Principles for Digital Development

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Preamble

The Principles for Digital Development serve as a compass for those working to promote sustainable and inclusive development in today's complex digital landscape. Using these Principles as a starting point, policymakers, practitioners, and technologists will be better equipped to ensure that all people can benefit from digital initiatives and from the broader digital society.

Originally developed in 2014, the Principles are officially endorsed by more that 300 organizations, including donors, international organizations, and civil society organizations. During the first decade (2014-2024), they widely influenced funder procurement policies and the design and implementation of development programs.

In 2024, the Principles were updated in consultation with a diverse set of individuals and organizations. Through this effort, the community expressed the need for the Principles to better reflect that people today largely interact with technology outside of development programs. Today, all people – even those who do not yet have access to or use technology – live in societies that are increasingly shaped by digital ecosystems that can bring both immense benefit and immense harm. Therefore, the refreshed Principles recognize the need for radical inclusion and local ownership; elevate issues arising from the generation and use of digital data; emphasize that open approaches to innovation can support the realization of the nine principles; and intentionally speak to the original audience while resonating further with the full diversity of individuals and organizations that exert power over the design, deployment, and governance of digital systems and solutions. The Principles are mutually reinforcing, as they emphasize the actions needed to ensure no one is left behind in an increasingly digital world.

Ultimately, when designing and implementing a policy, solution, system, or intervention (hereby collectively referred to as initiatives), endorsers of these Principles commit, at minimum, to do no harm, and at best, to ensure their work maximizes the agency of people and communities to drive their own development. To achieve these objectives, each endorser will define how these Principles can be operationalized in their work, sphere of influence, and specific initiative.

1	**Understand the existing ecosystem**

2	**Share, reuse, and improve**
3	**Design with people**
4	**Design for inclusion**
5	**Build for sustainability**
6	**Establish people-first data practices**
7	**Create open and transparent practices**
8	**Anticipate and mitigate digital harms**
9	Use evidence to improve outcomes

Principle 1: Understand the existing ecosystem

Trust starts with a thorough understanding of the dynamic cultural, social, and economic context in which you are operating.

Subtext:

- Digital ecosystems are defined by the culture, gender and social norms, political environment, economy, technology infrastructure and other factors that can affect an individual's ability to access and use a technology or to participate in an initiative.
- Understanding the existing ecosystem can help determine if and how we should engage, as ecosystems can have both positive dynamics and negative dynamics.
- Through this understanding, initiatives should adapt in order to support, to the extent appropriate, existing technology, local actors who are already working to tackle key challenges. This includes understanding existing government policies, national visions, sector policies/priorities/strategies, and efforts to expand foundational digital public infrastructure.
- This also includes understanding existing access to devices, connectivity, affordability, digital literacy, and capacity strengthening opportunities so that initiatives are designed to accommodate or strengthen these realities.
- When initiatives do not first understand the ecosystem they are operating in, it can hinder uptake, adoption, and trust. It can also lead to unintended consequences, such

as exclusion, loss of trust, reinforcement of harmful power dynamics, and putting the safety and security of stakeholders at risk.
- Digital ecosystems are fluid, multifaceted and ever-changing, requiring that digital development practitioners regularly analyze the context to check their assumptions.

Principle 2: Share, reuse, and improve

Build on what works, improve what works, and share so that others can do the same.

Subtext:

- Avoid innovation for the sake of innovation.
- To share, reuse, and improve is, in essence, to collaborate. Collaboration is essential to achieving our shared vision of a more equitable world. We have the most impact when we share information, insights, strategies, and resources across silos related to geographies, focus areas, and organizations. By sharing, reusing, and improving existing initiatives, we pool our collective resources and expertise, and avoid costly duplication and fragmentation. Ideally, this leads to streamlined services for people.
- This can apply to technology products, services, research, or policies.
- This requires organized and accessible documentation, and is greatly facilitated by adopting open standards, building for interoperability and extensibility; using open source software; and contributing to open source communities.
- Following this principle can save time and money, promote collaboration and the sharing of knowledge, and lead to better products and services through continuous improvement.
- Forgoing this principle in favor of do-it-alone approaches leads to wasted resources (particularly problematic in the case of public donor funds), limited innovation and improvement, and undue burden on people that can hinder trust and participation.

Principle 3: Design with people

Good design starts and ends with people that will manage, use, and ideally benefit from a given digital initiative.

