ONE Framework

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A Hare, a Tortoise, and the Business of Buying Groceries Online

nspiration came to Louis H. Borders back in 1997. The cofounder of the Borders bookstore chain was reportedly opening a package of Japanese spices and specialty foods that he had ordered from a catalog when he realized that Internet-based commerce would never take off until someone figured out a way to deliver products to people's homes simply and inexpensively.³ Determined to do just that, Borders came up with the concept for Webvan, an Internet venture whose ambitious goal was to revolutionize the low-margin, intensely competitive grocery business.

Armed with more than \$122 million in initial funding from blue-chip companies such as CBS and Knight-Ridder and backing from top-notch Silicon Valley venture capital firms such as Benchmark Capital, Sequoia Capital, and Softbank, Borders and his associates declared Webvan open for business in the San Francisco Bay area on June 2, 1999. "Webvan Group today set a new standard for Internet retailing," the company declared in its press release.

Borders, then the CEO—who was later replaced by George Shaheen, the former boss of Andersen Consulting (now Accenture)—enthusiastically said, "Webvan fundamentally transforms and simplifies the way customers shop for their groceries."

As everyone now knows, for all its hubris Webvan turned out to be one of the Internet's most spectacular failures. After burning its way through more than \$1.2 billion in two years after its high-profile launch, the company declared bankruptcy in July 2000. Most of its 2,000 employees were let go with minimal notice. Since then, the company has been liquidating its assets. Borders, through one of his companies, has petitioned the bankruptcy court to let him buy Webvan's software technology platform for \$2.5 million and the assumption of \$500,000 in debt.⁴

Does Webvan's Icarian flameout mean that the shoppers will never buy fruits and vegetables unless they can touch and smell them in a real-world store and that the online grocery business has no future? For part of the answer, look across the Atlantic Ocean to Britain's biggest retailer, Tesco, which traditionally operated a chain of supermarkets but has lately entered nonfood businesses, such as personal finance. The company's online arm, Tesco.com, was on track to garner \$420 million in revenues in 2001, and analysts estimate its profits from the grocery business to be around \$22 million.⁵ Tesco.com is said to have nearly one million registered users, 840,000 orders a year, and is expanding into categories such as baby products and wine. Tesco.com claims that it has become "the largest and most successful Internet-based grocery home shopping service in the world."6

On the surface, Webvan and Tesco had the same goal: both companies wanted to harness the power of the Web to deliver gro-

ceries to shoppers. That, however, is where the similarity ended. Anyone who compares Webvan's approach to the online grocery business with Tesco's will see that each company pursued a strategy that was not just different from the other's but poles apart. For example, while Webvan made huge bets on the Internet's ability to change shoppers' behaviors, Tesco made tiny ones. Webvan wanted to overthrow the grocery industry's infrastructure and replace it with its own, while Tesco used the industry's infrastructure to keep costs low. Webvan spent enormous sums of cash trying to build a brand and a customer base while Tesco used its existing brand and customers to drive its online business. (Of course, it is also true that Tesco began with some crucial advantages vis-à-vis Webvan. Webvan had to build name and scale de novo, while Tesco could leverage both. In addition, Webvan made its investments in the United States, where grocery shopping offers low margins to sellers, while Tesco began in Britain, where margins are significantly higher than they are in the United States.)

Jerry Wind, a Wharton professor of marketing who explores the actions of both companies in a book titled *Convergence Marketing*, notes that Webvan started with the notion that it would have to do everything from scratch and that a new type of firm would be required to do it. "But the company did not take into account the logistics issues that were involved," he says. "As such, Webvan had to create a whole logistics company. In contrast, Tesco followed a simple strategy. From the beginning, it saw Tesco.com as one more channel through which to reach its existing customers as well as some new ones. It tried to provide a multi-channel experience to the customers that it had already attracted." That strategy allowed Tesco.com's online grocery business to thrive.

It might be worthwhile examining the strategies of Webvan and Tesco in greater detail to show how those differences led to different results.

