Pure Paani

Christopher Bulkley-Logston, Kaylea Brase
Acara Challenge, 2016
50% of Bangalore’s drinking water is contaminated.¹

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42% of residents consider water contamination to be the primary cause of their illnesses.²

<table>
<thead>
<tr>
<th>Typical Consumer</th>
<th>Water Filtration Methods</th>
<th>Drawback</th>
</tr>
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</table>
Typical Consumer

Water Filtration Methods

Drawback

2 hr
Water Filtration Methods

Typical Consumer

Drawback

2 hr × 10
Typical Consumer

Water Filtration Methods

Drawback

Heart

$
Water Filtration Methods

Typical Consumer

Drawback

$ \times 10$
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<th>Typical Consumer</th>
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<tbody>
<tr>
<td>![Typical Consumer Image]</td>
<td>![Water Filtration Methods Image]</td>
<td>![Heartbeat Symbol]</td>
</tr>
<tr>
<td>![Typical Consumer Image]</td>
<td>![Water Filtration Methods Image]</td>
<td>![Dollar Symbol x 10]</td>
</tr>
<tr>
<td>![Typical Consumer Image]</td>
<td>![Water Filtration Methods Image]</td>
<td>![Clock Symbol]</td>
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Treatment Options

Bubble size indicates relative convenience.

Safety

Affordability

- Bottle
- Reverse Osmosis
- Boiling
- No filtration
Treatment Options

Bubble size indicates relative convenience.

- Bottle
- Reverse Osmosis
- Boiling
- No filtration

Graph with axes labeled Safety and Affordability.
Flow Rate: 5 liters per min.
Membrane Size: 1 micron

Effective
Convenient
Portable
Why Microentrepreneurs?
Why Microentrepreneurs?

The ideal microentrepreneur:

- personal relationships with fellow slum dwelling residents
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The ideal microentrepreneur:

- personal relationships with fellow slum dwelling residents
- intimate knowledge of water availability in their community
Why Microentrepreneurs?

The ideal microentrepreneur:

- personal relationships with fellow slum dwelling residents
- intimate knowledge of water availability in their community
- self managing
Pure Paani

$2.50 per month
Pure Paani

$2.50 per month
Pure Paani

$2.50 per month

1 ¢/L
Earns income 2x that of his fellow resident.

$2.50 per month

1 ¢/L
Profit Structure

Leasing Fees → $ → Filter Refills → Pure Paani
| Assumptions | Validation |
Assumptions

willing to pay 1¢/L for treatment
Assumptions

willing to pay \(1\,\text{¢}/\text{L}\) for treatment

Validation

already pays \(2.5\,\text{¢}/\text{L}\) for water & treatment
Assumptions

- willing to pay **1¢/L** for treatment
- willing to lease for **$2.50/month over year**

Validation

- already pays **2.5¢/L** for water & treatment
Assumptions

- willing to pay $1/L for treatment
- willing to lease for $2.50/month over year

Validation

- already pays $2.5/L for water & treatment
- positive field interviews, future pilot study
Assumptions

- willing to pay 1¢/L for treatment
- willing to lease for $2.50/month over year
- able to filter 900 L/day

Validation

- already pays 2.5¢/L for water & treatment
- positive field interviews, future pilot study
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<td>positive field interviews, future pilot study</td>
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<td>able to filter 900 L/day</td>
<td>prototyping, positive customer demand</td>
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Customer Feedback

“I like the filter. The pumping is very easy.”
-Samina
## Pilot Plan

<table>
<thead>
<tr>
<th>Cost: $5,000</th>
<th>Activities</th>
</tr>
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<tbody>
<tr>
<td>Airfare</td>
<td>Test assumptions</td>
</tr>
<tr>
<td>Materials and tools for system</td>
<td>Develop entrepreneur customer relationship</td>
</tr>
<tr>
<td>Replacement filters</td>
<td>Assess long-term integrity of system</td>
</tr>
<tr>
<td>Living expenses</td>
<td></td>
</tr>
<tr>
<td>In-country travel</td>
<td></td>
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Pure Paani Projections

- Hundreds of Families with Clean Water
- Microentrepreneurs
Team overview

Christopher Bulkley-Logston

Kaylea Brase
Theory of Change

More accessible water filtration

Cleaner water for end user

Less water-borne illness

Consumer's improved health

Business owner's improved wealth
Theory of Change

More accessible water filtration

Cleaner water for end user

Consumer’s
Improved health

Business owner’s
Improved wealth
Theory of Change

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More accessible water filtration
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Less water-borne illness

End consumer’s Improved health
Theory of Change

More accessible water filtration

Cleaner water for end user

Less water-borne illness

End consumer’s improved health

Microentrepreneur’s improved wealth
Pure Paani Payoff
Clean Water
Steady Income
Positive Social Impact
Pilot Plan

Cost: $5,000

- Airfare
- Materials and tools for system
- Replacement filters
- Living expenses
- In-country travel