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Doug Rauch: Solving the American Food Paradox

In the U.S. tons of perfectly edible food, representing thousands of meals, are thrown out while the underprivileged lack access to fresh, healthy foods and the U.S. is crumbling under an obesity epidemic. We need to find a solution.

- Doug Rauch

In October 2011, Doug Rauch walked through a vacant storefront in the middle of Boston's low-income Roxbury neighborhood, envisioning the non-profit grocery store he hoped would offer the community a place to shop for inexpensive healthy foods. Rauch, the former president of grocery store chain Trader Joe's and a fellow at Harvard University's Advanced Leadership Initiative^a, had long been troubled by the amount of food, especially fresh and healthy produce, which was wasted in the food system. Simultaneously, he was frustrated by the paradox he saw in the U.S. food system: rising food insecurity, broadly defined as a lack of access to enough food to fully meet basic needs at all times, concurrent with an obesity epidemic, suggesting that low-income communities lacked access not just to food in general, but to healthy foods in particular.

Rauch knew grocery stores were highly inefficient, throwing away upwards of 5% of all products and 11% of fresh produce and other perishables,^b most of which was still very much edible, to satisfy the demands of customers accustomed to having only the freshest perishables available at all times. Rauch believed he could build a non-profit store model that could take advantage of this inefficiency. Banking on his experience and connections in food supply and retail, Rauch envisioned a business model that would collect from grocery stores otherwise wasted perishables, as well as other healthy food items, transport them to a non-profit retail store, and resell them at a 60% to 75% discount.

Rauch selected Roxbury, a low-income neighborhood in Boston as the location for his initial store. Roxbury had an overall poverty rate of 30%¹; a youth poverty rate of 35%; an obesity rate of 31%; the highest incidence of food insecurity in Boston; and, the highest number of residents on food stamps.²

Senior Lecturer José B. Alvarez and Research Associate Ryan Johnson of the Global Research Group prepared this case. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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^a A program created at Harvard University to assist accomplished, experienced leaders in applying their talents to solve significant social problems. Fellows were given structured opportunities to exchange ideas with peers and faculty as well as flexible, individualized opportunities to work toward their own goals. They mentored students, led study groups, and sat in on relevant courses throughout the university. They met and advised leaders grappling with major social and global problems and traveled on guided field immersion trips to enrich their connections all over the world. The year led toward development and refinement of the Fellows' plans for their next stage work: starting a foundation, a campaign for a cause, a social enterprise, or public office with the potential for impact on a major social problem.

^b Perishables included both produce (fruits and vegetables) and other food items such as dairy and meat products with expiration dates that made it imperative that they be consumed within a defined period of time.

However, Rauch faced significant challenges in the implementation and execution of his plan, notably legal hurdles related to selling products past their expiration date, marketing challenges, and convincing grocers to partner with him to combat waste. And fundamentally, Rauch would only succeed if he could change the shopping, eating and cooking behaviors of a community. In doing so, he hoped to leave a lasting positive health impact and a scalable model for change across the U.S.

Rauch had received funding offers from two potential partners. Next Street Financial (Next Street), a for profit investment bank focused on helping businesses aiming to make a social impact in urban centers, was interested in taking an equity stake and partnering with Rauch. Additionally, supermarket chain Whole Foods Market (WFM), the largest seller of natural and organic foods in the world with more than 300 stores in North America and the United Kingdom, had shown serious interest in Rauch's plans. WFM wanted to create a foundation under the WFM brand that would put Rauch's idea into action. The partnership would be exclusive with Rauch as the President and CEO of the foundation and WFM controlling all but one board seat. As Rauch walked through Roxbury, where over 40% of adults were obese,³ he worked through the strengths and tradeoffs associated with his funding options, as well as the operational challenges he would face.

Doug Rauch

Rauch had already had a successful career as a businessman. During his 31 years at Trader Joe's, the last 14 as president, Rauch helped grow the firm from a small nine-store California retail chain to a nationally heralded retail supermarket with 325 stores across 26 states. Rauch developed Trader Joe's renowned buying philosophy, as well as their successful private label program. He also helped to create and cultivate Trader Joe's unique customer service environment.

Following his retirement from Trader Joe's, Rauch sat on numerous boards, consulted for a range of retailers and was invited to become a fellow in Harvard's Advanced Leadership Initiative.⁴ In 2010, Rauch began his fellowship with an open mind, his trademark enthusiasm, and a goal of making a real impact on a social cause.

Rauch also served as CEO of Conscious Capitalism, Inc., a non-profit organization that was created to advance the "integration of consciousness and capitalism" and believed that understanding and balancing the needs of all stakeholders including employees, suppliers, customers, community, and investors was the key to creating a successful and impactful business. (See **Exhibit 1** for more information on Conscious Capitalism.)

Global Food Waste⁵

Rauch came to Harvard worried that the global food system had reached a pivotal turning point, with approximately 1 billion people across the globe undernourished or hungry in 2010, and with world population expected to increase to 8.5 billion by 2025 and 9.5 billion by 2050. Food experts estimated that between 2010 to 2030, the production of the food system would have to increase by 50% to meet demand

However, in suggesting solutions, which typically included increasing yield through technological innovation and improved management practices, food experts often overlooked the inherent waste built into the food system. On a global scale, at least one-third and up to one-half of the food produced for human consumption was wasted. Per capita, far more food was wasted in industrialized countries than in the developing world. It was estimated that waste by consumers in

Europe and North America was 95 kg to 155 kg per year compared to just 6 kg to 11 kg per year in Sub-Saharan Africa and Southeast Asia.

In low-income countries, waste was primarily driven by managerial and technological hurdles in harvesting, storage, cooling, shipping, infrastructure, packaging and marketing. In industrialized nations, high levels of waste were largely driven by consumer behavior, as customers with high relative wealth tended to value convenience and therefore could and did waste and discard food without immediate consequences. Adding to the problem was increased packaging sizes, which often forced customers to purchase more than they needed. Additionally, the food chain in industrialized nations, from harvesting through retail, had a built in level of "expected waste" that was part of the acceptable operations and rarely scrutinized or improved. (See Exhibit 2 for an analysis of U.S. supply chain food loss.) Supermarkets in industrialized countries, driven by corporate marketing culture, also fed the problem. Growth in display size and heightened food display standards over the years raised overall waste in the system. It was estimated that industrialized countries wasted 222 million tons of food a year. In the U.S. it was estimated that approximately 126 million pounds of wholesome, edible food were lost each year at the consumer, retail and food service level alone. (See **Exhibit 3** for breakdown of edible food loss at the consumer, retail and food service level by type.) The production of this wasted food accounted for 25% of fresh groundwater usage per year, 10% of the methane (a greenhouse gas) production per year, and 300 million barrels of oil a year globally.

Waste and U.S. Food Retail

In 2010, the U.S. grocery store industry, which included a range of stores from small privately owned grocery and convenience stores to supermarket chains, had sales of \$1 trillion.⁶ Supermarkets first appeared in the 1930's and could be loosely defined as large-format stores that primarily sold food and select home goods, offered self-service shopping, separate departments, discount pricing, marketing and volume selling. The leading U.S. supermarket chains included WalMart, Kroger, Safeway and SuperValu, which included Jewel Food Stores and Shaw's. Supermarkets operated on small margins and faced intense competition both from other supermarkets, supercenters, warehouse clubs, dollar stores, drug stores, convenience stores and gourmet retailers.⁷

Built-in Waste

The supermarket retail model, as it developed through the mid-20th century, viewed waste as part of the cost of doing business, and therefore created and tolerated a large amount of waste, especially in perishable foods. In fact, as Rauch pointed out, "the reality as a regional grocery manager, if you see a store that has really low waste in its perishables, you are worried. If a store has low waste numbers it can be a sign that they aren't fully in stock and that the customer experience is suffering." Industry executives and managers viewed an appropriate amount of waste as a sign that the store was meeting quality control and full shelf standards. (**See Exhibit 4** for institutional causes of food waste in the U.S. food supply chain.)

