

Localizing Digital Public Goods



ACKNOWLEDGEMENTS

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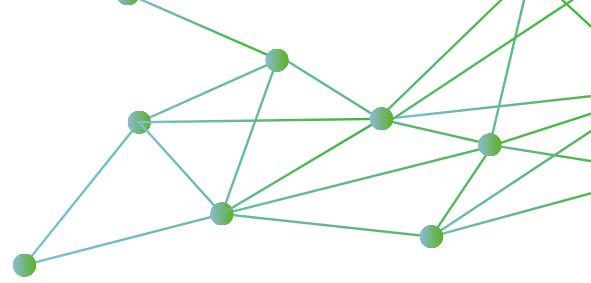
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Graphic Design: Yohan Perera

ACRONYMS



API	Application Programming Interface
DPG	Digital Public Good
DPGA	Digital Public Goods Alliance
DPI	Digital Public Infrastructure
EMR	Electronic Medical Record
HIC	High Income Country
LMIC	Low- or Middle-Income Country
PAHO	Pan American Health Organization
SDG	Sustainable Development Goal
UN	United Nations
UNDP	United Nations Development Programme
USAID	The United States Agency for International Development (USAID)

EXECUTIVE SUMMARY

Global donors and development implementers are increasingly aligned around the belief that digital investments are most effective and equitable when owned by local stakeholders who are able to leverage the full potential of digital technologies and data.¹ They are also embracing an agenda of “localization” to prioritize local digital ownership, expertise, and leadership.

Digital public goods (DPGs) provide local actors with an alternative to expensive, proprietary digital solutions through a verified registry of open-source software, open data, open artificial intelligence (AI) models, open standards, and open content. International development actors seeking to localize these DPG and related digital public infrastructure (DPI) must adapt digital solutions to suit local digital ecosystems, as well as ensuring they are wholly owned by local partners.

In assessing the prospects for localizing DPGs, this paper identifies five principal challenges and offers initial recommendations to address them:

- 1. Donors and implementers do not yet share an agreed definition of or vision for localization, let alone metrics for measuring progress toward it.** *Recommendation:* Donors should align on “Principles of DPG Localization” to explicitly state their definitions, priorities, and targets. The Digital Public Goods Alliance (DPGA) should consider expanding DPG metrics to include global utility, community support, and software maturity.
- 2. The DPG registry is skewed toward historical donor priorities rather than current implementer localization needs.** *Recommendation:* DPGA should consider actively soliciting underrepresented DPG categories, languages, and regions, as well as prominent “missing” DPGs. DPGA should also take steps to increase community ownership in the DPG approval process.
- 3. The DPG community of practice is fragmented and often inaccessible to local actors.** *Recommendation:* DPG experts and practitioners should make an effort to network, publish, and convene discussions outside of their sub-communities. Donors and implementers should insist on communicating through hybrid (digital and face-to-face) experiences that are comparable to in-person experiences, as well as rethink communication channels such as static reports.
- 4. Donor funding and implementation incentives are misaligned for DPG localization needs.** *Recommendation:* Donors should consider a “sustainability levy” to incentivize cooperation around localization and foster long-term capacity building initiatives to improve local partners’ ability to compete for grants.
- 5. Insufficient local technical capacities—and perceptions thereof—inhibit local ownership.** *Recommendation:* Donors should prioritize local DPG capacity strengthening as critical to DPG implementation and invest in DPG academies that generate open content that can be repurposed by local educational institutions. Donors and implementers should incentivize informal learning, peer-to-peer exchange, self-study content, and certificate programs.



INTRODUCTION AND METHODS

INTRODUCTION

In 2015, the United Nations adopted 17 Sustainable Development Goals (SDGs) seeking to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.² The 2023 SDG Report warns that these 2030 goals are in peril, anticipating 575 million people trapped in poverty, 84 million children out of school, and an estimated 300 years to close gender gaps.³ The investment gap in low- and middle-income countries (LMICs), meaning the shortfall in investment needed to achieve the SDGs, is an estimated \$4 trillion annually—and growing.⁴ Compounding crises such as the COVID-19 pandemic and an increase in violent conflict have even begun to erode development gains, including the first global decline in life expectancy in more than 70 years.⁵

Donors and implementers, recognizing that a new approach is needed, are turning toward localized development solutions as a more timely, cost-effective, sustainable, and equitable way to address global development challenges. This consensus was announced in 2016, when the “Grand Bargain” brought together donor and development organizations to commit to getting more resources into the hands of people in need.⁶ In 2021, the U.S. Agency for International Development (USAID) outlined a new localization vision for the United States, the largest donor country in the world.⁷

