

Greater good

Adam Mack and Aaron Sklar of IDEO discuss the three tools that will make the strongest contribution when designing for social impact

As designers, we are empowered to make choices and challenged to understand the consequences of our decisions. In fact, many of us were drawn to the field of design because of our desire to make an impact. While this drive to contribute has long been present in the design discipline, recent trends have thrust design into centre stage and we are increasingly being invited to take on bigger challenges with high-profile partners and even higher potential for impact.

Even with our best intentions and effort, the vast majority of design work is only reaching the wealthiest 10 per cent of the world's population. The world's poor pay a 'poverty penalty', paying as much as five to 25 times what the rich pay for the same services. Recent initiatives, such as the Cooper-Hewitt's

'Design for the Other 90%' exhibit emphasise the needs of the world's majority and highlights the contribution that design can make.

With this increased awareness, it is time for designers to acknowledge the opportunity not only to create products for the global marketplace, but also for the underserved and disadvantaged. Designers are taking the challenge to grow beyond the realm of products and services for the wealthy and design offerings to alleviate social problems, such as access to clean drinking water, provision of education opportunities for all, and increased availability of healthcare and medical technology, to name a few.

At IDEO, a design consultancy with offices in North America, UK, Germany and Asia, we are well versed in a methodology that guides us to learn quickly, explore options, and make informed tradeoffs to satisfy the goals of the project brief. These practices have served us well in the design of products, services, spaces, and organisations, and are proving themselves to be equally productive in the social arena.

Our clients have come to us asking bigger questions and have challenged us to continue to explore the



ABOVE | The Aquaduct is a pedal powered concept vehicle that transports, filters and stores water for the developing world.

boundaries of design by engaging in design projects with explicit intentions of social impact. In conducting these projects, we have reflected on our design approach and identified three foundational elements that make a strong contribution to design for social impact: empathy, prototyping, and storytelling.

Social impact challenges are inherently about people. Accordingly, our partners in the social sector are committed to making a difference in the lives of the people they serve. Empathy abounds in this domain, yet we have discovered that the designer's approach to understanding people can be a powerful tool for revealing new opportunities. Some social sector organisations, like many businesses, have traditionally addressed people's needs and problems with a demographic mindset. For designers, however, empathy is the process of getting to know the experience of the very individuals that a new and improved product, service, or space is intended to benefit. We have dozens of research methods that all ultimately share the goal of achieving empathy with individuals and understanding an experience through their eyes.

Our recent collaboration with International Development Enterprises (IDE), an international non-profit organisation that has been helping poor farmers in developing countries for more than 25 years and is adept at understanding their customers, demonstrates how empathy was used to address the needs of smallholder farmers in Ethiopia. In order to understand how to make a difference in the lives of these farmers, our design team began by visiting a rural

BELOW ■ Storytelling - The Aquaduct video in YouTube, designed to raise awareness of the issues surrounding clean water in the developing world.



The designer's approach to understanding people can be a powerful tool for revealing new opportunities

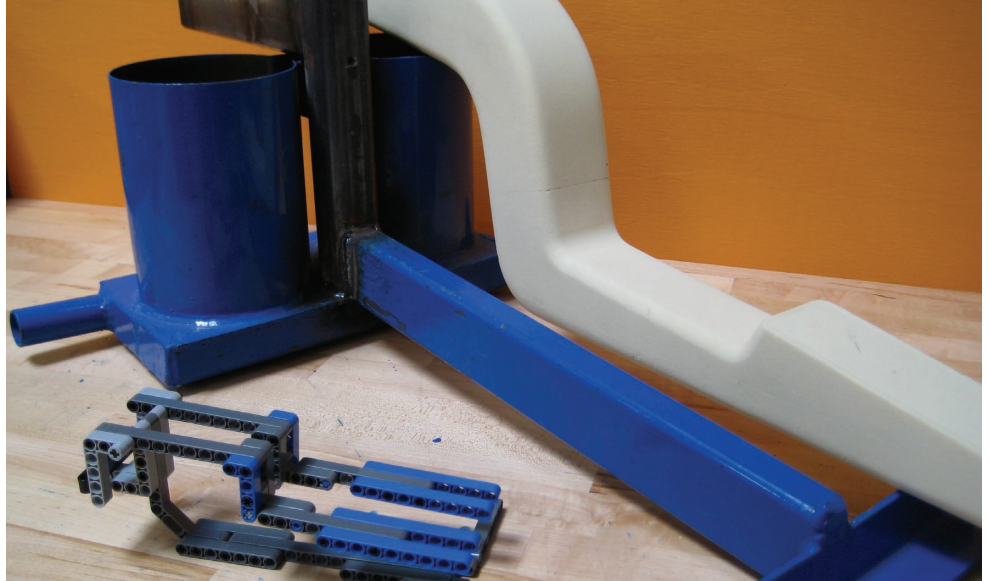
village. One of the farmers, Roba, described his struggles to afford schooling for his seven children. He spoke with a very dejected and hopeless tone and was minimally engaged in conversations with our team. In order to forge a greater connection with the villagers, the team chose to conduct a home-stay, experiencing life firsthand within the community - going to get water, ploughing fields, eating with families,

