E-PAPER

Building blocks for a new U.S. posture on digital development – from bilateral response to multilateral coordination

KAY MCGOWAN AND PRIYA VORA
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# Table of Content

1. Executive summary 03
2. Context 05
3. African perspective: overview of needs and priorities 11
4. Looking forward: a new U.S. posture on digital development 14
5. From bilateral response to collective action 18
U.S. policymakers are showing a markedly increased interest in addressing the persistent digital divide in low- and middle-income countries (LMICs). An examination of digital policy trends points the way to how the U.S. government can channel its resources and work effectively with allies to meet the stated needs of LMIC stakeholders, while promoting the values that underpin liberal democracies, including the right to privacy and to freedom of expression. Through a combination of desk research and consultations with subject-matter experts, as well as with current and former government officials from the United States and LMICs, we find that:

1. The growing policy attention to digital transformation in LMICs is motivated by (a) growing concern of authoritarian influences exerted through digital technology and data surveillance; (b) the hope that closing the digital divide can open new markets for next-generation digital technologies produced in the U.S.; and (c) the opportunity to use technology to close the social and economic divides in LMICs made even more apparent by the Covid-19 pandemic.

2. The increased policy attention among U.S. policymakers has led to lofty statements and highly visible initiatives designed to catalyze investments in technology that prioritize individual rights, market competition, environmental impact, and transparency. However, this rhetoric has, largely, yet to be matched with commensurate funding among the U.S. agencies that offer aid and investment in LMICs. There also is still no clearly articulated strategy that defines where and how these agencies can best engage and how to effectively coordinate with democratic allies. In fact, certain legislation governing U.S. foreign assistance hampers the American response to digital authoritarianism and the global digital divide.
3. A look at a broad sample of LMIC policymakers, particularly in Africa, reveals remarkably consistent and specific ideas about how the U.S. can add the greatest value. Perhaps more importantly, LMIC leaders express a strong preference for how the U.S. can engage on this issue – as a partner rather than as a patron.

4. To be a partner in the digital journey of LMICs, the U.S. and its allies should emphasize shared resources, mechanisms for coherent cross-border regulation, capacity building, and open dialogue to ensure the national policy landscape in the U.S. positively supports LMICs.

5. Finally, any meaningful response on the part of the U.S. government must be done in coordination with democratic allies, in particular the European Union and G7 member states. To offer a complement, if not an alternative (which may not be feasible), to China’s state-subsidized approach, the U.S. will need to work closely with allied sovereign states and multilateral development banks to both create the conditions for attracting private, institutional investment, and agree upon a common, overarching values framework to govern the digital infrastructure.
Almost half of the world’s population remains without internet access, and many others lack the meaningful connectivity that would allow them to engage in activities like online learning, remote work, and telehealth services. In the least developed countries (LDCs), only 1 in 5 people are online, and overall only 40 of LMICs have internet access that is affordable for people with average income levels. Chinese-provided infrastructure across Africa is closing this digital divide more quickly than any other source. Much of this investment – Huawei alone has built more than 70 percent of the continent’s 4G networks – is financed through China’s state-funded policy banks. Alongside this digital infrastructure investment, China is actively promoting norms of data governance that support state use of digital tools to conduct surveillance and stifle dissent. According to a *Freedom House report on the rise of digital authoritarianism*, the Chinese government trained officials from at least 36 countries on its digital governance model in 2018 alone. Earlier this year, Senegal became the first country to adopt the Chinese data policy approach wholesale as a part of Chinese-built data centers designed to enable Senegal to achieve “data sovereignty.”

This combination of “soft financing” for digital infrastructure packaged with the promotion of illiberal governance models has caused increasing alarm among U.S. policymakers in recent years, and has led to a series of reorganizations and policy pronouncements designed to bolster American support for closing the digital divide through overseas development assistance. Modest steps, such as the creation of a cross-cutting “digital development” practice at the U.S. Agency for International Development (USAID) in 2010 were followed by more muscular moves under the Trump administration, namely: the *BUILD Act of 2018*, which created the U.S. International Development Finance Corporation (DFC), replacing the Overseas Private Investment Corporation and expanding its authorities to de-risk private investment in LMICs; and
the announcement of the **Blue Dot Network**, a DFC-led initiative with financing counterparts in Japan and Australia, designed to assess and certify infrastructure development projects worldwide according to indicators of “financial transparency, environmental sustainability, and impact on economic development.”

