Measuring the Digital Principles

Be Informed

The Digital Impact Alliance at the United Nations Foundation was founded to help the most marginalized people benefit from technology. Toward that end, one of DIAL’s roles is to serve as the official steward of the Principles for Digital Development, a set of generally accepted design and operational principles for utilizing technology in development programs that have more than 240 endorsers across the digital development ecosystem. As steward of the Digital Principles, DIAL manages a community of practice, and develops and disseminates support, training, and advocacy materials to help organizations apply the Digital Principles to their ICT4D portfolios. Recently, DIAL and others have been considering how to provide endorsers with more design, monitoring, evaluation, and learning resources to encourage adoption of the Principles and improved programming within the digital ecosystem.

For DIAL, this work has included supporting the drafting of a conceptual MEL framework developed by the now-closed SIMLab; disseminating case study templates for signatories to self-assess and report their efforts toward applying the Principles; and, most recently, developing a maturity matrix with TechChange to be used in formative proposal evaluations by both digital service providers and donors to ensure greater quality in the bidding and contracting process. Other actors within the ecosystem have been applying the Digital Principles for evaluative purposes, including an external product and program evaluation using the Digital Principles as evaluation criteria by iHRIS; the development of another proposal review instrument, the Digital Health Investment Review Tool, led by USAID; and a practitioner crowdsourced evaluation checklist for digital development projects using artificial intelligence.

Increasingly, endorsers of the Digital Principles are requesting additional resources and materials to help their organizations monitor and evaluate their adherence to the Digital Principles and the resulting effects on their projects and programs. To that end, DIAL has been working on a suite of resources that fall under the auspices of broad principles-focused evaluative work, including an organizational self-assessment tool, guidance for conducting Digital Principles-focused evaluation, and a catalog of common metrics. This guidance document is focused on the last effort and is intended to serve as a companion guide to the basket of common metrics for organizations to use in measuring their adherence to the Digital Principles in their digital development programming.

1 https://docs.google.com/document/d/1jF0Nccn6LTtwE7uIVBtCybhol5qQWmQ_OOtEamUxNs/edit#heading=h.1naah8raq2qj
2 https://digitalprinciples.org/resources/?fwp_resource_type=case-study
4 https://www.intrahealth.org/resources/ihris-principles-digital-development-assessment
5 https://digitalprinciples.org/resource/digital-health-investment-review-tool-dhirt/
6 https://docs.google.com/document/d/1kMrU5FJ2WV2tw9xwCDBauRMP7bZ5XqY_bFJfT_Up/edit#heading=h.92t7557j96c7
8 https://digitalprinciples.org/digital-principles-focused-evaluation
Plan for Intended Use

What these indicators are and are not

The Digital Principles Common Metrics 1.0 constitute an initial and working version of indicators patterned after the IRIS+ metrics intended to measure activity related to the Digital Principles. These process indicators that focus on activities and outputs are intended to measure how and how well the Digital Principles are being put into practice in principles-driven digital development initiatives. In other words, they are general indicators of organizational adherence or fidelity to the Digital Principles. As such, input indicators—the contextual, organizational, and material resources needed to conduct the activities—are missing. Additionally, principle-specific outcome indicators, or the measures of changes in individuals or groups either in behavior or material conditions, are also absent from this indicator basket. Other self-assessment indicators have been developed to measure an organization’s generic engagement with the Principles without measuring any one principle application specifically. Further, DIAL has distilled and customized guidance from Patton’s Principles-Focused Evaluation\(^{16}\) into the guidance document Digital Principles-Focused Evaluation, which is a more holistic prescriptive model for evaluating not just adherence, but the relevance and results of applying the Digital Principles.

Intended use

DIAL’s most frequent feedback about the Principles from endorsing organizations—whether they be funders, implementers, or consultants—pertains to how the Principles can be applied at an organization. While providing overly decontextualized rules and checklists may defeat the purpose of using effectiveness principles to navigate the complexities of digital development, following the Be Data Driven principle, these indicators are in part a response to that feedback. Generally, these indicators can be used to provide endorsers a more concrete sense of what applying the Principles looks like at their

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9 \url{http://www.pvetoolkit.org/indicator-bank}
10 \url{http://geodata.grid.unep.ch/extras/indicators.php}
11 \url{https://www.crs.org/our-work-overseas/research-publications/gain-peacebuilding-indicators}
12 \url{https://www.allianceforpeacebuilding.org/eirene-peacebuilding-database}
13 \url{https://www.globalreporting.org/}
14 \url{https://iris.thegiin.org/metrics/}
15 \url{https://unstats.un.org/sdgs/indicators/indicators-list/}
16 \url{https://www.guilford.com/books/Principles-Focused-Evaluation/Michael-Quinn-Patton/9781462531820}
organization and partner organizations and how to begin measuring those applications. More specifically, there are multiple intended uses for multiple intended users within the digital ecosystem, including, but not limited to, supporting the quality of procurement, program design, monitoring, management, evaluation, accountability, and learning within principles-driven programming.

