CHAPTER 1

The Great Divide Between Customers and Retailers

Many people view the 1950s quite nostalgically as a time of happy families, increasing prosperity, and predictable world affairs. Much has changed since then. Back then, many people routinely got goods and services delivered to their homes. The milkman would drop off milk and other dairy products either once or twice per week. The dry cleaner often picked up dirty laundry, and returned the cleaned items. The Fuller Brush man sold a wide variety of brushes door-to-door. Diaper services that delivered freshly laundered cloth diapers and took away junior's odiferous old ones were plentiful. Some doctors even made house calls! As millions of people have noted, progress is not always forward.

Fast-forward more than fifty years, and much has changed. In general, most countries with developed economies have a substantially higher standard of living, and their citizens also are much busier in both their work and personal lives. Thus, in general, we have more money and less time, and yet home delivery of products virtually disappeared between 1950 and 1995. Shouldn't we have more ability to order products for home delivery, not less?

Given increased incomes, improved technology, and better management techniques, this book examines the resurgence of home delivery as a way to address the time pressures that weigh on the majority of consumers today. We argue that the combination of automated ordering systems (telephone, fax, and, most important, the Internet) and new supply chain management techniques allows companies to serve customers in new ways that add convenience, qual-

ity, customization, and enjoyable experiences to a business world that has increasingly been dominated by an emphasis on low price at the expense of service and any meaningful connection with customers.

New Strategies for New Times

The strategy that many companies are using to attack industry leaders in new ways involves extending the supply chain. Whereas Ford, McDonald's, and Wal-Mart all were (or are) masters at managing supply chains designed to minimize costs rather than create meaningful customer experiences, companies such as Dell, Amazon, and Office Depot are using the Internet not only to efficiently link with customers, but also to extend the supply chain the critical ''last mile'' into consumers' homes. The Dell model is widely known and examined for manufacturing firms, yet there have been few companies that have managed to successfully copy the entire system and apply it to nonmanufacturing environments. However, there is currently a wave of retailers that are refining this basic model and using it to extend the supply chain for a wide variety of products, including electronics, office supplies, and groceries.[1]

Fundamentally, there are two ways to compete in business: Offer low prices or differentiate your product or service in some manner such as improved quality, better service, more choices, etc. Offering low prices has a simple appeal to customers—we all would like to pay less. However, running a business to provide low costs that actually allow a profit is a bit more challenging. The elephant in any discussion of retailing in North America these days is Wal-Mart. While there are scores of factors underlying its success, the most fundamental one is that it has consistently worked to improve its supply chain with a relentless focus on squeezing out costs. Some of the supply chain techniques Wal-Mart has used to cut costs include vendor-managed inventory, real-time tracking of inventory and sales in individual stores, and cross-docking of fast-moving items in distribution centers. To compete with this, many companies are implementing everyday low prices; however, it is more of a challenge to back up this pricing with costs that allow organizations to remain profitable. Wal-Mart is very visible, hard to avoid, and must be watched carefully. Many retailers seem to be batting at this elephant with a flyswatter—inefficient supply chains that have substantially higher costs. This strategy is *not* going to remove the elephant.

Just ask any executive from Kmart, or the entire grocery industry. Consider

a regional grocer such as Farmer Jack, which announced on June 12, 2003, that it was radically changing its pricing strategy to go to constant low prices, forsaking weekly specials. Yet they did not provide any operational details underlying this strategy, saying instead, ''We have some great plans in the works.''[2] The big grocers aren't much different. The stock values of America's top three grocery chains (Kroger, Albertson's, and Safeway) were, on average, 51 percent off their 2002 high of May 5, 2003.[3] Could this have anything to do with the fact that they are not actually lowering prices? A study by A.G. Edwards in a price survey of 215 items in January 2002 in the Dallas market found that prices at Kroger were on average 35.1 percent higher than competitors in the same region.[4] As the saying goes, you do the math.

Let's return to the alternative, the other fundamental business strategy: Differentiate your product. While we all want low prices, we are also generally willing to pay more for better quality, better service, more convenience, or a more customized product. Everyone has a pretty good idea of the things that differentiate a Rolex from a Swatch watch, a BMW from a Hyundai car, or even a room at an InterContinental Hotel from a room at a Holiday Inn. People tend to recognize a product or service that offers more: higher quality, more choice/customization, or faster service. The challenge is determining how much customers are willing to pay. Is a Rolex worth 50 percent more than a Swatch? One hundred percent more? Three times as much? Quantifying the monetary value of some differentiating feature of a product or a service is a fuzzy exercise. This can be either a benefit or a drawback: Companies that convince customers that their product is worth substantially more than a less differentiated product often earn much higher premiums. However, companies that are not as successful in convincing potential customers to pay a premium generally do poorly.