Two modern changes in the 1990's and 2000's further exacerbated the waste problem. First, as competition between supermarkets increased and market research advanced, executives realized that many customers selected stores based on quality of perishables. In order to cater to customers, stores displayed more and offered a wider range of perishables, including more cuts of meat, more types of fish, more variations of yogurt, and various types of eggs. Produce offered an especially good example of this behavior. In order to attract customers, retailers often put produce sections closest to the entry and set up large, eye-catching displays kept fully stocked and free of any bruised or damaged fruit or vegetables. Cosmetically damaged produce that was otherwise safe for

consumption became a common waste product. Because of these aggressive presentation practices, produce departments often wasted 5% to 11% of total product. Rauch commented, "The thing is, at a lot of these stores, this is perfectly good fruit. The standard at the retail level, because all of these stores are leading with and staking their reputation on their produce section, is really high. On top of that these stores need to have everything, 20 different types of tomatoes, 10 different types of apples, there are leftovers, lots of them, and they shouldn't be wasted." This type of aggressive presentation happened throughout perishables, with milk and yogurt aisles stacked to the brim and cheeses from around the world overflowing from center aisle displays. Over time, customers came to expect this level of presentation, with fully stocked aisles even minutes before closing on a slow night. Rauch reflected, "The vicious cycle we've created is summed up by the quote, 'Perfect is the enemy of the good.' We as a society have become so used to perfect apples and tomatoes, but that's not how they grow in nature. Most people don't want to realize that if it's not perfect, it gets thrown away."

The second major change was in staffing levels and in-store food preparation flexibility. Up until the 1990's supermarkets carried a significant amount of in-store labor, which allowed them to be flexible around the use and distribution of products. For example, if a grocery store had a bruised watermelon, an employee could have taken that watermelon, diced it, and sold a container of watermelon chunks. However, as the food system modernized and mechanized, grocery stores cut back on labor and nearly all food was prepared offsite. Rauch commented:

It is funny because the base of the word retailer is a French word that basically translates as "to cut into pieces." You have a 50 pound wheel of cheese and I'll cut you off a chunk, you have a cow and I'll hack you off a piece, basically someone who took the large and made it small, and now-a-days, that isn't what retailers do, at least not on the store level, now they are basically just a distribution outlet. Standardization has become the norm to such an extent that food is basically manufactured. Counter intuitively, as the industry becomes more modern and standardized, the level of baseline waste increases and the ability of the store to deal with the baseline waste decreases. There is very little flexibility; it is all about efficiency of throughput.

Food and Low-Income Communities

Despite the large amount of waste at the retail and consumer level in the U.S. food system, there still persisted a high rate of food insecurity and a lack of access to fresh and healthy foods in low-income areas. Additionally, obesity was striking these communities at an alarming rate. This was an even larger concern as poverty rates in the U.S., following the global recession, had increased significantly, increasing the number of families and children in need. (See **Exhibit 5** for U.S. poverty statistics and graphs.)

Food insecurity In 2010, approximately 15% of U.S. households were food insecure, meaning they consistently reported reduced quality, variety, or desirability of diet. About 9% of U.S. households reported disrupted eating patterns and reduced food intake.⁸ In other words, approximately 50.2 million people, including 17.2 million children across the U.S, at times during the year, were potentially going to bed hungry because they had insufficient funds for food.⁹ (See **Exhibit** 6 for data on food insecurity)

Food deserts In addition to food insecurity, the U.S. had a growing number of food deserts or low-income communities where at least one-third of the population lived more than a mile from a supermarket. It was estimated, based on U.S. census data, that 23.5 million people lived in food

deserts.^c Since transporting groceries by walking or on public transport – in volumes needed to feed a family – was very difficult, families were often forced to shop at local convenience stores that had less healthy options, fattier foods, little to no fresh produce and higher prices. Without healthy options, low-income households became more prone to poor diets and to diet-related conditions such as obesity or diabetes. Furthermore, the higher prices at convenience stores left low-income families more prone to food insecurity.¹⁰

Food swamps Compounding the effect of food deserts were food swamps, or areas that lacked supermarket access but were dense with fast food options and convenience stores that tended to have limited, if any, healthy options. Researchers were concerned about food swamps as studies had found correlation between the proximity of fast food restaurants and body mass index.^d Experts felt that with an overwhelming selection of easy, quick, unhealthy foods, it seemed likely that consumers would select those options and develop patterns of eating them regularly.

"Cheap food policy" Further exacerbating the issue was the fact that unhealthy food was often the cheapest option for poor families. This was, at least in part, because of historically large subsidies for crops like corn and soy beans which were used in high fructose corn syrup and vegetable oil, which were key ingredients in high fat, high calorie, high cholesterol foods. Some argued that these subsidies, which incentivized farmers to grow large quantities of those crops, had enabled the production of low cost junk food and sugar-laden soft drinks. Others suggested that sugar was addictive, and therefore so was junk food. While some experts pointed out that a savvy shopper and able cook could purchase and prepare healthy food for roughly the same cost, experts pointed to the fact that, when stretched thin, low-income families turned to cheap, convenient options for meals, forgoing fruits, vegetables, and home cooked meals. There remained debate over whether consumers might simply prefer less healthy food because it was easier to access, cheap, and less time consuming to prepare or because they found it tastier and more satisfying, or both. However, the fact remained that healthy food was harder for low-income communities to access, harder to prepare, and often more expensive. Rauch reflected, "At most supermarkets it is typical to find soft drinks offered significantly cheaper than milk, and chips and cookies cheaper than eggs and fresh produce."

Finding a Solution

By 2011, U.S. food policy was based on outdated practices from the 1950's and at the retail level the food system was wasteful and inefficient. The convenient availability of cheap, unhealthy food, even when presented side by side with healthier food, was seen by experts as a significant factor in the growing obesity epidemic in the U.S. Additionally, with the onset of the global economic recession and high unemployment, many families were struggling to make ends meet and looked to purchase the cheapest food available, even if that meant soda and chips for breakfast.

Many stakeholders, researchers, and policymakers wondered what to do about the multi-headed problem, as there seemed to be many issues with no clear solution. Suggestions included adjusting

^c While 23.5 million people lived in low-income areas that were more than 1 mile from a supermarket or large grocery store, not all of those 23.5 million people had low-income. If estimates were restricted to consider only low-income people in low-income areas, then 11.5 million people, or 4.1 percent of the total U.S. population, lived in low-income areas more than 1 mile from a supermarket.

^d Body mass index was a key metric for relating a person's body weight to their height. The body mass index was a person's weight in kilograms (kg) divided by their height in meters (m) squared.

farm subsidies, placing taxes on soda and/or junk food, changing the SNAP program^e and incentivizing super markets to open stores in food deserts.

However, many of the proposed solutions overlooked the significant amount of waste that was produced, especially on the healthy perishable food side, from supermarkets and consumers around the country, something that Rauch had firsthand experience with. Rauch reflected on the issue:

Here we are in America, touting ourselves as the richest nation in the history of the world and yet we've got one-sixth of our population officially food insecure. One-sixth of our population is making bad nutrition decisions based strictly on economics and at the same time we have 40% of the food grown in America never consumed. Food waste is rising, not shrinking. We have a system that budgets, allows for and builds into accepted cost high levels of food waste. So we've got this dynamic tension, we've got people in America who can't afford to eat well and you've got all of this good food going to waste. For me, at least, there is a moral tension there. Something's got to be done about this, that isn't the way it should be.