Global donors and development implementers are also increasingly aligned that these investments are most effective and equitable when owned by local stakeholders who are able to leverage the full potential of digital technologies and data.⁸ However, the digital solutions needed to collectively achieve SDGs in LMICs are often unequally distributed, not easily accessible, or limited through copyright or proprietary systems. In 2020, the UN Secretary General’s “Roadmap for Digital Cooperation” recognized the importance of “digital public goods” (see Box 1) in addressing SDGs, resulting in the creation of the Digital Public Goods Alliance (DPGA), a multistakeholder initiative that reviews and approves the DPG that meet the standards for this vision.⁹ In 2023, USAID endorsed the Charter for Digital Public Goods, which was developed in consultation with 67 public and private organizations in more than 30 countries for a community-informed framework for aligning stakeholders in a digital ecosystem.¹⁰

Box 1: What are Digital Public Goods (DPGs)?

According to the DPGA:¹¹ “Digital public goods are considered to be open source software, open data, open AI systems, and open content collections that adhere to privacy and other applicable laws and best practices, do no harm, and help attain the Sustainable Development Goals (SDGs). This definition is operationalised through the DPG Standard, a set of nine indicators that are used to determine whether or not a solution is a digital public good. Once a solution is recognised as a digital public good it is discoverable on the DPG Registry.”

The DPG Charter campaign seeks to align and mobilize diverse stakeholders and initiatives around a shared vision for DPGs in driving safe, trusted, and inclusive digital public infrastructure (DPI) at scale (see Box 2).¹² Nearly 30 entities have endorsed the DPG Charter including countries (such as Bangladesh and Rwanda), companies (Jumo, Jumia), civil society organizations (Africa Digital Rights Hub, mEducation Alliance), and international development actors (Digital Square, Better than Cash Alliance).¹³ In September 2023, the G20 Digital Economy Ministers reached an agreement on how to effectively shape the DPI, which will accelerate DPG development, adaptation, scale, and sustenance.¹⁴ As a result of these investments in DPI and government spending, market demand for DPGs is expected to expand from \$11 billion to \$100 billion in 2030, with a critical role for local system integrators in developing, adapting, scaling, and sustaining these solutions.¹⁵

Box 2: What is Digital Public Infrastructure (DPI?)

According to the G20 consensus on DPI:¹⁶ “Digital public infrastructure is described as a set of shared digital systems that should be secure and interoperable, and can be built on open standards and specifications to deliver and provide equitable access to public and/or private services at societal scale and are governed by applicable legal frameworks and enabling rules to drive development, inclusion, innovation, trust, and competition and respect human rights and fundamental freedoms. As infrastructure, they cut through the siloed approach of designing and implementing digital solutions with interoperable, society-scale programmes that shift innovation and competition to activities that take place atop it.”

Despite market demand and donor enthusiasm, stakeholders operationalizing a shared definition of localization and its realization through DPG remains a challenge. Definitions of localization vary between technologists and development practitioners (see Box 3), government agencies, and sometimes even within organizations themselves. Within a development context, there is, however, broad agreement that localization activities include: 1) increasing direct funding to local actors; 2) investing in the local institutional capacity; 3) forming more equitable partnerships; and 4) ensuring coordination platforms are inclusive of local actors.¹⁷

Box 3: What Is Localization? Different Contexts, Different Definitions

To a technologist, “localization” means to adapt a digital solution to both the culture and the language of the end user. To an international donor or implementer, localization means that local partners play a leading role in identifying sectors, planning programs, implementing programs, and evaluating progress.¹⁸ For those advancing DPGs, any definition must include both concepts in order to fulfill their potential for efficient and equitable development.

For the purposes of this paper, localizing DPG will draw from both development (locally led) and technology (adapted for local context) definitions, with the perspective that both are required for fulfilling their development potential. Digital solutions adapted for a local context should also be owned by local actors in order to thrive in local digital ecosystems. And local leadership of development programming should leverage context-appropriate digital solutions.

METHODS AND LIMITATIONS

This paper builds on three sources: 1) a review of literature on localization, DPG, and related topics; 2) semi-structured remote interviews with global stakeholders and experts who represent institutional, technical, and context perspectives; and 3) two custom-built digital tools that aggregate, map, analyze, and digest insights across a wide range of use cases and digital solutions. This report then explores the localization experiences of local actors, DPG owners, national development implementers, and global funders to identify shared challenges and develop recommendations.

