



# ARCHIMEDES PROJECT

# Making a Difference Around the World



*The Archimedes Project designs and launches scalable market-driven water and sanitation enterprises, focusing on the 41 countries shown above in which the majority of the population is at the bottom of the pyramid. We aim to eliminate waterborne disease in countries without sufficient access to clean water and sanitation.*

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Archimedes Project is taking on one of the world's most significant human rights and human health problems by empowering local entrepreneurs in affected regions to capitalize on the huge market opportunities that exist in clean water and sanitization. Finding effective solutions to water-borne disease is a crucial step towards alleviating global poverty and improving quality of life.

# Project Strategy



## What does Archimedes Project do?

Archimedes Project co-founds profit-generating businesses that use existing cost-effective technologies to eliminate waterborne disease in countries without access to clean water and sanitation.

## How do we co-found revenue generating enterprises?

Archimedes Project generates new ideas by partnering with entrepreneurs across sectors who have the research and experience to develop social enterprises that can scale across a country.

Once a social enterprise is developed, the Archimedes Project works with the founding entrepreneur from ideation to a path of financial viability. This may include: helping to write a financial model, applying for grants, developing marketing materials, and connecting with experts in the field.

## How do we launch the enterprise?

When the idea is fully developed, the Archimedes Project and the entrepreneur move forward, as co-founders, with the goal of launching the enterprise within one year of starting the process. The Archimedes Project provides staff, operational support, and other valuable resources during this intensive period.

## Why is Archimedes Project unique?

Archimedes Project is unique in building businesses that focus on scale, while integrating existing technology and lessons learned by others.

Archimedes Project's sustainable business models not only provide clean water, but also stimulate the local economy. By training members of the community to distribute this technology, there are people who directly benefit from the distribution of clean water and sanitation, and the project is more likely to be sustainable in the long run.

*One man can move the world given a strong enough lever and a firm point on which to place it. - Archimedes*



# Market Opportunity

According to the World Bank, clean water for the world's poorest is a multibillion dollar market. Every dollar invested in water and sanitation generates an economic return of \$5-8. While charity chooses to see these people as helpless victims, they are in fact, customers in search of high quality and affordable products and services.

There are dozens of incubators and accelerators focused on supporting entrepreneurs. The Archimedes Project is the first to focus on designing and launching businesses focused on increasing access to water and sanitation products and services. We see people who need access as not just the needy poor, but as agents who are working hard to change their lives and the lives of their children. The Archimedes Project wants to give families better options for meeting their water and sanitation needs on a daily basis.

The solution to sustainable clean water and sanitation is the creation of a new generation of lean, scalable and market driven businesses. These enterprises leverage proven and affordable technology and best practices in business for the bottom of the pyramid and in water and sanitation distribution. The focus on scale is essential both for impact and for financial sustainability. A company must focus on reaching an entire country or large region in order to have the most substantial impact on health and the opportunity to reach the customers necessary. The strongest enterprises are led in collaboration with knowledgeable partners and are run by culturally proficient and dedicated entrepreneurs.

***Annually, over \$21 billion is already spent on clean water in communities where people make less than \$9 per day.***

## The Challenge

The Archimedes Project is focused on increasing access to clean water and sanitation in 41 countries in the world where the majority of the population is at the bottom of the pyramid. Access to clean drinking water and sanitation allows children to grow healthily, which in turn enables them to attend school. This education, in combination with their continued good health, allows them to become productive employees and heads of household, and ultimately achieve economic empowerment. It is crucial that water and sanitation be treated as a crosscutting issue as this affects every other major development challenge, including education, health and unemployment.

### Here are the Facts:

- Cholera kills over 120,000 people every year.
- Although it has been known since the 1800s how to stop cholera, this hasn't stopped the waterborne infectious disease from spreading.
- Globally, there are nearly 1.7 billion cases of diarrheal disease every year.
- Diarrhea kills 2 million children under the age of 15 per year and causes the loss of \$260 billion of economic productivity.
- There are 748 million people globally without access to clean water and 2.5 billion without access to sanitation.
- Despite the importance of water and sanitation, access remains one of the greatest challenges in the developing world.



# Community Chlorinators

**Community Chlorinators**, or “Kouzin Dlo” in Haitian Creole, was designed at the Archimedes Project November 2013 Ideation Lab. Jessica Laporte became the project’s co-founder and successfully launched the enterprise in June 2014. Community Chlorinators is working to create a national network of Haitian women who sell affordable liquid chlorine water-treatment products and educate community members about the value of chlorine to purify drinking water.