Improving Traditional Approaches

Settling into his fellowship at Harvard, Rauch began to probe possible solutions to the American food paradox. Rauch understood that he was not the only mind working on the problem and at first planned to leverage and improve upon traditional approaches such as food banks and SNAP.

Food recovery programs Food recovery programs, which included food banks, food pantries, soup kitchens and other community organizations, collected and distributed charitable food donations to people in need. These programs were often undercapitalized, staffed by volunteers and dependent on philanthropy and government funding. Rauch's first idea derived from his connections with the Greater Boston Food Bank. While at Trader Joe's, Rauch had worked closely with the Greater Boston Food Bank and built working relationships with many of its executives and managers. Rauch distinctly understood the relationship between food banks and grocery stores, "The problem is that food recovery programs depend on volunteer labor, which tends to be an unreliable resource for consistent pickup. That makes it tough for managers at grocery stores to go out of their way. Most stores want to help out, these aren't evil people, but their operations come first and the efficiency of your operation is hurt if pickups aren't predictable." Rauch felt he could figure out a more efficient way to get items from grocery stores to food recovery programs, especially perishable items.

Rauch explored using delivery companies, such as UPS and FedEx to transport food to food banks. As Rauch explained, "No food recovery program can afford to send a dedicated truck to pick up perishable food at every grocery store and get it back to food banks. But there are businesses with trucks on the road all day that are coming back empty. If getting food into the hands of the people who need it is a national priority, there must be a way to incentivize the Postal Service, UPS, or FedEx to make regular pickup and drop-off of this product." Rauch's idea piqued the interest of UPS.

However, as he dug deeper into the issue, he realized that some of his assumptions were wrong. In meetings with the Greater Boston Food Bank and Feeding America^f, it became clear that it was not

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^e The Supplemental Nutrition Assistance Program (SNAP), was a government assistance program to help low-income households pay for food. SNAP was previously called and commonly known as the Food Stamp Program. The amount of SNAP food stamps a household received depended on the household's size, income, and expenses. The SNAP food stamp program was managed by the United States Department of Agriculture. The Department of Agriculture gave money to each state to provide SNAP food stamps for its residents.

a lack of food or calories that these groups lacked, but rather a supply of healthy, fresh, perishable food. In summary, Rauch said, "I told them I could get them a lot of bread and they said, 'Doug, we don't need bread, we have plenty of bread, we need fruits, vegetables, milk, and meat. We need a nutritional blend.'" This realization was a turning point for Rauch, and after additional discussions with UPS, he realized that they would not be the right outfit for transporting perishables.

SNAP program As Rauch reexamined the problem, he began to focus on the fact that Americans seemed to be eating the wrong foods. "I started thinking that it's not really a lack of calories that is the issue, as much as it is that low-income families are eating the wrong types of calories. I wanted to increase nutritional eating. I thought, maybe we can tweak the SNAP program, and incentivize people to eat fruits and vegetables." Rauch figured that with emerging technology there might be a way to "smarten up" the SNAP program, by implementing software that could help incentivize healthy purchases through rebates, thereby changing the eating patterns of low-income communities. However, as he started to leverage the resources around Harvard University, he had a conversation with long time food policy and agribusiness expert Professor Ray A. Goldberg. Rauch reflected on the conversation, "Ray put it bluntly, he said, 'Doug, you're not a lobbyist and you're not a politician. There is gridlock in Washington and SNAP is part of the Farm Bill. There are multiple levels of bureaucracy and you could spend the rest of your life trying to change legislation and not get anywhere. You know retail, you know business, stick with that channel.' That conversation had a big impact on me and helped me to shift my beliefs around how to solve a social problem."

The Retail Model

Rauch decided to brainstorm around ways he could draw on his expertise and experience in retail to impact change. Rauch felt he could create a non-profit grocery store, stocked with the otherwise excess food from area supermarkets, located in a low-income community that would offer healthy food options for sale at a significant discount. Based on the high cost of goods sold at grocery stores, Rauch estimated that most products would receive a 65% to 70% markdown. Rauch felt he had arrived at the best possible model for making an impact on the American food paradox. He highlighted four reasons to move forward with charging for recovered food: revenue stream, dignity, behavioral economic reasoning, and the power of the customer mindset.

Revenue Rauch recognized that the main constraints on food recovery programs receiving and managing healthy, perishable food were limited funds and reliance on philanthropy and government funding. His retail model would produce a revenue stream theoretically equivalent to the margin a typical grocery store operated on. Rauch commented, "All we'd need to do revenue wise is cover operational costs, refrigeration, transport, staffing, and keep the lights on." By being able to cover those costs and not remain reliant on philanthropy and volunteer labor, Rauch felt he could create an economically sustainable and operationally efficient system that would attract supermarket partners willing to donate food.

Dignity After seeing the quantity of food available at inner city food banks, Rauch was at first mystified by how so many people were still food insecure. After speaking with community leaders and organizers, he realized one of the problems, "It's simple really; many people don't like to go to the food pantry or soup kitchen. Some people are embarrassed, ashamed; they'd rather eat cheap, unhealthy food than be labeled as poverty stricken or needing a handout." Rauch hoped to create a

^f Feeding America was the nation's largest domestic hunger-relief charity, providing food to over 37 million Americans each year and working with a network of 200 food banks across the country.

store that offered customers an opportunity to keep their dignity and pride through purchasing inexpensive, healthy foods.

Behavioral economics Rauch had come across research on the behavioral economic theory that customers who choose a product are more likely to value and use that product. Rauch believed this was a key reason that food banks' impact on food insecurity and health had been limited. Under his retail model, Rauch felt that the power of selecting and purchasing a product, even at a significant discount, could help drive customers to value and use healthy products. Rauch commented, "If you choose a food you will use the food. If I stand out on the corner and hand out apples that is, in some ways, less effective than if you come into my store and choose to buy that apple."

Customer mindset Rauch also felt that creating an atmosphere in which people adopted the mindset of a customer would help grow excitement and interest in healthy food, cooking, nutrition and an overall healthier lifestyle. Rauch explained, "There is a profound difference between being a customer at a super market and being served at a food kitchen. At a store, I, the store owner, have to earn your business, I have to show you a certain level of respect, I have to put things on display for you, and create a pleasant shopping experience. You are in a certain position of power as a customer. This is invigorating for the customer."

Making Ends Meet

In addition to excess waste in supermarkets, which he was counting on as the supply source for his store, Rauch identified two market realities that he felt would allow him to breakeven as a non-profit store. The first was that traditional supermarkets operated on extremely low margins (approximately 2% net margins on average) and had very high cost of goods sold (COGS) at about 65% to 75% of retail price depending on the product. Since his model was based around donations from other grocery stores, Rauch essentially had a COGS of zero, which, he felt, would allow him to sell most products at a 65% to 70% discount while still covering costs. "The big difference is I don't have to make a profit to give back to shareholders, which was part of the margin spread at a forprofit grocery store. So that gives me even more confidence. Say milk is \$4 a gallon for the sake of argument, we could sell that for \$1 and probably make enough to cover our costs every bit as well as any for-profit grocer could."

Rauch recognized that there would be extraneous start-up costs and possibly low volume at opening, but he remained confident, "Based on my experience we really ought to be able to cover our costs selling at 25% to 30% of typical retail prices and if we can't, there are probably some pretty serious efficiency issues. My own personal feeling is that we won't spend a lot of money on marketing. You take marketing out, you take advertising out, once you get up and running, you might even make a profit, which could then go back into the community or to build out future stores." (See **Exhibit 7** for estimated income statements for Rauch's store and a traditional supermarket.)

