



CASE STUDY

Powwater: The Power of Water for All

Background Information

The team at Powwater is on a mission to bring communities the most effective tool to spark transformative growth: water. Water is the gift that keeps on giving - when you give someone clean water, you create an opportunity for them to have a quality life. Powwater is a social business, selling customizable reusable water bottles, coffee mugs, and tumblers, while reinvesting the proceeds into sustainable clean water projects around the world. This drinkware brand has become a natural way for Powwater to connect consumers and businesses in the United States to water projects globally, raising awareness and excitement around the power of water. The result is that 58% of their customers continue to re-order additional products, serving as a sustainable funding mechanism for the water projects.

Powwater's journey began on August 23, 2017. Jack Hartpence, CEO & Chairman, was working for a law firm at the time. Yet his plans for a traditional career path came to a screeching halt on that day when he was hit head-on by a semi-truck going 60mph. As his life flashed before his eyes, what crossed his mind was the question: "what have I actually done to help the world I'm leaving behind?" Seconds later the truck hit. Jack's car was totaled on the side of the highway, but he stood up, unscathed. He had been given a second chance to make a meaningful difference in the world; and so, Powwater was born with a mission to bring water to water-scarce regions of the world. Powwater's core values are sustainability, purpose, altruism and transparency. The business is built on a belief in the power of universal access to clean water - a resource that 844 million people today live without.



Approach, Delivery, & Challenges

Powwater was built with a commitment to impact at its core, having recruited a team of coworkers, advisors, and partners, all of whom embody a similar passion for water and a determination to make the world a better place. The team has long-term aspirations, such as universal access to water across schools in Africa, and short-term goals to get them there. Powwater has worked through local channels to spread awareness, and through state and global levels to build influence. Last year, in their local community of Jackson Hole, USA Powwater was named startup of the year through Silicon Couloir. Jack has also hosted events with the US Youth Observer to the United Nations to raise awareness around water. Ultimately, the need for water is a commonality that we all share.

The social business model was inspired by the framework that was pioneered by Nobel Peace Laureate Professor Muhammad Yunus, also a member of the Board of Directors of the United Nations Foundation. The philosophy behind social business is simple: utilize a for-profit business model to overcome some of the world's most pressing challenges. As Professor Yunus says, "a charity dollar has one life; a social business dollar can be reinvested over and over again." By adhering to this structure, Powwater's water solutions not only sustain themselves, but they grow over time, reaching more people year over year. This is a critical differentiating factor as one of the most common problems with water scarcity is sustainability. In sub-Saharan Africa, for example, 30-40% of all water wells are broken.

The challenges around water scarcity stem from multiple sources, including climate change, population growth, urbanization, improper management, and lack of innovation and infrastructure. The result is a need for solutions with a focus on community engagement, capital investment in adequate infrastructure, and a heightened focus around sustainability and environmental conservation.

Powwater has worked through this lens to implement water projects in Kenya, Nigeria, Ethiopia, and Bangladesh. As an example, they recently micro-financed a local entrepreneur, Shahin Bhai, to design, reconstruct, own, and operate a UV-LED water filtration system in the city of Mymensingh, Bangladesh. Shahin manages his water plant as a business, employing locals to sell the water at an affordable price to families and businesses throughout the city. Adequate sales volumes permit Shahin's operation to become self-sustaining, thereby serving more people with clean water every day. Ultimately, this business ensures access to clean and safe drinking water for more than 3,000 people in Bangladesh at an affordable price for many years to come. Over time, Shahin will grow his business and pay back his loan, which Powwater will then use to finance another entrepreneur for a new water initiative.

Benefits & Lessons Learned

Powwater's innovative model for sustainable development has curated incredible results within its first year of business. What has proven to be important is a recognition of and focus on not just water scarcity and contamination, but also the many additional challenges which are inherently linked. The combination of enhanced collaboration with local partners, as well as proper engagement of local



community members, provides the proper backdrop to overcome these multifaceted challenges and allow for water solutions to last. For example, you cannot have clean water without effective sanitation measures. Accordingly, the team has partnered with Viva con Agua in Gojam, Ethiopia to establish effective WASH (water, sanitation and hygiene) systems. They work in conjunction with the communities to teach them how to independently monitor water quality, to build latrines and handwashing systems, and to promote hygiene and sanitation clubs in schools.

Separately, the team has partnered with Impact Water in Kenya to provide the proper capital resources and set up the chlorination systems to filter contaminated water for over 40,000 children in local public schools. With clean water, schoolchildren are found to be more engaged in the classroom. Plus, they are encouraged to bring the water home to their families at night, saving time and energy for their mothers that would otherwise be spent fetching water during the day.