This research has focused on DPG as registered by the DPGA, funded by global donors, and implemented by international and local partners, with primary research conducted in English. This perspective, accordingly, illuminates only a tiny subset of efforts to leverage digital solutions to meet development challenges. Additional research, conducted by actors in other languages and in their own communities (who may or may not see themselves as part of either localization or DPG agenda), is needed.¹⁹





CASE STUDIES: DPG LOCALIZATION EXPERIENCES

DPG LOCALIZATION EXPERIENCES

1. OS4H: Digital Health Implementation in the Caribbean



The OS4H Team. Peter Ricketts top left.

Credit: OpenFn Blog²⁰

In 2010, the proprietary system for electronic medical records (EMR) that Dominica used for digital medical data was failing. Unknown to the health officials responsible for serving the small island of 72,000, the EMR was no longer being maintained by its international implementer. Eventually, the local hard drives failed, and the data was lost.

Peter Ricketts, a technology consultant for the Pan American Health Organization (PAHO), felt that a replacement solution should be free, open source, and owned and controlled by the ministry of health so that the government could access the source code and decide who maintained it. Dominica ultimately selected OpenMRS—now a registered DPG—and the system is still operating in 2023.²¹



In 2010, we understood that our only option was open-source technology since we could not afford to maintain proprietary technology. The smallest license fees resulted in major data loss because payments defaulted and nobody was maintaining the system. What we needed in Dominica and the Caribbean did not exist yet.”

- Peter Ricketts, CEO of OS4H

In 2019, Mr. Ricketts went on to found Open Solutions for Health LTD (OS4H), a certified DPG implementing organization. Lacking any formal investment or donor support, Mr. Ricketts saw free, open-source software as a pathway to building a team in-country through online certification in relevant technologies, funded by stipends from OS4H. Mr. Ricketts credits DHIS2 (see Box 4) as the gold standard for an academy as accessible to local partners, along with components that scaffold learner experiences from free, self-paced online courses on fundamental concepts to in-person and regional training courses, as well as an annual conference.

Box 4: How DHIS2 scales partner capacity building initiatives

One of the most prominent global DPGs, the original District Health Information Software (DHIS) was developed in 1996 for three health districts in South Africa as part of the Health Information Systems Programme (HISP), a collaborative research project between the University of Oslo (UiO) and the University of the Western Cape.²² In 2006, UiO developed and released DHIS2—built on open-source frameworks and tools—which was used in India in 2006 and rolled out nationally in Kenya in 2010. DHIS2 is now a global open-source project, used in more than 80 countries, to collect and analyze health data.²³ DHIS2 is implemented through a global HISP network to support implementation, local customization, and configuration; offer in-country and regional training; and promote its value as a DPG.²⁴



The project's focus on partner capacity building has evolved for more than a decade; it involves coordinating DHIS2 Academy curricula, establishing individual-level certification programs, creating memoranda of understanding with core HISP groups.²⁵ In addition to collaborating with HISP UiO, individual HISP groups are free to provide DHIS2 support and consultancy directly to country governments and implementing partners.²⁶

In addition to DHIS2 implementation, OS4H sought certification and training from OpenFn to develop workflow automation projects and help regional partners achieve health systems interoperability including DHIS2. OS4H's engagement with OpenFn went beyond DHIS2 online courses, including mentorship directly with its leadership team. Unlike formal university degrees or online self-paced courses, this hands-on engagement and certificate-based training process rapidly accelerated the upskilling of local team members, reducing the time commitment from more than two years to as little as six months. In 2023, OS4H was recognized as the first certified OpenFn implementation partner in the Caribbean, with activities including workflow automation projects to help regional partners achieve health systems interoperability.²⁷

Dominica is still a small market for technology, and DPG implementers such as OS4H can only grow as quickly as they are able to find paying projects. OS4H is looking to expand “open solutions” to sectors beyond health and hopes to provide sustainable solutions for businesses, restaurants, and other industries. Mr. Ricketts concluded, “We are not asking for favors or handouts, just investments in the space that enables entities like ours to continue to grow.”

2. UNDP: Localization of a National Carbon Credit Registry in Namibia



UNDP team in Namibia. Mark Belinsky center back.

