

BerkeleyHaas

Case Series

Back to the Roots Ventures (BTTR)

Jorge Calderon
Nishant Bagadia

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Haas School of Business
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JORGE CALDERON
NISHANT BAGADIA

Back to the Roots Ventures (BTTR)

Our mindset has never been just about scaling revenue, but how we do it. We think of ourselves as a 'for-purpose' company.

—NIKHIL ARORA, CO-FOUNDER BTTR

PART 1

“Our vision is to make food personal again and to run a business that can do good and do well at the same time,” said University of California at Berkeley graduates ('09) Nikhil Arora and Alex Velez, co-founders of Oakland, California-based Back to the Roots Ventures (BTTR).¹ The B Corporation² launched in 2009 as a supplier of used coffee grounds-based growing medium for mushroom farmers; however by 2014, BTTR had pivoted numerous times before establishing itself as a sustainable consumer packaged goods (CPG) company.

Arora and Velez, both undergraduate business majors at Berkeley-Haas, had a history of demonstrated interests in education and sustainability. Velez had recently founded the Sage Mentorship Project, Berkeley's largest one-on-one mentorship organization for elementary school kids, and Arora had recently worked at the University of Ghana on campus sustainability.

Since its founding, BTTR had achieved much success. In the early years, the founders had received \$500,000 in grants, such as the 2011 MillersCoors Urban Entrepreneurship national business competition award (\$50,000 grant). They had been named “America's Top 25 Most Promising Social Entrepreneurs” by *BusinessWeek*, “Top 3 Company” in the *Newsweek World Challenge*, and “30 Under 30” by *Inc.* Arora and Velez had spoken at various TedX events across the country. The company generated significant media buzz in the *New York Times*, *Wall Street Journal*, *Los Angeles*

¹ Pronounced “better.”

² A corporate form (benefit corporation) where organizations are for-profit entities that also focus on society and the environment.

Nishant Bagadia prepared this case study under the supervision of Lecturer and Social Impact Fellow at the Institute for Business and Social Impact (IBSI) Jorge Calderon and with the assistance of Case Writer Victoria Chang as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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Times, *MTV*, *Newsweek*, *BBC*, and on Martha Stewart's show. BTTR was even recognized at the White House in 2012 as a top-100 entrepreneur as part of its Impact Awards (**Exhibit 1**).

By 2014, the company had not taken any significant outside investment, choosing to instead use grants and bank credit lines of \$150,000 in 2011, \$250,000 in 2012, and \$375,000 in 2014 as its seed capital. "We've worked hard to bootstrap BTTR," said Velez.

Siddharth Sanghvi, an experienced social entrepreneur hire and vice president of marketing and operations added: "Nikhil and Alex have always dreamed big. They've wanted to build a company that is scalable and reaches a lot of people...to build a platform that influences millions of people to understand where their food comes from. Our products are almost secondary."

Serendipity

Arora and Velez first learned about the possibility of growing mushrooms on recycled coffee grounds in their last semester at Berkeley when Professor Gunter Pauli³ guest-lectured in a business ethics class taught by Professor Alan Ross. Pauli had mentioned that women in Colombia and parts of East Africa were growing mushrooms from coffee grounds to fight malnutrition. Coffee grounds worked as a soil for mushrooms because they were rich in cellulose, were already sterilized through the brewing process, and had the right moisture content needed to grow mushrooms.

Arora and Velez didn't know each other, but both contacted Ross about the process and the professor made the initial introduction. "We were both intrigued by the fact that you could turn waste into wages by growing local, fresh, and sustainable food," said Arora.⁴ Velez added: "We just thought it was a cool idea but we knew nothing about mushrooms, agriculture, or farming. In the beginning, we had no idea we'd eventually become mushroom farmers."

The two hit it off right away, becoming excited about exploring coffee beans and mushrooms together. They also had complementary skill sets of finance (Velez) and marketing (Arora), and common interests in education and sustainability. Arora said: "When we're working together, it doesn't seem like work. It just seems like fun. We both have the same mindset on our values, mission, vision, and the attitude we want to bring to work. I think it's so important—the idea of a partnership and having a partner when you're starting a business."

When they learned that .02 percent of a coffee bean is used in making a cup of coffee, with the rest discarded,⁵ their initial concept was born. They could build a collection route around coffee waste and "pack it up and sell it to mushroom farmers," recalled Velez. "We definitely wanted to find a market before spending a dime, which has been our philosophy all along, so we went to farmers' markets, asking mushroom growers how much they paid for their current growing mediums and if they would pay for our coffee growing medium. We told them ours was great, even though we had no idea if it was."

Through these initial conversations, they discovered that farmers were only willing to pay "pennies" for the growing medium and the margins would be "negative after transportation costs," said Velez. "We learned that they would not pay much for it and we would be in a very low margin business."