While these metrics may be used by any type of stakeholder, they are likely to be most successful when used by internal staff to improve principles-driven strategy and initiatives. DIAL believes the Principles are interconnected and supports the application and measurement of the principles comprehensively. However, some common metrics within specific principles may be more fit-for-purpose within a given context to measure specific principle adherence than others. Further, there are more indicators in this common bank than can be feasibly measured by any one organization. Please use the referenced frameworks of indicator quality when selecting which indicators are most appropriate for any particular context. DIAL recommends selecting more than one indicator per principle to ensure a more robust measure of adherence to the Principles.

Focusing intended use

One practical activity to do when selecting indicators best suited for your organization’s purposes is the “Do You Believe Me?” test. Combining this activity with the question, “What will we do differently if and when we see this indicator?” will help your organization consider which indicators are best able to inform the intended use of indicators for intended users. See Digital Principles-Focused Evaluation for more in-depth descriptions of the different modes for using these indicators with various evaluative purposes.

Be Precise and Avoid Ambiguity

Values, principles, criteria, standards, and indicators

Different organizations and initiatives use different language to describe similar phenomena. Providing definitional clarity for how DIAL sees these indicators and how they fit into the suite of other evaluative concepts helps avoid ambiguity and further guides their responsible use. DIAL defines the following terms as such:

- **Values** are the beliefs individuals and organizations hold about what is important. Values—along with experience, expertise, and research—are the source of both effectiveness principles and evaluation criteria.

- **Principles** are values with verbs. They are prescriptive statements of action derived from values that are clear, meaningful, and actionable. An intuitive example is that the value behind the principle **Build for Sustainability** is sustainability. There are different types of principles, including moral, design, relationship, professional, and research principles. The Digital Principles are prescriptions about digital development intervention design and operation that constitute effectiveness principles, as opposed to moral principles. Moral principles tell us what’s right. Effectiveness principles tell us what works. Both can be evaluated, and, until they are, principles are merely hypotheses.

- **Criteria** are the dimensions or categories of goodness or quality for the objects of evaluation. Examples include efficiency, effectiveness, relevance, impact, sustainability, and coherence, though there are many more dimensions of criteria of merit that can be used to make evaluative determinations. The evaluation criteria within Digital Principles-Focused Evaluation are relevance, adherence, and outcomes, and are not the principles themselves. These common metrics are to be used as indicators to measure and compare performance of initiatives and organizations against the criterion of adherence to the Digital Principles.

- **Standards** are the degrees of goodness for evaluative criteria. They can be relative and qualitative, such as the case with various rubrics like good, better, or best; or they can be absolute and quantitative, such as cut scores or thresholds, proportions or ratios. These can also be referred...
to as benchmarks or targets. Importantly, due to contingencies and contextual factors, DIAL has not established common standards for these indicators of Principle adherence. If standards are needed, they should be established on a case-by-case basis at individual organizations in two ways. First, organizations may decide to associate certain indicators with certain standards. Using indicator quality frameworks, some may be determined to be good, some better, and some the best manifestation of a given principle given the particular context. Second, standards may be developed from individual indicators, such as a certain proportion of projects where an indicator is observed or further decomposed into sub-indicators that constitute specific standards of that indicator. Note that some organizations refer to principles, criteria, and indicators as standards. This is a common, though less precise, practice and should be avoided.

- **Indicators** or metrics are the manifestations, observations, or empirical evidence of the object of measurement, often abstract concepts, which in this case are the specific Digital Principles in practice. When indicators of performance are observed and reported without comparison to standards or criteria, indicators are used for descriptive measurement. When indicators of performance are compared with criteria and standards, indicators are used for evaluation.

### Functional Guidance

The Digital Principles Common Metrics are currently presented in an Excel spreadsheet. Future versions may present the metrics online or in a low-tech printable PDF option. The Excel table contains 291 unique process indicators across the nine principles and includes 11 columns per metric. Metrics are organized by principle in no order of importance. Please see the Read Me file in the Indicator Library to learn more about the metrics and indicators.