Secondly, grocery stores were offered up to a 50% tax credit on any donated goods through Federal tax laws. Most grocers, due to the fact that they only donated easy to transport non-perishables such as bread, cereal and canned goods, did not take full advantage of this tax credit. Rauch knew that if he could assure grocers that he would consistently pick up the goods in a timely fashion, and supply the necessary amount of labor, grocers would be attracted to this extra tax credit. On top of the tax credit, by hauling off food that would have otherwise been thrown out, Rauch would be saving grocers a significant amount of cost on garbage removal.

Rauch was not totally clear on what type of deal he might work out with his grocery store partners. Ideally he hoped to take some cut of the tax credit, "Maybe we can share in the credit, since they don't fully realize it currently. I don't think we need that money to operate the store, so I'd be willing to part ways with it as an incentive to stores to cooperate, we'll see how it works out."

Overall Rauch felt that making ends meet wasn't his biggest problem and would fall into place, "I frankly look at the structure or the funding model as not the big challenge here. Especially now that we have someone saying we'll fund you, and the reality is they will help determine the structure. We can do all that. It will come together. Those aren't the critical issues."

Product Supply

Given that his stores would rely on donations under any model, Rauch needed to assess what hurdles he might face in acquiring product. Ultimately, he was confident stores would be willing to donate. With increasing awareness around the issue of food waste, and grocery chains such as SuperValu and Kroger already working on programs to limit or eliminate waste, his timing was ripe to catch the attention of industry executives. Pood waste at grocery stores had received media attention in both national newspapers and trade publications, and grocery stores would be looking for options to lower waste that did not significantly interfere with operations or hurt their bottom line. Rauch felt that supply of fruits and vegetables would be the easiest to secure. Most stores had between 5% and 11% waste on these items and they did not have published expiration dates. (See Exhibit 8 for analysis of perishables recovery opportunity in Boston.) Rauch commented, "Most of what grocery stores are throwing out, you or I would've paid full price for an hour earlier. It's real food, good food, that is being thrown out simply because it doesn't meet a service standard or it didn't happen to sell that day."

For other perishable items Rauch faced multiple legal restrictions around the use of expired products. "In Massachusetts, it is against the law to not just sell, but to distribute, out of code food products," he explained. "The only exception is frozen meat, you can pull meat off the shelf within code, freeze it and then distribute it. But bread, if it expires on August 7th and you come by on August 8th, you can't distribute that, even if you're a food bank." Rauch felt the political tide was moving toward change, but progress was hard to predict. He reflected, "Most agree that the law was well intended but it has unintended consequences which limits the amount of food available for distribution in times when there is growing need. There are a lot of efforts and possible coalitions to reframe this discussion, especially around obvious products like bread. The intent was to protect people from eating bad food and keep them from getting sick, to do no harm, but this law is doing harm. There is no entrenched interest that doesn't want this to change, so I am hopeful."

With produce unaffected by code regulations, Rauch hoped to address the issue for eggs, milk, yogurt and other dairy by developing a system to receive and sell products that were "short-code" or within one or two days of their expiration date. Anecdotally, Rauch felt that most shoppers passed over milk and eggs that were within two or three days of expiration, instead looking for products further from expiration. Rauch commented, "We could pretty easily do a customer behavior study to prove this and then talk to stores about cutting their losses. If they let me pick up the eggs and milk within two days of expiration, they can make back half their investment through the tax credit. Over the long haul that is a significant savings."

Merchandising issues Since the store was going to rely on donations from other grocers, Rauch faced significant merchandising, stocking and inventory challenges. (See **Exhibit 9** for projected product mix.) His incoming supply, because it could not be controlled by an order, would be highly variable and largely out of his control, "We'll go out to collect and won't know what we

have until we come back with what we've got. What happens on the day that we only have a little bit of milk and by 10 o'clock in the morning we are out of milk? Customers are going to say 'hey I came by for milk and you didn't have any, you aren't of very much value to me.'" Rauch also worried about the opposite scenario:

One day we might get in 500 trays of blueberries and the next day, zero. We need to be ready and adaptable. I want to be out of product at the end of each day. I don't want anything left in the store, otherwise I'm just part of the food waste problem myself. Being empty at the end of the day becomes a problem in retail perception for a standard retailer. Can I get customers to perceive our store, which will be a retailer, as truly discontinuous and an opportunistic flow through of great deals and healthy food?

Additionally, Rauch wondered how he could make a retail store with constantly changing inventory and merchandise look full, attractive, and interesting, "We are going to have to recreate the store every day or every other day." Rauch thought about trying to create a feel similar to that of a farmer's market, where customers were accepting of a lack of inventory. "We need to create a fun marketplace feeling, cultivate a 'let's see what came in today' feeling," Rauch explained. In many ways, Rauch realized he was endeavoring to meld two worlds, "it's an experiment in combining the best business thinking and technology of the modern times in with the frugality and flexibility of bygone times."

More Than a Grocery Store

Hoping to take the best of both worlds, Rauch envisioned his store looking like a traditional grocery store, but "more interactive and without the soda, candy and ice cream." However, Rauch struggled with exactly what products he would carry in the store. He knew it would be important to be complete enough to potentially cover basic needs for customers, but he wanted to be part of the solution, not part of the problem and was committed to limiting products to healthy options.

Rauch was also committed to have the store be community-based and run. He said, "This store won't work if we have an outsider as the general manager, it needs to be authentic, it needs to be part of the community." Rauch envisioned developing a cadre of managers from within the community. He hoped to use the store as a job training center, a place where, for a fair wage, people could work, gain relevant and important job and life skills and then graduate to the "real world."

Changing Behavior with Design

Rauch foresaw two obstacles as potentially limiting the adoption of his store: the time constraints of potential customers, and the knowledge and preparation skills of potential customers. While operational challenges would be important hurdles to clear, if Rauch could not compete on convenience and start to educate low-income communities about the benefits of eating healthy, success would be hard to reach.

Convenience by commissary Rauch knew that fast food's success in low-income areas was as much about time and convenience as it was cost. "Part of the problem is not that people can't afford to eat well, they can't afford the time and effort it takes. If I don't address both then I've only gotten to the 50 yard line, it's not a touchdown. If I just say, you can now afford to eat this, come in and buy it, and they go, 'this is great but now what? I've got to go home and cook this and I'm worn out, and my kids are hungry and why don't I just stop at Burger King.'" In order to address the time and convenience issue, Rauch hoped to have a small commissary in the store. Rauch commented, "This would be a live staffed station. I picture a couple of entrees each night, maybe two soups and a

few smoothies, all made from whatever we have a surplus of that day." The commissary offerings would offer shoppers a quick, easy and healthy option for dinner at prices competitive with fast food. The added flexibility that the commissary and associated labor would provide the store would help in managing inventory and limiting in-store waste.

The how and why of eating healthy Rauch also wanted to drive an increase in awareness, preparation skills and community health, with the store acting as a unique type of community center. Rauch commented, "My target audience isn't used to eating kale, broccoli and carrots. Many of them aren't used to cooking. In essence they don't know how to eat healthy. The challenge is how do you educate them." Taking a cue from Trader Joe's, Rauch planned to have food demonstration stations with employees offering samples, discussing recipes, and sharing educational materials about healthier eating. Rauch also hoped to staff some of these stations with volunteer dieticians offering free advice on developing a healthy balanced diet, and occasionally celebrity chefs from famous Boston restaurants who would share secret recipes and quick cooking tips: "It would be a big mistake for us to try and do it all ourselves. We need to reach out to partners, Harvard School of Public Health, community organizers, literally say, 'help us,' here we are at the base of the pyramid trying to make a difference and we need you to come implement the things you talk about." Rauch also hoped to attract local celebrities, such as sports stars, to adopt a store, visit it regularly and lead by example. "I'm hoping that between community support, chefs, experts, universities and celebrities, people with strong authoritative voices that the community wants to hear, we can get the message of healthy eating and healthy living across and build real sustained interest," Rauch explained.

