

Hult Global Case Challenge

WaterLadder.org



Experienced Team

With Global Network



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Problem: Access to Clean Water & Sanitation in Urban and Peri-Urban regions



Challenges:

- Availability: “Scavenger Hunt” for **women & girls**
- Accessibility: Multiple hours & paying too much
- Hygiene: Lack of potable water & sanitation facilities



Insights:

- Inequitable distribution of water
- Target population is poorest of the **poor in BoP**
- Power of community & aggregation economics

Water Ladder Business Model



Robust Solution

- ☑ Market based solution
- ☑ Actionable
- ☑ Sustainable
- ☑ Scalable
- ☑ Cost Efficient: Philanthropic cost = \$0.12 pp

Sustainable Economics

Unit Economics for WaterChamp

Water Mafia

Cost of Water/ 100 Gallons	\$0.10
Cost of Water/ 1 gallon	\$0.0010
Private Vendor Rev/ gallon	\$0.0100
Gross Margin	\$0.0090

Global Water Intelligence Report, Avg for Asia/Africa

90%

10x cost charged by Water Mafia

Water Champ

Water Champ Rev/ gallon	\$0.0020
Service 5 Slum Communities	7,500
Gallon need per Community/ year	15,208,333
Target demand in Gallons	7,604,167
Market Penetration	50%
Water Champ Revenue	\$7,604

2.0x cost charged by water champ

Avg size of slum in India ~ 1500 ppl; 1 school services 5 communities
20 litres/day/person*365 days a year/3.6 liters/gallon

50.0% need can be met

Costs

Cost of water (COGS)	\$3,802
Wate Ladder Franchise Fee	\$760
Cost of free water provided	\$180
Gross Margin	\$2,862
Transportation/ Other G&A	\$380
Maintainance Capex (Containers etc)	\$500
Water Champ Operating Margin	\$1,981

10% of Revenue

38%

30% of slum community is children; 40% attend; 1 school for 5 slums

10% of COGS

26%

\$500 capex to build shop and maintain per year

Current Income of slum dweller ~\$1/day

Cost to Start Business for WaterChamp \$2,000

Cost to build shop/ get Muni connection

Time for WaterLadder to breakeven 2.6yrs

Reduced Philanthropic Cost/person

Market Sizing

# of Slum dwellers in the World today	1billion	Mike Davis' book Planet of Slums
In city of Manila alone	6million	50.0% of population lives in slums; http://home.earthlink.net
Total target reach	100million	10% reach as target
Each vendor is serving	7,500	
# vendors needed	13,333	
Total Capex cost needed	\$26.7mm	

Water Ladder Revenue Model

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	
# Vendors funded	333	667	2,667	6,667	13,333	
% of target reached	2.5%	5.0%	20.0%	50.0%	100.0%	
Revenue from Vendors	\$250,000	\$500,000	\$2,000,000	\$5,000,000	\$10,000,000	<i>\$750 Franchise fee/year</i>
Cumulative \$		\$750,000	\$2,500,000	\$7,000,000	\$15,000,000	
Funding Gap					\$11,666,667	
Philanthropic Cost per reached customer					\$0.12	

Leveraging Water Ladder to create Sanitation Ladder



- Sharing access to municipality's water source
- Generating demand within schools through education and Sanitation Champs
- Construction of latrines by Water Ladder
- Operations & Maintenance by schools
- Achieving higher female student attendance rate in schools

Key Challenges

- Reliant on existing community relationships
- Requires access to water supply
- Hinges on customer ability and willingness to pay (*mitigated by our low price*)

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Q&A

