Clean Team:
Sanitation with Soul
**Initial scoping IDEO: Phase 1**

**Location**

**Focus: Kumasi, Ghana**
- 1.5 million residents
- 33% have water connection
- 28% have sanitation at home
- 77% economically active

---

**Situation**

**Public Toilets**
Public toilets became the norm for the majority of urban Ghanaians with the outlawing of bucket latrines. They're generally blocks of 15-20 squatting stalls with minimal privacy, and varying degrees of cleanliness. They cost between $0.03-$0.20 per use, and have long lines in the mornings and evenings.

**Open Defecation**
Public toilets can be a significant financial burden for an entire family to use every day. This leads many to resort to open defecation, a practice that spreads disease and contaminates water, while also bringing shame upon the person. Many children, however, openly defecate without stigma as it is socially acceptable for them to do so.

**Flying Toilets**
To avoid the inconvenient and expensive trip to the public toilets in the dark of the night, many people will use a chamber pot and empty its contents into a plastic bag the following morning. Known as "flying toilets," these bags are often tossed in roadside ditches, garbage piles, or waterways.

---

**Some solutions**

**High-Touch Service Toilet**
This is a sanitation service where users lease a toilet with interchangeable waste cartridges that are emptied and serviced on a bi-weekly basis.
The Idea: Phase 1

A convenient home sanitation service for low-income areas

01 Branded household toilet with bio-digester chemical and removable waste container.

02 Local franchised operator provides household waste collection service.

03 Waste taken to neighborhood transfer tank for interim storage.

04 Vacuum truck services local transfer tanks.

05 Waste used to generate electricity or create fertilizer to sustain and grow local business.
Developing the concept: Phase 2

Testing camper toilets and prototyping

Human centred design

Education and marketing

Concept development
Branding: Phase 2

It takes a team.
The simple visual of people working together struck a chord. People understand the importance of this service and that it needs a coordinated team to be successful.
The Result: First prototype design

WET URINE DIVERSION TOILET

Based on feedback received in Ghana, our conclusion is that a urine diverting toilet with a removable sealed waste tank is our best option.

- Standard size toilet seat comfortably fits even larger users.
- Urine diversion comes out back with flexible tube.
- Shortened base allows room for feet.
Piloting the concept
The Trial: Phase 3

- Testing with camping toilets from Sweden
- Started with 20 families, desire to reach 100 families
- 1\textsuperscript{st} month free, then $8-12 per month
Bringing the vision to life

The creation of The Clean Team

Training is key
Initial Service Results

- 114 families signed up as of today.
- Only 12 drop outs mostly in 1st month
- The model is working:
  - Waste collected, taken to IBC and finally collected by vacuum truck
- 100% payment received
- Smell is the key problem
- Customers buying hygiene products
Concept to reality in 2 years

$100k  Project evolution  $1m
OUR BRAND VALUES

The Clean Team values define the heart of our brand. Whether expressed through product, service, or communications, these elements are what we strive to uphold. Together, they form our foundation, and make us uniquely who we are.

ENGAGED
- We are proactive and responsive.
- We anticipate needs.
- We follow up and check in.
- We are respectful of you and your time.
- We take time to explain and to answer questions.

DELIGHTFUL
- We make functional, everyday essentials lighter and more enjoyable.

DEPENDABLE
- We’re there when we say we will.
- We’re here to stay; you can count on us not to disappear.

RECEPTIVE
- We seek out feedback from customers
- We are interested in ideas from employees

POLISHED
- We pay attention to detail.
- We don’t rush.
- We come prepared.
KUMASI CLEANS UP

I never thought I’d be bragging about my toilet!
GET PERSONAL,
GET CLEAN TEAM.
(sitting in traffic):

How long did you spend this morning going to the toilet? Your time is worth more than that.
Waste treatment

What to do with the waste?

05
Waste used to generate electricity or create fertilizer to sustain and grow local business.

Research conducted

- Realistic waste treatment / resource recovery
- Reviewing options for municipal and private sector waste treatment
- Locally manufactured productized options
- Pilot at neighbourhood/city scale
- Front End Engineering Design of a scalable, modular, transportable and low cost AD system

Need a solution for scale up in areas without treatment

Easy Maintenance

Modular
Thank you
Any Questions?