# Chapter 18: Physical Products Online

# "[In 1900] the catalogue industry, like online commerce today, experienced significant and initially alarming rates of growth, triggering predictions of the demise of the physical store format."

Kenneth T. Rosen and Amanda L. Howard, "E-Retail: Gold Rush or Fool's Gold?", *California Management Review*, Spring 2000.

## Prologue

Rosen and Howard emphasize parallels for selling physical products online and via catlaogues. After analyzing the nature of products that are suitable for online selling, they concluded, "the lag in gratification together with the cost of delivery and inconvenience of return will restrict consumer retail acceptance." Events in the year 2000, with many e-tailing firms biting the dust, appeared to bear out this analysis. If e-tailing ends up with a share of total retail sales similar to catalogue shopping (3 or 4 %), then the all the hype will have come to very little.

On the other hand, perhaps there are enough differences between the Internet and print catalogues to make a difference in the long run. Online product lines can be much larger. If internal inventory and fulfillment information systems are already electronic, including the consumer in this net can substantially increase efficiency. We discussed many of the changes that may be wrought by e-commerce throughout earlier chapters: better information of all kinds being a major theme. Certainly the largest brick-andmortar retailers are moving to stake out their claims in the "gold rush". Will they succeed? What will happen to the upstarts that rushed in at the beginning of the game? Read on for the unfolding story.

#### **18.1 Introduction**

Retailing of physical products includes an enormous amount of economic territory. We will cover some of this ground, proceeding by first considering some retailing sectors that have been popular online. We begin in Section 18.2 with books, where much of it all began. Amazon.com stands out as a successful pioneer, having rapidly built one of the most well-known brands in the world. We consider the economics of bookselling, and some of Amazon's rivals in the physical and online worlds.

Section 18.3 examines the struggle to build online grocery businesses. The size of this market, many times that for books, attracted major entrants with large investments, but the results so far have not been very positive, as traditional grocery stores have proved to be efficient and resilient competitors. This section describes some of the developments in the online grocery business so far. Section 18.4 looks at a third specialty sector, which also represents a large market, that for drugs and related health and beauty products. Again, established competitors have asserted themselves. In addition, the special structure of the industry, where sales of prescription drugs are tied in to the broader healthcare industry, has made it difficult for new entrants.

In section 18.5, we examine specialty retailing more broadly, discussing apparel and toys in more depth, while briefly considering the fate of the many e-tailers in sectors such as furniture, pet supplies, barbecues, and so on. We also examine developments in the markets for cars and houses. Each of these products is quite special, and has its own particular structure of organizing its market. Neither (especially houses) fits into the category of 'retailing' as typically understood, but they do come under the heading of physical products that can be sold online, or where some parts of the transaction can be conducted online.

Finally, in Section 18.6, we look at some of the giants of general retailing: Wal-Mart, Kmart and Target, and how they have pursued their online store endeavors. We also provide some general analysis of online retailing, outlining ideas that may apply to specialty retailers as well.

#### 18.2 Books

Amazon.com is certainly one of a handful of the most prominent e-commerce retailers, or e-tailers. We have used Amazon repeatedly as an example throughout this book. Amazon began as an online book retailer. Why did it choose books? What is special about selling books online? Who are Amazon's competitors, and how has online bookselling changed the industry?

There are two salient economic factors that made books an attractive commodity to sell online. First, on the supply side, the variety of books makes them costly to sell in traditional ways. The requirements for inventory for a successful physical bookstore run into many thousands of titles that must be managed, shelved, monitored, and so on. Online bookselling seemingly has the potential to reduce these high selling costs. On the demand side, book buyers are a fairly well-defined, relatively high-income segment of the population. Conversely, initial users of the Internet have been relatively welleducated, higher income groups, making them likely book buyers.<sup>1</sup> Yet another aspect of the book market has mixed implications for online selling. Book buying can involve high search costs: going to the bookstore, browsing titles, leafing through likely candidates for purchase. Online book buying can dramatically reduce these search costs. However, like much other physical shopping, searching and browsing in a bookstore can itself be part of the consumption experience (a generous free trial) rather than viewed as a cost.

Whatever the overall differences between buying books online versus from a bricks and mortar store, online bookselling has clearly established itself, thanks to firms such as Amazon. The market for books recently stacked up as in the following table.

Seller	Sales (\$ million)	
Overall US market	23,300	
Barnes & Noble	2,700	
Borders	2,300	
Amazon.com	610	
Barnesandnoble.com	70	

Table 18.1: The Market for Books, 1998

While Amazon's book sales put it well behind Barnes & Noble and Borders, the two largest brick-and-mortar booksellers, it is now the third-largest bookseller in the US, and achieved that status in only three years. Note also that the two largest chains have less than 25% of the overall market. A large number of independent booksellers will probably continue to thrive. Just as these independents sharpened their competitive strategies to counter the physical chains, they have followed Amazon's lead in harnessing the World Wide Web for their own benefit.

Anita Hennessey summarizes the key features of Amazon's online bookselling approach. Consumers can:

- Conduct targeted searches from database of 4.7 million titles
- Browse highlighted selections
- View bestseller lists and other features
- Read and post reviews

<sup>&</sup>lt;sup>1</sup> Another possible factor in favor of bookselling online is that most books have a reasonable value to weight ratio. See also, *Online Bookselling 1999*, Master's Thesis, New York University Center for Publishing, Anita Hennessey, http://www.bisg.org/99thesis.html. Several statistics in the following discussion are drawn from this source, which has a lengthy bibliography on online bookselling.

- Register for personalized services
- Participate in promotions and check order status
- Purchase gift certificates

Almost all these features are ones that can be and have been imitated by others. The advantage Amazon has is its size, which may allow it to offer more reliable bestseller lists and richer selections of reviews. Amazon's community of book customers itself potentially generates a competitive advantage for the firm. However, to some extent smaller booksellers can band together, sharing resources and information on the web. If they have physical locations, but in different places, their competition on the web is minimized, while they gain some benefits of cooperation, just as they have done in competing against physical bookstore chains.

Despite Amazon's advantages that come from size, what is to stop anyone from gathering the information from Amazon's web site, then buying from the lowest priced bookselling site, using a price comparison (or "robot shopper") site such as Dealtime (discussed in an earlier chapter), acses.com, or andall.com? In the face of such low cost search, greater selection and ease of browsing do not offer a competitive advantage. The key to competitive advantage is in features that raise customer switching costs and lock them in as much as possible. Amazon tries to do this with a reputation for reliability, offering personalization, and a simple checkout technology (its controversially patented 1-click method) that together make it costly for customers to switch back and forth among whoever happens to offer the lowest price on the book being currently purchased. That Amazon is successful in this approach is borne out by the fact that, while it offers competitive prices, and has shown itself willing to engage in price wars, its average prices are higher than those of many smaller online bookselling rivals.