This problem is compounded in a retail environment, where selling commodity products does not offer much room for differentiation. The Crest toothpaste or Coca-Cola from Wal-Mart, Rite-Aid, or Kroger is exactly the same. This is why the majority of retailers pursue some type of low-price marketing strategy. In order to successfully differentiate themselves, retailers must offer services (not products) that appeal to consumers. In other words, they must have friendlier, faster, more convenient service, or have more selection. The challenge is getting customers to value this—and to pay for it. Let's try a mental comparison. If money were no object, where would you shop for clothes? Brooks Brothers? Neiman Marcus? Bergdorf Goodman? What differ-

entiates these retailers from Wal-Mart, Target, and Sears? Are their clothes better? Probably, but probably not three, four, or five times better. So what does a ''high-end'' retailer do differently? They make the process of buying something more pleasant, less time-consuming (or, if you enjoy shopping, longer). They have less busy, nicer surroundings. In short, they make shopping a pleasant experience, rather than a trial to be endured. You can easily catalog your own experiences and, using this strict set, classify every shopping experience you've had recently as either price-oriented or experience-oriented.

In some ways, retailers that are either clearly price-oriented or experience-oriented have it easy—at least in the sense that they have a clear goal. It is when retailers are in between these extremes that defining their appeal to customers is difficult. Companies that lack the type of dominating, engineered for low-cost supply chain exemplified by Wal-Mart or the high-end, experience-oriented selling exemplified by Bergdorf Goodman must communicate to customers exactly where they stand, and how they are different. The past few decades have seen a huge increase in price-oriented retailers. According to a recent National Retail Federation study, 8 percent of retail sales were based on discount pricing in 1971 versus 78 percent in 2002. Yet, the pendulum is beginning to swing back toward service. According to consumer psychologist Lilliam Maresch, founder of Generation Insight (a market research firm), ''People are yearning for that high touch after so many years of high tech. When you get consumers talking about service, they are very vocal and articulate.''[5]

The quote above mentions high tech and high touch, which are the key elements of a fundamentally new way to bridge the two extremes of low cost versus high service. The last-mile supply chain delivers a product from the retailer (either from a manufacturing facility, a distribution center, or a store) directly to a customer. The delivery of a product serves to differentiate the experience, without causing the price to increase proportionately. In short, the last-mile supply chain offers a new approach to business that offers customers greater convenience at a price—a service that is appealing in an increasingly cash-rich, time-starved society.

The Dawning of Extended Supply Chains

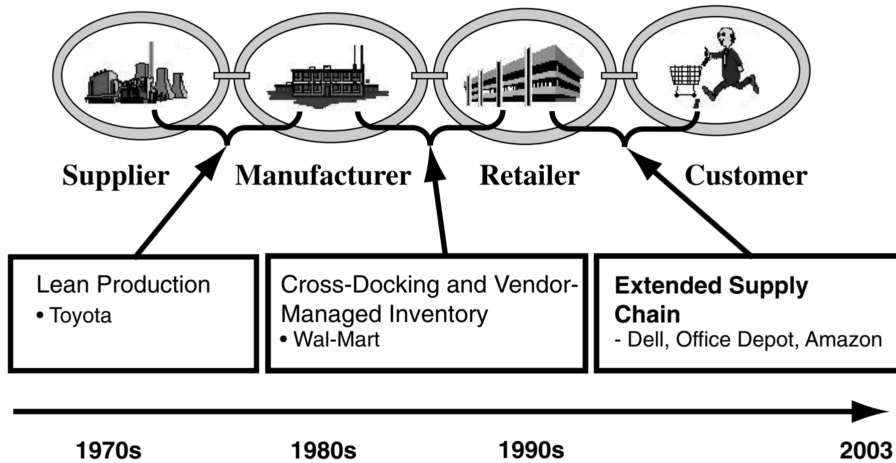
Numerous authors have argued in the past five years that the era of mass production is giving way to an era where services and products are designed to

create an experience that resonates with customers. Various terms have been introduced, such as mass customization, the experience economy, the support economy, or the loyalty effect.[6,7,8,9] Retailers and manufacturers such as Dell, Amazon, and Office Depot are effectively extending the supply chain directly to consumers' homes to provide the type of experience for which consumers will pay a premium. The extension of the supply chain allows companies to circumvent the relentless pressure to compete primarily on ever lower costs, as personified by the twentieth century giants Ford, McDonald's, and Wal-Mart. At the dawn of the twenty-first century, the Internet is a tool that allows customers unprecedented access to a vast variety of retailers, while logistics and production techniques have advanced to a point where goods can be delivered directly to customers with an enormous degree of quality, service, and customization.

The evolution of supply chain management essentially started with Ford's highly integrated River Rouge plant in the early twentieth century, in which raw materials would enter one side of the plant, and a finished Model T would exit the other end. Following World War II, Toyota redefined supply chain standards by strengthening its relationships with suppliers. The next evolutionary step was Wal-Mart's development of cross-docking and vendor-managed inventory to improve the supply chain linkages between manufacturers and retailers. Finally, Dell has been the exemplar of a manufacturer linking directly to consumers. Only in the last five years have retailers made substantial inroads, linking more directly with customers by covering the ''last mile'' into their homes. As shown in Figure 1-1, this extended supply chain represents a powerful opportunity to build stronger relationships with customers.

