



Case Study: Clean Team

In-Home Toilets for Ghana's Urban Poor

For the millions of Ghanaians without in-home toilets, there are few good options when it comes to our bodies' most basic functions. Working with Unilever and Water and Sanitation for the Urban Poor (WSUP), IDEO.org developed Clean Team, a comprehensive sanitation system that delivers and maintains toilets in the homes of subscribers. Clean Team now serves thousands of people in Kumasi, Ghana, making lives cleaner, healthier, and more dignified.



DESIGN TEAM

8 IDEO.org designers

PARTNERS

Water and Sanitation for the Urban Poor (WSUP), Unilever

TIMELINE

20 weeks

LOCATION

Kumasi and Accra, Ghana

THE OUTCOME

An IDEO.org team designed a comprehensive sanitation system to serve the needs of low-income Ghanaians. The Clean Team service is a custom-designed stand-alone rental toilet as well as a waste-removal system, but the design work extended to the entire service ecosystem including branding, uniforms, a payment model, a business plan, and key messaging. Unilever and WSUP piloted the project with about 100 families in the city of Kumasi, Ghana, before launching in 2012.

INSPIRATION

The Inspiration phase of the project was intense, with scores of interviews needed to understand all facets of the design challenge. “Because sanitation is a systems-level challenge we knew that we couldn’t just design Clean Team’s toilet,” says team member and designer Danny Alexander.

After six weeks of talking with sanitation experts, shadowing a toilet operator, digging into the history of sanitation in Ghana, and talking to scads of Ghanaians, key insights about what the toilet should look like and how waste should be collected emerged.

An important historical note came out too: For years Ghana had night soil collectors, people who cleaned out bucket latrines each night. But because many night soil collectors dumped human waste in the streets, night soil collection was banned in the 1990s as a threat to public health. This meant the team could leverage an existing behavior around in-home waste removal, but they would have to avoid any association with illegal dumping.

IDEATION

This was a lightning-fast phase in the project, one that leapt from learnings to prototypes in seven weeks. After brainstorming with its partners and everyday Ghanaians, the team determined which direction to take and began testing its ideas. What aesthetics did people like? Would a urine-diverting toilet work? Would people allow servicemen into their homes? Where in the home would the toilet go? Can you design a toilet that can only be emptied at a waste management facility?



By building a handful of prototypes and modifying existing portable toilets, the team got tangible elements of the service into the hands of Ghanaians. They learned how the service should be positioned, early ideas around marketing and promotion, as well as certain technical limitations, namely that though flush functions appeared popular early in the goings, water scarcity was a major factor to contend with and nobody relishes disposing of his own waste.

IMPLEMENTATION

Once the service offerings and look and feel of the toilet were more or less fleshed out, WSUP ran a live prototype of the Clean Team service. Because tooling for toilet manufacture is so expensive, WSUP used off-the-shelf cabin toilets, which approximated about 80% of the toilets that IDEO.org would design, to test the service. They got great results, went ahead with manufacturing, and as of 2012, the toilets were in production. They sport IDEO.org-created branding and the Clean Team service has found its way into the lives of thousands of people.