Credit: UNDP blog²⁸

Carbon credit markets are an important potential source of revenue to finance climate action goals in LMICS, and can help expand climate action and ambition at the country level.²⁹ However, while 83 percent of LMICs are interested in leveraging carbon markets to reduce greenhouse gas emissions, most are unable to do so.³⁰

The National Carbon Registry is a recently accredited DPG built by the United Nations Development Programme (UNDP) that allows countries to start their own national registries to issue and manage carbon credits, as well as replicate and adapt modules to suit their own needs and contexts. Mark Belinsky, UNDP's Head of Digital Innovation, believes that by “by democratizing access to state-of-the-art carbon monitoring systems, we’re leveling the playing field, ensuring that every country—irrespective of its size or economic power—can efficiently work to meet its climate targets.”³¹



UNDP, along with global partners, is striving to magnify the positive impact of technology on the sustainable development goals. Through the Digital Public Goods approach, UNDP Digital is leading global advocacy and work on reusing and sharing technologies for recurring development challenges. By creating well designed, SDG aligned technology once and ensuring meticulous localization with local digital ecosystems, we help a singular solution that can be progressively enhanced with each country’s engagement, optimizing costs, preserving quality, and maximizing long-term positive impact.

- Mark Belinsky, Digital Innovation & Scaling Specialist at UNDP

But first, local partners need to understand what is possible. UNDP organized a trip for Namibian government delegates to engage in a four-day study tour of Ghana’s Carbon Markets to explore a potential application in Namibia.³² Following the visit, UNDP installed the technology on Namibian government servers and began technology localization of the DPG. This involved translation into French, German, and additional languages, as well as localizing the terms and maps to the Namibian context. Finally, the team reviewed the relevant legal documents such as the website’s privacy policy, as well as conducting a security review.

In September 2023, a session of the UN SDG Digital event featured Namibia as “an early adopter of DPI for green transitions,” citing the deployment of the country’s carbon registry.³³ The World Bank’s Climate Warehouse program is extending the initiative, working closely with its partners on implementation in new local contexts.³⁴

3. Ushahidi: DPG Owner Pivoting from Software to Data in Kenya



Ushahidi team. Credit: Ushahidi blog.³⁵

In 2007, Kenyan bloggers and software developers created the Ushahidi platform (Swahili for “testimony” or “witness”) to collect and digitally map reports of violence during Kenya’s election. Ushahidi joined the open-source software DPG registry in 2022.³⁶ Anglea Oduor Lungati, Ushahidi’s Executive Director, credits support from the Digital Impact Alliance (DIAL) for accelerating the company’s journey to becoming a DPG by reviewing documentation, onboarding volunteers, and directing engagement with the open source community. Being listed on the DPG registry helped refocus the team on getting tools into the hands of those who need them most.



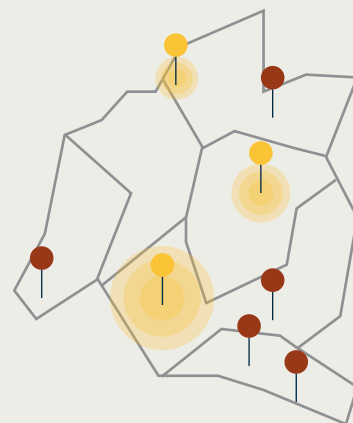
“When I think about Ushahidi and some of the other companies that have emerged in the tech scene in Kenya, it’s been a result of scratching our own itch: having a lived experience with a particular problem, and then trying to figure out how best to address it. Localization is at the core of what Ushahidi does from the very beginning. We are just enablers. We built a framework and platform and others can come and take it and make it their own.”

- Angela Oduor Lungati, Executive Director of Ushahidi

Ms. Lungati explains that in addition to making solutions available in contextually appropriate languages and formats, localization requires asking questions about program leadership and decision making. In the past, global funders have made the decisions about where and how money is spent. But this top-down approach to solving the world’s most pressing problems is shifting towards a more co-creative process, opening up new opportunities for learning from all parties.

How Ushahidi combats misinformation through mapping

In 2023, DPGA and UNDP recognized Ushahidi's role in promoting information integrity through the Nobel Prize Summit.³⁷ The company's success dates back to 2007, when Ushahidi received, verified, and triaged more than 40,000 reports in response to election violence in Kenya.³⁸ By 2018, Ushahidi had been used more than 150,000 times in 160 countries, crowdsourcing more than 50 million reports from citizens across the world.³⁹ In 2020, Ushahidi added more than 1,800 deployments in 130 countries for local communities to fill in critical information gaps.⁴⁰ Ushahidi aims to reach 20 million additional individuals from marginalized groups by 2026, with the goal of achieving meaningful, long-lasting change through knowledge based on inclusive and truthful data.⁴¹



Ushahidi received recognition as a DPG for playing a vital role in maintaining information integrity, which is especially important during critical moments such as elections and humanitarian disasters.⁴² But the public listing and recognition has not yet translated into increased funding or revenue opportunities, raising concerns that localization risks becoming a donor buzzword rather than a practical path forward.