Our examination of the extended supply chain is based on insights from leading twenty-first-century companies and in-depth customer data from an emerging channel—consumer-direct groceries. This book presents a combined examination of the key components of last-mile supply chains, including marketing, supply chain fulfillment and delivery, and IT. The book combines insights and data from the authors' large-scale studies of multiple online grocers, Office Depot, and Federal Express, and from data gleaned from the popular press. The lessons and insights offered in this book apply to a broad range of retailers and manufacturing firms that are seeking to offer new services and differentiate their offerings from the predominant model, which emphasizes low prices. To introduce the power of extended or last-mile supply chains, we

Figure 1-1. The push for extended supply chains.



start off with a brief overview of the current state of the grocery industry, and the impact of extended supply chains.

The Grocery Industry

The grocery industry is an ideal example for examining extended supply chains that is at once universal—we all shop and eat—and also the most challenging supply chain environment. The grocery industry is characterized by hypercompetition with average profit margins of 1–2 percent of sales and highly perishable and fragile products with a low value-to-size ratio. Customers have widely varying tastes, and they tend to fixate on prices. For all these reasons, extending the supply chain for groceries (so that consumers have an experience that is more service-oriented) provides a unique opportunity for companies to differentiate themselves. For example, customers can place orders online from the comfort of their homes, and have their orders filled and delivered to their doorstep. There are substantial costs involved in extending the supply chain into consumer homes, which does not seem to fit with an extremely price-sensitive industry. And yet, it is precisely by turning this reasoning on its head that there is a quiet insurrection occurring. Extending the supply chain for groceries works, despite its challenges. It provides a means of enhancing the customer's experiences and breaking away from the crushing ''price, price,

price'' strategy exploited by leading retailers, such as Wal-Mart. It creates the type of customer experience that leads to greatly increased customer loyalty. The idea is to reforge links with customers that have been severed by decades of price promotions that have eroded customer loyalty to specific brands and to individual stores. If extending the supply chain can be used to create a loyalty effect in the ultrachallenging world of retail grocers, there are important lessons for a broader range of retailers and manufacturers.

As leading Internet retailers such as Amazon and Dell have shown, there is a market for products ordered online and delivered to customer homes. Yet, delivering products directly to customers is a challenging task—particularly with groceries. Perhaps the leading example of an Internet failure in this industry sector is Webvan, which burned through $700 million of investor capital in a little over a year in a highly visible effort to deliver groceries to customers' homes at prices competitive with traditional grocers. We argue that the spectacular failure of Webvan in 2001, and its contemporaries such as HomeGrocer and Streamline, was due primarily to two factors: (1) poor alignment between marketing and supply chain management, and (2) poor management of the supply chain. Fundamentally, Webvan was a symbol of putting the cart before the horse—the Internet can be an effective tool, but the real advantage is in extending the supply chain directly to consumers. The conventional wisdom has been that this last link will never be perfected, and over the period between 2002 and the end of 2003, several companies started or expanded their efforts to deliver groceries directly to customers. Just because earlier efforts weren't successful doesn't mean the war is over. In fact, major grocers including Albertson's, Tesco, Safeway, and Sainsbury's, and start-up companies such as Ocado and FreshDirect have seen sales of home-delivered groceries increase at rates above 50 percent per year over the last couple of years.

Book Layout

The extended supply chain creates opportunities to establish bonds with consumers where they live, but the opportunity comes with some unique challenges. The cost of delivering many small shipments to individual consumers (rather than large consolidated shipments to neighborhood stores) is substantially higher. Yet, companies such as Amazon, Lands' End, Office Depot, Grainger, etc. have already vaulted this barrier. We will devote the remainder of this chapter to two important topics. First, we profile the benefits of ex-

tended or last-mile supply chains for customers. Second, we introduce a framework of four strategies for extending supply chains into customer homes or places of business. This framework will be used as our central foundation to compare and contrast various retailers and manufacturers throughout the book. It also examines the grocery industry in particular to illustrate the framework. As is said about New York City, ''If you can make it here, you can make it anywhere.'' The same saying can be applied to groceries—if supermarkets can use extended supply chains to break from the vicious cycle of lower and lower prices, then retailers and manufacturers in many other industries can too. The rest of the book is then laid out in two major sections:

- *Part 2, Strategies*. Chapters Two through Five examine each of the specific strategies introduced later in this chapter in more detail. In each of these chapters, case studies of grocery firms and other retailer/manufacturers are used to illustrate how these companies are bridging the last mile. Each of these chapters also examines the key advantages and challenges associated with that particular extended supply chain strategy.
- *Part 3, Transforming the Supply Chain*. Chapter Six starts this section off with an examination of how to mesh marketing and operational goals—something that all last-mile retailers realize is crucial, but few accomplish flawlessly. Chapters Seven through Nine then look separately at how marketing, supply chain design, and IT are being applied to change relationships with end customers.

Extended Supply Chains Attract Customers

We conclude this chapter with a brief discussion of the key advantages of extended supply chains from a customer's perspective that will drive sales. While there are many challenges in bridging the last mile, it is these rewards that will unite companies and customers across the chasm between price-focused and service-focused retailing. We also introduce four strategies that retailers and manufacturers can utilize to extend their supply chains.