### Blue Dot Network’s Vision of Quality Infrastructure

The U.S. International Development Finance Corporation’s Blue Dot Network is one of several initiatives attempting to offer a credible certification regime of high-quality standards to help attract private sector finance to accelerate investment infrastructure development in LMICs, in alignment with core democratic values. It was launched under the Trump administration, and the Biden team opted to continue the initiative with the addition of standards that address the imperative to slow or reverse climate change. The U.S. government, in partnership with Japan, is working with the Organization for Economic Cooperation and Development (OECD) to develop the standards. Other such initiatives include the U.K.’s **Clean Green Initiative**, standards to be embedded in the EU’s Global Gateway connectivity initiative, and the public-private initiative **FastInfra**. Notably, China’s President Xi Jinping also has called for the Belt and Road Initiative to include “high quality” infrastructure projects that, as he described it, promote harmony between humanity and nature.

While seemingly competing, these initiatives are all in early stages of trying to find the balance between credibility, speed, and value. Blue Dot intends to be certified by auditors, while FastInfra relies on self-assessment. Clean Green is focused on environmental consequences, while Global Gateway’s aims appear broader. These initiatives offer an opportunity for the U.S. and its allies to determine the best method for raising quality standards, mobilizing private financing, and accelerating the provision of much-needed infrastructure.

In 2022, the Blue Dot Network will release its framework to be pilot-tested in the first set of infrastructure projects. Should it be deemed a success, many questions remain: how to build a broader coalition of partners around this standard? How to ensure a wide network of certification experts? And perhaps most notably, how can supporters of Blue Dot not only establish standards for quality infrastructure but also meet those standards?
Importantly, the Biden administration has signaled that foundational technology investments both at home and abroad are a top policy priority – officials particularly highlight access to the internet for Americans and a meaningful contribution to increasing internet access globally. This stance recognizes the importance of connectivity for all people to thrive, but also recognizes that access to global markets as well as the ability to shape the governance of digital infrastructure is critical to U.S. economic competitiveness and national security.

This call for investment to close the digital divide in the U.S. and in LMICs is accompanied by a growing bipartisan consensus that U.S. regulatory frameworks should be updated to deconcentrate markets and to better protect people and democratic institutions against the misuse of data generated online. Domestically, the bipartisan infrastructure legislation signed into law in mid-November 2021 includes $65 billion to ensure universal internet access, while the White House recently called for a new “Bill of Rights” to govern the use of artificial intelligence. Internationally, the administration introduced the Build Back Better World (B3W) initiative at the G7 summit in June 2021, touting a “values-driven, high-standard, and transparent infrastructure partnership,” around which wealthy democracies would commit to mobilizing capital to help address climate change, gender inequality, and healthcare systems, and to close the digital divide in LMICs.

Further, the administration hosted the high-profile “Summit for Democracy” in late 2021, in which technology and governance of technology were recognized as a cross-cutting issue. The summit, which brought together government officials and civil society leaders committed to liberal democratic norms, laid out a series of commitments to both counter digital repression and promote values-driven investments to close digital divides. Among these values, efforts to mitigate the impact of technology investments on climate change will take center stage, as will efforts to employ technology to reduce human impact on the climate and environment. Separately, in September 2021, the newly established U.S.-EU Trade and Technology Council (TTC) identified a shared desire to “drive the digital transformation that spurs trade and investment, benefits workers, [and] protects the environment and climate,” offering another venue for cooperation among democracies.

These high-profile announcements signal the Biden administration’s increasing recognition that the gaps in digital infrastructure in LMICs are a strategically important arena for competition with technology provided by Chinese companies. In particular, the B3W initiative reflects increasing concern that Chinese-led investments in the digital infrastructure of LMICs under the “Digital Silk Road” are financing the installation of technologies produced by companies subject to Chinese regulations and legal frameworks that obscure access to and use of the data produced through the infrastructure.
In addition to recognizing the national security implications of ceding leadership in the
global digital economy to an authoritarian rival, U.S. government officials increasingly
understand developing and emerging countries as important markets for next-genera-
tion digital technologies produced by U.S. firms. Finally, the Covid-19 pandemic exposed
and accelerated digital gaps. That highlighting the criticality of digital infrastructure
and services not only for economic growth and resilience but also for virtually the entire
agenda of the United Nations’ Sustainable Development Goals.