Webvan: Speed Kills

From the beginning, an ambitious winner-take-all attitude marked Webvan's approach to selling groceries online. In the late spring of 1999, just as Webvan was getting ready to launch its Web site, Borders told *The Wall Street Journal* that Webvan planned to sell \$300 million worth of groceries a year from a single warehouse in Oakland, California. "If it thrives, and even if it does not, Mr. Borders plans to open another enormous grocery warehouse in Atlanta a few months later. Down the road are plans for at least 20 more such facilities throughout the United States in practically every city big enough to support a major-league sports team," *The Wall Street Journal* wrote.8

Borders raised an initial \$120 million in venture capital and spent a significant part of it building the state-of-the-art warehouse, "a 330,000-square-foot behemoth adorned with five miles of conveyor belts and \$3 million of electrical wiring," according to *The Wall Street Journal*. Although other online grocers such as Peapod were in trouble, Webvan had high hopes that it would be able to succeed where others had failed because it had invested heavily in high-tech infrastructure. Webvan executives believed that this investment would translate into much higher productivity and that this strategy would enable the company not only to beat out other online grocers but also traditional brick-and-mortar supermarkets.

Unlike shoppers in traditional grocery stores who moved around aisles with carts, Webvan workers would stand at automated carousels equipped with nearly 9,000 products. Thanks to its

unique technology, Webvan executives predicted, its workers would be 10 times as productive as traditional shoppers—and this scenario would translate into faster profitability. Borders claimed that the Oakland warehouse would be profitable in six to 12 months while other warehouses might break even in as little as 60 days. "I do not see any reason why an Internet company should take five to 10 years to be profitable," Borders argued.9

If higher worker productivity was one key element of Webvan's strategy, another was its assumption that time-starved shoppers would respond overwhelmingly to the convenience of being able to order products on Webvan's Web site 24 hours a day and have them home-delivered within a 30-minute window of their choosing. This goal, the company said, would be accomplished by having a fleet of customized delivery vans to handle distribution. So efficient would this process be, Webvan believed, that customers would be able to shop at Webvan at the same or lower prices as they did at traditional grocery stores. "Prices are up to 5 percent less on average than typical supermarkets, and delivery is free for orders of \$50 or more," the company said. 10

Based on these twin assumptions of super-efficient worker productivity and customer-friendly delivery, Webvan embarked upon aggressive growth after its Web site was launched. By July 1999, the company announced that it had hired the Bechtel Group, an engineering firm in San Francisco, to build 26 highly automated warehouses for \$1 billion. Each warehouse was to be modeled on the facility in Oakland. Webvan clearly wanted to grow—and fast. (A note of caution is in order: The desire for massive investments in scale per se is not necessarily a recipe for failure. In fact, in the drug wholesaling business, companies made massive investments to support efficient warehousing operations and customer-friendly distribution, and the only survivors in that industry are companies that

ramped up their scale rapidly. Webvan, however, chose this approach in the grocery business, where profit margins are minuscule, and the willingness of customers to adopt online grocery shopping in large enough volumes to support the investments in scale was uncertain.)

Two factors contributed to Webvan's aggressive drive for growth. The first was the threat of emerging competition. Peapod, with sales of some \$40 million, had a head start over Webvan in the online grocery market, but it was bleeding cash. A greater challenge seemed to stem from HomeGrocer, a Seattle-based online grocery firm. At around the same time that Webvan launched its operations, Amazon.com announced that it had bought a stake in HomeGrocer. The Amazon-HomeGrocer combination could have affected Webvan's prospects significantly. For Webvan, the way to head off that threat seemed to lie in making a run for dominance.

Webvan executives believed that the threat of competition made the company's drive for market dominance necessary. The second factor—easy availability of capital—made that drive possible.