Within the first three months of operations, Community Chlorinators established pilot sites in three communities in the greater Port-au-Prince, the Haitian capital. In collaborating with community based partners RAJEPRE, PENAH, and Team Tassy, sales agents work with local hub staff and are trained in basic social marketing and sales, in addition to household water treatment, hygiene and safe sanitation. As of February 2015, Community Chlorinators had 27 independent sales agents in six communities who have sold 954 bottles of chlorine, amounting to 143,100 gallons of treated water and 28,620 days of clean drinking water for an entire family. In order to improve customer acquisition and increase sales tracking, Jessica Laporte and a partner Dimagi, Inc. designed an SMS and smartphone app which is intended to increase sales agent retention and improved data collection.

**Why Haiti?** In Haiti alone, there have been over 800,000 reported cases of cholera and over 8,500 deaths from this devastating disease since October 2010. Simultaneously, more than 40% of Haitians are unemployed, and more than two-thirds of working individuals do not have formal jobs. In urban Haiti, the cost for a household to purchase safe drinking water is equal to 50% of the average wage; a cost burden many are not able to bear. Community Chlorinators provides a lost cost solution, as each bottle of liquid chlorine costs approximately \$1.00 (or ~2% of income) and provides 30 days of clean water for a family drinking five gallons a day. This method is less expensive than water kiosks, which aren’t reliably safe and often are not available in low-income communities.

*Community Chlorinators is building a national network of Haitian women who sell affordable clean water-treatment products and educate community members.*

Community Chlorinators co-founder Jessica Laporte training sales agents



# Expansion Plan

Archimedes Project has done a lot with a little. Since our launch in 2013, the Archimedes Project has raised nearly one hundred thousand dollars, all of which has gone into setting up our inaugural co-founded enterprise, Community Chlorinators in Haiti. So far we have relied heavily on volunteers to establish the foundation of the organization, to date nearly 17,000 volunteer hours have been logged. While we are proud to have achieved all this with limited resources and expenditures, we are keen to grow the organization to significantly greater capacity and impact. Our plan is to accelerate the rate at which we set up social enterprises in the countries that need it most.

Archimedes Project has identified a list of priority countries by looking at key criteria, including where diarrhea is a top-3 cause of death for children under five, and where there is no current conflict. We know there is huge potential for our enterprises to bring clean water solutions to local communities.

## Next Steps

The next stage in the development of the Archimedes organization is to establish a team of entrepreneurial advisers. This team will coach our co-founders through the first stages of their enterprise founding and development and then give them the needed mentorship and support to keep their businesses on the path to lasting success. This team will help our entrepreneurs to establish their enterprises on a solid foundation of human resources, operations, marketing, and administration practices. The total cost to employ this team of professionals will be \$180,000 per annum. With these new resources, we would be able to launch and support as many as three new enterprises each year. As we've shown so far, we aim at all times to keep our central administration costs low, but the time has come for us to devote resources to increasing our capacity to fill and maintain the pipeline of entrepreneurs who can bring so much benefit to their local communities.

**Become a partner in this journey  
with the Archimedes Project!**

*Archimedes Project relies on  
pro-bono consulting groups,  
interns and volunteers in  
order to get work done.  
To date, 63 people have  
donated 16,868 hours  
which translates to a  
value of \$582,704*