Nevertheless, in practical terms, despite growing U.S. recognition that its strategic and
economic interests create both an imperative and an opportunity to play a larger role
in closing the global divide, the U.S. government’s response has been largely rhetorical
thus far. No new funding has been allocated to the B3W initiative, for example. And
neither has the U.S. created a common financing mechanism to de-risk investments
in LMIC connectivity, even though the success of LMICs in mobilizing private capital
from wealthy democracies will rely on the ability of development finance institutions
and aid agencies of the G7 member states to coordinate. Further, that coordination will
be necessary not only within and between member state institutions, but also with the
multilateral development banks. In the U.S. alone, the Biden administration envisions
interagency partnership among at least five separate government bodies (USAID, DFC,
the State Department, the Millennium Challenge Corporation, and the U.S. Trade and
Development Agency). An alliance of development finance institutions (the DFI Alliance),
launched in 2019 with participation from DFC and the respective Japanese and Canadi-
an development finance institutions, recently expanded to include 16 countries of the Or-
ganization for Economic Cooperation and Development (OECD), is a potentially import-
ant starting point to pool resources and align de-risking processes but cannot coordinate
decisions among the G7 and industrialized, democratic governments alone.

Additionally, despite the early intent that DFC focus on LMICs, it is not statutorily pro-
hibited from working in upper-middle income countries and can do so on two grounds:
1) national security or 2) developmental, the latter referring to work in an underdevel-
oped part of the country in question. This loophole was quickly exploited: in 2019, DFC
was directed to support energy projects in high-income Europe and Eurasia through the
European Energy Security and Diversification Act, in order to support allies and count-
er Russian influence. In 2021, some in Congress expressed the desire to move the DFC
even further away from a focus on LMICs, via a provision in the proposed EAGLE Act:
Section 116 of the draft bill explicitly allows DFC to invest in high-income countries
everywhere, not necessarily those most in need of foundational infrastructure (digital or
otherwise).
When Democratic Values Collide

The U.S. Development Finance Corporation (DFC) and its counterpart development finance institutions (DFIs) in G7 member states must overcome not just complex coordination challenges but also bilateral rules to which each DFI must adhere, which at times are in tension, if not explicitly contradictory. For example, the legislative requirement that the U.S. DFC eschew any investments in networks that contain Chinese-produced equipment severely constrains its ability to join deals that support the provision of mobile telephony in LMICs. In a rare “greenfield” opportunity, the U.S. DFC pledged $500 million to a consortium that enabled Vodafone Group to win Ethiopia’s first mobile telephone license. Yet, fallout from the escalating conflict between the government and its opponents in the Tigray region now threatens the ability of the U.S. to participate in the deal. Already, the U.S. cited “gross human rights violations” by government forces in rescinding Ethiopia’s participation in the African Growth and Opportunity Act, an initiative that gives African countries duty-free access to U.S. markets, provided they meet certain conditions, including political pluralism. The Biden administration must soon decide which objective takes primacy: upholding democratic norms by punishing the government for abuses committed in the escalating conflict or ensuring that Ethiopia’s mobile network is provisioned by companies based in democracies.

Neither is the U.S. government’s development agency well positioned to ramp up technology investments in LMICs. To wit, the budget of USAID is 89 percent committed to congressional earmarks in sectors such as health, education, and agriculture. Without a connectivity earmark or a discrete, funded mandate, technology investments by USAID suffer from the classic “tragedy of the commons” misalignment of incentives. The exceptions to this rule are longstanding investments in health information management systems and one-off, crisis-induced opportunities. For example, in the wake of the West African Ebola outbreak, USAID used $10 million to underwrite the creation of Monrovia’s metrofiber ring. This project has drastically changed the broadband landscape in Liberia by laying more than 180 kilometers of fiber and connecting nearly 50 government facilities to the internet. But was only possible due to congressionally authorized emergency funding for the Ebola response.