Convenience

Clearly, consumer-direct ordering (either over the Internet or by phone) is largely focused on customer convenience. People enjoy being able to order

anytime and anywhere. While developed nations generally have scores of retail outlets within easy reach of most potential customers, shoppers get a certain enjoyment out of surfing the Web and placing orders for delivery. What businesses need to be careful about is how this transaction is conducted, how it is marketed to potential customers, and how it is executed.

Consider Amazon, which is widely regarded as one of the leaders of e-commerce. Is it more convenient to order a book online? Most people would answer yes without giving the question much thought. But the answer is really that *it depends*. On what? If I want something to read now or later today, then ordering from Amazon is less convenient since I can't get the book right away. In a few major cities, Barnes & Noble's online service, bn.com, will deliver that day. However, if I want a specific or obscure book title, going to the store is a wasted trip if it is not stocked by that store. Take for example a book that received an excellent review, but that is fairly low selling (say something like *The Natural History of the Oak Tree: An Intricate Visual Exploration of the Oak and Its Environment,* by Richard Lewington and David Streeter, DK Publishing, 1999). This book ranked as the 1,411,285th most popular book on Amazon (and, by the way, got a fantastic customer rating). This book is extremely unlikely to be in stock at almost any bookstore (the largest booksellers such as Barnes & Noble stock "only" 125,000 books in a superstore), thus online ordering offers a very convenient way to obtain it. Like Amazon, all last-mile supply chains must focus on providing increased convenience, but there also must be an understanding of the specific type of convenience (where direct to the consumer is more or less convenient).

Customization

Customization has been exploited by relatively few companies, yet it has the huge potential to offer products and services that consumers value and are willing to pay higher prices for. Dell Computer is the widely examined leader in customization. Starting from Michael Dell's dorm at the University of Texas, Dell has grown into the largest personal computer manufacturer in the world. Since its founding in 1984, the method of receiving orders has evolved from mail to telephone to online. The two fundamental advantages that Dell has exploited: first, cutting out the middleman and going direct to consumers to save costs; but more important, developing a supply chain that allows each consumer to order "her" personalized computer. Customers are allowed to

choose the size of the hard drive, the speed of the processor, the type of input/output device (CD/DVD, zip disk, floppy disk), the type of monitor, and even the color of the computer. In a world where most products are commodities, offering customers *meaningful* customization is a huge advantage.

Why is the word *meaningful* emphasized? Because many companies offer customization that does not really offer great value to the customer, or that is so difficult to order that it loses appeal. Thus, we must contrast between *meaningful* and *minutia* in customization. Consider something like gift wrap or cards: Many retail Web sites offer the ability to have an item wrapped, or to enclose a card. This is customization, but it is mostly a qualifier—customers expect it, and they don't see it as a huge additional value. After all, there is nothing that special about wrapping a package before mailing it. This type of minutia customization is not only of slight value to customers, but it is also likely to confuse or trouble them by forcing them to make extra decisions. In contrast, consider Lands' End Custom: It allows customers to select one of nine colors, three rises, two back-pocket styles, two front-pocket styles, two leg styles, two fits (natural or relaxed) for a total of 432 possibilities *before* we even decide waist, hip, and inseam size, each of which can be selected in increments of a quarter inch. The end result provides well over 25,000 combinations of waist, hip, and inseam, which when multiplied by the 432 possibilities for color, rise, pockets, etc. comes to *over a million end possibilities*. This is *meaningful* customization, since each customer feels that he is getting his own customized pair of pants. Obviously, it would be impossible to stock all these combinations in a store or centralized distribution center. What have the results been for Land's End Custom? In the first year of operation, sales of custom chinos topped the company's initial goal of 10 percent of sales for the category. In addition, the company estimates that 25 percent of the buyers of custom pants and jeans are new to the company.[10]

A recent Harris Interactive poll found that less than half of Americans are content with buying clothing off the rack, and two-thirds have difficulty finding the right garments in the right size off the rack. Twenty percent say that finding clothing that fits is one of their greatest challenges.[11] Apparently, the entire apparel industry could benefit from more customization, yet this potential has been untapped. Take it from us (all three authors of this book are 6-foot, 3-inches, or taller), finding clothes that fit is not easy or convenient. We will see in Chapters Three and Nine how manufacturers can profitably use last-mile

supply chains to offer customization directly to customers and help increase customer loyalty.

Quality

Quality is one of the most misused words in the business lexicon. Everyone wants quality. Everyone promises quality. After all, have you ever met a retailer who says, ''What we sell is junk, but it is really cheap''? The point is that everyone says he has quality, but what is truly important is ''relative quality.'' Most retailers promise quality products, but since they are selling commodity products, there is little incentive to actually improve quality. The Nikon digital camera bought at Best Buy is the same camera that can be bought at almost any other electronics outlet. So what does quality mean to a retailer? Mostly that the camera was not broken or dropped when in shipment or when being placed on the shelf. If there is a problem after purchase, then the retailer simply issues a credit, and returns the item to the manufacturer. Hence, quality here means little more than the product is what the manufacturer provided. It is the quality of service that offers retailers a chance to set themselves apart. Yet the recent trend has been for retailers such as Wal-Mart and Home Depot to greatly decrease the availability of service in favor of reducing prices.