In 1999, capital was flowing in tidal waves towards technology and Internet companies, especially those backed by leading Silicon Valley venture capitalists such as Benchmark Capital and Sequoia Capital—both of which were solidly in Webvan's corner. That year, venture-capital investments reached an all-time high of \$48.3 billion, an increase of more than 150 percent over 1998's total, according to the NVCA and Venture Economics. More than 90 percent of that capital went to high-tech and Web-based companies. Before a company could qualify to grab a piece of that action, however, it had to convince potential investors that it was willing to live by the Internet economy's unwritten rule of growing at breakneck speed.

Even if someone at Webvan had wanted to first try out its online grocery model in one city, improve upon it, and then expand to other cities, the financial climate of those times would have had little patience with that approach. Many people involved with Internet startups believed that they had a narrow window of opportunity and that they had to act fast before it slammed shut. In an interview with The New York Times, David Beirne, a venture capitalist with Benchmark Partners and an early backer of Webvan, described the situation as a catch-22. "We had a unique opportunity to raise a lot of capital and build a business faster than Sam Walton rolled out Wal-Mart," he said. "But in order to raise the money, we had to promise investors rapid growth."12

If rapid growth was what Webvan's investors wanted, that is what they got. The company began rolling out massive warehouses at a cost of more than \$30 million per warehouse in areas such as Suwanee, Georgia (serving the Atlanta market) and Carol Stream, Illinois (serving the Chicago area). Smaller distribution centers were set up in areas such as Los Angeles and San Diego, among others. On November 5, 1999, with hardly a few months of online product sales under its belt, Webvan went public in a stock offering co-underwritten by some of Wall Street's most blue-blooded investment banks: Goldman Sachs, Merrill Lynch, BancBoston Robertson Stephens, Bear Stearns & Co., and Salomon Smith Barney. Webvan sold 25 million shares priced at \$15 each, but so heady was the buzz surrounding its IPO that the stock soared to a short-lived high of \$34 on its first day of trading, giving Webvan a market capitalization of \$7.6 billion.

Over the next year and a half, Borders and other Webvan executives strove mightily to remain true to their vision for the company. Among its most ambitious moves was to recruit George Shaheen, the CEO of Andersen Consulting, as Webvan's CEO, with Borders taking the chairman's post. As the months passed, however, it became clear that Webvan was unable to get away from one simple

fact: Webvan was spending more money on acquiring customers and products and that it could make by selling them. Some analysts estimate that Webvan lost more than \$130 per order, including depreciation, marketing, and other overhead.¹³

In an attempt to gain economies of scale, which might have led to profitability, Webvan in September 2000 merged with its erst-while rival HomeGrocer, but that, too, could not postpone the decline. In documents filed with the *Securities and Exchange Commission* (SEC), Webvan reported that in the fiscal year ending December 31, 2000, the company had lost \$453 million on sales of \$178 million. By April 2001, Shaheen had left Webvan, and the company was scaling back dramatically. This change included dropping plans for the construction of new warehouses as well as slashing marketing expenses. Lowering marketing costs immediately hurt sales. Even more significantly, though, these actions added to the perception that Webvan was in trouble and that it was unable to stanch its financial hemorrhage.

Goldman Sachs, meanwhile, was making intense efforts to find a buyer or new investors for Webvan. When these efforts failed, Webvan had little choice but to announce on July 9, 2001 that it was closing its operations and would declare bankruptcy.

How Flawed Assumptions Misled Webvan

In retrospect, what did Webvan do wrong? The company's assumptions led directly to its blunders. To recount, Webvan assumed the following:

1. That a very large number of people would prefer to buy groceries online and have them delivered at home, rather than buying them at a physical supermarket. This belief led them to reckon that Webvan's sales would explode and that people would place a high value on not having to go to a physical supermarket.