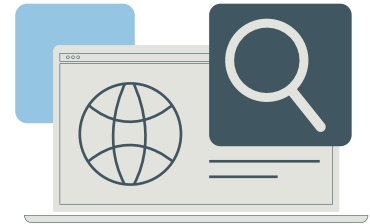
Ushahidi is now repositioning itself as a “data company” to strengthen links between its core platform and other DPGs.⁴³ Recognizing that the promise of data-driven insights relies on access to that data, data equity initiatives that work to address the underrepresentation of marginalized communities are critical. Ushahidi's shift as a company—from providing open-source technology, to implementation support, to unlocking citizen-generated data—represents this evolution.



CHALLENGES AND RECOMMENDATIONS

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1. Donors and implementers do not yet share an agreed definition of or vision for localization, let alone metrics for measuring progress toward it



The term “localization” lacks a standard definition within the international development community, and the term is not used in the technology sector. In the absence of a shared understanding of this concept, DPG stakeholders are not aligned in planning, coordination, assessment, or knowledge sharing. Questions remain: Is a DPG considered localized if a solution is adapted for a context without the involvement of a local stakeholder? What if a U.S.-based DPG owner opens a country office that hires local team members? Is it considered localization if a U.S.-based DPG is replaced by an India-based DPG in an LMIC? What if a regional vendor network provides technical support, but without compensating or involving any local stakeholders?

RECOMMENDATION 1:

Donors should align on “Principles of DPG Localization” to explicitly state their definitions, priorities, and targets. Building on previous initiatives such as the “Digital Investment Principles” and “Principles of Digital Development,” donors and implementers are well positioned to align efforts around DPG localization. Given the scarcity of high-quality localization data, the DPG community has a unique opportunity to develop and share metrics to accelerate DPG adoption—and enhance development impact in general.

RECOMMENDATION 2:

To assist donors and implementers in selecting and promoting sustainable DPGs, DPGA should consider expanding DPG metrics to include global utility, community support, and software maturity. Even if these metrics are self-reported, they will help donors explicitly link DPG localization data to funding opportunities and SDG targets, as well as assist implementers in adopting and adapting appropriate tools.

2. The DPG registry is skewed toward historic donor priorities rather than current implementer localization needs



Challenge:

Most registered DPGs are currently open-source software focused on digital health and developed in the U.S., India, or other high-income countries.

This disparity distorts the research, community, and best practices for DPG implementation in local contexts, leaving potentially useful categories such as open data or open content in sectors such as food security or climate change relatively understudied. Since DPG funding tends to concentrate on mature DPGs that can be adopted or deployed at scale, this imbalance can become part of a self-reinforcing cycle.

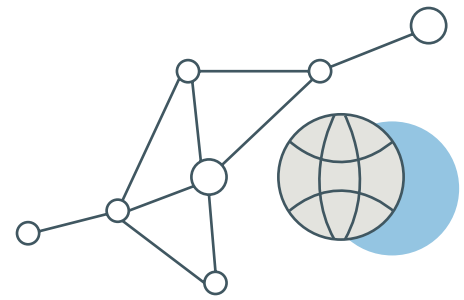
RECOMMENDATION 1:

DPGA should consider actively soliciting underrepresented DPG categories, languages, and regions, as well as prominent “missing” DPGs. The current process is oriented towards applicants who are already aware of DPGs and well-equipped to apply and submit the required documents. By actively seeking out potential candidates who have not applied, DPGA could offer a wider registry, as well as receive feedback from new sources of information in joining the community.

RECOMMENDATION 2:

Increase community ownership in the DPG approval process. DPGA should expand the DPG registration process to a more transparent community-owned model, similar to the Peer Review Committee (PRC) for Global Goods, which can increase adoption, improve sustainability, and add value for approval and funding.⁴⁴

3. The DPG community of practice is fragmented and often inaccessible to local actors



DPG experts and practitioners tend to self-select into sub-communities by category (e.g., open source or DPI), sector (e.g., digital health), or region (e.g., Latin America). Shared resources and interactions tend to be primarily in English and include technical concepts and language that may be inaccessible to non-English speaking or non-technical community members. **The return to in-person gatherings following COVID-19 has accelerated community fragmentation and inaccessibility.** The rapid rise of online, multilingual, accessible events scheduled across time zones was a boon for global cooperation. The return to exclusively in-person events—as well as hybrid events that are delayed or separated from real-time, in-person interaction—exclude those who cannot travel and do not share time zones.