In contrast, extended supply chains offer opportunities to provide service quality that is substantively better than normal supply chains. For the most part, the improved quality is offered by delivering orders directly from a manufacturer or distribution center, rather than from a store. The advantage here is that delivering from the manufacturer or distribution center cuts a link out of the supply chain. Most products sold in stores today are shipped according to the general flow shown in Figure 1-1. Suppliers ship parts and raw materials to a manufacturer that produces or assembles the end product, which is then shipped to a distribution center. The distribution center typically receives shipments from numerous manufacturers, breaks large truckload shipments up into smaller orders, and ships smaller trucks with numerous SKUs to individual stores. For example, Kraft produces Oreo cookies in its plant on the south side of Chicago, and then ships orders by the truckload to distribution centers. So a distribution center for Kroger might get an entire truckload of Oreos once a month. The distribution center stores the Oreos and ships smaller quantities to individual stores in combination with other items. So an individual Kroger store might get a shipment of a single case of Oreos once a week, but this

shipment comes on the same truck with orders for cereal, cheese, disposable diapers, and hundreds of other products. Few customers of grocery stores, drugstores, etc., ever give much thought to how their products get to the store, yet this is precisely where an opportunity for improvement can be found.

By delivering straight to the consumer from the manufacturing facility or distribution center, the supply chain can be substantially shortened. A large part of the success of Dell is attributable to its shortening of the supply chain. By cutting out retailers, Dell has less inventory spread across the supply chain—hence, less potential for obsolete computers. Computers have a relatively short life span (often changing every two to three months in today's accelerated business climate), but this is nothing compared to any company offering perishable products for sale, such as food products. Here, shortening the supply chain can have a substantial impact on product quality/freshness. Consider Omaha Steaks, which has become a $300 million per year business by mailing premium steaks through the mail directly to customers. The increased costs of shipping to individual consumers are more than offset by the decrease in time to get the steak from processing to customers, and the accompanying improvement in product freshness. Online grocers such as FreshDirect (see Chapter Two) and Ocado (see Chapter Five) are capitalizing on this shortened supply chain to offer fresher, higher-quality products.

Experience

In many ways, this is the toughest advantage to capitalize on, but also one of the best opportunities for retailers. Most retailers have moved relentlessly toward the price-oriented, low-customer-contact, big-box experience over the past three decades. At best, the experience of shopping in a superstore is OK, but most of us prefer to get it done as quickly and painlessly as possible. Think of the greeters at many of the big-box retailers (Wal-Mart, Home Depot, Best Buy etc.)—do they do anything useful? Mostly they stand at the front of the store and say hello. So what! Didn't everyone in stores fifty years ago say hello and treat customers like they were valued? Seventy-five or a hundred years ago, your corner baker, grocer, hardware store owner, and druggist probably knew most of his customers by name. No more. Now, aside from the greeters, it is hard to find a human being to help in many of the big-box stores. How many times have you spent five to ten minutes wandering around these stores trying to get someone to answer a question, or to find a particular item? It almost

seems like these retailers think they are doing you a favor by letting you shop in their stores, rather than the other way around.

So how do extended supply chains address the experience problem? They do this in one of two ways: by completely removing human interaction for routine purchases (let's face it, you get little ''human'' interaction when shopping in person at a big-box retailer), or by creating opportunities for *real* interaction. By far, the most common approach is the first—removing human interaction for routine purchases. When buying a commodity product like an airline ticket, a book, or a digital camera, many consumers can quickly find what they want and place an order with no human assistance. In fact, the Web site likely will provide more useful information than a person in a store ever could. For example, Amazon has capitalized on its ability to suggest other books/items that a customer may be interested in, based on previous purchases. In fact, one of the benefits of the low or no-contact experience is that customers can spend as little (or as much) time placing an order as they want. A specific book can be obtained on Amazon by a customer who has purchased previously in well under three minutes by using one-click ordering. On the other hand, many of Amazon's customers often spend an hour or more browsing through customer recommendations. Two things are important for the low/no-touch experience: The retailer must have a clear understanding of what/when this approach is attractive to customers, and he must offer reasonable alternatives to submit, process, or follow up on an order, since inevitably there will be exceptions and problems. In other words, call centers, e-mail correspondence, live chat, and a place to walk in and talk to a company representative will be used less often (as a lower proportion of total orders), but they will be used by many customers in situations where something abnormal happens in the transaction.

The second approach to handling customer experiences is to use extended supply chains to create *real* interaction. What does real interaction mean? At the point of direct customer contact, the moment of truth as it were, customers must feel like they are genuinely appreciated. This means that the delivery agent should be friendly, approachable, and, ideally, familiar to the customer. In other words, all the things that we don't typically receive in a big-box store. The advantage of extended supply chains is that delivery agents have an opportunity to create a real, meaningful customer experience at the customer's home or place of business, but that interaction can be managed and scheduled to occur in a brief amount of time (say, less than ten minutes). Thus, in a well-managed situation, customers can have a real, enjoyable experience, without

the retailer having to sacrifice all efficiencies. As we will see in Chapters Six and Seven, companies that offer direct delivery have an opportunity to create stronger customer relationships through positive experiences. Interestingly, some companies that offer only indirect delivery can also capitalize on extended supply chains to improve customer experiences.