Code and food safety education Since he planned to sell products on short-code, Rauch felt the store would need to take on some responsibility for educating customers. Issues such as food borne illness, bacteria growth and not breaking the cold chain became even more prominent and important as products approached and passed the code date. Rauch, both for liability and public image reasons, did not want his store, which was likely to attract the attention of food safety activists regardless, to be the source of any food safety or health issues. Rauch commented, "There are a lot of things that people just don't realize. Bread, you don't throw it out if it's out of code, every household in America has out of code bread. Same thing with cheese, if there is a piece of mold on cheese you cut it off, you don't throw out the whole block of cheese. But there are also products you have to be really careful with. We need to figure out a way to spread this knowledge." Rauch recognized how serious an issue food safety was and planned to work closely with leading quality assurance experts to ensure that all product in his stores was thoroughly tested and safe for consumption.

Controlling the message Rauch was committed to selling short-code products and cosmetically damaged produce since he was offering such a drastic discount. But he worried about customers' reactions and wondered how to control the message. "I'm willing to sell the imperfect, how willing is the customer to buy the imperfect? Even at a deep discount. It's a question of are we just up against the mentality of 'I'm a loser I got an apple with a bruise.' Or will customers realize they are savvy because they just got an apple for a dime and it is delicious." He realized he would need some quality control measures in place, "I don't want to be the dented can store, and I'd rather make apple sauce, or a fruit salad than put out an apple that turns people away from the store. The question is, what is the new service standard and how can we effectively tell our story to customers."

Rauch also wondered how best to name the store. He didn't want the name to connote cheap or discounted, as he wanted the store to be a type of community center, "something the community can be proud of." He also wanted to signal the healthy side of the store, and possibly the "marketplace" atmosphere that he imagined, without turning more conventional customers away before they even walked in the door.

Moving Forward

With partnership offers from Next Street, and WFM, Rauch had two strong options. He wondered if he should look for partners elsewhere, including other supermarkets or Feeding America.

Founded in 2005, Next Street's mission was "to transform the way that finance and business advisory services are provided to small companies and nonprofit organizations in urban markets." 14 Next Street targeted companies in the \$5 million to \$60 million range that had growth potential. The firm hoped to hasten the growth of its portfolio companies by providing more access to capital as well as advising on business strategy, organizational development and marketing. Next Street also hoped that by supporting its portfolio companies it would help to enhance economic development and job creation in cities. The firm had 2010 revenues of just over \$4 million and was named one of America's most promising social entrepreneurs by Bloomberg BusinessWeek in 2011.¹⁵ Next Street had an office in Roxbury and was immediately taken by Rauch's plans. Next Street and Rauch had several meetings early in the summer of 2011. Rauch reflected, "They came back with a bunch of ideas, proposals, key deliverables, a timeframe and a number of ways to move forward. I chose to put forward a plan in which I would put up \$25,000 and they would take an equity stake in the form of \$25,000 worth of sweat and labor." Rauch recognized that Next Street brought some significant resources, skills and connections to the table, particularly in community resources and tax credit law and research that would help him put together a strong plan. Rauch said, "I am going to want a strong plan, and Next Street could be very helpful with the details."

As Rauch was mulling over the Next Street offer and learning more about the firm, he had a previously scheduled meeting with John Mackey, the CEO of WFM, to discuss initiatives related to Conscious Capitalism, a group Rauch had recently agreed to lead. However, the two also spoke about food policy issues. "The conversation went a bunch of different ways but eventually we landed on wellness and I said 'here is what I think about wellness. I think the problem at the base of the pyramid is we have cheap food policy in America instead of good food policy. People can't afford to eat well.' At first, he challenged that premise, but he heard me out and I gave him my whole picture of food waste, food insecurity and the lack of access to and education about fresh and healthy food in low-income urban areas." A few days after the meeting, Mackey called Rauch and asked if he'd be willing to partner with WFM, adding that the executive team thought it was an amazing project.

Whole Foods Market

Rauch was excited about WFM and Mackey's immediate and enthusiastic interest in the project. WFM had 2010 revenues of just over \$9 billion, up from \$8 billion the previous year. WFM was committed to delivering extremely high quality product, maintained high presentation standards and supported organic and sustainable agriculture. The company considered itself a mission driven company, and its mission was based around three concepts, Whole Foods, Whole People, Whole Planet. (See **Exhibit 10** for details on WFM's mission and core values.)

After initial conversations with Mackey, Rauch sat down with WFM's executive team to work through details. Rauch had hoped to convince Mackey and his team to be the lead partner of a broader coalition of stores that would support Rauch's foundation both financially and with product. However, just minutes into his meeting with WFM he realized that this wasn't likely, Rauch explained, "it was pretty clear to me that for WFM it was probably going to be an exclusive or nothing." WFM offered a deal that would make Rauch the President and CEO of a new WFM foundation that would operate the stores under his vision and leadership. The foundation would be fully funded and supported by WFM and WFM would control all but one seat on the board. All waste from WFM's stores would be diverted to the foundation stores.

Rauch recalled the main reasons WFM gave for making the partnership exclusive. First, there was a significant quality control benefit to an exclusive partnership. Fearing that other grocers could potentially game the system by sending inedible and severely damaged product to the store to collect the tax credit and avoid hauling costs, which would cause significant issues at the store level and potentially damage the image of all stores involved, WFM preferred to retain exclusive control over supply. Additionally, WFM relayed a concern about being unable to control food safety and contamination issues on both sides. If product supply, delivery and receiving were all kept internal, the risk of issues or problems occurring dropped significantly. Secondly, an exclusive partnership would streamline business operations by allowing WFM operational support to run back office administrative tasks such as accounting, legal, tax credits, and product tracking. Thirdly, the food service, commissary and store opening resources and experience that WFM possessed in-house would likely allow Rauch to start his project in a much shorter time frame and potentially roll out to multiple geographies quicker than planned. Additionally, the project offered an opportunity for a significant public relations boost. With the announcement of a new foundation, with Rauch as its leader, WFM had the opportunity to elicit an enthusiastic response from its stakeholders including community members, shareholders, customers and employees. Being part of a broader coalition might dampen employee enthusiasm and support around the initiative.

While WFM's offer was significant, an exclusive partnership meant that if the operation grew, it would be limited to metro areas that WFM had a significant presence in. This geographical limitation was a concern for Rauch, as WFM did not have a presence in many of the cities that could benefit most from Rauch's project. In an exclusive partnership Rauch's project would likely be closely tied with the WFM brand, most likely as a foundation under the corporate umbrella, which, in Rauch's mind had both positive and negatives, "there are many people who look at WFM and say wow, incredible company, but there are many people who are turned off by their pricing and image consciousness. It is a very polarizing brand." Rauch was also concerned about WFM's organizational structure with headquarters in Austin, over 2,000 miles from Rauch in Boston, and 12 distinct regions led by 12 presidents, each with significant autonomy. He recognized the potential delivery and execution pitfalls of partnering with such a decentralized organization.

Rauch was also concerned about the proposed governance structure. On a hypothetical board of seven members, he was being offered only one seat. While WFM asked him to be the President and CEO of the new foundation, Rauch wondered, "What type of control I really have over this project. What happens after our first spat when I think we need to be heading in a different direction." In discussions with WFM he was assured he'd have an employment contract and it didn't see big issues arising. But Rauch remained concerned, "It's not compensation that worries me, that's not what I'm after, it's a question of how much control do I have over this project?"