Despite its online sales lead, Amazon has yet to make a profit. Its reputation, brand name and installed base of customers have been purchased at a high cost in terms of marketing expenditures. Jeff Bezos, Amazon's founder and CEO, argues that these are start-up costs that will eventually be spread over increasing book sales over time, as well as over other products besides books. The question marks about this strategy include the effectiveness of extending Amazon's brand beyond books. A more fundamental issue lies in the basic economics of selling physical products on the web.

Despite all the advantages of browsing and buying online, in terms of convenience and personalization, it is unclear how much this is ultimately worth to the great majority of customers. If book buying in a physical store is a pleasant tactile experience, made even more attractive by pleasant music, helpful sales people and other ambient benefits, and if physical stores can simulate some of the advantages of the web with their own information systems, the relative net benefit of online shopping is reduced to being able to save time and to shop at odd hours.

Perhaps the fundamental advantage of pure online book selling must come on the supply side, through cost savings in inventory and in all the other costs of operating physical stores. This is where doubts have been expressed about the underlying business model. Amazon, for example, began by using the warehouses of book distributors such as Ingram and Baker & Taylor. Book orders were fulfilled directly from these intermediary warehouses. The failed attempt by Amazon rival Barnes & Noble to acquire Ingram highlighted the competitive vulnerability of this outsourcing, and together with Amazon's move into other products besides books, led to its building its own warehouses. The concern is with the efficiency of this arrangement. While it gives Amazon more control over its supply chain, it does not appear to give it significant cost advantages over rivals. This is a problem for pure online book selling in general, since fulfillment of orders from warehouses to customers' homes is inherently costly. Hybrid models, where the web is used for gathering and processing information, and even for ordering, but the order is picked up from a local store, may still make independent booksellers and bookstore chains with online presences strong competitors for Amazon.

As long as books are a traditional paper-based product, the bookselling industry will remain relatively fragmented. Specialty online bookstores with subject or categorybased niches also prolong another aspect of the existing fragmentation. If the overall market is growing slowly, then online stores such as Amazon can only grow by taking away sales from physical stores, but there appear to be limits to Amazon's growth in bookselling alone. The economies of scale, whether on the demand side (network externalities) or supply side (falling average costs) seem to be limited. That may justify Amazon's movement into other product lines, where economies of scope and the power of its brand will matter. The advent of online bookselling has sharpened competition, and made marketing and customer management strategies more sophisticated and salient. Ultimately, however, bookselling will change dramatically only when electronic books take off, and books become a digital rather than a physical product. Current online booksellers may be in a good position to take advantage of this shift.

#### **18.3 Groceries**

Groceries are a market worth over \$400 billion in the US, or almost 20 times the market for books. There are some similarities in the two markets. For example, grocery stores also carry a wide array of items, making inventory management an important task. Grocery stores preceded bookstores in moving toward national or regional chains, pushing many "mom-and-pop" stores out of business. Their capturing of economies of scale at the retail and distribution levels was supported by Americans' growing use of automobiles and the increasing presence of refrigerators and freezers at home, allowing weekly, large-scale grocery stores have survived, like independent bookstores, at the high end of the market, offering bundles of service and product characteristics that the chains could not perhaps match. Mom-and-pops have also survived where incomes are low, or where other barriers exist to a shopping model that requires infrequent, large-scale shopping.

Several factors make groceries quite different from books, and they have important implications for selling groceries online. First is perishability. A significant proportion of groceries involve perishables such as produce, or items that require freezing or refrigeration. Second are much lower value-to-weight or value-to-volume ratios for groceries than for books. Third, delivery of groceries must often be more immediate than that of books, even when perishability is not a concern. All these factors imply that groceries cannot be sold on the same model as books. Fulfillment of orders for a full-line grocer cannot be done from a few large warehouses. The existing infrastructure of UPS, FedEx or other parcel carriers cannot serve to carry out deliveries of many perishables.

One exception to the constraints mentioned is NetGrocer, which is operating precisely on the model of online booksellers, by eliminating perishables from its offerings. Instead, it has broadened its product line (much as physical grocery store chains have done over time) to include drugs, household products and higher-value items such as electronics. The exclusion of perishables allows NetGrocer to ship from a few warehouses all over the US, using FedEx deliveries at special rates. The advantage, of course, is that the firm is able to more fully exploit any economies that exist in eliminating numerous retail stores close to consumers. The disadvantage is that, in not offering the range of items that consumers would expect from a grocery store, and requiring them to still purchase those in a traditional way, NetGrocer does not provide its customers with a compelling reason to switch.

On the demand side, what are the reasons for consumers to buy groceries online? We have already discussed these in Section 9.5, and will briefly review them here. The main value to consumers is in time and other shopping cost savings. Buying online saves a drive to the grocery store, and the process of scanning shelves and filling the cart. Selecting on the web also allows the shopper to save a list of standard items that are bought regularly, avoiding having to manually repeat certain selections. In these respects, buying groceries online may be more attractive than buying books: no one goes to the grocery store. Online grocers have tried to create additional benefits by providing nutritional and other information to their customers, but this is not a compelling case at all. For groceries, there is nothing equivalent to online book reviews that would help create an online community and pull shoppers back to the online site: groceries do not engage people in the same way as books.

Peapod, HomeGrocer, Webvan and Streamline have been the main online grocers pursuing a full-line approach, offering produce and other perishables. They have therefore had to build a physical distribution infrastructure, requiring them make heavy physical investments, and making the supposed cost savings from an online presence hard to come by. The financial record of all these firms has been less than stellar. While NetGrocer remained private, postponing a planned IPO as the market soured on online grocers, the others rushed to go public, with Webvan, in particular doing so from a position of strong initial private financial backing. Peapod ended up being bought by Royal Ahold, a European grocery store chain. Streamline sold its Washington, DC and Chicago operations to Peapod in November 2000. HomeGrocer is merging with Webvan, leaving the latter as the only independent full-line grocer on the web.