*Sales agents with training certificates*

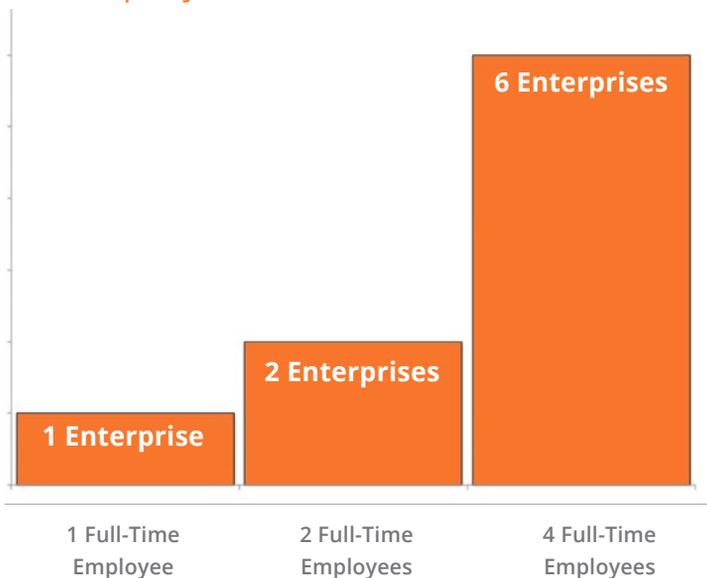
## Co-Founder Program

The Archimedes Project will select entrepreneurs to partner with and support in funding and implementing a business plan. The Archimedes Project invests over 10,000 hours working side-by-side with the co-founder from the ideation process to the scaling of the business. These entrepreneurs must be deeply connected to one of our target countries and willing and legally able to live in that country. Over time, the goal is for the co-founder to develop the enterprise, move to the country to launch the business and become increasingly independent of the Archimedes Project. This will allow for Archimedes Project to focus on the next enterprise while the co-founder runs the enterprise full time on his or her own.

## Expanding our Impact

The co-founder’s commitment, determination and vision are all key to the success of enterprise. The Archimedes Project provides guidance and deep mentorship at every stage of enterprise development. To expand our impact, we are working to increase the number of enterprises the Archimedes Project can launch each year. We are presently recruiting entrepreneurial advisers to work closely with the co-founder during the entire process, connecting them with Archimedes Project and outside resources, helping them build networks, and advising them in their development.

Number of potential enterprises to be launched per year with increase of staff.



## Ideate

We bring together research, experts, existing technology and crosssector professionals to design a scalable water or sanitation business specific to the country of interest.

## Develop

For 6-12 months, we work with the cofounder to develop the business idea through a rigorous process that involves creating a financial model, securing seed funding, building ontheground partnerships, identifying local staff, determining performance metrics, and designing an evaluation plan.

## Launch

Within a year of the initial ideation, we work with the cofounder to launch the business on the ground, begin to gather local feedback, hire local staff and make initial adjustments in the business. During the launch process, the businesses’ first customers are made, the supply chain is established and the business begins the process of iteration.

## Scale

Once the initial launch period is over and the first outlets of the business are established, the business begins to scale increasing the number of outlets, improving sales at existing outlets and spreading the reach of the business. At this stage, the Archimedes Project begins to transition to an advisory role, working with the cofounder to identify expansion funding, conduct an impact evaluation and establish management staff and an outside advisory board.



## Frontier Fellowship Program

We are recruiting aspiring changemakers to spend two to three months working in their chosen country as an Archimedes Project Frontier Entrepreneur. The Fellow will examine the water and sanitation market, needs and customer attitudes, conduct stakeholder interviews, build local partnerships and may begin microtesting business ideas. Working with the Archimedes Project team, the fellow will, among other things, identify social enterprises and nonprofits working in the area, pinpoint potential markets. At the end of this period, the Fellow will present their findings to the Archimedes Project. Based on demonstrated aptitude during this Fellowship period, Fellows may be selected as an Archimedes Project Cofounders with whom we would design and launch an enterprise. The fellow will receive a stipend of \$5,000 to cover the cost of a roundtrip flight and room and board in country.

# Friends & Partners

Ropes and Gray

Rockefeller Foundation

Clinton Foundation

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World Bank

American Enterprise Institute

Harvard Business School

McKinsey & Company



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## History

The idea for Archimedes Project began when Faith Wallace – Gadsden, the passionate and determined founder, traveled to Haiti in 2010. The country had recently been devastated by a 7.0 Earthquake that caused catastrophic damage. While working alongside a large international community of aid workers, all working hard to help rebuild, there was a cholera outbreak, which ravaged communities that had no access to clean water. Faith realized that the traditional international aid model was not best equipped to distribute clean water technology to stop the spread of disease.

Faith, with a background in microbiology, was shocked to see the inability of the international community, with its money and manpower resources, to solve the issue of unnecessary deaths. Unnecessary because a clean water solution has been around since the 19th century. This problem was not something that needed to be solved with an advanced medical breakthrough, but rather a breakthrough in innovation and sustainable distribution systems. With this in mind, Faith began to see if there were any other non-profit organizations working to solve this problem. After much research, and after finishing her PhD, Faith launched the Archimedes Project in April 2013- creating a non-traditional not for profit business model that would lead communities to establish and maintain their own clean water solutions and economic stimulus.



***Archimedes Project, Inc. is a not-for-profit organization in the process of filing for federal tax exempt status.  
We are currently under a fiscal sponsorship agreement with the 501(c)(3), Peace Development Fund.  
Donations can be made out to "PDF/Archimedes Project" or 'Archimedes Project'."***