Both Rauch and WFM were confident that given the density of WFM stores in metropolitan areas, and WFM's highly selective perishable presentation standards, which resulted in more waste than a typical store, there would be plenty of food to support Rauch's retail concept. WFM also seemed open to working with Rauch on shipping him short-code products, meaning milk, eggs, and other dairy products that were not yet expired. Rauch commented, "This would be a big game changer for me because then I could get started on this without regulatory relief. I could still work toward regulatory relief, but at least I could get started." WFM also suggested supply options that Rauch had not thought about, including direct vendor participation and even farmer level participation. Rauch commented, "Only 2% of the waste in our system is at the retail level. There is a ton of waste at the farmer and vendor level, initially I felt like that was biting off more than I could chew, but WFM's strong relationships could simplify the process, guarantee steady supply and increase my impact on reducing food waste."

Rauch was also aware that, having walked WFM through his business plan, there was a good chance that they would attempt to create a project like his with or without him. He commented, "It's an interesting dilemma. If you don't go and sit down with them, you limit your growth opportunities, but if you do then you have essentially given them a good idea. It depends on whether you look at it as losing the idea or setting it free."

Other Options

Rauch felt there was potential for other partnerships if he declined the WFM offer. One option was to partner with another large supermarket chain, especially if they were willing to give him more ownership and control. Rauch was confident supply would be there but still had reservations:

I want to lead with mission and WFM understands that, they are a very mission and purpose driven company. Other supermarkets are going to focus on the numbers, see how they can take full advantage of the tax credit, how this could be a huge savings for them and how they can best market it. They will also be focused on just the food aspect of this, which obviously is a big deal but this is bigger than just food, it is about community, health, obesity. I want to make sure that the mission isn't compromised, if we can't see eye to eye on the mission, it won't work.

Another option was a potential partnership with Feeding America. The non-profit had thought about entering retail in recent years. Rauch was potentially a strong partner for the foundation as he had a unique and differentiated approach, as well as a strong retail background. Feeding America had proven its dedication to solving both the food waste and hunger problems in the U.S. but was founded on a charity and volunteer model. Rauch's model directly confronted the traditional food bank model and he wondered how the two would coalesce, "Feeding America has a certain culture and trying to implement a totally new strategy within that culture would be a huge challenge. If you can't shift the culture itself, make it a true retail business mentality, which I am not sure they are open to, it will be very hard to execute on the strategy."

How to Deliver

Rauch commented on his options:

The options I see are: One, say to Whole Foods, 'awesome, let's do it together' and then it's just the two of us trying to make this work; The second option would be to work with Next Street on funding and business plan and then try and partner with other grocery stores; The third option is forging a partnership with Feeding America and trying to shift both the culture and strategy of a large organization.

Rauch also thought about where he was personally:

With partnerships I worry a lot about mission slip, about losing control of the project. But on the other side I also worry about not making a sizeable impact. I keep reminding myself that this is about the underserved and not me, and perhaps I need to get out of my own way at this point and let the idea grow rapidly. I also think about what I really want to be doing, I'm less enthusiastic about being on the ground level implementing a new store and ensuring the logistics are working. Marketing and messaging is interesting to me and a place where I feel I can add value. But what I really want is to work on the strategic level, ensuring the mission is being met, thinking about what's next and not getting bogged down in day to day details.

As Rauch exited the store and walked through Roxbury, he reflected:

My non-negotiable is making sure this mission gets delivered. Whatever I choose, I want to make a social impact. I want to positively impact communities, educate people around healthy eating and bring them healthy food. How am I going to measure that? Sure, we need a revenue generating store that people in the community are proud of, but ultimately I want to have a measurable impact. I want to see the community BMI drop, the community obesity level drop and I want to see an increase each year in the pounds of healthy food sold to the community.

Exhibit 1 Background Information on Conscious Capitalism

Conscious Capitalism, a term coined by Nobel Prize winner and micro-lending entrepreneur Mohammed Yunus, was started by WFM CEO John Mackey and author Michael Strong, and was based on the idea that businesses create profit by balancing the needs of all stakeholders (employees, suppliers, customers, community and investors) and by having a greater purpose other than just financial profits. In other words, Conscious Capitalism did not put the shareholder first. As Mackey put it, "Paradoxically, the best way to maximize profits over the long term is to not make them the primary goal of the business."17 The movement challenged business leaders to re-think why their organizations existed and acknowledge their company's role in the interdependent global marketplace.¹⁸ The group had four tenets of conscious business: 1) Adopting a higher business purpose, one that transcends profit maximization; 2) Stakeholder orientation, managed for the simultaneous benefit of all its stakeholders. By creating value for all stakeholders the whole system advances; 3) Conscious leadership, driven first and foremost by the purpose of the business, a conscious leader viewed their organization as a complex, interdependent, and constantly changing system that served multiple constituencies; and 4) Conscious culture, built around the TACTILE (trust, authenticity, caring, transparency, integrity, learning, and empowerment) framework, one should be able to "feel" the difference when walking into a conscious business.

Source: Conscious Capitalism Website, "About the Organization," http://consciouscapitalism.org/, accessed September 2011.

Exhibit 2 Food Waste in the U.S. Food Supply Chain

Step in Supply Chain	Approximate Percent of Total Food Supply Lost (Total Supply = 428 billion pounds)	When Does Waste Occur	Strategies To Mitigate Losses
Grower Processor/Manufacturer	Amount not well defined. Best estimates range from	Weather-related losses Pre-harvest losses Storage losses Removal of inedible components Discard of bad product	Leftover crops used as fertilize of animal feed. "Gleaning" or taking excess harvest to charities such as food banks Losses diverted into animal feed or ingredients for other products
Distributor	7% to 15% ^a	Shrinkage and poor handling Transport damage	Improving packaging and handling
Retailers	10% or approximately 42 billion pounds	Overbuying at warehouse level Overstocking at shelf Transport damage Discard of blemished product	Divert safe but "unsaleable" items to charities such as food banks
Consumers & Food Service	19% or approximately 83 billion pounds	Over purchasing Plate waste Spoiled product	Some donation from food service companies but limited at household level

Source: Buzby, Hyman, Stewart and Wells, "The Value of Retail- and Consumer-Level Fruit and Vegetable Losses in the United States," *The Journal of Consumer Affairs*, Fall 2011: pg 492-515, ABI/INFORM via ProQuest, accessed February 2012.

Notes:

a. This number has proved difficult to calculate and while estimates exist it remains unclear what is included in those estimates. Questions remain around how best to account for unharvested acres, passed over product, crop damage and weather related losses.