Strategies for Bridging the Last Mile

We propose four strategies for last-mile retailers to successfully deliver to customers' homes. However, we start with a brief examination of notorious failures in order to first show what does not work.

Past Failures

While retailers are effectively realizing that the Web provides opportunities for tapping new markets and adding sales growth not possible through traditional channels, there is also a growing awareness of the complex challenges that direct fulfillment entails. The first wave of last-mile retailers made bold promises during the Internet boom of 1998 to 2000, but mostly fell flat on their faces. The most prominent failures include Webvan, Pets.com, eToys.com, and Kozmo. In many ways, Webvan became the standard bearer for poor business planning by promising to provide groceries shipped directly to the customer's door in a prespecified, thirty-minute window at a price matching or beating that of existing grocers. Although this sounded excellent to customers, the operational challenge of fulfilling orders for low-margin, hard-to-handle groceries that required tight temperature controls left Webvan with a negative gross profit per delivery—before overhead costs of developing the Web site and brand were even incorporated. In short, Webvan went bankrupt—falling from a high market value of $7.9 billion to the $2.7 million that Louis Borders sold his 45 million shares for (at six cents per share) in July 2001, while burning through over $1 billion in start-up capital.[12] Another notorious flameout involved Pets.com, which spent $55.3 million in its first ten months of operations, mostly on high-profile television ads, including an infamous $2 million commercial during the 1999 Super Bowl. While this represented a tour de force in marketing brand development (the August 7, 2000, issue of *Advertising Age* called the Sock Puppet, the lovably loquacious icon of Pets.com, the "first bona fide advertising celebrity to be created in dot-com land"), it also represented a complete failure

of fulfillment operations, given that it sold goods that cost $13.4 million for a price of $5.8 million.[13] Perhaps the Sock Puppet would have been more useful had it helped with deliveries rather than simply serving as a cute mouthpiece.

Two other notorious examples must be mentioned in any discussion of last-mile failures. During the Christmas of 1998, thousands of customers discovered that while Santa may be 100 percent reliable in delivering toys beneath the tree, retailers (including Toysrus.com, KBKids.com, and eToys.com) had substantial problems. Only 90 percent of over 1 million online orders were delivered on time by eToys.com—despite requiring purchasers to book orders by December 10 for delivery by December 24. Toysrus.com had similar problems. Thousands of customers were left hanging with unclear feedback regarding the status and whereabouts of their orders. The $100 rebate coupons offered to consumers to compensate them for their difficulties did little to combat the image of Toys 'R Us as Scrooge when children did not get coveted toys for Christmas.[14] Our final entrant in the hall of shame is Kozmo.com, which promised free delivery of almost anything from candy bars to CDs to videos in an hour, and managed to burn through $280 million in capital in its roughly year and a half existence from late 1999 to mid-2001. While this business model was described as dimwitted by many, and Kozmo never even got close to breaking even, many customers did love the service, as exemplified by Elizabeth Georges: ''. . . I miss Kozmo—anyone who can bring me a dozen Krispy Kreme doughnuts and a DVD of *Gladiator* in under an hour with no delivery charge is my best friend.''[15] As evidenced by this quote, there was a high degree of enthusiasm for Kozmo, but clearly some problems with its business model.

Despite the well-publicized disasters profiled above, there are now scores of companies that have employed more rational strategies for fulfilling orders received online for either customer pickup or home delivery. As discussed in Chapter One, this second wave of last-mile retailers shares two primary characteristics. First, their marketing focuses primarily on selling customers a value-added convenience, rather than a low-priced commodity. Gone is the idea that customers will flock to order online simply because it is the new cool thing; instead retailers must carefully target customers who want value-added convenience, and are willing to pay for it. Most of these retailers have implemented some type of delivery charge, and they have implemented constraints on when and where deliveries will be made. Essentially, retailers are now focusing on specific target markets, rather than trying to be all things to all people. The second characteristic that is shared in this second wave is a more rational, prag-

matic approach to fulfilling orders. Much greater thought is being applied to supply chain decision making, and many lessons from the failed first wave of retailers are being incorporated into new supply chain designs.