- 2. That so much inefficiency existed in the grocery industry's infrastructure that Webvan would garner a bigger margin if it rebuilt the whole infrastructure by doing all its own warehousing and logistics and moving further up the value chain by cutting out the wholesalers
- **3.** That if a Web site gave shoppers more choice and a wider selection of products, that people would be willing to pay at least the same price (if not a premium) for the privilege of shopping online as they did in a physical store

As time was to show, each of these assumptions was wrong. Webvan's biggest mistake was assuming that people did not want to shop in a supermarket. Large numbers of shoppers have not made their purchase decisions before going to the store. This situation is where Webvan ignored the basic laws of economics: The company could not get people to buy something they did not need. When it comes to groceries, a supermarket cannot get shoppers to buy a delivery service that is convenient for them if they have not decided what to order.

Had Webvan made its groceries dramatically cheaper—selling them, say, at half price—then conceivably some people would have thought more about their needs and organized their shopping behavior to make the process work. But if the groceries are the same price online as they are in the stores, it does not have the same incentive except for a very small percentage of the population that finds buying online more convenient.

Webvan's second mistake was to try to reinvent the entire infrastructure that the grocery industry has evolved over the past 100

years. It turns out that the infrastructure might be more efficient than people realize. Webvan spent huge amounts trying to integrate this infrastructure, and it also did not do it as efficiently as it thought it would. It would have taken years for Webvan to learn how to integrate its infrastructure, and it ran out of capital long before that.

Webvan's third mistake was to choose San Francisco as its starting point. The company assumed that this market had people with high incomes and a higher interest in the quality of food, and its executives thought that this place would be good to start, but that market is very difficult from a traffic standpoint. San Francisco has hills and houses that are hard to reach, and these factors make it a nightmarish location for companies that have to deliver things. That added to Webvan's implementation problems.

If all these errors are added together, the result is that Webvan invested \$1 billion based on very shaky assumptions that do not hold up under economic scrutiny. An electric company that wanted to invest \$1 billion in building a new power station would have to look long and hard at the demand for electricity before making a decision. A chemical company would have to look thoroughly at the demand for plastics before deciding to build a billion-dollar plastics plant.

Webvan, however, did not go through that exercise. So rosy was the view inside the dot-com bubble that it did not need to—and the company and its investors eventually paid the price for that mindset.

Tesco: Slow and Steady

With \$32 billion in annual sales, Tesco bills itself as the "number one food retailer in the U.K. and the largest e-grocer in the world."¹⁴ When it wanted to enter the world of e-business, how-

ever, its approach was dramatically different than Webvan's. Tesco executives recently told *Business Week* that back in 1996, the company tested whether shoppers were willing to buy groceries online by introducing a single Web site at one store in Osterley, England. In fact, as *Business Week* notes, "Tesco's big bet was to bet small." ¹⁴

Early in its e-business experiment, Tesco realized that it would have to address one key issue: should it supply shoppers with groceries taken off the shelves of its existing stores, or would demand be so high as to require the construction of dedicated warehouses? Tesco decided not to invest in the construction of special warehouses until it had a better sense of online consumer demand. The company kept testing and readjusting its online sales process, letting customers order groceries on the Internet and supplying them from its existing stores, for nearly two years—which was not only an extremely long period in "Internet time" but also coincided with the height of the dot-com boom.

At the time, Tesco was often criticized as a company that did not "get it" and that stood timidly by letting other, so-called "purer" Web-based retailers forge ahead. By plodding along at its tortoise-like pace, however, Tesco learned a lesson that its hare-like rivals did not—that for the time being, online grocery shopping represented a niche trend rather than a full-blown mass market. By 2000, for example, although Tesco.com's annualized online sales were running at a rate of \$420 million a year, this figure was less than 2 percent of the company's total revenues of \$32 billion.

Taking the gradual approach helped Tesco.com learn at least two significant lessons. First, rather than promising ambitious home deliveries, the company experimented with having customers order their groceries online but pick them up at a store near their home. Customers saved on the time and effort that it took to pick products

off the shelf, and they found that they had a bag of groceries waiting for them when they arrived at the store. At the same time, however, if they wanted to add one or two items to their order, they had the option to do so.

