where appropriate. With these steps, Washington can improve U.S. business competitiveness while aligning with Kenyan citizens frustrated by corruption's toll.



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