

Issue 133 February 7, 2014 | Focus on WASH and Design Thinking

Design thinking is an interesting approach to problem solving. Clark Kellogg states, from the University of California, Berkeley and Collective Invention, states "Unlike most previous problem solving approaches, it is human-centric, collaborative, and driven by experimentation." One important principle of design thinking is to get feedback from real users as soon as possible in the form of prototypes. While early prototypes often fail, design thinking enables designers to quickly refine ideas based upon feedback from real users. One of the benefits of design thinking is to mitigate risk by testing early and failing fast.

GENERAL/OVERVIEW

David Kelley of IDEO Talks "Design Thinking" on 60 Minutes. CBS 60 Minutes, Jan 2013. (Link)

What makes a great designer? According to IDEO founder David Kelley, being an incredible designer isn't necessarily about having a great aesthetic sensibility or coming up with out-of-the-box ideas. No, Kelley says that the key characteristic is empathy. Kelley has been on teams that created many game-changing products, from the first Apple computer mouse to the stand-up toothpaste tube to the "lavatory occupied" sign on airplanes. And on 60 Minutes, Kelley gives a tour of IDEO and shares his unique approach to what he calls "design thinking."

Collective Action Toolkit, 2013. Frog Design. (Link)

Is it possible to inspire design thinking outside of the design world? The practice has helped countless organizations innovate new products and services but has infrequently been made available to a broad audience. Frog set out to prove the practice is universal by creating the Collective Action Toolkit, a set of resources and activities to help people accomplish tangible outcomes through a set of guided, nonlinear collaboration activities.

Design Thinking Demystified: An Interview with Clark Kellogg, 2013. N Mahajan. (Link)

Design thinking derives its basic principles from the discipline of design. As Clark Kellogg, partner at Collective Invention and lecturer at UC Berkeley's Haas School of Business and College of Environmental Design, explains, unlike most previous problem solving approaches, it is human-centric, collaborative, and driven by experimentation. Many companies, such as consumer products giant Procter & Gamble, GE Healthcare, and Philips Lighting have adopted design thinking processes.

Design Thinking: Training Yourself to Be More Creative, 2013. (Video)

In this webinar Professor Bill Burnett summarizes the Innovation Masters Series course in 2013 at Stanford University.

From Design to Design Thinking, 2013. (Video)

Tim Brown, president and CEO of IDEO, explains how to go from design to design thinking and how it applies to health care in this Transform 2009 symposium sponsored by the Mayo Clinic Center for Innovation.

Solving Problems with Design Thinking, 2013. (Video)

Most managers lack a sense of how to use design thinking for issues other than product development and sales growth. Solving Problems with Design Thinking details 10 real-world examples of managers who successfully applied design methods at 3M, Toyota, IBM, Intuit, and SAP; entrepreneurial start-ups such as MeYou Health; and government and social sector organizations.

WASH/COOKSTOVE CASE STUDIES

Bringing Design Thinking to Social Problems, 2013. W Pastroek. (Link)

The nonprofit IDEO.org takes on issues like sanitation and clean cookstoves from the unique perspective of the design world. Jocelyn Wyatt and Patrice Martin are the co-leads and executive directors of IDEO.org, the unique nonprofit wing of innovative design firm IDEO. Their mission: apply human-centered design to poverty-related challenges ... and in the process, change the way that a for-profit business can use its resources to create social good.

Building Human-Centered Design into ICT4D Projects: An Interview with Danny Alexander and Sean Hewens. Best Practice in ICT4D, July 2013. (Link)

In general the development community is very risk averse. If things go badly, you're not talking about losing quarterly profits but losing lives.

Cooks + Cookstoves: Daily Life in Tanzania, n.d. S Boutilier. (Video)

IDEO.org used a human-centered design (HCD) approach to examine the habits, motivations, and aspirations of cookstove users in Tanzania. This movie provides a glimpse into the lives of some of the cookstove users that the IDEO.org team met while conducting HCD research in Tanzania.

Design for Those Who Need it Most: Lessons from the Nepal Sanitation Studio, 2014. Nepal Sanitation Studio. (Link)

The Village Sanitation Program in Nepal has been designed to improve health, and that means all the parts that make the program work—the buildings, all that lies beneath the ground, the people, and the ongoing maintenance—have to function. This requires the very best design, construction, and ongoing, locally organized maintenance.

Design Thinking for Water Challenged Rural Communities. iHub Research, May 2013. M Kamau. (Link)

iHub Research conducted a comprehensive research project among the rural population of Kenya that looked at water-related challenges the communities face. During a design thinking workshop, stakeholders gathered to discuss ways for rural citizens to access water information.

An Inside Look at a New Documentary on Extremely Affordable Design, 2013. R Goodier, Engineering for Change. (Link)

The documentary features students in a Stanford University course, Design for Extreme Affordability. During the course, the students design, build, and finally field test their inventions in the communities that could use them. The student inventors apply the principles of design thinking, the evolution of a product that starts with recognizing a problem and ends with testing a prototype that could solve it. The devices include a container for safely storing drinking water in an Indonesian community, an IV infusion pump, and a breathing apparatus to treat babies with pneumonia in Bangladesh.

WEBSITES

- BoP Designer Daily (e-newsletter) (Link)
- CoDesign from Fast Company (Link)
- MIT's D-Lab (Link)
- Stanford's D-School (Link)
- Virtual Crash Course on Design Thinking, Stanford D.School (Link)

WASHplus Weeklies will highlight topics such as Urban WASH, Indoor Air Pollution, Innovation, Household Water Treatment and Storage, Hand Washing, Integration, and more. If you would like to feature your organization's materials in upcoming issues, please send them to Dan Campbell, WASHplus Knowledge Resources Specialist, at dacampbell@fhi360.org.



About WASHplus - WASHplus, a five-year project funded through USAID's Bureau for Global Health, supports healthy households and communities by creating and delivering interventions that lead to improvements in access, practice and health outcomes related to water, sanitation, hygiene (WASH) and indoor air pollution (IAP). WASHplus uses at-scale, targeted as well as integrated approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. For information, visit www.washplus.org or email: contact@washplus.org.