Thus, despite the aspirational rhetoric of B3W, the Summit for Democracy, and the U.S.-EU TTC, no specific operational details have been announced and additional funding has not yet been allocated to an effort that would meaningfully change the scale of U.S.
investment in closing the global digital divide. Strategic considerations still being debated within the administration include:

1. **U.S. comparative advantages**: Where does the U.S. offer unique support and expertise? How can U.S. efforts complement those of democratic allies?

2. **Impact**: Which efforts will most meaningfully advance the goals of catalyzing economic prosperity, creating new markets for U.S. companies, and countering digital authoritarianism?

3. **Resources**: Especially at a time when the U.S. government is prioritizing Covid-19 response and climate change, how can initiatives make the greatest difference with the available resources? How can the U.S. encourage private-sector investment in LMICs?

4. **Approach**: Does the U.S. government need to form a new organizational structure/framework to bring together its digital competencies or can a loose coordination of relevant partners (USAID, State, DFC, the Commerce Department, MCC, and USTDR) be equally effective? How can USG efforts be coordinated and aligned with other countries?
While U.S. attention to closing the digital divide is growing, it pales in comparison to the observed and stated needs of LMICs. From hard infrastructure to softer (but equally critical) complementary requirements such as training and skills cultivation, the opportunity for supporting digital transformation grounded in democratic values is significant.

Before examining the needs, it is valuable to reflect on the incredible – if uneven – progress achieved over the past decade. We focus on Africa, where development assistance has been a priority and where much of the geopolitical debate has been centered. While it is impossible to tell one story of Africa – a continent of 54 countries and home to 1.3 billion people – some trends are undeniably consistent. Notably, the population is comparatively young and urbanizing. It has one of the highest dependency ratios in the world because of the high percentage of youth, putting significant pressure on the relatively small labor force. Africa is also urbanizing at a higher rate than other continents. Important to digital development, Africa lacks legacy systems – like traditional telephone lines – so it is leapfrogging with modern technology at a rapid pace. Most countries now have in place national ICT strategies, and countries like South Africa, Egypt, and Nigeria each host more than 30 innovation hubs. As a result of these trends, the technology-innovation market has exploded over the past decade, with hundreds of African technology start-ups reaching the critical milestone of receiving venture capital investment. In fact, between 2015 and 2020, the growth in the volume of African technology start-ups receiving financial backing was almost six times faster than the global average.

And yet structural and systemic challenges to digital development remain. Twenty-eight percent of urban households and 6 percent of rural households have access to the internet. Only one country on the continent (Morocco) has more than 70 percent of citizens using the internet. Talent is also a major impediment to ICT use and growth. Of the
700,000 software engineers in Africa, more than half reside in one of five countries, leaving much of the continent woefully short of skilled technologists. And the inconsistent regulations across the fragmented African marketplace make doing business a challenge. These issues are at the heart of why so many technology start-ups fail to raise capital beyond the second round of financing.

In light of these needs, the African Union developed its first continental framework for digital transformation by 2030. The comprehensive framework identifies four foundational pillars that must be in place to ensure all businesses and individuals can participate in a thriving digital economy: (1) enabling environment, policies, and regulation; (2) digital infrastructure; (3) digital skills and human capacity; and (4) digital innovation and entrepreneurship. Importantly the document sets the aspiration high, such that a single African marketplace becomes a producer, not only a consumer, of technology solutions, thus advancing economic and social goals. That there now is an Africa-wide framework for the first time is as much a signal of the importance of digital development as the specifics of the framework itself.

Oxford University’s 2020 survey of LMIC policymakers reveals specific requests for international assistance in building national digital ecosystems. From those responses, we glean the following:

1. When policymakers in developing countries were asked about their technology priorities, four areas were regularly identified as top issues: “Jobs and Skills,” “Telecommunications Infrastructure,” “Privacy and Data Protection,” and “Data Sharing and Interoperability.” (It’s worth noting that African citizens themselves have voiced the need for improved data sharing. In a 2018 Afrobarometer survey, people from across the continent reported feeling limited in accessing public data sets. This limitation is highly correlated with the perception of corruption within government.)