Subtext:

- To design with people means to invite those who will use or be affected by a given technology policy, solution, or system to lead or otherwise meaningfully participate in the design of those initiatives.
- In all cases, there will be more than one group of relevant stakeholders (including those who ideally benefit from the initiative and those who will maintain/administer the initiative), each of whom need to participate and engage in the initial design phase and in subsequent iterations. The specific stakeholders will need to be defined separately for each initiative.
- Initiatives can encourage meaningful participation by creating opportunities for people to innovate on top of products and services; establishing avenues for feedback and redressal that are regularly monitored and addressed; and committing to agile methods that allow for continual improvement.
- Otherwise, initiatives are unlikely to gain trust of and adoption of the communities they seek to reach.

Principle 4: Design for inclusion

Consider the full range of human diversity to maximize impact and mitigate harm.

Subtext:

- When leveraged intentionally and to its fullest potential, technology can overcome, rather than exacerbate, existing inequality. To design for inclusion is to seize the opportunity for digital initiatives to drive social progress by dismantling systemic barriers related to gender, disability, income, geography, and other factors.
- Regardless of the size of their intended audience, technology initiatives should be designed to be accessible and usable for a diverse range of people, including those with disabilities, low digital literacy, those who speak different languages, who face obstacles to device access/affordability/connectivity, and those from different cultural backgrounds.
- This can be achieved by adopting iterative methodologies (such as agile) and by leveraging redressal systems to quickly identify - and address - challenges that negatively impact certain groups of people.
- Designing for inclusion can include considering how the benefits of an initiative accrue even to those who are not online.

- Designing for inclusion requires considering the opportunity to strengthen capacity for those who do not have the skills or tools necessary to benefit from a given initiative, as well as the affordability of devices and services (in the short and long-term).
- Without following inclusive practices in the design of digital initiatives, we risk amplifying existing inequalities, creating unforeseen harms, and excluding segments of the population from participation and opportunity.

Principle 5: Build for sustainability

Build for the long-term by intentionally addressing financial, operational, and ecological sustainability.

Subtext:

- Sustainability here is defined broadly to account for financial, operational, and ecological sustainability, all of which are important to avoid service disruptions for people.
- Building for sustainability means thinking about leveraging the inherent scalability of digital technology solutions early on. Decide on the desired scale of your initiative and prepare accordingly from the start.
- Building for sustainability means presenting the long-term cost of ownership--both technology licenses, operations and maintenance, capacity building, etc.--and clearly indicating how initiatives will be paid for in the future, by donors, host governments, or commercial means.
- Ecological sustainability requires considering an initiative, solution, or system's potential to help people and communities adapt to the changing climate. At the same time, they should seek to minimize the environmental impact of any initiative, solution, or system, particularly the CO2 emissions generated by any hardware or software during the entire lifecycle from production to disposal.
- Building for sustainability does not mean that all products, services, or policies will last forever. Optimizing for sustainability may result in consolidating services, transferring knowledge, software, and/or hardware to a new initiative, planning for the secure transfer (or deletion) of data at the end of a project, or helping clients to transition to a new, more relevant product or service.

Principle 6: Establish people-first data practices

People-first data practices prioritize transparency, consent, and redressal while allowing people and communities to retain control of and derive value from their own data.

Subtext:

- Digital services and initiatives generate, rely on, and/or use data derived from people or their assets. This principle emphasizes the need to avoid collecting data that is used to create value (financial or otherwise) for a company or organization, without delivering any direct value back to those people from whom the data is derived.
- It is thus critical to consider *people* and to put their rights and needs first when collecting, sharing, analyzing, or deleting data. In this context, 'people' includes those who directly interact with a given service, those whose data was obtained through partners, and those whose are impacted by non-personal datasets (such as geospatial data.)
- When collecting data, it is important to consider and follow relevant data standards and guidelines set at the international, regional, national, or local level.
- People-first data practices include ensuring that people can understand and control how their data is being used; obtaining explicit and informed consent from people before collecting, using, or sharing their data; and investing in people's capacity to navigate the tools, redressal systems, and data practices.
- People-first data practices also include sharing data back with people, so that they have agency to use this data as they see fit, and providing access to individual, secure data histories that people can easily move from one service provider to the next.
- When this principle is violated, people may be subject to undue and unpredictable harms, stemming from data breaches, exclusion from services, or discrimination based on their digital data trail.

Principle 7: Create open and transparent practices

Effective digital initiatives establish confidence and good governance through measures that promote open innovation and collaboration.