RECOMMENDATION 1:

DPG experts and practitioners should make an effort to network, publish, and convene discussions outside their sub-communities. Making content more accessible to non-technical audiences, especially in other languages, will increase its applicability to other DPG categories and communities.

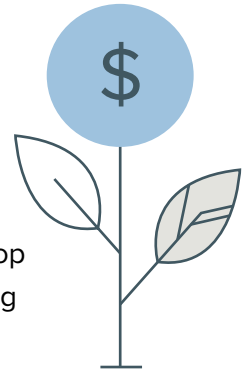
RECOMMENDATION 2:

Donors and implementers should insist on communicating through hybrid experiences that are comparable to in-person experiences. The COVID-19 pandemic has proven it's possible to include previously neglected communities that cannot join events in person. Donors and implementers should insist on continuing remotely accessible practices not only to be inclusive but also to maximize the potential of DPG localization.

RECOMMENDATION 3:

Donors and implementing partners should rethink communication channels such as static reports. In the fast-moving world of DPGs, static reports often lag months or years behind the latest insights and case studies. These long reports, published in English (such as this one!), can exclude non-English speaking communities, professionals too busy to read a long report, and anyone not up to date on new resources. By transitioning event funding models from exclusive, in-person experiences to online community discussions, donors and implementers can help reopen communities for shared, ongoing conversations across time zones.

4. Donor funding and implementation incentives are misaligned for DPG localization needs



Donor funding tends to be short-term and targeted, which can disincentivize local capacity building and long-term sustainability. In a 2022 survey, 94 percent of DPG owners said their top challenge was resourcing for sustainability.⁴⁵ DPG owners also noted in interviews that achieving international recognition as DPGs had yet to translate into increased revenue. Interviewees attributed this phenomenon to donor tendencies to fund short-term development outcomes rather than long-term DPG development or local capacity strengthening that can improve flexibility and scale for future implementation. These incentives can unintentionally create competition between DPG owners and local implementers for limited local resources, disincentivizing DPG capacity transfer to local partners.

Donors and implementers recognize that the current funding situation is not sustainable. Donors are increasingly frustrated that they must repeatedly channel money into established, mature DPGs to prevent them from failing. Implementers are handing off major projects to local partners only to see solutions go unmaintained. Underpinning the entire ecosystem is the fact that many DPGs require the active involvement of private sector tech companies who may choose the end their social good activities during a market downturn.

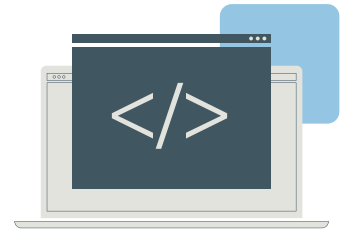
RECOMMENDATION 1:

Donors should consider a “sustainability levy” to incentivize localization cooperation. Donors can send a strong message by including a line item in a large contract for DPG funding to align DPG owners and local implementers. This “sustainability levy” would not only provide a dedicated funding source for the tool, but directly incentivize DPG owners to invest in building their own capacity and resources to improve partner competitiveness.

RECOMMENDATION 2:

Donors should incentivize long-term capacity building initiatives to improve local partner competitiveness for grants. New donor and implementer models are emerging to test and iterate on building both partner capacity and future competitiveness for receiving donor grants. For example, the CRS “High Performing Implementers (HPI)” initiative aims to support national government partners to eventually become and remain strong Principal Recipients of Global Fund grants through a structured approach and global HPI support team.

5. Insufficient local technical capacities—and perceptions thereof—inhibit local ownership



The rollout of DPGs at scale is complex and requires a depth of experience not always available at the local level. But perceptions of lack of local capacity can also be a pretext to rely on international actors.

While it's true that insufficient formal education and technical experience is a barrier in some contexts, local technical implementers can rapidly upskill using online courses, mentorship programs, or even self-study. Such abilities are increasingly important as technical skills can become obsolete in as little as two and a half years—representing both a challenge for capacity strengthening and opportunity for local implementers to close skills gaps.⁴⁶ As the bulk of the needs for DPG localization pertain to adaptation and sustenance, the majority of technical efforts can be done sustainably at the local level.