2. When asked how the international community can support telecommunications infrastructure, respondents indicated financing gaps are the most important to address.

3. Respondents suggested a variety of support structures – not only funding - are needed to help with issues of data governance. The requests included standards, financing, regulatory coherence, and training. Data governance is particularly complex, as no country has figured out how to create the conditions for strong data usage and interoperability while also protecting civil liberties.

In short, the needs are many, and some issues are more mature (infrastructure) and some more nascent (data governance). Each issue deserves a distinct response with appropriate financing instruments and support. It may be useful, therefore, to deconstruct the elements of a healthy digital ecosystem to establish a more nuanced view of how to assist at each level.
### Elements of digital development

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<th>Infrastructure: Mobile connectivity &amp; usage</th>
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<td>Handsets</td>
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<td>2G connectivity and interoperability</td>
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<td>Usage/skills</td>
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<th>Infrastructure: Broadband connectivity &amp; usage</th>
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<td>Data centers</td>
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<td>Submarine cable capacity</td>
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<td>3G/4G connectivity</td>
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<td>Internet freedoms</td>
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<td>Usage/skills</td>
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<th>Platforms: Digital payments &amp; usage</th>
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<td>Open switch</td>
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<td>Merchant acceptance</td>
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<td>Data protections</td>
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<td>Usage/skills</td>
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<th>Platforms: Data exchange</th>
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<td>Data interoperability platforms</td>
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<td>Cyber security laws and practices</td>
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<th>Ecosystem: Innovation landscape</th>
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For each element, it is useful to ask: What are the challenges to scale? To what extent are solutions known? What amount and type of financing is required? To what extent does this element impact democratic outcomes? How might international actors coordinate to reduce redundancies and maximize impact?
Looking forward: a new U.S. posture on digital development

It is clear the digital development agenda is on the rise among U.S. policymakers, both in service of social and economic goals and to counter authoritarian influence. It is equally clear that developing countries want more international support and investment in their digitalization journey. But to date, the financial support from the U.S. government has not been material, though private sector investments from U.S.-based companies are increasing. Facebook and Google have both committed more than $1 billion dollars to improve connectivity in Africa through building undersea cables, while Microsoft pledged $100 million in Kenya and Nigeria alone to open “development centers” to build first-in-class engineering talent. These pale in comparison to Chinese investment, but they are not immaterial. However, the extent to which these corporate investments align with U.S. or broader G7/OECD interests remains unclear.

To the extent new resources become available from the U.S., major questions remain: Within the broad set of needs outlined above, what kinds of support do LMICs seek from the U.S. and G7 partners to achieve digital transformation? Conversely, in what ways do G7 countries want to support digital transformation, in light of their commercial and geopolitical agendas as well as their interests in promoting human rights, sustainability, democracy, and social justice? In what ways do the needs of LMICs and the interests of G7 allies overlap?

We offer three overarching recommendations for U.S. engagement:

1. **Put forward a positive vision of change.** The U.S. portfolio on digital investment in LMICs has largely been perceived as a move to counter Chinese growth and influence. This is out of sync with popular perceptions of China in Africa, which are more positive, and frustrates political leaders on the continent who cannot turn their backs on important financial and trade relationships with China. At the same time, a com-
mon sentiment among African policymakers is that more financing and engagement on these issues is welcome, so that they are not so singularly tied to one country for financial assistance. As one former ICT minister put it, “We don’t want to be caught in the middle of a U.S. and China digital Cold War,” but instead want to see more and increasingly diverse funding from a range of partners. The United States and its democratic allies will be better served by presenting a positive vision of a digital future that can use technology to serve the very important economic growth imperative that is of utmost importance to LMICs, while simultaneously underpinning democratic norms, fostering competitive markets, and promoting human rights. For example, the U.S. position, codified in the National Defense Authorization Act, to not finance broadband infrastructure that uses or has ever used Chinese equipment suggests there is a viable alternative. In fact, nearly half of the telecom networks around the world contain some equipment produced by Huawei and/or ZTE. Taking such an absolutist position against Chinese equipment – no matter how valuable from a data security standpoint – does not offer a realistic alternative and may have the unintended consequence of locking the U.S. out of infrastructure deals entirely. Rather than projecting direct competition with China, the U.S. can tacitly acknowledge the reality that Chinese digital infrastructure is in place and investments are continuing. Doing so allows the U.S. to focus resources on solutions that promote democratic norms: good digital governance, capacity building on issues of data protection and empowerment, civil society actors to hold governments and private sector accountable, and knowledge exchange with democratic allies.