Subtext:

- To establish and maintain trust in the digital ecosystem, it is necessary for all people—whether or not they are directly impacted by a given initiative—to have confidence in digital policies, services, and systems and the associated data handling. This confidence is nurtured through open and transparent practices, which in turn foster accountability.
- Open and transparent practices can include but are not limited to: clear and accountable governance structures that define roles and responsibilities; open and proactive communication, decisions, policies, and practices; mechanisms that allow stakeholders to provide feedback, ask questions, and raise concerns; and quick and transparent responses to feedback.
- In terms of technical design, open and transparent practices can include the use of agile methodologies, open standards, open data, open source, and open innovation.
- When organizations do not prioritize transparency and openness, it results in a lack of or loss of trust. Trust is critical to encourage participation, and without it, people will rationally choose to avoid the risks associated with engaging with digital services and sharing their data - thus foregoing any potential benefits.

Principle 8: Anticipate and mitigate harms

Harm is always possible when it comes to technology. To avoid negative outcomes, plan for the worst while working to create the best outcomes.

Subtext:

- Technology is now part of our everyday lives: no program or technology solution operates in isolation. Therefore, to live up to the commitment to *do no harm*, policymakers and practitioners need to anticipate and work to mitigate harms, even those that originate outside of a given initiative.
- There are a number of potential harms that may arise from any given digital initiative, and any list offered here will prove to be insufficient. Examples of harms include enabling digital repression (including illegal surveillance and censorship); exacerbating existing digital divides associated with, for example, disability, income, or geographic location; technology-facilitated gender based violence; undermining local civil society and private sector companies; amplifying existing, harmful, social norms; and creating new inequities.
- While harms are present with all technology, these harms are particularly relevant, and the impacts are less known, when it comes to machine learning and artificial intelligence (AI).

- Harm mitigation is context-specific, and requires a multi-faceted approach that integrates technical, regulatory, policy, and institutional safeguards. Effective harm mitigation takes a long-term approach, considering how current challenges and inequities will be amplified by unknown developments.
- Without these types of safeguards, specific groups of people may decide to disengage or systems may be used to intentionally target certain groups of people, undermining all sustainable development goals.

Principle 9: Use evidence to improve outcomes

Evidence drives impact: continually gather, analyze, and use feedback.

Subtext:

- Over time, good practices in understanding monitoring and evaluation of technology initiatives have evolved to emphasize outcomes on people and communities, rather than just access and usage.
- To understand outcomes for people and communities, it is necessary to use a variety of methods - both technology-enabled and analogue - to gather, analyze, and use feedback to get a holistic view of the impact of technology on people and communities.
- This also includes providing redressal channels for people to submit feedback and complaints, which are regularly monitored, addressed, and analyzed.
- Understanding outcomes is critical to an agile or iterative design approach through which digital policies, systems, and solutions are continually updated and improved.
- Involve people in the design and implementation of the monitoring and measuring of outcomes as well, so that the outcomes being measured are relevant and meaningful to them.
- Otherwise, initiatives may meet efficiency and outreach goals, but fail to see lack of impact, harmful impacts, or opportunities to improve positive outcomes on people and communities.

Background

The Principles for Digital Development ("the Principles") were drafted in 2014 to guide the use of digital technology in international development and have been stewarded by the Digital Impact Alliance (DIAL) on behalf of the digital development community since 2016. The Principles have been officially endorsed by more than 300 organizations and, over the past decade, have informed both funder procurement policies and the design and implementation of development programs.

The Principles represent a shared commitment to responsible digital technology use in service of development goals. They have helped establish a common language and framework among digital development practitioners and have facilitated collaboration and innovation across organizations and countries.

Acknowledging the many contributions of the Principles to improving the practice of digital development, we also recognize that digital technology has evolved substantially over the past decade. During this time, we have increased our collective understanding of both the opportunities and the risks that digital technology presents to people, markets, and the public sector. This understanding led to an inquiry process, through which DIAL and partners opened a dialogue about the need to revisit the Principles to ensure they remain relevant and effective as a guiding force for investments in digital technology for development.

As steward of the Principles, DIAL spoke with partners and members of the Principles community over three months to assess *if* the Principles need to be refreshed. This process consisted of numerous informal conversations, as well as four structured consultations.
Overall, consensus from these initial consultations was clear:

1. The Principles **need to be updated** to better capture the risks and opportunities associated with digital technology design, deployment, and governance as understood today;
2. Nevertheless, this exercise should **refresh rather than overhaul** the Principles to ensure fundamental continuity for the 300+ organizations that have formally endorsed them; accordingly, the focus and intent of the nine principles should be respected.

Consultation Process

Input from over 300 people and organizations globally, through the following steps:

1. Initial consultations: (yes/no to refresh (60 people consulted)
2. 15 consultations in-person and virtual consultations, managed by either DIAL or Principles community members (168 participants)
3. Draft created with a Working Group of 18 members
4. Public comment period distributed via the endorser email list, the Working Group, and social media which garnered 61 responses
5. Final edit and review by the 18-member Working Group