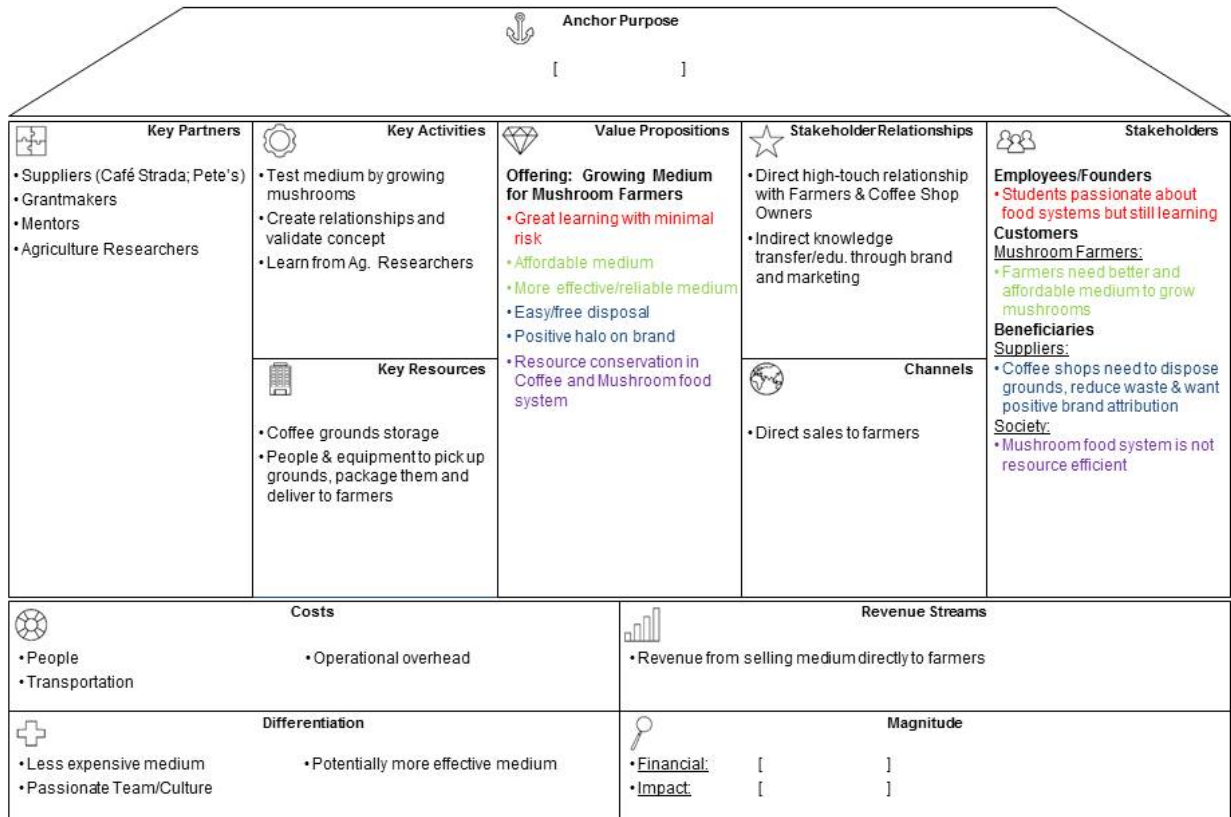
³ Author of *The Blue Economy: 10 Years—100 Innovations—100 Million Jobs* (a book that argues that society will shift from scarcity to abundance "with what we have").

⁴ <http://nikhilarora.com/>. TEDx Talk – Alejandro Velez / Nikhil Arora (TEDxYSE, Washington DC).

⁵ http://en.wikipedia.org/wiki/BTTR_Ventures.

Velez reflected on these early days of their journey: “We didn’t think about how we talk about it today—we just said, ‘Oh, let’s explore mushroom farming.’ It’s what I love about the young Alex and Nikhil—we would just jump head first into any idea we had and hit our heads so hard that we’d realize that probably won’t work.”

BTRR: Original Concept



At that point, they shifted their thinking: “Maybe we should collect coffee waste to actually *grow* mushrooms,” said Velez. They went to Café Strada and a few local coffee shops to pick up coffee grounds to launch their experiment. “At that point, our business model changed 180 degrees,” said Velez.

Full-Time Mushroom Farmers

Arora and Velez brainstormed about mushroom growing, watched YouTube videos, consulted with expert mycologists such as Paul Stamets, ordered spores, and used Velez’s fraternity house kitchen to run some tests. They filled 10 plastic buckets with soil and spores and left for spring break, a few months before graduation. Arora reflected on their lack of experience: “We just realized this was a good idea with a lot of potential. It was a total by-the-boot-strap, learn-as-you-go operation.”⁶

⁶ Sarah Henry, “Emeryville’s ‘Mushroom Guys’ Grow Their Business,” *The Bay Citizen*, November 12, 2010.