2. Mobilize the U.S. government around a clear agenda. There are many relevant agencies who can support the digital democracy agenda in LMICs, including but not limited to USAID, DFC, MCC, State Department, USTR, USTDA, Commerce, and the U.S. Treasury Department. The deep expertise across these agencies can be an asset in reinforcing and supporting a positive vision of digitalization only once a common position is established that reflects U.S. commercial, geostrategic, and development objectives. USAID has led a cross-agency strategy for a digital paradigm supporting democratic ideals. That can serve as a useful starting point for crafting a common U.S. government position on policy issues critical to the way digital transformation impacts economies and societies, including data protection, taxation, and identification.

3. Shift from patron to partner. At a moment when the U.S. is grappling with governing its digital ecosystem – from misinformation to data breaches to concerns over surveillance capitalism – it is important to approach any other government with a strong dose of humility. To be clear, there is yet to be an answer for how to ensure the technology landscape of the future underpins democratic ideals as opposed to undermining them. U.S. foreign assistance risks being perceived as paternalistic if it comes with a heavy hand of prescribing solutions. Insisting on conforming to the U.S. posi-
tion on net neutrality and data localization, for example, or to Europe’s position on General Data Protection Regulation is premature at best. It isn’t the content of these policies that is rejected but, as one official told us, “Nobody wants to be told how to govern.” While it may not be possible – or desirable – to take a politically agnostic view when investing in LMICs, the United States can approach LMICs as peers on this agenda. The United States might consider some of the following in order to demonstrate a partnership-based approach:

a. Develop mechanisms for cooperation on digital laws/regulations and resist attempts to coerce regulatory environments to conform to the U.S.;

b. Soliciting perspectives from LMICs on proposed U.S. legislative action, including data protection laws, content moderation, and competition policy, given the far-reaching implications of U.S. rules on transnational technology platforms headquartered in the U.S.;

c. Enact and enforce the proposed global minimum tax, which will alleviate concerns that U.S. corporations are extracting value out of LMICs without paying their share of taxes (often described in inflammatory terms such as digital exploitation and digital colonialism); and

d. Invest in research to build shared understanding of how policies and practices are affecting the digital societies of LMICs.

By acknowledging that solutions may still have to be found and that approaches taken in the Global North may not be entirely transferable to low-resource settings, the U.S. can create fora for dialogue and exchange on how to establish an inclusive, thriving digital economy that builds trust and agency and promotes open societies.

4. **Build on unique capabilities/comparative advantages to maximize impact.** Digital development needs are extensive, and financial resources can easily run short. The U.S. can leverage existing programs and resources to meet the requests from LMICs. While not exhaustive, the U.S. can leverage two key legacy assets – its track record in education and in fostering connections with the American innovation community.

a. **Education.** The U.S. State Department and USAID have a long and successful track record of building global educational programs and peer exchanges. From the more recent Young Africa Leadership Initiative to the renowned Fulbright Program, to the International Visitors Leadership Program, and perhaps more specifically the U.S. Telecommunications Training Institute, the United States has sponsored a variety of initiatives that support education and training needs where-in technology issues can be mainstreamed. As one policymaker noted of Africa, “No Chinese institute has planted itself on the continent in the same way the U.S. has.” In fact, a common concern is that China’s approach to digitalization in Africa
is heavily dependent on Chinese labor, thus creating a lasting cycle of dependency. Building up indigenous technology talent can drive faster and more effective digitalization and, if done well, build the capabilities to govern the digital future with a common set of shared values.

b. **Connections to American innovators and technologies.** A common aspiration across LMICs is to shift from being a technology taker to a technology maker, whereby a thriving private sector continually establishes technology tools that meet their unique market conditions. The U.S. can support this aspiration in two ways. First, it can foster formal exchange with technology hubs (Silicon Valley, Salt Lake City, Austin, and elsewhere) and, just as importantly, with the financing communities that power every stage of an innovator’s growth. Second, the U.S. can expand its technology transfer initiatives with like-minded governments to share new developments in technologies such as artificial intelligence and cybersecurity, but also new ways to apply, finance, and govern these tools.