RECOMMENDATION 1:

Donors should prioritize broad local DPG capacity strengthening as critical to DPG implementation. DPGs require technical capacity to use, and the supply of technical talent is currently difficult to maintain in LMICs. However, by supporting broad capacity-strengthening initiatives, donors and implementers can increase in the supply and maintenance of technical personnel to build a more sustainable ecosystem.

RECOMMENDATION 2:

Donors should invest in DPG academies that generate open content that can be repurposed by local educational institutions. As DPG owners respond to incentives to strengthen partner capacity by developing their own certification programs and content, donors should ensure that resources can be easily adapted and repurposed by more formal institutions in accredited programs for local partners. Expanding earlier education opportunities to build foundational skills as well as current technical knowledge will be critical for the next generation of DPG localization.

RECOMMENDATION 3:

Donors and implementers should incentivize informal learning, peer-to-peer exchange, self-study content, and certificate programs. In most local contexts, there are not enough university programs to keep pace with anticipated DPG demand, much less existing funded programs. Creating sustainable pathways to capacity strengthening that leverage informal learning opportunities reinforced by certificate programs can train new cohorts of implementers, as well as repurpose existing vendor networks.




CONCLUSION

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The growing, \$4 trillion shortfall in annual investment to achieve the SDGs suggests the need for a new approach to leverage scarce resources and digital solutions. The recent emergence of DPGs—and the localization agenda—offers a more efficient and equitable path to local ownership of digital solutions and development outcomes. Unfortunately, these possibilities are currently limited by a lack of shared vision, local representation, a cohesive community of practice, donor incentives, and sustained financing—as well as technical capacity.

Fully realizing the individual potential of either the localization agenda or DPGs requires a coordinated and combined approach to them both. The recommendations outlined in this paper present a potential path forward. Aligning donor and implementer conversations and actions can help shape a future in which local actors benefit from both digital technologies and data.

A photograph of three men in a field. One man on the left wears an orange shirt and a red turban. The other two men are in light blue and light brown shirts. They are all looking at a tablet held by the man in the light brown shirt. The background is a lush green field with trees.

**Aligning donor
and implementer
conversations and
actions can help
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benefit from both
digital technologies
and data.**

APPENDIX

Key Informant Interviews (by Last Name)

Rob Baker	Former Ushahidi & USAID
Mark Belinsky	United Nations Development Program
Anthony Connor	Bill & Melinda Gates Foundation/ Former CommCare
Taylor Downs	OpenFn
Leslie Hawthorn	Red Hat
Nicola Hobby	DHIS2 / Global Fund
Siobhan Green	USAID
Mala Kumar	Former GitHub
Prasanna Lal Das	DIAL
Angela Oduor Lungati	Ushahidi
Matthew McNaughton	Co-Develop / Former RapidPro
Chrissy Martin Meier	DIAL
Inta Plostins	DAI
Peter Ricketts	OS4H
Bridget Bucardo Rivera	CRS
Ricardo Mirón Torres	DPGA
Linda Taylor	PATH
Allana Welch	USAID
Kate Wilson	Impact Futures
Chris Worman	Connect Humanity
Tim Wood	Co-Develop