“We came back from spring break and opened the closet where these buckets were and nine of the buckets were contaminated but in this one bucket, there were these beautiful oyster mushrooms,” recalled Arora.⁷ Giddy with excitement, they brought their bucket to Chez Panisse, the famous Berkeley restaurant started by Alice Waters. Waters, whom they did not know at the time, happened to be there and asked the chef Cal Paternell to sauté them on the spot. “He said they were delicious and good mushrooms.” (Exhibit 2).

Arora and Velez took that same batch of mushrooms to Whole Foods in Berkeley and ran up to the first person they saw in the produce department to excitedly show him the bucket. The produce person sent them to someone else who sent them to someone else, and after a few weeks, the regional buyer for Northern California Whole Foods (Randy Ducummon) sent Arora and Velez an email to arrange a phone call. Arora said: “The regional buyer told us that if we could figure out a way to get him enough product, he could ‘blow this business up.’ We had no idea what we were doing, but he bought into the ‘why’ and we would figure out the ‘what’ later.”⁸ Arora explained: “We had mushrooms that tasted good, we had demand from Whole Foods, all we needed was supply.”

They subsequently built a relationship with Peet’s Coffee (Shirin Moayyad, prior Director of Coffee) to supply the coffee waste. On Peets, Arora said: “When we first approached them, we didn’t know how they would respond to us. But they were so happy for us to take the grounds off their hands that they started paying us to do it!” In the early days, Arora and Velez collected grounds at 30 cafés every morning at 5 a.m.

The budding entrepreneurs also received a \$5,000 grant from the U.C. Berkeley Chancellor for social innovation a few weeks before graduation. They decided to forgo their investment banking (Velez) and management consulting (Arora) job offers and become full-time urban mushroom farmers, launching Back to the Roots, with the name representing sustainability, innovation, and social responsibility—a “better” way of doing business. And Back to the Roots referred to the completely closed loop system of BTTR’s business. Velez said: “Our first estimate of the U.S. gourmet mushroom industry market was around \$500 million, a small market, but we also saw that this was trending upwards because people in the U.S. were learning about the health benefits of mushrooms and protein and vitamin D. Plus the Asian market was \$8 billion so we thought it could continue to grow in the U.S.”

The entrepreneurs invested in farm processing and equipment to build up operations for scaling a business of mushroom production from recycled coffee grounds. On October 9, 2009, BTTR had its first consistent crop and sold the 3.14 pounds of fresh gourmet oyster mushrooms that had grown out of basketball-sized plastic bags to Whole Foods in Berkeley. The buyer “basically lost quite a bit of money per ounce just to help us out because oyster mushrooms sold around \$10 to \$15 per pound, but they paid us a whopping \$10 per pound,” said Velez. A month-and-a-half later, BTTR had expanded to 500 pounds per week to all 30 local Whole Foods stores and 20 other natural food markets in the area.

As Arora and Velez continued to operate as urban mushroom farmers, however, they quickly realized the challenge of making money in mushrooms with a small agricultural operation (a labor intensive process with high overhead). They did, however, notice that they had generated a lot of excitement from consumers wanting to learn more about growing their own mushrooms.

⁷ <http://nikhilarora.com/>. TEDx Talk – Alejandro Velez / Nikhil Arora (TEDxYSE, Washington DC).

⁸ Sarah Henry, “Emeryville’s ‘Mushroom Guys’ Grow Their Business,” *The Bay Citizen*, November 12, 2010.

Introduction of the D.I.Y. Kit

Arora and Velez wanted to allow customers to replicate the mushroom growing process themselves (because customers had been asking and agricultural farming presented its own set of challenges). The two decided to develop a grow-your-own mushroom kit—the “BTTR Gourmet Mushroom Garden” in a green cardboard box (**Exhibit 3**) that launched in March 2010 as a small test at Whole Foods for \$19.99 (the cost of goods for the kit eventually settled at \$3.50 for the regular version).

These early kits included oyster mushroom spawn, mixed with nutrient rich coffee ground substrate that served as the growing soil. At their own warehouse, BTTR first pressed the coffee grounds to get the right moisture level, then during inoculation placed seeds/spawn into the coffee grounds. In an incubation room, the bags sat for three weeks where mycelium (vegetative part of fungus) started to grow. The bags were then packaged for sale. Consumers purchased the kits, sprayed them with water with provided small spray bottles, and watched them grow. The kits provided up to one pound of mushrooms from the front of the box in as little as 10 days. Later versions provided one pound of mushrooms or more over multiple crops (front and back of the box).