While infrastructure support is not viewed as a core competency or strategic advantage of the United States, several African policy makers are calling for the U.S. to engage more on infrastructure to reduce the dependency on China. In doing so, the U.S. may not distinguish itself on price but instead on the ability to support “soft investments” such as those noted above. Bundling infrastructure financing with such capacity building mechanisms might be a winning strategy.
Even if the United States does all of the above – (a) defines a positive vision of the digital future; (b) focuses its attention on high-impact activities where it builds upon core capabilities; and (c) embraces LMICs as equal partners – the U.S. alone cannot close the digital divide and counter undemocratic uses of digital technology. A larger, collective response is required among democratic allies and partners beyond government to meet the magnitude of the challenge.

We offer several practical means through which to drive collective action:

1. **Convert principles into broadly agreed-upon standards:**
   a. As noted above, the early efforts of Blue Dot, FastInfra, and others will hopefully soon show evidence of raising the quality bar for physical infrastructure and for mobilizing financing. The international community can make deliberate efforts to review the evidence and converge around the quality standards that are proving most effective. The G7 is a promising starting point, given the majority of members are already engaged on this topic, but it will be important to ensure any standard is widely endorsed by LMICs.

   b. Within the foreign assistance realm, the *Principles for Digital Development*, crafted by an international group of implementers, development practitioners, and donors, have been endorsed by more than 300 organizations and referenced in foreign assistance procurements of some bilateral aid agencies, including USAID. These principles can be more strongly codified into practice if more aid agencies and international financial institutions endorse them through procurement language and if there are adjoining tools (accredited training and audits perhaps) to help meet them.
c. G7 allies can advance a digital society that upholds liberal democratic values by jointly and more precisely defining what that means. There is not yet a systematic method to evaluate whether digital infrastructure and platforms are designed, implemented, and governed to maximize outcomes for all people and for the economies and societies in which they live. Once stakeholders align on the specific metrics by which countries are evaluated, there will be common understanding of how countries are advancing digital ecosystems that support democratic values.

2. **Combine grant dollars toward digital public goods:**

   a. In other sectors, there has often been a small set of industry leaders offering support for public goods (Consultative Group to Assist the Poor for scaling microfinance; Alliance for a Green Revolution in Africa for promoting food security measures). But the digital development sphere remains underfunded for such initiatives. G7 partners can co-fund a center of excellence (or network of them) to promote research, policy dialogue, training, and other public goods related to digital development. Greater investment in grant-funded programs like the Digital Impact Alliance and ICT Africa can drastically improve shared understanding of digital development trends, experiences, and needs.

   b. Similarly, there is an opportunity to coalesce around the creation and maintenance of open standards digital infrastructure designed to serve the public good (or **Digital Public Goods** for short). Through nascent efforts such as the Digital Impact Alliance, Digital Public Goods Alliance, Co-Develop Fund, and other vehicles, there is a growing acknowledgment that infrastructural layers such as payments, identity, and data exchange can be designed, deployed, and governed to maximize inclusion and foster competitive markets. Countries like India, Estonia, and Morocco are demonstrating the societal impacts of introducing such digital infrastructure for the public interest. However, there is yet to be a technical entity established to build and maintain these layers of infrastructure for any country to then adopt.

There may be many more ways for G7 allies to work together to combat digital authoritarianism and the persistent digital divide. But these are important starting points to defining and monitoring success and building the mechanisms for urgent and flexible action for the years to come.
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Editor:
Heinrich-Böll-Stiftung Washington, DC, 1432 K St NW Washington, DC 20005, USA

Contact:
Sabine Muscat, Technology & Digital Policy Program Director, sabine.muscat@us.boell.org;
Philipp Kühl, Program Director Technology and Digital Policy, philipp.kuehl@us.boell.org

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