Exhibit 3 Estimated U.S. Edible Food Loss (2008)

		Losses from Food Supply						
	Food Supply ^a	Retail Level		Consumer Level		Total Retail and Consumer Level		
Commodity	Million Pounds	Million Pounds	%	Million Pounds	%	Million Pounds	%	
Grain products	59,757	7,171	12	10,517	18	17,688	30	
Fruit	61,832	5,742	9	9,040	15	14,782	24	
Fresh	36,599	4,228	12	6,668	18	10,896	30	
Processed	25,233	1,514	6	2,372	9	3,886	15	
Vegetables	82,463	6,886	8	16,483	20	23,369	28	
Fresh	52,735	5,102	10	11,730	22	16,832	32	
Processed	29,728	1,784	6	4,754	16	6,538	22	
Dairy products	83,455	9,360	11	14,025	17	23,385	28	
Fluid milk	54,463	6,541	12	9,584	18	16,125	30	
Other dairy products	28,992	2,819	10	4,441	15	7,260	25	
Meat, poultry, and fish	59,861	2,724	5	20,370	34	23,094	39	
Meat	32,920	1,471	4	11,009	33	12,481	38	
Poultry	22,087	856	4	8,167	37	9,022	41	
Fish and seafood	4,854	397	8	1,193	25	1,591	33	
Eggs	9,690	872	9	1,323	14	2,195	23	
Tree nuts and peanuts	3,175	190	6	298	9	489	15	
Added sweeteners	41,440	4,558	11	7,376	18	11,935	29	
Added fats and oils	26,458	5,430	21	3,645	14	9,075	34	
Total	428,131	42,934	10	83,078	19	126,012	29	

Source: Buzby, Hyman, Stewart and Wells, "The Value of Retail- and Consumer-Level Fruit and Vegetable Losses in the United States," *The Journal of Consumer Affairs*, Fall 2011: pg 492-515, ABI/INFORM via ProQuest, accessed February 2012.

Notes:

- a. Food supply at the retail level, which is the foundation for the retail- and consumer-level loss stages in the loss-adjusted data series.
- b. Totals may not add due to rounding
- c. Table was computer by authors using assumptions in the ERS Loss-Adjusted food Availability data as of March 7, 2010 (ERS 2010a) and the US population on July 1, 2008 (304.06 million). Per capita losses at the retail and consumer levels for each commodity (not shown) were estimated by multiplying the quantity of that commodity available for consumption by the appropriate loss assumption. Individual loss estimates were then multiplied by the US population and summed up into their respective food groups and retail or consumer levels.

Exhibit 4 Institutional Causes of Food Waste

Supermarket Product Specifications

- Supermarkets required the "perfect product."
- In order to meet high standards at retail, standards starting from the farm field, packing houses, and distributors were raised. This led to product being plowed over or sent to landfills before it reached the retail level.

Supermarket Merchandising Specifications and Policy

- Standards at store level caused edible but cosmetically damaged product to be thrown away.
- Stores maintained extremely large displays which led to waste because it contained multiple days' worth of supply that rotted before sale. Stores required displays to be full 24 hours a day seven days a week so that the customer always had a choice of all products, but this led to overstocked shelves and wasted product.
- Supermarkets removed items that were close to expiration, therefore leaving them to expire and be thrown away.
- Promotions led to erratic demand and poor forecasts and therefore waste.
- Lack of automation and perpetual inventory led to poor forecasts.

Supermarket Operations

- Lack of in-store manufacturing and low staffing levels, and therefore lack of labor and equipment, led to excess product being thrown away rather than reworked for other uses. For example, beef being reworked into hamburger patties.
- All perishable product was stocked from a large case at one time in order to reduce restocking time, leading to poor maintenance of cold chain and waste from lost products.

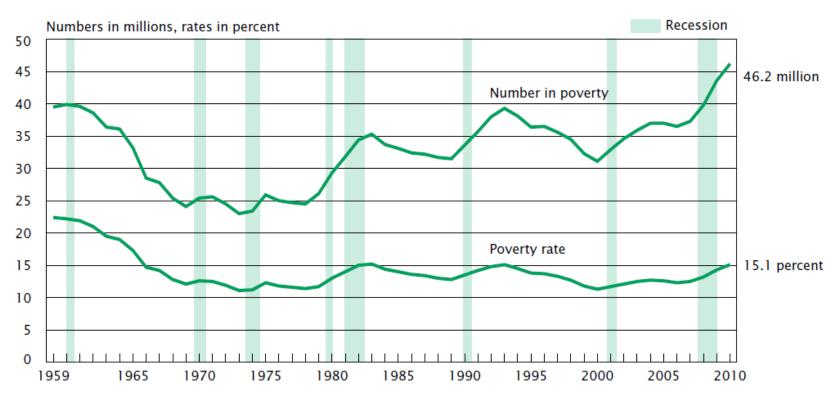
Supply Chain Constraints

- Large packaging sizes, used to increase shipping efficiency and packing process, led to waste as often more product was supplied than was in demand.
- Case packaging cost reductions led to breakage and waste from using inferior packaging.
- Poor signaling of demand through supply chain led to over inventory for most perishables.

Source: Casewriter research.

Exhibit 5 U.S. Poverty Rates

Number in Poverty and Poverty Rate: 1959 to 2010



Note: The data points are placed at the midpoints of the respective years. For information on recessions, see Appendix A. Source: U.S. Census Bureau, Current Population Survey, 1960 to 2011 Annual Social and Economic Supplements.

Poverty Rates by Age: 1959 to 2010



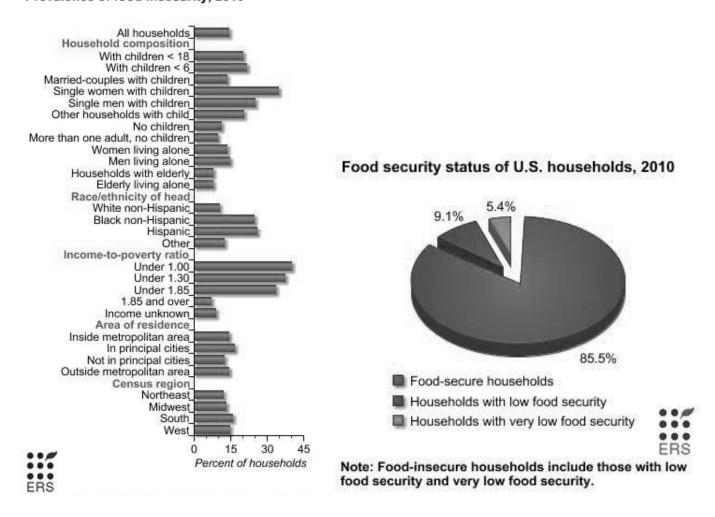
Note: The data points are placed at the midpoints of the respective years. For information on recessions, see Appendix A. Data for people aged 18 to 64 and 65 and older are not available from 1960 to 1965.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2011 Annual Social and Economic Supplements

Source: U.S. Census Bureau, "Income, Poverty and Health Insurance Coverage in the United States 2010," September 2011, http://www.census.gov/prod/2011pubs/p60-239.pdf accessed September 2011.

Exhibit 6 Food Insecurity in the U.S.

Prevalence of food insecurity, 2010



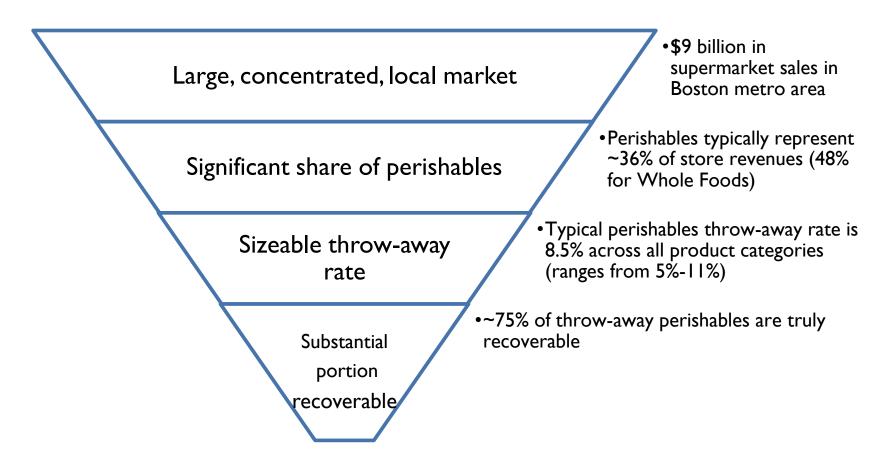
Source: United States Department of Agriculture website, "Food Security in the United States: Key Statistics and Graphics," http://www.ers.usda.gov/Briefing/FoodSecurity/stats_graphs.htm, accessed September 2011.