THREE MONTHS ENDED	JUNE 30, 1999	JULY 1, 2000
Revenue:		
Product and service revenue, net	\$ 4,807	\$ 8,091
Subscription and delivery fees	176	408
Advertising, research and marketing fees	277	360
Total revenue	5,260	8,859
Operating expenses:		
Cost of revenue	3,633	5,990
Fulfillment center operations	2,444	5,714
Sales and marketing	1,510	3,535
Technology systems and development	1,158	2,031
General and administrative	2,474	2,980
Total operating expenses	11,219	20,250
Loss from operations	(5,959)	(11,391)

#### Table 18.2: Streamline's Income Statements (\$ '000s)

Source: Streamline financial reports

Even supposedly rich urban markets, where the time costs of customers are high, and the density of populations makes delivery more economical, have not been kind to the online grocers. As in the case of online booksellers such as Amazon, the hope is that most of the costs being incurred are one-time fixed costs that will be recovered over time. The recent financial record of Streamline indicates some of the problems: see Table 18.2. As its revenues grew, so did the costs of its fulfillment center operations, sales and marketing, and even technology development. Economies of scale, where average costs decline as a firm expands in size and spreads its fixed costs over a greater revenue base, have proved quite elusive. Webvan's losses have been many times those of Streamline, but its funding may leave it as one of only two online grocers left standing in the long run.

Part of the problem for online grocers has been, of course, that their brick-andmortar competitors have not stood still. We discussed the nature of strategic responses in general in Section 5.7. Grocery store chains are constantly seeking ways to cut their own costs, using many of the advantages of information technology in managing their supply chains. Furthermore, information technology, in the form of smart "membership" cards, has allowed traditional grocery store chains to capture many of the benefits of information gathering that the web provides. Information on buyer preferences and shopping patterns can not only help manage inventory better, but it allows firms to price more effectively, discriminating over time and across products more effectively, and even across shoppers, by offering "frequent buyer" rewards. The latter also serve the purpose of raising customer switching costs, and promoting lock-in. The relative advantage of shopping online is reduced by such strategic responses, and is focused more on the time and shopping cost savings, which may be significant only for a fraction of the grocery-buying market.

The elusiveness of advantages of web models may also be seen by the failure of the WebHouse Club online grocery service. This differed from all the other online efforts in attempting to introduce another point of differentiation. WebHouse was started by Jay Walker, the founder of Priceline.com, and while it remained an independent company, its use of the Priceline name-your-own-price model, and its operation through the Priceline web page made the two closely linked in people's minds. It never really took off. While people have been willing to name their own price for airline tickets and vacations, the so-called "reverse auction" model seems to provide few benefits for groceries, and involves relatively high information-processing costs and uncertainty for shoppers, compared to the standard posted price model. Again, new alternatives are likely to succeed only where a real and substantial economic advantage exists from the innovation.

In all this, it should not be forgotten that traditional grocery store chains face new competition from other brick-and-mortar rivals as well. Discount stores and warehouse clubs also offer groceries, along with a wide array of other items. Their goal is to be as much of a one-stop shop for regular household supplies as possible, reducing the average fixed cost of a shopping trip so much that online shopping further loses its edge. The prognosis for online grocers therefore seems to be guarded, with the likelihood that they will become successful niche players, and possibly only as subsidiaries of the big brick-and-mortar chains, rather than fundamentally altering how we shop for groceries.

#### 18.4 Drugs

Drugs, nutritional supplements, and beauty and personal care products fall somewhere in between groceries and books in frequency of purchases and total expenditure. Table 18.3 gives the estimated market size for various segments of this market. Clearly, prescription drugs are the most significant component in terms of overall size. Drugs and many personal care products are also often high-markup items with high value-to-weight ratios. All these factors appear to make drugs and related products an attractive candidate for online sales.

The importance of prescription drugs means that any online drugstore must have the capability to handle prescriptions. Without it, they will not be able to offer one-stop shopping that compares with brick-and-mortar drugstores. However, this introduces a major complication not faced by online sellers of books or groceries. A substantial part of the cost of prescription drugs in the U.S. is often paid for by individuals' private health insurance companies. If online drugstores are to succeed in the U.S., they must negotiate with the existing infrastructure of healthcare provision.

Category	Market Size
Prescription drugs	101
Over-the-counter medicines	16
Beauty and personal care products	36
Vitamins, supplements, alternative remedies	11
Total	164

Source: "Drug Test", Melanie Warner, Fortune, July 19, 1999

Key intermediaries in the health insurance industry are the pharmacy-benefits management companies (PBMs). PBMs act as agents of the health insurance companies, taking on the task of processing prescription insurance claims. They may interact with employers, but are practically invisible to the final consumers of prescription drugs. There are five major PBMs: Advance Paradigm, Caremark, Express Scripts, Merck-Medco, and PCS. They vary in their industry position: PCS is owned by Rite Aid, the largest physical drugstore chain; Merck-Medco is owned by drug manufacturing giant Merck; and Express Scripts is "independent".

The online drugstore pioneers, Soma, Drugstore.com and PlanetRx, registered with the PBMs when they began operations in 1998-99. Soon after, though, the PBMs terminated their contracts. The PBMs may have had concerns about quality of service: certainly the federal and state governments have expressed worries about lack of controls in online prescription drug sales. However, straightforward competitive strategy issues were also involved. For example, Express Scripts launched its own online prescription drug service in mid-1999, called YourPharmacy.com. Rite Aid also planned its own online operation.

In the end, neither side could manage without the other. The online entrants had technical skills and the ability to move quickly. The PBMs and brick-and-mortar chains had controlled key value chain components, or had substantial customer bases and brand names. The result has been varying partnerships. Drugstore.com, heavily backed by Amazon, brought in Rite Aid as a part owner and partner, allowing Drugstore.com customers to order online but pick up at the local Rite Aid instead of waiting for home package delivery. This also gave the online seller access to Rite Aid's PBM. In return, Rite Aid gained a share of the new distribution channel. Soma.com, the first but the weakest of the online drugstores, was purchased by CVS (and is now CVS.com), another major physical drugstore chain. PlanetRx, meanwhile, did a deal with Express Scripts, which sold its fledging online effort to Planet Rx only three months after launch, with the PBM receiving an ownership stake in PlanetRx in return. PlanetRx is now Express Scripts' preferred online drugstore, and the two companies' web sites promote and link to

each other. PlanetRx has also done a deal with CCN, the country's largest Preferred Provider Organization (PPO), a network of HMOs and physicians.