Powwater & the SDGs

Water development efforts (SDG 6) may serve as the foundation with which to address many of the United Nations' Sustainable Development Goals (SDGs). Powwater's mission is formed from this belief that water has the power to empower communities to address many challenges, whether it be large urban centers such as Bangalore, India or Cape Town, South Africa that have rapidly growing populations and depleting water tables, or rural villages such as Sodo, Ethiopia with improper infrastructure to access groundwater. In other words, the ripple effects of clean water are meaningful, and, in the interconnected nexus of the SDGs, addressing SDG 6 can catalyze the achievement of other SDGs.

Powwater's projects have created lasting full-time jobs, lifting families out of poverty (SDG 1). Proper filtration methodologies have spared vulnerable children from contracting otherwise deadly water-borne illnesses (addressing SDG 3.3 on water-borne and communicable diseases), allowing for children to be more engaged in the classroom, as confirmed by teachers in Powwater's network of schools in Kenya (positively impacting SDG 4 on Quality Education). In fact, 1,800 children under the age of 5 currently die every day from water-borne illnesses such as Typhoid, Cholera, E. Coli, Hepatitis A and Salmonella (hampering the achievement of SDG 3.2 on mortality of children under 5). Local access points have also freed up time for women to work jobs during the day, time that would otherwise be spent fetching water, furthering gender equality (SDG 5).

Opportunities & Next Steps

Globally, over 200 million people in cities lack access to a safe drinking water source. Water infrastructure systems around the world are failing the inhabitants of rapidly growing low and middle income cities due to unreliable water supply and unsafe water quality. Historically, there has been limited innovation in water supply system design. Where traditional water supply systems fail, private water vendors fill this gap with bottled and vehicular water delivery. As a result, innovation in water service provision is occurring at the household and local scale due to necessity and opportunity – all humans need water and find innovative ways to access a supply, even at high expense. The poorest



households, already neglected by public utilities, face an unfair and unregulated private water market characterized by exploitative pricing, unreliable delivery, and uneven water quality. There is a significant opportunity to address this global challenge by re-inventing vehicular water delivery through the use of mobile technology.

H2Go is Powwater's data technology initiative that connects water vendors with consumers through a mobile application platform. Deliveries are made by local entrepreneurs signed onto the platform. Powwater will partner closely with local organizations and municipalities with supplies to act as hubs in the H2Go water delivery network. For water buyers the digital platform will provide transparent pricing, delivery scheduling and tracking and user ratings. For these suppliers, the app connects them to users beyond their traditional reach (i.e. a distance away) increasing sales. Local entrepreneurs can earn extra income performing deliveries through the H2Go platform, utilizing advanced delivery routing and scheduling to minimize operational costs. H2Go is a last mile solution that facilitates cost effective provision of water service for households that are beyond the reach of or underserved by a traditional supply network.

Examples from transportation sector (e.g., Uber) highlight the potential for digital technology to dramatically transform infrastructure systems. The team at Powwater sees this as an opportunity to extend this transformation to water supply distribution. In the developing world, use of mobile phones is growing rapidly, even in the poorest neighborhoods, and the Economist notes that smartphone data subscriptions in India doubled from the end of 2016 and the end of 2018. Mobile money is on the rise, and this penetration of technology will allow the ability for H2Go to scale to communities across the world. By using digital technology to integrate water delivery with existing water access points, H2Go will re-engineer water delivery and dramatically improve access to safe drinking water for the poor and vulnerable in cities around the world.



References

- Children dying daily because of unsafe water supplies and poor sanitation and hygiene, UNICEF says. (2013, March 21). Retrieved May 15, 2020, from https://www.unicef.org/media/media_68359.html
- Progress on drinking water, sanitation and hygiene: 2017 update and SDG baselines. Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), 2017. License: CC BY-NC-SA 3.0 IGO.
- Saldanha, A. (2016, September 16). Bengaluru wastes nearly 50% water supply from Cauvery. Retrieved May 15, 2020, from <https://www.hindustantimes.com/india-news/bengaluru-wastes-nearly-50-water-supply-from-cauvery/story-Eqn0wQsVTHbj2bPsWCsNiJ.html>
- SDG Essentials for Business. (n.d.). Retrieved May 15, 2020, from <https://sdgessentials.org/>
- The Economist, 8 June 2019. <https://www.economist.com/briefing/2019/06/08/how-the-pursuit-of-leisure-drivesinternet-use>
- The Economist, 28 May 2020. <https://www.economist.com/middle-east-and-africa/2020/05/28/the-covid-19-crisis-isboosting-mobile-money>
- WASH. (2020, May 15). Retrieved May 15, 2020, from <https://thankyou.co/global-impact/wash>
- Water Crisis - Learn About The Global Water Crisis. (n.d.). Retrieved May 15, 2020, from <https://water.org/our-impact/water-crisis/>
- Yunus Social Business. (n.d.). Retrieved May 15, 2020, from <https://www.yunusb.com/>

Contact

Alec Bernstein
alec@powwater.com

Jack Hartpence
jack@powwater.com

Ellie O'Neill
ellie@powwater.com