even spending the night in the village. When the villagers awoke the next morning, they were genuinely stunned to see the visitors still there. At that point, the team experienced a breakthrough in their ability to connect with the villagers. Upon meeting Roba again, the tone of the conversation shifted dramatically. He expressed newfound willingness to share his hopes for the future and his plans for getting his family out of poverty. Conversations like these served as inspiration to guide the project toward microfinance and other poverty-reducing strategies that could be used in farming communities. Based on this research, the IDE is exploring microfinance programmes that allow for loan payments to be timed with farmers' cyclical income stream, rather than requiring weekly payments.

The next step is concept generation and refinement, or, in design terms, prototyping. The design approach to prototyping - rough, rapid, and iterative - can bring great value to social impact projects. Prototyping allows for quick and inexpensive exploration of potential solutions to design challenges. The best way to test out a series of brainstorm concepts is to make them real. They can take the form of physical models or role-played experiences - anything that moves an idea from a description to an articulated concept. Prototypes are not an end result of project work, they are the vehicles that allow the team to think through solutions and imagine alternatives. There is no need to 'get it right' the first time; the design process demands exploration and works best with multiple avenues of opportunity.

socialimpact

RIGHT | Prototyping - One of the prototypes for KickStart's micro-irrigation pump. Rapid prototyping enabled designers to explore different solutions. **BOTTOM RIGHT** | Empathy - the IDEO team gets closer to the community to understand the real needs of farmers in Ethiopia



Our team had precisely that experience when we collaborated with KickStart to redesign a micro-irrigation pump used by farmers in Africa. The challenge was to lower production costs without sacrificing the farmers' perceived quality of the pump. Over the course of three months, the team produced close to 75 prototypes. Some were simple, made out of paper or Lego blocks; others were functional, made out of steel or created using 3D software. Each prototype was built to answer a unique question or prompt a specific conversation, and the level of resolution varied accordingly. Prototyping allowed the team to explore the possibility of an idea (cheaply and quickly), in addition to inspiring new ideas. Each subsequent prototype responded to findings from the previous versions, resulting at the end of the project in a final concept that inspired confidence in its ability to satisfy KickStart's intentions.

In the context of social impact projects, we are realising with increasing clarity that a great concept can rarely stand on its own. To truly achieve the desired impact, the concept must be accompanied by a compelling story that connects all stakeholders to the powerful mission of the project. Here, design's third foundational element, storytelling, can become our biggest contribution.

As designers, we are adept at synthesising large amounts of information and identifying the core elements. After all, bringing ideas to life through visual and physical means is, in essence, what design is all about. Storytelling brings prototyping and empathy together to create a

compelling message that can inspire action and ensure implementation and support. Designers are often fluent in a variety of media to convey the message: printed material, photo and video, digital interactions, environments design, and person-to-person communication all make up the comprehensive battery of tools we use to deliver a concept.

When a team of IDEO designers entered the 'Innovate or Die' competition (hosted by Google and Specialized) our aim was to start a conversation. The competition challenged individuals to design a pedal-powered system with an environmental impact. Our team won the contest, in large part due to our effective use of storytelling to showcase the design process and final concept. The winning entry, the Aquaduct, is a prototype vehicle for the developing world that stores, transports, and filters water. One member of the design team was dedicated specifically to telling the story, which was embedded in a rich context of human needs and existing behaviours around water in the developing world. The concept was physically realised in a way that captured the imagination of the audience: a working model was functional but emphasised aesthetics over technology in order to guide attention to the issue and to the design's potential. To present this concept in the context of the global water crisis, using compelling images, music, and script, the team created a video to capture the audience's imagination.

While not intended to be the sole solution to the lack of available clean water in rural areas of the developing world, the Aquaduct proto-

type and video served to raise awareness of this increasingly dire global issue. Indeed, the video has been viewed more than 750,000 times on youtube.com, provoked nearly 4,000 comments, and was featured on dozens of blogs, thus demonstrating the power of storytelling to effectively raise awareness around the needs of resource-constrained communities in the developing world.

Empathy, prototyping, and storytelling are at the core of design thinking. These three tools provide a foundation and starting point for designers to engage with any project and are of particular relevance when the aim is social impact. Our relationships with non-profit organisations and social enterprises are fueled and strengthened by our growing confidence in applying our practices to challenges in these new arenas. Entrenched issues such as water and sanitation, agriculture, and basic health services are being addressed from new angles and approached by an increasing portion of the design community. New alliances are being formed to combat the world's greatest problems and designers are ready and able to have a seat at the table and have an opportunity to contribute. |