Exhibit 7 Basic Estimated Income Statement

Typical Supermarket			Rauch's Market		
	\$	% of Sales		\$	% of Sales
Sales	\$ 100		Sales	\$25	
Cost of Goods	\$ 75	75%	Cost of Goods	\$ 0	0%
Gross Profit	\$ 25	25%	Gross Profit	\$25	100%
SG&A	\$ 22	22%	SG&A	\$25	100%
Operating Profit	\$ 3	3%	Operating Profit	\$ 0	0%

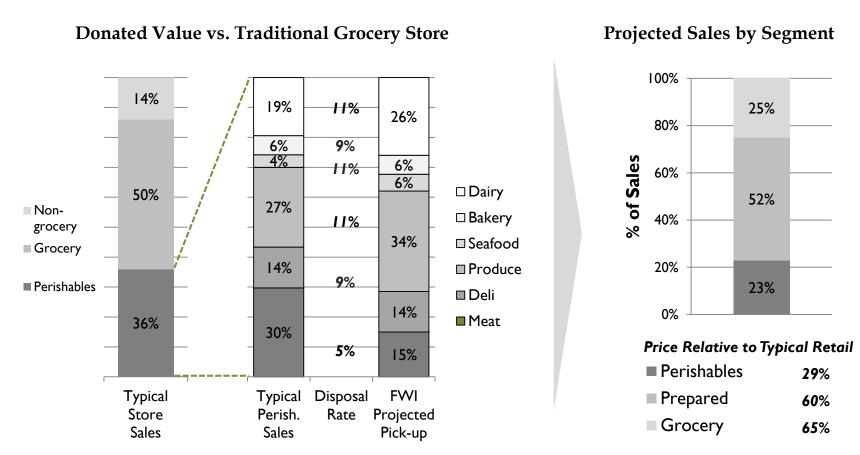
Source: Casewriter research.

Exhibit 8 Boston Perishables Recovery Opportunity



Source: Next Street Financial LLC, "Market Opportunity: Boston Pilot," PowerPoint Presentation to Doug Rauch, 2011. Next Street Financial LLC, http://www.nextstreet.com.

Exhibit 9 Product Mix Analysis



Source: Next Street Financial LLC, "Business Model: Product Mix," PowerPoint presentation to Doug Rauch, 2011. Next Street Financial LLC, http://www.nextstreet.com.

Exhibit 10 Whole Foods Market Background

Whole Foods Market's mission was based around three concepts, Whole Foods, Whole People, and Whole Planet. Its website explained its mission statements:

- **Whole Foods** We search for the highest quality, least processed, most flavorful and natural foods possible because we believe that food in its purest state unadulterated by artificial additives, sweeteners, colorings and preservatives is the best tasting and most nutritious food there is.¹⁹
- Whole People Our people are our company. They are passionate about healthy food and a
 healthy planet. They take full advantage of our decentralized, self-directed team culture and
 create a respectful workplace where people are treated fairly and are highly motivated to
 succeed.²⁰
- Whole Planet We are committed to helping take care of the world around us, and our active support of organic farming and sustainable agriculture helps protect our planet. And while we assist our global neighbors through our Whole Planet Foundation's micro-lending operations, we also step out the back door of each of our stores to support food banks, sponsor neighborhood events and donate to local non-profit groups.²¹

Additionally the firm held a core set of values that helped to guide its purpose that read:

- Selling the highest quality natural and organic products available
- Satisfying and delighting our customers
- Supporting team member happiness and excellence
- Creating wealth through profits & growth
- Caring about our communities & our environment
- Creating ongoing win-win partnerships with our suppliers
- Promoting the health of our stakeholders through healthy eating education

Source: Whole Foods Company website, http://www.wholefoodsmarket.com/, accessed September 2011.

Endnotes

- ¹ Boston Public Health Commission Report, "Health Status of Youth: Roxbury," November 7, 2007, http://www.bphc.org/about/Documents/Health%20Status%20of%20Youth%20Roxbury.pdf, accessed September 2011.
- ² Boston Public Health Commission Report, "Health of Boston 2009: Socioeconomic Status," http://www.bphc.org/about/research/hob/Forms%20%20Documents/HOB%20with%20Charts/2.SES_%20te xt%20w%20tables_HOB09_30Apr09.pdf, accessed September 2011.
- ³ "Mayor Menino Celebrates Greenhouse Opening," City of Boston Mayor Press Office press release, March 12, 2011, on City of Boston website, http://www.cityofboston.gov/news/default.aspx?id=5099, accessed September 2011.
- ⁴ Harvard University Advanced Leadership Website, http://www.advancedleadership.harvard.edu/, accessed September 2011.
- ⁵ Unless otherwise noted facts from this section are sourced from: the Food and Agriculture Organization of the United Nations, "Global Food Losses and Food Waste," Study Conducted for International Congress, May 2011, http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf, accessed July 2011.
 - ⁶ Supermarkets and Drugstores, Standard & Poor's NetAdvantage, accessed September 2011.
 - ⁷ Supermarkets and Drugstores, Standard & Poor's NetAdvantage, accessed September 2011.
- ⁸ United States Department of Agriculture website, "Food Security in the United States: Key Statistics and Graphics," http://www.ers.usda.gov/Briefing/FoodSecurity/stats_graphs.htm, accessed September 2011.
- ⁹ United States Department of Agriculture website, "Food Security in the United States: Key Statistics and Graphics," http://www.ers.usda.gov/Briefing/FoodSecurity/stats_graphs.htm, accessed September 2011.
- ¹⁰ Michele Ver Ploeg, "Access to Affordable, Nutritious Food Is Limited in 'Food Deserts,'" USDA Amber Waves Newsletter, March 2010, http://www.ers.usda.gov/amberwaves/march10/features/FoodDeserts.htm, accessed September 2011.
- ¹¹ Jenn Abelson, "Smarter Food," July 25, 2010, http://www.boston.com/bostonglobe/magazine/articles/2010/07/25/smarter_food/, accessed September 2011.
- ¹² Trend Central website, "Wasted, Going 'zero waste' is becoming a priority for grocers," August 15, 2011, http://www.trendcentral.com/life/wasted/, accessed September 2011.
- ¹³ Trend Central website, "Wasted, Going 'zero waste' is becoming a priority for grocers," August 15, 2011, http://www.trendcentral.com/life/wasted/, accessed September 2011.
 - ¹⁴ Next Street Financial website, http://www.nextstreet.com/about_us, accessed September 2011.
 - ¹⁵ Next Street Financial website, http://www.nextstreet.com/about_us, accessed September 2011.
 - ¹⁶ Supermarkets and Drugstores, Standard & Poor's NetAdvantage, accessed September 2011.
- ¹⁷ Maria Halkias, "Container Store, Whole Foods aim for conscious capitalism," *Dallas News*, August 8, 2010, http://www.dallasnews.com/business/headlines/20100808-Container-Store-Whole-Foods-aim-540.ece, accessed September 2011.
 - ¹⁸ Conscious Capitalism website, http://consciouscapitalism.org/, accessed September 2011.
 - ¹⁹ Whole Foods Company website, http://www.wholefoodsmarket.com/, accessed September 2011.
 - ²⁰ Whole Foods Company website, http://www.wholefoodsmarket.com/, accessed September 2011.
 - ²¹ Whole Foods Company website, http://www.wholefoodsmarket.com/, accessed September 2011.