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 co-creation, 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