The online drugstore industry has therefore rapidly become integrated into the existing market structures. Oligopoly firms in drug retailing and in prescription management have essentially made the World Wide Web an additional channel for sales and for management of information flows. Does this mean that consumers have gained nothing? Informal surveys suggest that online drugstore prices for nonprescription items are somewhat lower than those of their brick-and-mortar competitors (excluding delivery costs), but it is not clear if this reflects business-building promotional pricing or long-term efficiencies through cost-saving and/or greater competition. At this stage, PlanetRx is effectively the only major new retail entrant, since Drugstore.com and CVS.com are tied to incumbent firms. PlanetRx's financial statements (Table 18.4), for example, suggest it is quite far from equilibrium, and how much it will need to raise prices to break even remains to be seen. Like many other B2C e-commerce firms, the online drugstores have quickly run short of cash (as the financial statements would indicate), and may never reach that long run equilibrium on their own.

	Year Ended December 31,1999	Six Months Ended June 30, 2000
Statement of Operations Data :		
Net revenue:		
e-commerce	7,856	15,945
Sponsorship	1,143	2,263
Total revenue	8,999	18,208
Cost of net revenue:	-,	-,
e-commerce	7,489	15,070
Sponsorship	100	365
Total cost of revenue	7,589	15,435
Gross profit	1,410	2,773
Operating expenses:	·	,
Marketing & sales	55,184	49,342
Product development	12,946	11,812
General & administrative	6,448	4,859
Amortization of Intangible Assets	9,627	20,430
Stock-based Compensation	15,647	7,129
Contract Termination		4,466
Total operating expenses	99,852	98,038
Operating loss	(98,442)	(95,265)
Interest income	2,691	2,181
Interest expense	(2,263)	(465)
Net loss	(98,014)	(93,549)

## Table 18.4: PlanetRx's Income Statements (\$ '000s)

Source: PlanetRx S-1 form, filed with SEC, October 11, 2000

Lower prices are, of course, not the only potential benefits from online selling. In the case of drugs and related items, the benefits seem to be documented. For example, Greenfield Online, an Internet marketing research firm (www.greenfield.com) surveyed 2,500 people in April-May, 2000, and found that 40 % had visited online drugstores. Of those, in turn, 60 % had made a purchase. Reasons for purchasing online included time saving, convenience of home delivery and avoiding crowds. The latter may reflect the embarrassment factor: as Amazon.com founder Jeff Bezos apparently said when Drugstore.com was launched, "You don't exactly browse the Preparation H aisle."<sup>2</sup>

Additional positive factors, similar to the benefits of online shopping for other goods, include substantially more variety, the ability to shop at any time, and the possibility of easy gathering of product information. The last factor might seem especially attractive for health and beauty products. Online drugstores provide much information directly on their web sites, as well as email responses to specific queries. However, many consumers find the inability to talk to a pharmacist in person a barrier to using online drugstores. Ultimately, these problems will also be overcome, as the capacity of Internet connections continues to grow. It is likely, however, that the brickand-mortar incumbents are the ones that will reign online as well.

# 18.5 Specialty Retailing

Booksellers are just one example of specialty retailers. We began this chapter with online booksellers because of the prominence of Amazon.com as an e-tailer. While Amazon began as a bookseller, it has aggressively moved into other product areas, and is now more an example of a general retailer, a category we consider in the next section. On the other hand, there are numerous other categories of specialty retailing, and most of these have ventured online. Toys are a prominent example, and pet supplies, garden supplies and other niches have received considerable publicity. However, the largest specialty category by far is clothing or apparel.

**Clothing** U.S. consumers spent about \$170 billion on clothing in 1999.<sup>3</sup> Of this amount, just over \$1 billion, or 0.6%, was spent online. High income households were much more likely to purchase online, as were individuals in the 25-44 age range. Furthermore, the share of online sales is expected to increase fairly rapidly, though still from a small base.

While clothing may seem an unlikely candidate for online sales, since it involves personal items that might better be tried on for fit, and examined in person for texture, color and other characteristics, mail-order catalogues have long overcome these problems by offering precise measurement and fit guidelines, good illustrations, liberal return policies, and so on. In fact, the nature of clothing, as an extension and signal of personality and mood, has made it an item with a relatively high likelihood of return even if purchased in a conventional store after trying it on. Thus online apparel retailers are not necessarily at a significant disadvantage on these fronts.

<sup>&</sup>lt;sup>2</sup> Bezos is quoted in "Drug Test", by Melanie Warner, *Fortune*, July 19, 1999.

<sup>&</sup>lt;sup>3</sup> These and other statistics in this section are taken from CyberAtlas, at cyberatlas.internet.com/ markets/retailing. Many other e-commerce statistics are available at this site. Original sources of the statistics include market research firms such as MediaMetrix and NPD Group.

One area where online clothing retailers were perceived to have an advantage over traditional catalogue sellers was in the dynamic and interactive nature of the World Wide Web, which would allow online sellers to simulate the fitting room experience. For example, Boo.com was a high-profile European online clothing boutique that started in 1999 with great plans: free shipping and free returns; a web site in seven languages; and "a shopping experience that would let you zoom onto a product, turn it around and see what it looked like on a virtual mannequin."<sup>4</sup> However, Boo's web site debuted six months late, well into the holiday shopping season. Worst of all, "the company's expensive, cutting edge technology was riddled with numerous technical glitches that kept many would-be shoppers off the site. Those who could get on the site reported that ... the site would freeze and crash and was difficult to navigate. Perhaps its biggest bug: some shoppers couldn't complete their purchases." Clearly, implementing the promise of online clothes shopping is difficult.

Despite such high-profile failures, online clothing sales offer several advantages. In particular, the range of possible niches for clothing is enormous, because of the role of clothing in personal expression. Of course boutiques and catalogue retailers realized this long ago, moving beyond simple men, women and children distinctions to appeal to the trendy, the big, the sportsminded, and so on. Online retailing offers two advantages over previous approaches to niche retailing. First, the lower costs of operation make it possible to serve smaller niches online than would be possible in traditional brick-andmortar or catalogue retailing. Second, it is much easier to reach customer groups that are geographically widely dispersed: prospective customers can search and pull in information much more easily, saving the firm the cost and difficulty of locating and targeting customers.

For example, alhannah.com (see Figure 18.1) sells Islamic clothing online in the United States, reaching a market that might be very difficult to serve otherwise. On the other hand, serving very different niches from this one are online apparel retailers such as fetish-factory.com and hallucinet.com/retailslut/! One can easily find uniforms, tropical clothing, Renaissance costumes, or any other category of clothing on the Internet, with much less effort than would have been required a few years ago. There are also numerous intermediary sites, such as fashionbrokers.com, which offer links and services related to a wide range of boutique-type online apparel stores.