In addition to prepackaging orders for shoppers, Tesco.com also began to deliver groceries to customers' homes near each store. In an important departure from Webvan's strategy, however, the company imposed a delivery charge right from the beginning. Not only did this approach help Tesco.com recover part of its delivery costs, but it also had another positive result: the company saw the shoppers' order sizes increase as households endeavored to get maximum mileage for the delivery charge.

This approach has kept Tesco.com growing. On September 18, 2001, Terry Leahy, chief executive of Tesco, PLC, announced that in 2001 Tesco.com's sales were "up 77 percent on last year, a period when we were still rolling out the service. Grocery home shopping made good profits, however overall Tesco.com made a small loss of £3 million (in the first half, reflecting the launch cost of new sites such as our wine warehouse." He added that Tesco.com "made excellent progress and we now reach 94 percent of the U.K. population. In the first half our grocery home shopping operation achieved like for like sales of nearly 40 percent and created 600 new jobs."

In an effort to extend its model to the United States, in June 2000 Tesco.com announced a partnership with Safeway, one of the largest food and drug retailers in the United States. The company, which is slightly bigger than Tesco—its annual revenues are \$32 billion—operates more than 1,700 supermarkets in the United States and Canada. Since January 2000, Safeway had been providing online grocery shopping through a Texas-based unit called GroceryWorks. As part of the deal, Tesco.com bought a 35 percent

stake in GroceryWorks for an investment of \$22 million in cash as well as intellectual property and technical resources, while Safeway held 50 percent of GroceryWorks. According to Leahy, the objective was to introduce the Tesco.com model to American grocery shoppers in collaboration with Safeway. "With Tesco's know how and the Safeway brand, we have the perfect combination to bring grocery home shopping to the world's largest market," Leahy said.¹⁵

Will Tesco.com's approach work in a market where Webvan failed? It well could. The reason is because Tesco used technology to make the existing shopping process—that people were used to—more efficient rather than trying to totally reinvent a process with which people were not familiar.

Tesco is hardly the only British retailer trying out this approach. Another leading supermarket chain, Waitrose, which operates 135 stores around Britain, has introduced a system called Waitrose@Work in which the company delivers groceries to offices. To sign up its workers for the program, companies must have at least 500 employees and register with the supermarket company. Waitrose also provides home deliveries of groceries in selected markets in Britain.

Neither Tesco nor Waitrose tried to reinvent the whole infrastructure of the grocery industry. They did not incur a large capital cost. They just used the Internet to increase the efficiency of a piece of their business.

Wind sees considerable potential in Tesco's approach. He says that Tesco "basically has to worry just about distribution from the store to the home. This is a far more economical model—and it offers the opportunity for considerable cross-selling. Tesco has found out that by adopting this model, its online customers have increased their purchases from the stores, and people who used to

Table 1.1 Two Approaches to Selling Groceries Online

	Webvan	Tesco
Timing	Rapid rollout	Gradual rollout
Scale	Large	Incremental
Key value drivers	Reinvent infrastructure	Modify infrastructure
	Create new brand	Leverage existing brand
	identity	identity
Outcome	Bankruptcy	Profitability

shop in the stores have increased their shopping on the Web. So there is a crossover effect between the two channels."

This model is also starting to catch on in other parts of the world. Caprabo, a European supermarket chain that is "replicating the Tesco model in Spain, has announced that it expects to break even this year—in less than a year," Wind says. "The reason is simple: The entire cost of launching Caprabo.com was as much as opening a 20,000-square-foot store. And the volume of sales has been amazing. Within the first three months, even though it was just one store out of a network of 52 stores that introduced online sales, that one store already accounts for 6 percent of Caprabo's total sales volume." ¹¹⁶

With 20-20 hindsight, some critics have blamed Webvan's failure on the arrogance of its executives. This view, however, is oversimplified. When an organization gets as seriously lost as Webvan did, it is not enough to do soul searching about the errors of its leaders. It is time to start thinking seriously about strategy.