
Water being dispensed at the Nagaram WaterHealth Centre
(credit: Robert Katz)

# Creating a capital curve for social enterprises

Impact investing is a hot topic, built on the growing interest in innovative business models serving the "base of the pyramid" (BoP). However, despite the profusion of social enterprises and impact investing funds, there are relatively few success stories. Acumen Fund has looked into thousands of BoP businesses, and only a small proportion are clearly achieving viability and scale.

How should philanthropists and impact investors deploy their capital to achieve the greatest impact? In this chapter, we share the story of an Acumen Fund investee company to illustrate how investors can help social enterprises navigate the path towards scale and sustainability.

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Since the term was coined just over three years ago, impact investing has become a hot topic. Understandably, investors, entrepreneurs, policymakers and social sector leaders are excited by the prospect of coupling financial and social return together.[1]

Acumen Fund is one of the more experienced impact investors, having deployed more than USD $70m in businesses delivering critical products and services to the poor. In the past ten years, we have spoken to more than 5,000 social ventures – and invested in just 57. Even within that subset, only a small proportion of these are operating at scale. Those that are typically take much longer to get there than we initially expected. We are not alone. In one of the most comprehensive studies to date on market-based solutions to poverty, the Monitor Group examined 439 businesses operating in various sectors throughout Africa; only 59 out of this group were commercially viable and operating at scale. [2]

1 For a comprehensive overview of the impact investing sector, see O'Donohoe, Leijonhufvud, Saltuk, Bugg-Levine, and Brandenburg. Impact Investments: An emerging asset class. J.P. Morgan and Rockefeller Foundation, 2010. Available: http://www.thegiin.org/cgi-bin/iowa/resources/research/151.html

2 Kubzansky, Michael, Ansulie Cooper and Victoria Barbary. Promise and Progress: Market-Based Solutions to Poverty in Africa. The Monitor Group, 2011.

While patience is important, it is not sufficient. Ultimately, impact investments are only as successful as the companies receiving the money. So while the momentum builds and more and more investors move into the space, we have been asking ourselves, **what type of capital at what stage of a company's growth is optimal to help a social enterprise scale?**

We have been working with a team of experts at the Monitor Group's Inclusive Markets practice[3] to get under the hood of Acumen Fund's portfolio in search of answers. The initial findings have already prompted a number of fascinating conversations and are the basis for much of this article. We expect more discussion when a final report is published in the spring of 2012.

Specifically, we've been debating this question: If so few firms are making it to the point where they are investible, then how do we ensure a robust pipeline of companies going forward, ready to be funded by newly minted impact investors?

3 We are indebted to the team of Ashish Karamchandani, Harvey Koh, Nidhi Hegde, Ravi Swarup, Swati Chaudhary, Sahil Shah, Katherine Fulton and Mike Kubzanksy for leading this work and pushing everyone's thinking forward.

In other words, we want to construct a capital curve that enables social enterprises, and their investors, to succeed. To understand how such a capital curve might be built, it's helpful to look at the funding path followed by traditional companies.

**The Four Stages of Firm Development**

Raising money to fund a social enterprise is confusing and difficult, more so than funding a traditional start-up company. To cut through the confusion, we first needed to describe how these companies grow. The Monitor study lays out the development journey of the social enterprise across these four stages: **blueprint, validate, prepare, scale.**

All entrepreneurs begin with a **blueprint**, developing disruptive ideas or technologies and talking to customers to develop a compelling value proposition. Social business blueprints are often driven more by the potential social benefit than potential profitability.

Business plan in hand, firms then road test their ideas through pilots and market tests, a process of business model **validation** that often, especially in developing countries, takes years of trial and error.

With the business model in place, a company **prepares** to capture the full market opportunity, winning market share, establishing supply and distribution chains and building its own capacity to grow. Only then do firms move to the final stage, **scale**.

How are these four stages funded? New ventures are often funded philanthropically or through government-backed research grants. In a traditional business, there are risk capitalists with venture capital to help companies move through the next two stages – validate and prepare – when the market opportunity is clear, and profitable enough. Think software, or medical technology. Commercial investors enter the conversation when a company is primed to – or already at – scale.