<table>
<thead>
<tr>
<th>Principle</th>
<th>Number</th>
<th>Name</th>
<th>Definition</th>
<th>Theme</th>
<th>Common Measurement</th>
<th>Indicator Type</th>
<th>Reporting Format</th>
<th>Project Lifecycle Stage</th>
<th>Additional Resources</th>
<th>User Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect and Impulse</td>
<td>7.23</td>
<td>Dissemination for Accountability</td>
<td>Describes efforts to raise awareness about the technology tool and contribute to the digital development community by sharing experiences, taking responsibility, filling gaps for public data</td>
<td>Share, Inform, Learn</td>
<td>Output</td>
<td>Percentage</td>
<td>Ongoing, MeA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect and Impulse</td>
<td>7.24</td>
<td>Reusable Data Format/Publishing</td>
<td>Ratio of the identified data published in a CSV format</td>
<td>Inform, Manage, Learn</td>
<td>Output</td>
<td>Number</td>
<td>Ongoing, MeA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address Privacy and Security</td>
<td>8.01</td>
<td>Definition of Data Terms</td>
<td>Indicates whether an initiative has defined data ownership, ownership, and access prior to data collection</td>
<td>Inform, Protect</td>
<td>Responsible Data Methodology</td>
<td>Activity</td>
<td>Yes/No</td>
<td>Analyze &amp; Plan</td>
<td>Online data ownership, ownership and access. Before any data are collected, captured. Determine what laws and regulations need to be followed.</td>
<td></td>
</tr>
<tr>
<td>Address Privacy and Security</td>
<td>8.02</td>
<td>User Interests and the Forecast</td>
<td>Indicates whether an initiative has incorporated data privacy and security throughout the user project implementation plan</td>
<td>Protect</td>
<td>Activity</td>
<td>Yes/No</td>
<td>Analyze &amp; Plan</td>
<td>Data privacy and security</td>
<td>Keep the best interests of end users and individuals whose data are collected at the forefront of your planning for protecting user privacy and ensuring data security and ethical project implementation.</td>
<td></td>
</tr>
</tbody>
</table>

### Select the Best Indicators

**Indicator quality frameworks**

DIAL believes the best indicators are those that perform well against common and custom criteria of indicator performance as determined by intended users. The Digital Principles Common Metrics were developed and refined with the guidance of multiple indicator quality frameworks. These are the collections of criteria used by evaluation practitioners to evaluate or determine the quality of indicators themselves. Some frameworks focus on how indicators should be used, while others focus on the selection and development of indicators. Different frameworks may be better suited for intended users, depending on the intended use and the role of users and their relationship to the organizations looking
to measure adherence to the Digital Principles. DI\textregistered\textsuperscript{AL} recommends becoming familiar with these frameworks and selecting a particular framework or combination of criteria of merit from multiple frameworks before selecting indicators that are fit-for-purpose. Some criteria from these frameworks will not be applicable to the process indicators, such as attributable, since these are not outcome or impact indicators, and many criteria overlap across frameworks, if not in name in definition.

- USAID TIPS Performance Indicator Criteria\textsuperscript{19}
- The Evaluation Center’s High-Performing Indicator Checklist\textsuperscript{20}
- Search for Common Ground Designing for Results Indicator Criteria\textsuperscript{21}
- CREAM Indicator Criteria\textsuperscript{22}
- SPICED Indicator Criteria\textsuperscript{23}
- RACER Indicator Criteria\textsuperscript{24}
- SMART Indicators\textsuperscript{25}
- sopact Criteria for Indicator Selection\textsuperscript{26}
- SASB Criteria for Metric Selection\textsuperscript{27}