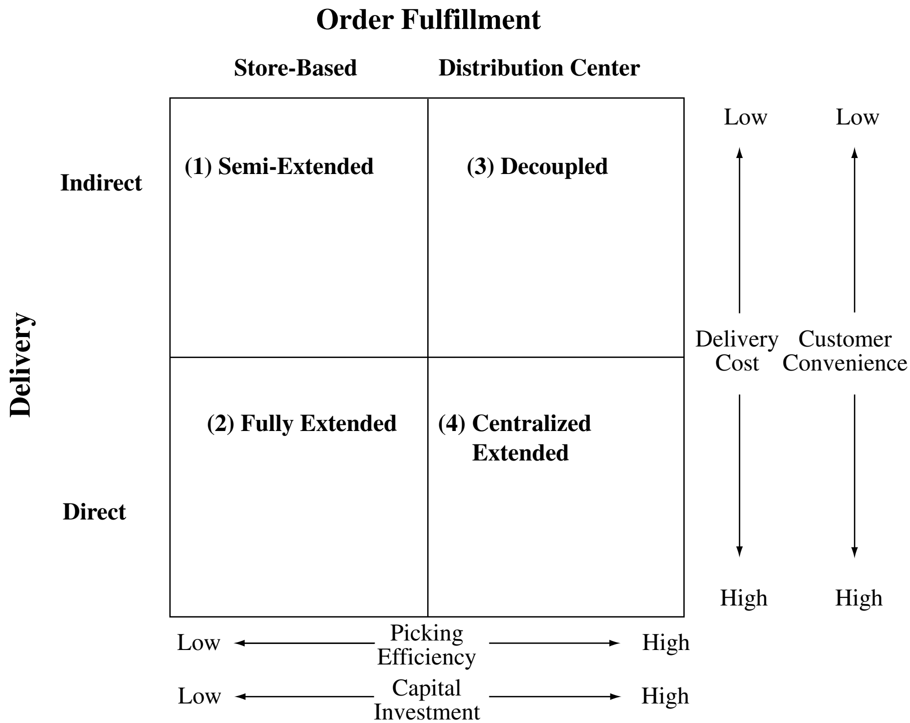
Retail sales growth over the Web has consistently outpaced in-store sales over the past five years. While same-store sales have been largely stagnant, online sales continue to grow quickly, with $45.4 billion in 2002, $58.2 billion in 2003, and expected growth to $88 billion in 2005. Established retailers increasingly see online sales as a promising channel for growth. For example, Office Depot grew online sales by 23 percent in the first quarter of 2003, while total first quarter sales grew only by one percent, with same-store sales falling by 3 percent. With online purchases representing 19.3 percent of all sales, Office Depot clearly is only experiencing growth through its online channels. Similarly, outdoor gear retailer REI experienced a healthier overall 3.6 percent increase in sales at its sixty-five stores, yet its online sales grew by over 20 percent in the same period. Sears Canada Inc. experienced an online sales increase of 27 percent, from $94 million in 2001 to $120 million in 2002.[16] These retailers represent just a sampling of the hundreds that are finding that the online sales channel for home delivery or pickup offers opportunities for growth that simply do not exist with more traditional channels.

Successful Strategies

There are two key decisions associated with extending the supply chain. First, order fulfillment, or the picking of items for consumer orders, can be accomplished either in existing stores or in a centralized distribution center(s). Store-based order fulfillment generally involves a lower fixed capital investment, yet suffers from lower efficiency and more challenging inventory tracking than distribution centers. Second, delivery to the end consumer can be direct, as in delivery to the consumer's home, or indirect, wherein the consumer is required to pick up her order, or a third-party provider such as Federal Express or UPS provides the deliveries. Direct delivery is of greater value to the consumer, but also engenders increased delivery costs. Each of the four strategies shown in Figure 1-2 is a viable and attractive business model in the right circumstances.

The four strategies differ in terms of four critical factors: customer convenience, delivery cost, picking efficiency, and capital investment. Companies wishing to offer high levels of customer convenience deliver directly to consumers. For example, Office Depot delivered over $2 billion in office supplies

Figure 1-2. Strategies for extending the supply chain.



directly to customer offices and homes in 2002. Office Depot employs a *centralized extended* strategy because the large volume of consumer direct sales justifies a large capital investment in order to achieve picking efficiencies. In contrast, Tesco also delivers directly to customer homes (over $600 million of groceries and other household items in 2002), but it utilizes a *fully extended* strategy that involves picking orders from individual stores. This strategy allows Tesco to minimize capital investment for what is currently a niche market (about 1.5 percent of their total sales) and to make a profit on this business.

In contrast to Tesco and Office Depot, companies that want to minimize delivery costs either subcontract with third-party providers (such as UPS, Federal Express, or Airborne), or allow customers to pick up Internet orders at existing stores. Scores of companies follow a *decoupled* strategy to minimize delivery costs, while taking advantage of high picking efficiencies. Prominent examples of companies using this strategy include Dell, Amazon, NetFlix,

Caremark, and almost any catalog retailer such as Lands' End. Companies that choose to offer Internet ordering for pickup at a store do so to minimize capital investments and offer customers another channel. Companies such as REI, Best Buy, Rite Aid, and Lowes Foods To Go have used a *semi-extended* strategy to offer customers increased convenience at a low delivery cost and have forged stronger links with previously indifferent consumers.

Figure 1-3 provides an overview of the advantages and disadvantages of each of our four strategies, as well as examples of companies that are applying these strategies successfully. The figure provides a broad introduction to the extended supply chain strategies that will be examined throughout the remainder of this book. More detailed examinations of each of these strategies and case profiles of leading companies that utilize them are offered in Chapters Two through Five.

Action Steps

We have examined the potential benefits of last-mile supply chains and shown how they offer an opportunity to build stronger, more enduring, and profitable relationships with customers. We have also profiled four strategies for bridging the last mile. These strategies have numerous benefits as well as challenges; thus, we offer the following action steps as a starting point.

