# **Principles for Digital Development**

The following set of principles represents a concerted effort by donors to capture the most important lessons learned by the development community in the implementation of information and communications technology for development (ICT4D) projects. Having evolved from a previous set of implementer precepts endorsed by over 300 organizations, these principles seek to serve as a set of living guidelines that are meant to inform, but not dictate, the design of technology-enabled development programs.

### 1. DESIGN WITH THE USER

- Develop context-appropriate solutions informed by user needs.
- Include all user groups in planning, development, implementation, and assessment.
- Develop projects in an incremental and iterative manner.
- Design solutions that learn from and enhance existing workflows, and plan for organizational adaptation.
- Ensure solutions are sensitive to, and useful for, the most marginalized populations: women, children, those with disabilities, and those affected by conflict and disaster.

# 2. UNDERSTAND THE EXISTING ECOSYSTEM

- Participate in networks and communities of like-minded practitioners.
- Align to existing technological, legal, and regulatory policies.

#### 3. DESIGN FOR SCALE

- Design for scale from the start, and assess and mitigate dependencies that might limit ability to scale.
- Employ a "systems" approach to design, considering implications of design beyond an immediate project.
- Be replicable and customizable in other countries and contexts.
- Demonstrate impact before scaling a solution.
- Analyze all technology choices through the lens of national and regional scale.
- Factor in partnerships from the beginning, and start early negotiations.

## 4. BUILD FOR SUSTAINABILITY

- Plan for sustainability from the start, including planning for long-term financial health, e.g., assessing total cost of ownership.
- Utilize and invest in local communities and developers by default, and help catalyze their growth.
- Engage with local governments to ensure integration into national strategy, and identify high-level government advocates.

#### **5. BE DATA DRIVEN**

- Design projects so that impact can be measured at discrete milestones with a focus on outcomes rather than outputs.
- Evaluate innovative solutions and areas where there are gaps in data and evidence.
- Use real-time information to monitor and inform management decisions at all levels.
- When possible, leverage data as a by-product of user actions and transactions for assessments.

# 6. USE OPEN STANDARDS, OPEN DATA, OPEN SOURCE, AND OPEN INNOVATION

- Adopt and expand existing open standards.
- Open data and functionalities, and expose them in documented APIs (Application Programming Interfaces) where use by a larger community is possible.
- Invest in software as a public good.
- Develop software to be open source by default with the code made available in public repositories and supported through developer communities.

## 7. REUSE AND IMPROVE

- Use, modify, and extend existing tools, platforms, and frameworks when possible.
- Develop in modular ways favoring approaches that are interoperable over those that are monolithic by design.

## 8. ADDRESS PRIVACY & SECURITY

- Assess and mitigate risks to the security of users and their data.
- Consider the context and needs for privacy of personally identifiable information when designing solutions and mitigate accordingly.
- Ensure equity and fairness in cocreation, and protect the best interests of the end-users.

#### 9. BE COLLABORATIVE

- Engage diverse expertise across disciplines and industries at all stages.
- Work across sector silos to create coordinated and more holistic approaches.
- Document work, results, processes, and best practices, and share them widely.
- Publish materials under a Creative Commons license by default, with strong rationale if another licensing approach is taken.

For more information: ICT4DPrinciples.org