3.3
THE MORE YOU KNOW HOW TO SOLVE **WIDE REACHING PROBLEMS**, THE EASIER IT WILL BE FOR YOU TO SCALE AND INCREASE YOUR IMPACT.

Design and innovation principles provide useful constraints to those considering solutions to wide-reaching social problems. Design principles can work as best practices that inform the design of technology based projects that aim to reach social impact. You can set your own constraints and define your design guidelines or have a look at the general principles provided in this resource.

While reading the principles, do not forget to tick the ones that you are applying to your project. If the list appears to be complete, you are growing healthy and strong. It helps to identify small, measurable opportunities to design for circularity.

Type:

#guidelines

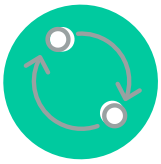
Subject:

innovation principles

Keywords:

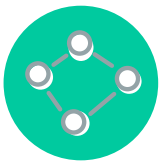
#design constraints #problem solving #best practices

Design with the User



Build for Sustainability

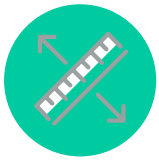
Reuse and Improve



Understand the Existing Ecosystem

Be Data Driven

Do Not Harm



Design for Scale

Use Open Standards, Open Data, Open Source, and Open Innovation

Be Collaborative

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.

Understand the Existing Ecosystem

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

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.
- ☐ Demonstrate impact before scaling a solution.
- ☐ Be replicable and customizable in other countries and contexts.
- ☐ Analyse all technology choices through the lens of national and regional scale.
- ☐ Factor in partnerships from the beginning and start early negotiations.

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 catalyse their growth.
- Engage with local governments to ensure integration into national strategy and identify high-level government advocates.

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.

Use Open Standards, Open Data, Open Source and Open Innovation

- 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

Reuse and Improve

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

Do No Harm

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

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.

Which other design principles will you add to this list?

About: UNICEF innovation principles and 'Wearables for Good'

The 'Wearables for Good' challenge was promoted by UNICEF, ARM and frog to demonstrate how wearable technology can be used to solve some of the most pressing challenges facing children. The challenge proposed a global call to action to developers, designers, community partners and problem-solvers to identify and develop solutions for areas where wearable devices can generate tremendous social good. Announced in November 2015, the two winners of the challenge – Khushi Baby and SoaPen – successfully demonstrated how wearable technology can address some of the fundamental challenges children face in the areas of immunization and water and sanitation, respectively.

www.wearablesforgood.com

Source:

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Related resources

Ethical design guide, www.ind.ie/ethical-design