Unlike in the case of Amazon.com and books, there is no online clothing retailer that has set out to dominate the category. To some extent, the mass market for apparel is already captured by department stores, discount retailers, and warehouse clubs. Catalogue retailers have also proved resilient, even when they have been slow to move substantial operations to the web. Online clothing sales become just another channel to reach customers, as far as existing retailers are concerned. Many niche retailers have been able to use the web to expand their market reach geographically, while others have

<sup>&</sup>lt;sup>4</sup> "Boo Who?", The Industry Standard, This Week in the European Internet Economy, May 19, 2000, www.thestandard.com

been born simply to fill niches that were otherwise underserved. As in other markets, factors such as customer switching costs and the strategic responses of incumbents have limited the pace of any revolution in apparel retailing.



# Figure 18.1: Islamic Clothing Online

**Toys** This category represents quite a large market, representing about \$23 billion in US sales in 1999.<sup>5</sup> Toy'R'Us is well known as the most prominent toy store chain. It pioneered the "category killer" concept for toys in the 1980s, benefiting also from favorable demographics as the baby boomers began to have children. Toys represent a reliable niche overall, though predicting what toys will be successful in the crucial holiday season can be difficult. As with other products, shopping for toys in brick-and-mortar stores can be preferable because the item can be physically inspected. Returns are also important for toys, which are often given as gifts. On the other hand, for gift-givers and for parents, shopping online for toys may be extremely convenient, since there may be few adult pleasures in toy shopping.

<sup>&</sup>lt;sup>5</sup> Statistics on the toy market are from online research firms The NPD Group and Media Metrix, and available at cyberatlas.internet.com.

Online US toy sales in 1999 were \$425 million, or close to 2 percent of total US toy sales. By January 2000, the top four web sites selling toys were, in order, Amazon.com, eToys.com, Toysrus.com, and kbkids.com. The latter two of these four are "click-and-mortar" toy sellers, with the advantage of allowing returns to physical stores. Nevertheless, later in 2000, Toys'R'Us entered into a partnership with Amazon, leaving eToys to struggle as the only major specialty toy retailer online. Reasonably high value-to-weight ratios and a probable low price elasticity of demand for toys have helped toy retailers avoid some of the problems of other segments. As for clothes, niche sellers within the category, such as educational toys, will probably benefit from online sales, since they can expand their geographic reach. However, it is unlikely that any e-tailer of toys alone can succeed in the way the Toys'R'Us did with its physical chain. In fact, Toys'R'Us had itself been struggling with inroads into its market from discount stores and warehouse clubs.

As noted, Toysrus.com initially formed a partnership with Amazon.com. This was in August 2000, with the latter focusing on web site development, order fulfillment and customer service, and Toysrus.com handling buying and inventory management. Just a month later, however, Toysrus.com closed its own web site, leaving Amazon.com as the 'winner' in the online toy market. eToys struggled through the Christmas 2000 season, when a slowing economy and a lack of hot toys contributed to slow growth in online toy sales. In a way, the success of Amazon as a general retailer with toys in its product line paralleled the success of Walmart in overtaking Toys'R'Us as the largest US toy retailer.

**Cars** Cars are clearly one of the highest-value items that households purchase. In Section 6.2, we discussed how a car buyer may negotiate with a dealer over the price of a particular automobile. In section 6.3, we provided an overview of how shoppers search for product information and the best "deals" on price. This shopping around definitely precedes the actual negotiation of a purchase, and may be intertwined with bargaining – a car buyer may bargain with a dealer, not reach a satisfactory agreement, and walk away to search some more. In fact, the option of walking away is a crucial source of the buyer's bargaining power. Dealers, on the other hand, obtain bargaining power from the fact that searching among sellers and switching from one to another are costly for the buyer.

As we illustrated in Figure 6.3b, the opportunity for bargaining is created by the existence of a large potential surplus from the sale of a single item. Even in this case, however, the costs of bargaining may be high enough that some dealers are able to offer posted prices, which are preferred by buyers whose bargaining costs are high. One problem with posted prices in the case of cars has been the problem of credibly committing not to bargain when faced with a potential customer and a situation such as in Figure 6.3b. To some extent, the World Wide Web has provided a way of posting prices for cars: many dealers offer "Internet prices" that are supposedly non-negotiable. If a buyer is identified as having been quoted an Internet price, the dealer may choose to hold firm on the price. Thus one change in car buying resulting from e-commerce may be

some shift from bargaining to posted prices, using the Web as a kind of sorting mechanism.

A second effect of the Web on the buying of cars comes about through its obvious function in aiding search. Potential buyers can troll through Web sites, gathering information about the characteristics of different cars, as well as their prices at different dealerships. The evidence suggests that this is happening extensively: consumers can perform all the steps prior to kicking the tires and taking a test drive over the Internet. There are over a dozen "car-buying" sites (e.g. CarsDirect, DriveOff, and CarPoint) that liberally offer product information as well as price quotes. Yet most people do not actually buy cars from these Web sites, and some surveys suggest that Internet prices are higher on average than prices obtained by going to a dealer. Why is this so?

The answer lies chiefly in the particular nature of automobile retailing. Car dealers form a group that not only has bargaining power with manufacturers, but also considerable political leverage. The fear of alienating dealers, plus actual legal restrictions (varying from state to state), prevent car manufacturers from selling cars directly online. All the so-called Internet car buying sites are merely additional sales intermediaries between dealers (themselves intermediaries between producers and buyers) and buyers. Competition among dealers does give the online sites some leverage, particularly since they provide information and buying access to competing manufacturers' cars. Ultimately, however, the dealer remains as an entity that must receive its cut, even if the buyer never visits a showroom. A car 'bought' from an online car buying site is actually always bought from a physical dealership.

So far, we have implicitly focused on new cars. There is also a considerable market for used cars, and here the Internet has served to improve matching between buyers and sellers, beyond what was earlier possible with newspaper classifieds and local flyers. This clearly disintermediates used car dealers, who are not protected by legal barriers or relationships with manufacturers. On the other hand, used car dealers can play many of the intermediary roles outlined in Chapters 7 and 8, in particular providing credible warranties, and being carriers of reputation, in ways that individual sellers may not be able to achieve. Hence it is unlikely that used car dealers will ever be completely eliminated by the Internet, no more than they were by other communications media.