**For social businesses and their investors, however, the path to scale remains unclear.** Entrepreneurs need to do more – both upstream and downstream from the firm, they need to innovate, experiment and build a market, often from scratch. Market creation and related experimentation require more patience than a typical venture capitalist can stomach. To understand this unique dynamic, let's examine the case of WaterHealth International.

**One Drop at a Time: Funding WaterHealth**

Prasad lives with his parents in Kompally, on the outskirts of Hyderabad. His father is a carpenter, picking up work on construction sites; his mother works in a factory. Their 1-bedroom apartment is modest, boasting a TV and a single fan, but the power is irregular at best and they only get municipal water every three days.

A business student in the local college, Prasad's interest was piqued when WaterHealth International began offering safe, clean drinking water nearby. He decided to do some price shopping: his family used to pay 12 rupees (about €0.18) for 20 liters of untreated water; WaterHealth charged just 4 rupees (€0.06) for the same amount. It doesn't take a business degree to know that's a good deal.

Prasad's family is among the 1.1 billion people worldwide who lack access to reliable sources of drinking water. A handful of firms see this as an immense, untapped market waiting to be captured using innovative water treatment and distribution businesses.

WaterHealth International (WHI) is one such company. Founded in 1995, WHI's initial **blueprint** called for ultraviolet water (UVW) treatment technology used in community scale water systems. In 2001, they went into receivership and emerged again in 2002. In 2004, WHI raised fresh equity to **validate** the business model in India. A $2.6m Series B round was led Acumen Fund and included the International Finance Corporation and Dr. Anji Reddy. Dow Chemical and a clean tech venture firm, SAIL Venture Partners, later came in for a Series C round of $11m.

As WHI expanded into rural India, others followed. Along with their competitors, WHI was building the drinking water market from the ground up. Underserved customers – like Prasad – were the core of the market opportunity, but building an entire market from scratch is also a classic public good problem. Companies investing in market development and product awareness were, in essence, sowing the seeds for their competitors' entry.

WHI and its peers had to identify promising sites, develop local supply chains, and most of all, convince people to pay for something – water – that had always been free. The market development work paid off: by the end of 2010, there were more than 2100 community water systems in India, 366 of which were WHI's.

Continuing to validate the model, WHI reworked the blueprint in 2009 to move away from being just an innovative UVW equipment supplier, to building and operating their own community water systems. Then, **preparing** to scale and capture as much market share as quickly as possible, WHI expanded; to finance its growth, it raised approximately $24m in a Series D round in 2010.

So after 15 years and approximately $40m invested, the company has learned a great deal about serving the poor. But is WHI operating sustainably and at scale?[4] Not yet, but the firm is growing rapidly in India and West Africa through its own wholly owned subsidiaries and via a joint venture agreement to move into Bangladesh.

In India, WHI is growing organically financed by its own debt and equity, as the market there is deeper and more stable. In West Africa, partners including Coca Cola and Diageo, keen on the development of clean water solutions, have purchased community water systems for the local community. WHI has partnered up with them and IFC in the Safe Water for Africa initiative to construct and operate approximately 200 water centers in West Africa.

In Bangladesh, where the market is difficult to access and develop, WHI has teamed up with AK Khan and the IFC to develop the clean drinking water business.

4 We define scale as something pervasive, and sustainable as something that lasts. For more detail, see Trelstad and Katz, "Mission, Margin, Mandate: Multiple Paths to Scale" in Innovations: Technology, Governance, Globalization Summer 2011, Vol. 6, No. 3: 41–53.

**Lessons from the Field**

The WHI case illustrates the challenges faced by entrepreneurs and investors in determining the right types of capital to support a path breaking social enterprise.

How did the company progress from create to validate, then to prepare and scale? In WHI's case, their team at Lawrence Berkeley Labs knew they were onto something when they developed the ultraviolet treatment system, and secured grant funding to support early research and development. Still, they were unable to make a go of it commercially, and entered bankruptcy a few years later.

Plucked out of Chapter 11 by Plebys International at the end of 2002, the company undertook a series of experiments around plant size, site location, marketing tactics, water delivery and staffing to get the model right. The promise of these experiments convinced a combination of social and commercial investors to support the firm.