- Examine your company's supply chain and classify it as (1) predominantly price/cost-oriented, or (2) focused on differentiation. If it is price/cost-oriented, are you the leader in your business segment? If it is focused on differentiation, does cost ever lead you off track?
- Have you ever worried that Wal-Mart or some other price-oriented retailer/manufacturer will wipe your business out? If so, identify which of the potential benefits of last-mile supply chains your firm could most easily tap.
- Consider how last-mile supply chains may change your relationships with customers. How can you reap some benefits from this closer relationship?
- Choose one of the four strategies depicted in Figure 1-2 that best fits your goals for delivering directly to customers. You may want to consider things like total sales for your company, the value customers place

Figure 1-3. Overview of extended supply chain strategies.

	Advantages	Disadvantages	Examples
Semi-Extended	• Low, fixed investment cost • Increased foot traffic in stores and continued opportunities for impulse buys • Dual channel marketing • Low delivery cost	• High picking costs • Inventory tracking is difficult • High risk of stock-outs/substitutions • Low customer convenience	Best Buy Circuit City Lowes Foods REI Sears Canada Rite-Aid Walgreens
Fully Extended	• Low fixed investment cost • Halo effect • Dual channel marketing • High customer convenience	• High picking costs • Inventory tracking is difficult • High risk of stock-outs/substitutions • High delivery cost	Tesco Grainger Sainsbury Albertsons America Fresh
Decoupled	• Aggregated inventory • Low picking costs • Specialized and dedicated fulfillment • Fresher product & faster inventory turns • Ability to manufacture or assemble to order • Low risk of stock-outs/substitutions • Low delivery cost	• Low customer visibility • Low brand awareness • High fixed investment cost • Long lead time	Amazon Dell FreshDirect NetFlix Lands' End LL Bean Drugstore.com Caremark Omaha Steaks
Centralized Extended	• Aggregated Inventory • Low picking costs • Specialized and dedicated fulfillment • Fresher product & faster inventory turns • Ability to manufacture or assemble to order • Low risk of stock-outs/substitutions	• High delivery cost • Low customer visibility • Low brand awareness • High fixed investment cost • Long lead time	Office Depot Ocado Grocery Gateway Simon Delivers OfficeMax RoomstoGo Schwan's Dairy

on convenience for your products/services, your existing supply chain, etc. Follow this initial choice of strategies by a close reading of the chapter (Two through Five) on this strategy.

Notes

1. J. Swartz, ''More Click on Item on Web, Pick it Up at Store,'' *USA Today* (December 5, 2002).
2. J. Dixon, ''Farmer Jack Gambles on Big Change,'' *Detroit Free Press* (June 12, 2003), p. C-1.
3. R. Taylor, ''Saving America's Grocers,'' *Brandweek* (May 5, 2003), p. 21.
4. Ibid.
5. John Reinan, ''Retailers Boosting Emphasis on Service to Loyal Customers,'' *Minneapolis Star Tribune* (July 8, 2003), p. D-1.
6. James P. Womack, ''Mass Customization: The New Frontier in Business Competition,'' *Sloan Management Review* (Cambridge: Spring 1993), Vol. 34, Issue 3, pp. 121–122.
7. B. Joseph Pine II and James H. Gilmore, ''Welcome to the Experience Economy,'' *Harvard Business Review* (July/August 1998).
8. Shoshanna Zuboff and James Maxmin, *The Support Economy: Why Corporations Are Failing Individuals and The Next Episode of Capitalism* (Viking Press, 2002).
9. Frederick F. Reichheld, ''Lead for Loyalty,'' *Harvard Business Review* (July/August 2001), Vol. 79, Issue 7, p. 76.
10. ''More Lands' End Customers Ditching Standard Sizes in Favor of 'Size You,' '' *Internet Retailer* (September 4, 2002), see www.internetretailer.com.
11. Ibid.
12. T. Rizzo, ''The Death of Webvan,'' *Internet World* (August 1, 2001), pp. 4–5.
13. Data drawn from J. Weil, ''Going Concerns—Did Accountants Fail to Flag Problems at Dot-Com Casualties?,'' *The Wall Street Journal* (February 9, 2001), p. C.1, and H. F. Schultz and D. E. Schultz, ''Why the Sock Puppet Got Sacked,'' *Marketing Management* (July/August 2001), Vol. 10, No. 2, pp. 34–39.
14. D.G. Stankevich, ''Was the Grinch Really Online?'' *Discount Merchandiser* (March 2000), Vol. 40, No. 3, pp. 40–42.
15. Quote from M. Totty, ''Listen Up, Retailers: These Five Consumers All Like Some Aspect of Shopping Online: So Why Don't They Do More of It?'' *The Wall Street Journal* (September 24, 2001), p. R.9; financing information taken from J. Angwin, ''Web Delivery Firm Kozmo Shuts Down,'' *The Wall Street Journal* (April 12, 2001), p. B.10.
16. Sales data for retailers taken from articles posted at www.internetretailer.com: ''Online Retail Sales Will Nearly Double by End of 2005, eMarketer Projects''

(April 23, 2003); ''Office Depot's Web Sales Grow 23% in Q1 While Total Sales Remain Flat'' (April 17, 2003); ''Sales Up More Than 20% at Outdoor Gear Retailers Altrec.com and REI.com'' (April 22, 2003); ''How Sears Canada's Fulfillment Network Supports Rising Web Sales'' (April 17, 2003).