

# KNOWLEDGE@WHARTON

## On Building Corporate Value

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**MUKUL PANDYA, HARBIR SINGH,  
ROBERT E. MITTELSTAEDT, JR.,  
AND ERIC CLEMONS**

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John Wiley & Sons, Inc.



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## INTRODUCTION

### You Cannot Violate the Laws of Economics

**A**lmost everyone knows the parable of the talents. The story describes a rich man who goes out of town after giving his servants five talent coins, two coins, and one coin each. When the master returns, he learns that while the servants who had five and two talents have doubled their money through business, the one with the single talent has simply buried it in the ground and done nothing. The furious master berates the servant, takes away the coin, and gives it to the one who has 10.

This deceptively simple story, which has been taught to children around the world for centuries, undoubtedly has deep philosophical connotations. But at its core also is a timeless message about value. The purpose of economic activity, the story implies, is to build value—and those who recognize that reality and act upon it are rewarded, while those who fail to do so are punished.

In 2002, as the aftershocks of the Enron debacle ripple through a weak economy, that message about building—and destroying—value

seems particularly appropriate. In its heyday, Enron—the Houston-based energy giant—appeared to be a colossus that had revolutionized the way markets traded (and even thought about) energy and deserved its vaunted position in the top 10 of the *Fortune* 500 list. As has increasingly become clear, that appearance was a sham, and thousands of Enron investors, employees, and others will have to pay the price for one of the biggest corporate bankruptcies in U.S. history. It is hard to imagine another case where more shareholder value was demolished—and so fast. (In hindsight, the Enron logo seems ominously apt. Someone should have asked earlier why it stood precariously on its edge, poised to topple over.) The consequences do not end with Enron. Arthur Andersen, Worldcom, Tyco International, Qwest Communications . . . the list goes on and on.

Even before these financial shenanigans hit the media spotlight, the effects of the Internet boom and bust were being felt across the United States—and to a more limited extent, the global—economy. For most of the late 1990s, the Internet was hailed as a revolutionary force that would transform everything. It was the age of the New Economy, when Old Economy rules and economics ceased to matter. Venture capital poured into Internet start-ups, investment bankers on Wall Street vied to take dot-com upstarts public, CEOs with strange names and ponytails pontificated from TV screens, and the NASDAQ stock index seemed to be heading for the stratosphere.

After Spring 2000, when it became clear that the hysteria could no longer be sustained and that the speculative bubble surrounding the Internet was about to burst, the pendulum began to swing in the other direction. The same companies that once set up separate dot-com units within their enterprises and bragged about how they “got” the working of the New Economy, now began to describe the Internet phenomenon as a mere speculative bubble. Now that it had burst, they argued, it was time to get back to business as usual.

Their refrain changed from "everything is different" to "nothing is different."

*Knowledge@Wharton*, the online research and business analysis journal of the Wharton School of the University of Pennsylvania, was launched in May 1999 when dot-com mania was going strong. During the past three years and more, the publication has witnessed—and covered—Internet entrepreneurs who claimed to be taking over the world as well as the collapse of their dot-com visions (accompanied, in some cases, by massive financial losses and in others by the acquisition of large personal fortunes). At the same time, *Knowledge@Wharton* profiled how the Internet was transforming the way established companies were doing business as they integrated the web into their operations. It often appeared that the main beneficiaries of the Internet's phenomenal growth were not the dot-coms, but large, established companies that were using the web to do things they could not do before.

From that vantage point, it became clear that both the extreme positions regarding the Internet—that it is a revolutionary force that will change the world immediately and that the dot-com phenomenon was just a speculative mania intended to con the gullible—were wrong. The truth lies in the middle: The Internet can be a powerful tool if companies and consumers learn how to use it creatively and imaginatively. When it is used right, the web enables companies to extend the impact of their own operations in dramatic ways. It opens up opportunities and possibilities that would either not have existed—or existed in a very limited way—before the Internet became a popular technology. Most importantly, the Internet makes it possible for companies to formulate information-based strategies that are rooted in economic sense and that can help them, in some instances, gain an edge over rivals. And when a company's strategy gives it a sustainable competitive advantage, that is when it is best positioned to build corporate value.