**Figure 1**

## The Indian private rural water industry, 2004–2010

**Source: Acumen Fund**

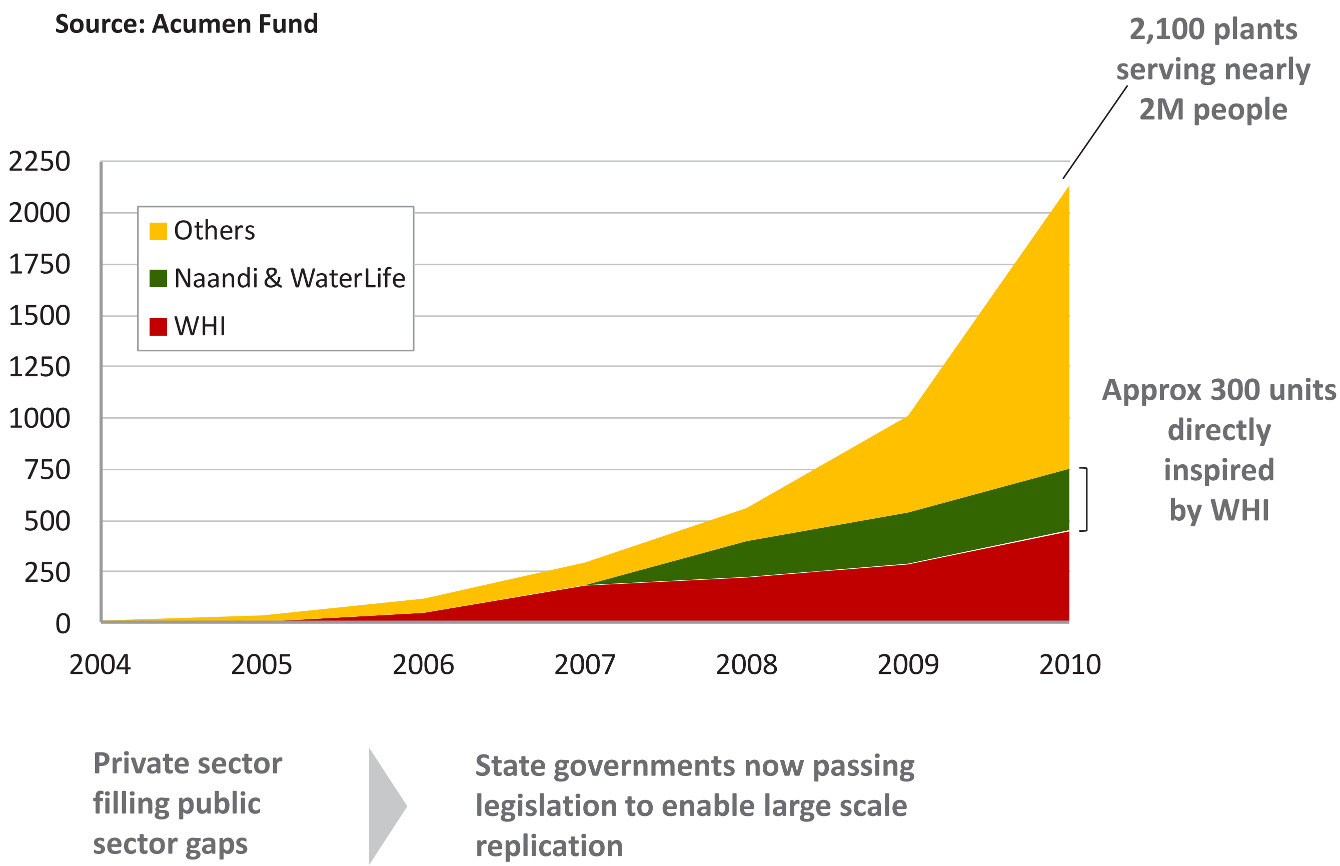

**Figure 2**

## Evolution of WaterHealth International

*WaterHealth did not receive any grant funding and was dependent upon commercial capital from the onset*

**1995-1996** | **1997 - 2001** | **2002** | **2004** | **2006** | **2008** | **2010** | **2011**

**1 Blueprint**

- Developed and licensed UV Waterworks technology, based out of Lawrence Berkeley National Laboratory