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End Notes

- ¹ <https://www.workwithusaid.org/blog/usaids-commitment-to-advancing-localization>
- ² For more on the SDGs, visit the UNDP website: <https://www.undp.org/sustainable-development-goals>
- ³ For more information on the 2023 SDG Report key messages, visit: https://unstats.un.org/sdgs/files/report/2023/SDGs_Report_Key_Messages_2023.pdf
- ⁴ See UNCTAD World Investment Report: <https://unctad.org/publication/world-investment-report-2023>
- ⁵ <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/20/fact-sheet-u-s-action-on-global-development/>
- ⁶ <https://interagencystandingcommittee.org/frequently-asked-questions-faqs-on-the-grand-bargain>
- ⁷ <https://www.usaid.gov/news-information/speeches/nov-04-2021-administrator-samantha-power-new-vision-global-development>
- ⁸ <https://www.workwithusaid.org/blog/usaids-commitment-to-advancing-localization>
- ⁹ <https://digitalpublicgoods.net/digital-public-goods/>
- ¹⁰ <https://www.usaid.gov/news-information/press-releases/apr-27-2023-usaid-endorses-charter-digital-public-goods>
- ¹¹ For a full definition and additional details on DPGs, visit the DPGA website at <https://digitalpublicgoods.net/digital-public-goods/>
- ¹² <https://www.dpgcharter.org/>
- ¹³ <https://dial.global/5-things-weve-learned-through-the-digital-public-goods-charter/>
- ¹⁴ <https://www.undp.org/india/press-releases/g20-digital-ministers-recognize-digital-public-infrastructure-accelerator-sdgs>
- ¹⁵ https://www.ey.com/en_gl/government-public-sector/digital-public-goods-government-business-collaboration
- ¹⁶ <https://www.undp.org/publications/accelerating-sdgs-through-digital-public-infrastructure-compedium-potential-digital-public-infrastructure>
- ¹⁷ <https://fic.tufts.edu/wp-content/uploads/Localization-FINAL-12.30.21.pdf>
- ¹⁸ This uses the USAID version of localization. For more information, see: <https://www.workwithusaid.org/blog/usaids-commitment-to-advancing-localization>
- ¹⁹ DIAL has recently launched an exciting fellowship that does exactly this and is recommended for DPI insights and developments: <https://dial.global/digital-impact-alliance-research-fellowship/>
- ²⁰ <https://docs.openfn.org/blog>
- ²¹ <https://digitalpublicgoods.net/registry/openmrs.html>
- ²² <https://en.wikipedia.org/wiki/DHIS2>
- ²³ <https://dhis2.org/>
- ²⁴ <https://dhis2.org/hisp-network/>
- ²⁵ <https://docplayer.net/40760080-The-hisp-uo-business-plan-for-dhis2-core-resources-the-goal-of-sustainable-national-health-information-systems.html>
- ²⁶ <https://dhis2.org/hisp-network/>
- ²⁷ <https://docs.openfn.org/blog/2023/08/14/OS4H-case-study>
- ²⁸ <https://www.undp.org/news/newly-accredited-digital-public-good-national-carbon-registry-will-help-countries-meet-their-climate-targets>
- ²⁹ <https://www.undp.org/news/newly-accredited-digital-public-good-national-carbon-registry-will-help-countries-meet-their-climate-targets>
- ³⁰ <https://www.undp.org/news/newly-accredited-digital-public-good-national-carbon-registry-will-help-countries-meet-their-climate-targets>
- ³¹ <https://economist.com.na/82196/technology/national-carbon-registry-launched-to-synchronise-global-climate-action/>
- ³² <https://www.undp.org/namibia/stories/unveiling-green-economy-namibia-study-tour-carbon-markets-ghana>
- ³³ <https://www.undp.org/press-releases/un-digital-event-mobilizes-global-leadership-and-us400-million-support-digital-public-infrastructure>
- ³⁴ https://economist.com.na/82196/technology/national-carbon-registry-launched-to-synchronise-global-climate-action/?utm_source=Dlvrit&utm_medium=links-referral&utm_campaign=socialmedialinksLinkedIn&utm_id=G-4BCRPBFTLT&utm_term=Facilit8%20Namibia
- ³⁵ <https://www.usahidi.com/about/blog/life-at-ushahidi-reflections-from-q1/>
- ³⁶ <https://www.usahidi.com/about/blog/ushahidi-bags-prestigious-recognition-as-a-digital-public-good-from-the-digital-public-goods-alliance/>
- ³⁷ <https://digitalpublicgoods.net/information-pollution/>
- ³⁸ <https://www.usahidi.com/in-action/10-years-of-global-impact/>
- ³⁹ <https://www.usahidi.com/in-action/10-years-of-global-impact/>
- ⁴⁰ <https://www.3blmedia.com/news/social-good-data-platform-transforming-global-covid-response-through-citizen-engagement>

⁴¹ <https://www.usahidi.com/about/blog/stepping-boldly-into-the-future-usahidi-as-a-data-company/>

⁴² <https://www.usahidi.com/about/blog/from-the-frontlines-of-truth-harnessing-citizen-generated-data-to-fight-misinformation/>

⁴³ Read the full blog post on Ushahidi becoming a data company at: <https://www.usahidi.com/about/blog/stepping-boldly-into-the-future-usahidi-as-a-data-company/>

⁴⁴ For more on the Peer Review Committee (PRC), visit the Wiki at: https://wiki.digitalsquare.io/index.php/Peer_Review_Committee

⁴⁵ <https://public.digital/signals/signals-sustainability-in-digital-transformation/stewarding-public-digital-digital-public-goods>

⁴⁶ <https://hbr.org/2023/09/reskilling-in-the-age-of-ai?>



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