### Indicator Quality Frameworks

<table>
<thead>
<tr>
<th>Criteria Framework</th>
<th>Description</th>
<th>Criteria</th>
<th>Intended Use</th>
<th>Checklist</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>USAID Performance Indicator Criteria</td>
<td>7 criteria focused on measuring change</td>
<td>Direct, objective, useful, attributable, practical, adequate, disaggregated</td>
<td>Guide indicator selection</td>
<td>Yes</td>
<td>USAID</td>
</tr>
<tr>
<td>EC High-Performing Indicator Criteria</td>
<td>14 criteria used to engage stakeholders in indicator selection</td>
<td>Applicability, availability of data, clarity of focus, data quality, cultural appropriateness</td>
<td>Guide indicator selection</td>
<td>Yes</td>
<td>Evaluation Center at WMU</td>
</tr>
<tr>
<td>SFCG Designing for Results Criteria</td>
<td>5 criteria for qualitative and quantitative indicators</td>
<td>Targeted, measurable, reliable, feasible, utility</td>
<td>Guide indicator development</td>
<td>Yes</td>
<td>Search for Common Ground</td>
</tr>
<tr>
<td>CREAM Criteria</td>
<td>5 criteria for results-based indicators</td>
<td>Clear, relevant, economic, adequate, monitorable</td>
<td>Guide indicator selection</td>
<td>No</td>
<td>Schiavo-Campo 1999</td>
</tr>
<tr>
<td>SPICED Criteria</td>
<td>6 criteria for participatory, qualitative indicator development and use</td>
<td>Subjective, participatory, interpretable, comparable, empowering, diverse</td>
<td>Guide indicator use</td>
<td>No</td>
<td>Equal Access</td>
</tr>
<tr>
<td>RACER Criteria</td>
<td>5 criteria and 16 sub-criteria for useful indicators</td>
<td>Relevant, accepted, credible, easy, robust</td>
<td>Guide indicator assessment</td>
<td>Yes</td>
<td>European Commission</td>
</tr>
<tr>
<td>SMART Criteria</td>
<td>5 criteria for objectives from management applied to indicator development</td>
<td>Specific, measurable, attainable, reasonable, time-bound</td>
<td>Guide indicator development</td>
<td>Yes</td>
<td>Various authors, though original is Doran (1981)</td>
</tr>
<tr>
<td>sopact Criteria</td>
<td>6 criteria for selecting metrics for impact management</td>
<td>Mission critical, realistic, already measured, reasoned, outcome, worth measuring</td>
<td>Guide indicator selection</td>
<td>Yes</td>
<td>sopact</td>
</tr>
<tr>
<td>SASB Criteria</td>
<td>9 criteria for sustainability accounting indicators</td>
<td>Fair representation, useful, applicable, comparable, complete, verifiable, aligned, neutral, distributive</td>
<td>Guide for evaluating metrics</td>
<td>No</td>
<td>Sustainability Accounting Standards Board</td>
</tr>
</tbody>
</table>

\textsuperscript{19} https://www.dmeforpeace.org/sites/default/files/USAID%20Tips.pdf
\textsuperscript{20} https://wmich.edu/sites/default/files/attachments/u3036/2019/indicators-en-macdonald.pdf
\textsuperscript{22} https://www.linkedin.com/pulse/20141031111752-1892784-from-s-m-a-r-t-indicators-to-cream-and-spiced
\textsuperscript{23} https://www.betterevaluation.org/sites/default/files/EA_PM&E_toolkit_module_2_objectives&indicators_for_publication.pdf
\textsuperscript{25} https://sites.google.com/site/savethechildrendme/Home/smart-indicators
\textsuperscript{26} https://www.sopact.com/social-impact-measurement-framework#indicators
\textsuperscript{27} https://www.sasb.org/standard-setting-process/conceptual-framework/
Use Intentionally

Qualifications, caveats, and words of caution

As suggested earlier, there is a tension in providing common indicators for principles. The risk is that the line between principles for achieving goals and the goals themselves will be blurred and that some users may be tempted to misuse the indicators for symbolic or legitimate purposes. In other words, endorser organizations and principle-driven initiatives may begin to see the principles as ends in and of themselves as opposed to the means for navigating complex situations in applying strategy to realize Digital Development outcomes. Michael Quinn Patton suggests that “...evaluating principles requires examining both processes and results and may rely more heavily on qualitative data (interviews, fieldwork, observations, and documents). Evaluating principles as if they are goals or projects is inappropriate and distorting.” Some may use these indicators to revert the Principles to goals. While these indicators could be sufficient for evaluating the adherence of initiatives and organizations to the Digital Principles, they are not sufficient for conducting Digital Principles-Focused Evaluation. For further guidance on this, see DIAL’s guidance document, Digital Principles-Focused Evaluation. Beyond this philosophical challenge, there are methodological challenges in using common, global indicators. For example, since the Digital Principles straddle overarching and operational effectiveness principles, a multitude of activities can be indicative of any one principle. Therefore, only using one indicator would be inadequate. The use of common metrics presents a host of challenges and is by no means the sole way to measure the Digital Principles. DIAL recommends referring to complementary guidance on principles around effective use of common indicators. An example to highlight would be the UNDP and International Alert, which has developed guidance, including a set of principles for using their common indicators.

“The more any quantitative social indicator is used for social decision making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor”

- DONALD CAMPBELL

28 (P-FE, 2018, p. 41)
29 https://digitalprinciples.org/digital-principles-focused-evaluation
30 http://www.pvetoolkit.org/undp-me/using-the-indicator-bank-for-preventing-violent-extremism