**2 Validate**

- Set up operations in Philippines and Mexico
- Unable to breakeven and filed for bankruptcy in ‘01
- Plebys International LLC initiated a buy-out and restructured the company at the end of ‘02
- Entered the Indian market with two pilot plants

**3 Prepare**

- Entered Ghana and conducted several education campaigns for educating the community to increase demand for clean water
- Setup plants in India in association with Naandi Foundation and looked at government contracts
- Raised $40 M from various investors
- Enhanced the model with reverse osmosis filtration and water delivery options

**4 Scale**

- Scaled to ~500 plants across India in 2011
- Received $ 6Mn in commitments from Coke, Diageo and WADA to develop plants in Africa
- Inked joint venture to expand into Bangladesh
- Expanded into Liberia
- Raised another $20 million in equity

***Investment***

***Grant funding to customers of WHI***

Today, WHI has a strong plant-level business; going to scale will mean operating those plants effectively across multiple Indian states and a number of foreign countries, no small task. Its investors believe that the company has what it takes to deliver on its original promise: a commercially viable business bringing clean water to the billion-plus people worldwide who currently go without.

WaterHealth International has moved through the stages of growth using a series of commercial equity capital injections, a bit of Acumen Fund’s patient capital, and debt. WHI has supplemented these efforts with innovative partnerships that often involve grants to its customers. Our analysis suggests that the company spent 11 years validating and preparing to scale – talk about patient capital.

In retrospect, **we wish the company had raised some earlier grant capital** to help validate the business model, but the investor group has been patient as the company experimented with different models. WHI has crossed the funding gap chasm and with the new joint venture in Bangladesh and philanthropically funded expansion into West Africa, may finally be getting the funding mix right, if a little late.

### Adding Grants to the Financing Mix

Unlike commercial investors, **grantmakers measure their success in terms of social impact per granted dollar**. Our experience demonstrates that grants can catalyze social enterprise growth, and bridge the gap from enterprise creation to scale, especially when made during the validating and preparing stages.

Grants to social enterprises support market development, and seed innovations. Philanthropic capital is also more risk tolerant and accepting of longer time horizons. When given well, grants can also bridge a firm from idea creation to scale and impact investment – and are therefore can be **a key component of an impact investor's toolkit**. However where they become part of the capital structure of a company, they can hinder market based pricing and sustainable operations. WHI has avoided such market distortions by keeping grants off its balance sheet, yet has managed to partner with grantmakers to bring clean water to new markets.

In addition to a role for grants, hybrid forms of capital that originate from philanthropic sources - but are structured as debt or equity investments - can position emerging social enterprises to attract investments from commercial sources of capital. This "Patient Capital" also serves as a bridge between grants and impact investments.

As the sector grows, especially with the excitement surrounding impact investing, we know this is not the last time we will travel down this road. The path to scale is clear, as are the types of capital needed to get there. **Grants can and do play a critical role in bridging the social enterprise funding gap**. Now it is up to impact investors and grantmakers to work together to ensure a robust pipeline of high impact businesses in which impact investors can invest – and that will serve hundreds of millions of low-income customers.

**If social enterprises are difficult to find and expensive to conduct due diligence on, here are some lessons we've learned along the way, which may help newer entrants to the sector:**

1. Be realistic about expectations; the social vs. financial return tradeoff inherent in social investing is hard to quantify but present in every deal

2. Investible companies are not knocking down the door, so think long-term - you're building the pipeline of future investments

3. Consider coupling an impact investment with a grant, either with your own money or from others, to help develop business plans and provide technical assistance to make enterprises more investment-worthy

4. Be considerate; social entrepreneurs often won't have the spreadsheets, analyses and fully fleshed-out business plans mainstream investors have come to expect

5. Think about pooling your capital with other investors who have developed the expertise and can do the due diligence for you

6. Be patient; social enterprises are slow to scale up.


**Brian Trelstad** is the Chief Investment Officer of Acumen Fund, where he has led the growth of Acumen's portfolio to more than $70 million. Brian is a founding executive committee member of the Aspen Network of Development Entrepreneurs, a Henry Crown Fellow of the Aspen Institute, and the first impact investor to participate in the Kauffman Fellows program.

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