**Houses** Most house sales involve "used", or (to use the more standard term) existing houses. This simply reflects the durability of houses, changing housing requirements at different stages of life, and, to some extent, the mobility of the population. Both buyer and seller are households in such cases. Intermediaries have been an almost universal feature of this market, but not in the same way as, say used car dealers. Real estate brokers have provided a bundle of services to home buyers and sellers, providing a bundle of specialized information and skills to whoever they represent, but never taking ownership of the house itself (see Chapter 8, particularly sections 3 and 5).

#### **Competition and Commissions in Real Estate**

The Internet has joined with other trends to drive down commission rates for real estate agents. Real estate brokers and agents typically receive a fixed percentage of the sale price of a house as their payment for services. As house prices have soared recently, brokers have been able to shade commission rates and still make more money. Added to this effect has been the greater speed of home sales, which means that real estate agents spend less time on each transaction, and may be willing to accept less per transaction. The Internet may be having an indirect effect in this case, because it increases and speeds the flow of information, making it possible for buyers and sellers to be matched more quickly.

The Internet has also had more direct effects, that are exactly what economic theory would predict:

- Consumers are doing more house shopping directly online, giving them more bargaining power with respect to brokers as intermediaries, and reducing the work that intermediaries have to do.
- The Internet has allowed more entry into the real estate industry, with online companies such as eRealty.com and Ziprealty.com challenging traditional brokers.

All these factors have begun to push down commissions from 6 or 7 per cent, levels long cherished by the industry, to closer to 4 per cent.

According to the National Association of Realtors, the proportion of home buyers going online for information increased from 18 per cent in 1997 to 37 per cent two years later. As this trend continues, some industry experts predict that real estate agent fees will more closely reflect the component services they provide and the time they put into a transaction.

Source: "Competition Drives Down Commissions", by Mary Shankin, *San Jose Mercury News*, December 30, 2000, p. G1.

The Internet, as in other cases, does not make real estate brokers redundant, but it does alter their role. Much of the basic information that brokers might otherwise provide individually is now available on the Web. Home buying sites such as Homesore.com, HomeAdvisor and RealHome.com provide listings with photographs, information on mortgages, advice on the details of negotiating and completing the transaction, and so on. Much of the basic informational role of the broker as intermediary may be shifted to the Web if the house buyer or seller wishes. Value capture by the intermediary based on controlling information flows is reduced. However, brokers retain the advantages of specialized skills and knowledge, as well as reputation, and these advantages are enough to insulate them against being disintermediated. Houses are extremely heterogeneous, with a large number of characteristics that must be evaluated. The size of the transaction and the information processing required are unaffected by the nature of the information that is available online, and the potential risks are great enough that most people will continue to pay sizeable commissions to real estate agents who handle house buying and selling for them. At the same time, the Internet appears to already have increased

competition enough to put downward pressure on commissions (see Illustration Box above).

**Other Goods** From garden supplies to pet needs, specialty retailers rushed online in 1999 and 2000, chasing supposed first-mover advantages. In the end, it is obvious that most of these attempts were doomed to fail (see Illustration Box below). First-mover advantage was supposed to come from brand-building and creating an installed base of customers with high switching costs. None of these were realistic goals. Brand-building takes time, especially when the first-mover is really a latecomer versus brick-and-mortar incumbents, and where online imitators can follow in a matter of months. Switching costs were never likely to be high enough in such a short time, making holding on to initial customers almost as difficult as acquiring them.

# Illustration Box The Other Y2K Bug

The Y2K bug was supposed to disable computer systems not equpped to handle years beginning with '20'. That problem turned out to be less severe than the disease that laid many dot.coms low in the year 2000. The year began with at least five online pet e-tailers: Petopia.com, Petsmart.com, Pets.com, Petstore.com, and PetPlanet.com, backed by a total of \$400 million in venture capital and public equity. A year later, only the first two still survived, but Petopia had become a subsidiary of the brick-and-mortar 530-store chain Petco, while Petsmart was always in that position, being owned by the similarly-sized Petsmart chain. Furniture.com, BBQ.com, and Flake.com (for breakfast cereals) were other examples of high profile failures.

Sources: "E-com geniuses go thud", by Michael Liedtke, *San Jose Mercury News*, December 27, 2000, p. 3C, and company web sites.

Most of all, fulfillment of orders for physical goods negates many of the efficiencies of operating online. The cost of physical space is replaced by costs of maintaining a web site (comparable until a substantial scale is attained) and of fulfilling orders. Garden tools and pet needs are not like computers, where Dell realizes real efficiencies by building to order. Furthermore, shipping orders in the thousands of dollars to individuals is quite different from individual orders that may rarely reach three figures.

Even high-value goods such as computers, electronics and some household goods such as furniture have had difficulty making a profit online. Some of the successful online entrants have benefited from being existing retailers (with stores, catalogues or both) with strong brands, existing loyal customer bases, and being in segments where price elasticity is low. These factors allow successful online retailers to avoid pricecutting and overspending on marketing, the two jaws that have crushed many e-tailing hopefuls. Flowers and other gifts, and high-end sporting goods and household items are examples of niches where some success has been realized by firms such as 1-800-Flowers, REI and Crate and Barrrel. On the other hand, furniture has proved to be an item with too high a consumer touch required before sale, and with high costs of fulfillment. Despite the high value of furniture items, and often very high markups in physical stores, furniture has not been a successful online product.

Finally, it needs to be recognized that companies like Dell and Cisco have really succeeded most in selling online to other businesses, not in retailing to households. Their profits have been built on keeping inventories down, outsourcing effectively, and an overall management of information flows throughout the supply chain. Online retailers are not always able to realize these efficiencies as easily as anticipated. Realistically, therefore, while niches within specialty retailing may profitably benefit from wider reach at lower cost, building large new specialty online stores may turn out to be a pipe dream.

# **18.6 General Retailing**

Modern mass-market general retailing is an American invention, and the United States has given birth to many of the most well-known names in retailing. Over a hundred years ago, Montgomery Ward pioneered the department store and the catalogue, before falling on hard times and recently succumbing to bankruptcy. Sears Roebuck quickly followed in the catalogue business, and became a household name around the country and the world's largest retailer, while Macy's was once a name familiar enough to feature prominently in Hollywood movie scripts. More recently, Kmart, Target, and the all-time king of retailing, Wal-Mart, have become ubiquitous features of the landscape of America, with Wal-Mart even pursuing ambitious global expansion.