Arora and Velez had come up with the mushroom kit idea while discussing the mushroom growing process with their Whole Foods buyer/mentor. Velez recalled: “We realized the process of growing mushrooms using coffee grounds was pretty simple and that’s when we started asking how we could take this model and make it even more local where people could grow mushrooms at home. That’s when we showed our Whole Foods buyer our plastic bags with mushrooms growing out of them and said, ‘what if we throw a sticker on these bags and you can sell them in your store?’ He said, ‘those bags are hideous but I like the concept.’”

The pair started thinking about package design and came up with an attractive and innovative package that was thin and tall, resembling a wider wine bottle carton. This first green box also had a mushroom shaped cutout in the front from where the mushrooms would grow. On the design challenges of the food movement, Arora said: “The grow-at-home food movement is still kind of stuck in the Berkeley/hippie stereotype. Apple brought design, ease of use to gadgets—we thought, ‘how can we bring design and ease of use to this?’”⁹

“Our vision is to make food personal again,” said Arora. “We’re trying to show that anyone can grow their own.”¹⁰ He added: “We’re the first to admit that this kit is not going to solve world hunger. We’re trying to create tools. We look at this like the first time you ride a bike—it’s an experience a kid never forgets. They can grow this kit, and it might inspire them to think, ‘If I can grow this, where’s the other stuff I’m eating coming from?’”¹¹ Velez added that the shift to a DIY kit “allowed us to become a true product company. Before, just growing fresh mushrooms, it’s impossible to build a brand and differentiate.”

The test kits in the Berkeley Whole Foods market were a “hit with the kids, families, foodies, chefs, and people who were into environmentalism,” said Velez. “Within three-and-a-half weeks, we went from one store into every single Norcal Whole Foods store. We then got a call from Randy [Ducummon] who asked for two kits. He told us that he just dropped the product off with the global produce buyer at Whole Foods—‘let me know if you get a call back,’ he told us. Sure enough, two weeks later, Joe Sandro called us and said he gave the kit to his kid and he loved it and he wanted to take us national. We went from one store to 89 Whole Foods across 11 states within three months.

⁹ Jennifer Elks, “Back to the Roots Growing Food Education, Reducing Waste Thanks to Smart Design,” *Sustainable Brands Issue in Focus*, February 20, 2013.

¹⁰ Whitney Pastorek, “Back to the Roots: Two Fun Guys Help You Grow Your Own Mushrooms,” *Co.exist*, June 1, 2012.

¹¹ *Ibid.*

This is when we realized this is not just about coffee or mushrooms, but about a movement of growing your own and knowing where your food comes from.”¹²

Peet’s also provided a \$2 coupon for a bag of coffee that was inserted in every mushroom kit. Velez discussed this partnership: “This exemplifies the constant interchange of value between partnerships. Our customers were getting rewarded for making another business more sustainable and could get 20 percent off a product they already loved. And that brought up a natural discussion of us asking them to put the mushroom kit in Peets’ stores in 2011.”¹³ Arora added: “When you’re in school, you’re taught that you have to constantly innovate to maximize your own value. But what we’ve learned through BTTR is that to grow your own business you’ve got to constantly innovate to maximize your partner’s value. That to us is an economic sustainable business, that is business 3.0.”

Arora reflected on his and Velez’ early passion about the DIY mushroom kits: “First, this shows us that no matter what your expertise... anyone can grow local and sustainable food easily and we think that sense of empowerment is really important. Second, is turning this whole idea of waste upside down—nothing is really waste and hopefully we can get people to look at all the other waste streams they encounter in their lives and asking what else they can do with those. And finally, by far the thing that gets us most excited is the kids—the energy and excitement they bring to us every single day through photos and notes, showing us how important it is for children and the youth to start asking those questions of where their food comes from.”¹⁴

The mushroom kit was so successful in receiving significant media coverage that BTTR became profitable in its first few years of business, with \$240,000 in revenue and \$20,000 in profit with only a handful of employees (year one). They generated \$1.1 million and \$274,000 in profit in the second year. BTTR also expanded to other retailers such as Nordstrom, Safeway, HSN, Toys “R” Us, ThreeSixty, Loblaws, and eventually Costco and Sam’s Club.

END OF PREVIEW

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¹² <http://nikhilarora.com/>. TEDx Talk – Alejandro Velez / Nikhil Arora (TEDxYSE, Washington DC).

¹³ TedX Presidio, <https://www.youtube.com/watch?v=nboaE3O8zE8>, April 7, 2011.

¹⁴ <http://nikhilarora.com/>. TEDx Talk – Alejandro Velez / Nikhil Arora (TEDxYSE, Washington DC).