Exploring how companies can do just that—formulate information-based strategies that yield a sustainable competitive advantage—forms the theme of this book. Before doing that, however, it might be helpful to ask a question that is so basic that it is often forgotten and it has to be learned over and over again. The question is, “What is value?”

Economists have long distinguished between two notions of value for commodities: use value (or utility) and exchange value, or the rate at which commodities can be exchanged for one another (or for money). The focus of this book, however, is not the value of commodities but rather corporate value—which is measured by yardsticks such as profits and share prices. The purpose of corporate strategy is to enhance corporate value and shareholder wealth. In his book *Contemporary Strategy Analysis*, Robert M. Grant points out that strategy is a quest for profit. “Business is about creating value,” he writes. “Value can be created in two ways: By production and by commerce.” He explains that while production creates value by transforming objects (turning clay into pottery), commerce creates value not by transforming objects but by repositioning them in space and time, such as moving them from places where they are valued less to those where they are valued more.<sup>1</sup>

The Internet—and the information revolution that it has unleashed—does not change these rules of value any more than the invention of the steam engine or electricity did. It does, however, create new opportunities for value generation that did not exist before. For example, before the Internet became a popular force, the only “commerce” possible with used household objects might have been to sell them at a yard sale. The arrival of eBay—the online auction firm—has not only exponentially increased the size of that market to millions of potential buyers, but it also has enhanced opportunities for enhancing value. When hundreds of buyers bid against one another to buy an item on eBay, it adds more

value to those objects than if their only outlet were a yard sale. Similarly, the existence of hundreds of sellers ensures that buyers, at least in most cases, do not get gouged. Little wonder that eBay's user base has grown to more than 42 million. The eBay model works because it helps buyers and sellers find one another in ways that would have been impossible before the Internet came along.<sup>2</sup>

This book, in many ways, explores how companies can build value through the Internet—and information-based strategies—just as countless individuals do every day through their transactions on eBay. It performs this task at two levels.

The first part of the book—the framework—offers theoretical tools and concepts that executives can use to examine how the Internet and the information revolution have transformed the global business scene. The initial chapters explore the key sources of competitive advantage and how success depends upon the ways in which companies position themselves in their industry, how they leverage their own capabilities and those of their alliance partners, and how effectively they neutralize their competition through their understanding of the competitive dynamic of their markets. The framework section also explains three important consequences of the Internet: the information effect, the brokerage effect, and the integration effect, and what these mean for companies. Furthermore, the book examines how the Internet affects customer behavior and the implications for companies. The Internet and the information revolution, in addition to creating new opportunities, also has created new risks. The final chapter in the framework section examines these risks and how companies can manage them.

Part Two of the book goes beyond the theoretical tools to the experiences of companies that have succeeded—and failed—in their experiments with the Internet and information-based strategies. The book looks at efforts in industries such as financial services and the media as well as the postage business. The final

chapter in this section looks at what is living and what is dead in the world of *business-to-business* (B2B) e-commerce and online exchanges.

If one overarching lesson emerges from the pages that follow, it is that you cannot violate the laws of economics. The difference between the successes and the failures is that economic sense ultimately prevails, no matter what happens in the short run. Especially when we consider the use of technology to enable business, economics goes beyond dollars and is defined broadly to mean all the things that individuals (and businesses acting through individuals) trade off when making decisions. Money, time, convenience, service, reputation, and quality are all variables that enter the equation.

But we have said enough. It is time to begin this exploration. Because food and drink are primary to survival, that is where our journey begins: We look at lessons that two companies, Webvan and Tesco, learned (or failed to learn) as they tried to apply the Internet to the grocery business. Bon voyage.

# ONE

## Framework





# 1

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

Inspiration 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.<sup>3</sup> 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.<sup>4</sup>

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 non-food 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.<sup>5</sup> 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.”<sup>6</sup>

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."<sup>7</sup> 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.<sup>8</sup>

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.<sup>9</sup>

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.<sup>10</sup>

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.<sup>11</sup> 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."<sup>12</sup>

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.<sup>13</sup>

In an attempt to gain economies of scale, which might have led to profitability, Webvan in September 2000 merged with its erstwhile 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.<sup>12</sup> 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 Mised 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