The brick-and-mortar retail giants were relatively slow to embrace the World Wide Web for e-commerce. "Relatively" because they have not moved that slowly if measured by traditional metrics of expansion. What explained their deliberateness? First, given the strength of their existing businesses, they had less incentive to rush toward this strange new model of retailing than entrepreneurs starting out from scratch. Second, large corporations can often be more risk-averse, because of the nature of incentives within corporate bureaucracies. The risks involved not only the success or failure of online initiatives, but also the impact on their existing businesses. Finally, these retailers were not necessarily equipped with the right set of skills to capitalize on the opportunity. Even Wal-Mart, which had been a leader in using IT to enhance the efficiency of its supply chain, found itself struggling with using the Web to actually initiate and complete sales to consumers. Note that this was quite a different and more complicated task than simply creating corporate Web sites, which acted essentially as company brochures or permanent advertisements.

In the remainder of this section, we describe the experience of some of the U.S.'s largest general retailers in moving online. In some respects, they have also had the luxury of moving slowly because they have not faced any substantial "pure-play" online rivals, barring Amazon.com. We examined Amazon.com in the context of online bookselling, but it has, of course, taken aggressive steps to position itself as a general online retailer. We close the section with some general comments on online retailing and its special problems.

*Target* The Target chain has been one of the most successful upstarts in traditional discount retailing, nipping at the heels of previous leaders such as Kmart. Target's store layout and customer service, as well as, more recently, a surprisingly trendy image, made it a strong and growing competitor, but it was late to go online, even relative to Kmart and Wal-Mart. When it did, though, it was immediately successful. Target chose to keep its online operation, Target.com, in-house. It began by strengthening its distribution and customer service (back end) capabilities to make sure that it was able to deliver on online promises. It also decided to stay focused, avoiding an emphasis on books, music and other products where the online shopping choices were already crowded, and choosing to offer "exclusive" Target lines, where price competition on the Web would be mitigated by product differentiation. By September 2000, Target was attracting 1.6 million new visitors, according to Internet marketing research firm Media Metrix. This was far behind Amazon's 14.4 million figure, but close to catching up with Kmart's Bluelight.com (some estimates even putting Target ahead).

*Kmart* Once the king of discount retailing, Kmart has seen itself left far behind by later entrants such as Target and, of course, Wal-Mart. With its aging stores and internal information and management systems, it has struggled to stay viable, let alone competitive. The Internet has given the ailing discount chain an opportunity to compete on what might be a more level playing field. Kmart began its online presence back in May 1998 with an in-house site called Kmart.com, but the effort failed to take off. In December 1999, the company tried again, this time with a spin-off. BlueLight is a joint venture with Softbank (a Japanese venture capital firm) and Martha Stewart Living Omnimedia. Kmart's collaboration with Martha Stewart, featuring her branded items in its traditional stores, has been one of the bright spots in its recent efforts. Kmart retained 60% of the joint venture, but allows it to function independently.

BlueLight offered a free ISP with the same name to get potential customers online, and had over 4.5 million subscribers by the end of 2000. (Interestingly, both Target and Wal-Mart are copying this aspect of Kmart's strategy). The existing physical stores were used to sign up subscribers, by offering low-cost PCs branded with the BlueLight logo and loaded with the requisite software, and to stage other marketing efforts. Unlike Target's focused online product line, Bluelight.com offers more items than the physical stores. The 2000 holiday shopping season saw BlueLight's sales increase tenfold, or an impressive-sounding 1060 per cent, over the previous year (when it was still Kmart.com). While the dollar figures for online sales are still only in the tens of millions, representing a tiny fraction of Kmart's \$36 billion annual sales, for Kmart the online venture represents a chance to improve brand image and employee morale, something that had proven difficult at its 2,000 plus physical stores.

*Wal-Mart* In the world of bricks and mortar, Wal-Mart rules retailing. It is several times as large as its nearest rivals in size, Kmart and Sears, and much more profitable. Yet its online presence has been anemic. In late 2000, Walmart.com was ranked 47th out of 50 retial sites surveyed by Media Metrix. As was the case with Kmart, Wal-Mart's first attempt at an online sales site was relatively unsuccesful, and it began again in spring

2000 with a separate spin-off company, headed by Jeanne Jackson, an executive from Gap, with experience in both traditional and online retailing.

Jackson has taken a solid analytical approach to her mission. Asked<sup>6</sup> about the danger of Wal-Mart being eliminated as the middleman, with people just buying music from the record label site, Kleenex from the Kleenex site, and so on, she responded,

You fundamentally have to believe there's some value in bundling. Customers will trade a certain amount of time for efficiency; otherwise, why don't people just drive to the Kleenex factory? Some subset of this will be true on the Internet. It won't be worth your energy to shop around [online] to manufacturers all day to spend \$100. And if you, as a retailer, are the one who does the best bundling, then customers will want to buy from you.

Note that Jackson's argument is based on the fact that search and other shopping costs on the Internet are reduced, but not driven close to zero. This may well change in the future. Also, her use of the term "bundling" refers to the product line offered in the store, and not bundling in the sense of offering a package of products for sale together, as was discussed in Chapter 13.

Jackson emphasizes ease and reliability for using the online site, as well as trying to build long-term customer relationships. The former goals are to be met by focusing on areas such as

- shipping reliability
- credit processing
- order status and tracking
- gift features and return options

Jackson also considers that Walmart.com can complement its online stores, offering more items, particularly ones which turn over more slowly and thus tie up shelf space in physical stores.

Furthermore, the complementarities may work even more strongly in the opposite direction, with the online site being able to take advantage of its parent for:

- expertise in forecasting demand and managing inventory
- logistics expertise for efficient fulfillment
- leverage with suppliers
- lower marketing costs per capita

Of these fulfillment is clearly the area that presents the most challenges for all online retailers, not just the 'click-and-mortar' ones. Another area where the parent's help has been limited (to deep pockets) is in the actual site. Despite hiring a whole group of firms with high tech expertise, taking many months and spending large amounts of money, Walmart.com's redesign and relaunch has not been an unqualified success, characterized by some as "clunky" and hard to navigate.

<sup>&</sup>lt;sup>6</sup> Knowledge@Wharton website, "Walmart.com Round Two: Jeanne Jackson Does Some Remodeling."

*Overall Perspectives* The experience of Walmart.com illustrates that there are some basic differences in online retailing that revolve around the minutiae of the interaction between the buyer and seller. There is over a hundred years of experience with these factors in modern mass-market retailing: store layouts, physical displays, employee roles, checkout procedures, and so on. In e-tailing, all this is being learned, both by consumers and by stores. Possible evidence of this learning process comes from statistics such as those from the Boston Consulting Group, that of the millions of visitors to 10,000 or more e-tailing sites, 97 per cent leave without buying.<sup>7</sup> Of course much catalogue shopping and mall crawling may share similar properties: one of the advantages of the Web is that it allows customer traffic to be tracked.

One group of problems is the pure analogue of the psychological and mechanical factors that affect the success of traditional retailing: the look and feel of web pages, such as graphics and the placement of click buttons; how they are linked and how easy and logical they are to navigate, from beginning browsing to completing a transaction; and the kind of problem solving help that is available, from basic product information to specific comparisons and product research.

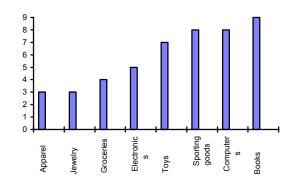
A second set of issues centers around other kinds of information. Consumers may be reluctant to provide too much information to an e-tailing site: there is no online analogue of walking into a store and buying an item immediately and anonymously with cash. They also may not have enough information to trust the e-tailer, lacking the signals conveyed by a physical site, which may, for example, be well-maintained or shabby. Some of these problems will be overcome by online brand-building and by anonymous transaction technologies based on versions of digital cash.

On the other hand, some characteristics of online retailing cannot be overcome. As Kenneth Rosen and Amanda Howard of the University of California at Berkeley argue,<sup>8</sup> e-tailing has many similarities to catalogue retailing, and some products are less suited to this approach, such as products that require a high touch (e.g., furniture), products that are hard to judge and subject to high return rates, and impulse items purchased for instant gratification. They construct a scoring system for different categories of products, which places books, computers and sporting goods at the top of the e-tailing suitability list (see Figure 18.2). Rosen and Howard note that catalogue retailing grew rapidly 100 years ago, but has ended up with only about 3-4 per cent of retail sales today. On the other hand, the lower costs of reaching customers via the web, the ability to build more accurate profiles of customer preferences online, and the greater interactivity possible on the Internet may together ultimately make e-tailing more attractive than catalogue sales.

# Figure 18.2: Scoring E-tail Categories

<sup>&</sup>lt;sup>7</sup> Reported in "The Riddle of the Abandoned Shopping Cart", by Gary Andrew Poole, *Grok: The Industry Standard Special Reports on the Internet Economy*, December 2000-Janury 2001, p. 77.

<sup>&</sup>lt;sup>8</sup> "E-Retail: Gold Rush or Fool's Gold?", California Management Review, Spring 2000.



Source: Rosen and Howard, California Management Review, Spring 2000, Table 4.

Rosen and Howard also examine economic factors that affect e-tailing. They suggest that the costs of building and maintaining web sites, and of marketing and advertising, may eliminate any cost advantage gained from more efficient operations, inventory management and procurement. The financial figures for e-tail examples such as those in Tables 18.2 and 18.4 would appear to bear out this contention, but these are obviously not long run equilibria. In Figure 5.12, we illustrated how non-cooperative choices of R&D spending could lead to "overexpenditure" from the point of view of the firms in the industry jointly. Much the same kind of logic applies to marketing and advertising expenditures, which may partly explain current situation in e-tailing. In Figure 5.14, we showed how a rival might be shut out of a market, or forced to exit, through aggressive spending on R&D, and again a similar logic may play out with respect to marketing expenditures. Thus cost advantages may exist for online retailing once there is soemthing like an equilibrium, with excess entry weeded out. As in cases such as pet supplies (see Illustration Box above, The Other Y2K Bug), however, the e-tail survivors may be those with physical stores as well.

#### **18.7 Conclusion**

Analysis of the economics of selling physical products online suggests that in many areas, strong brick-and-mortar retailers may have an advantage, because of their existing resources and expertise. Even "pure play" online retailers have found building some physical infrastructure to handle order fulfillment to be advantageous: Amazon and Webvan are two prime examples. Where brick-and-mortar chains do not have the requisite skills, those may be obtained from outside, as Wal-Mart and Kmart have shown. Deep pockets are a big advantage, as long as the move online is implemented well. In some industries, existing oligopolies are the result of legal, institutional or relationship barriers. Drugs, automobiles and houses all have special structures that make entry harder.

In many respects, online retailing is reminiscent of catalogue retailing, which a century after its initial rapid growth, still has ony a few percent of the United States retail market. However, the Internet and the World Wide Web have many features that go

beyond what catalogue retailing can offer. Aside from costs that may be substantially lower once the technology becomes standardized and brand-building wars die down, online commerce does offer opportunities for closer links between consumers and producers, in the form of better information flows that allow wants to be satisfied more efficiently. Other long-run factors that may support the growth of online sales of physical products are the growth of broadband, or high-speed access, which will increase the informational advantage of the web over catalogues and reduce the disadvantages relative to visiting physical stores, and the continued increase in the value of time, which will make physical trips to the store relatively costlier, and tip the balance toward online shopping for more kinds of products.

# Summary

- Books were one of the first products sold online. They have many features that make them attractive as online offerings, but the size and fragmentation of the market probably limit bookselling as an e-tailing sector, until electronic books take off.
- The market for groceries is very large, but margins are thin, existing grocery chains very efficient, and value-to-weight ratios are often low. All these factors have made it difficult for online entrants to become successful in this sector.
- Drugs and related heatlh and beauty products offer some advantages over books and groceries for online trnasactions: going to a drugstore may not be pleasant, and value-to-weight ratios are relatively high. However, the power of existing intermediaries in the health insurance sector has limited the success of online drugstores.
- Many kinds of specialty retailing have suffered from the same problems as sectors such as groceries and books. However, clothes and toys do provide categories where niche catalogue retailers have been successful, and e-tailing allows these niches to be refined, through wider reach, lower costs and more precise targeting.
- Cars and houses are high value items which have entrenched specialized intermediaries. Much of the impact of the Web has been and will be in disseminating product and pricing information, improving matches, and putting some pressure on margins. Transactions will therefore continue to be completed in traditional ways. While there are new online intermediaries in these markets, they are often an additional layer on top of the existing dealers or agents.
- In general retailing, brick-and-mortar chains such as Target, Kmart, and Wal-Mart have slowly crafted their entries to the online marketplace, where their only likely long-run competitor in general retailing is Amazon.com, as it broadens its product line from books and music. The model of combining online and physical stores is likely to be a dominant one in the future, for general retailing, while specialty niches will flourish online.

# Questions

- 1. Try to summarize a few of the key differences and similarities in selling books, clothes and drugs online.
- 2. Compare the approaches of Wal-Mart, Kmart, and Target in their online selling efforts.
- 3. How and why are the institutions for selling cars and houses different from 'retailing'? Will they become more similar as a result of the Internet?