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# Internet retailing: enablers, limiters and market consequences☆

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**Abstract**

Despite a tremendous and enthusiastic reception for Internet retailing in the last few years, this new channel has not performed as anticipated, nor has its acceptance been as pervasive as originally expected. This paper details the many inherent structural and functional weaknesses of Internet retailing. Various strategies designed to improve the performance of e-tailers are explored.


*Keywords:* Retailing; E-Commerce; Internet

## 1. Introduction

Retailing emerged from the Dark Ages in the last two centuries. For instance, R.H. Macy, founder of Macy's initiated one-price buying when he opened his first dry goods store in 1858 (Sales and Marketing Management, 1998). Marshall Field's opened the first suburban department store in Illinois in 1930 (The New York Times Magazine, 1997). However, no other innovation has received as much attention from retailers, manufacturers, consumers and the general public as has been accorded to Internet retailing, or e-tailing. Indeed, no other form of intertype competition threatens to upset traditional retailing more than Internet retailing. In the last few decades, discount stores, superstores, warehouse stores, direct sales and home shopping cable networks have provided consumers with new shopping options. The difference between these retail formats and e-tailing is technology. Technological innovations in retailing have heretofore been relatively low scale, such as the shopping cart, which was introduced in a Humpty Dumpty store in Oklahoma City in 1937 (Chain Store Age Executive, 1994) or low key, such as UPC scanning (Burke 1999).

Despite some relative successes, especially in terms of sales volume and growth of a customer base, the initial fast-paced growth in e-tailing has slowed. Regardless of several temporary setbacks to sales and a heretofore long-term lack of profitability, e-tailing is here to stay. E-tailing is the newest store format in retailing, albeit using more radical models of retail operations, compared to the traditional bricks-and-mortar store, catalog and home shopping formats in use today. Indeed, the technological characteristics and potential worldwide reach of e-tailing creates additional markets. As a result, many of the largest retailers (such as Wal-Mart, K-Mart and Sears), manufacturers (such as Proctor & Gamble and Ford) and catalog marketers (such as Lands' End and L.L. Bean) have integrated online retailing into their existing operations. Thus, what started out as a separate format of retailing that was the innovation and exclusive domain of new entrepreneurs is now becoming simply part of a multichannel strategy.

The organization of the paper is as follows. In Section 2, we provide an overview of Internet retailing and elaborate on a variety of factors that have either enabled the spread of Internet retailing or have limited its expansion and success. In Section 3, we offer an evaluation of the broader strategies pursued by e-tailers, including the various business models that are being utilized. We then comment on the impacts of the Internet environment and strategies on e-tailing performance and identify the various long-term impacts of e-tailing on the retail environment. We then suggest several strategies and competencies that would enable e-tailers to withstand the competitive onslaught of online manufacturers and hybrid format stores. In conclusion, we offer an agenda for future research in this important area.

Because Internet retailing is technology based, and because technologies change rapidly, e-tailing as a new retail format has moved very quickly through its life cycle, from its

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introduction in the 1990s to growth or even maturity today. The observations made in this paper with regard to the current state of e-tailing may be debatable even as we write them. When this paper is read at a much later date, we expect some of our examples of good e-tailers to have turned out to be bad, and some of our prognostications to have been proven false. We would like to think that thoughts that hold the test of time will be considered to be more than just lucky guesses.

## 2. Internet retailing

Although the growth in Internet retailing has not turned out to be as strong as predicted in the late 1990s, it is clear that some e-tailers offer distinctive value propositions to customers in certain categories. At the core of any business strategy is the ability to develop a sustainable competitive advantage. Some retail format elements are more sustainable than others, both for e-tailers and for bricks-and-mortar players. For instance, pure commodities (e.g., hardware or building supplies) are easy for competition to match, both in terms of assortment and price (de Figueiredo 2000). As a result, a sustainable advantage will be difficult for e-tailers of pure commodities. It is also difficult for quasi-commodities (e.g., books and CDs) to maintain a profitable and sustainable position. Although current market leaders, such as Amazon.com, enhance the shopping experience by providing reviews and making suggestions based on past purchases, customers can still use a shopping bot to find and purchase the lowest-cost product. Other products, such as apparel, can be difficult for customers to purchase over the Internet because of the need to touch, feel and try on products. Market leaders, like The Gap and cataloger Lands' End, can be successful because of their prior customer base, strong brand identity, consistent quality and fit and outstanding service and guarantees. Smaller players selling touch/feel products without strong brand identities, however, are expected to have a difficult time in the future. Similarly, unique touch/feel products such as diamonds or fine art are not easily sold over the Internet at a profitable level because they are perceived as being high-risk products and often need a personal sales touch to close the sale.

Where, then, in the e-tailing space do we expect to see long-term successes? Table 1 provides comparative per-

Table 1
Comparative performance of top 20 Internet retailers

| Company/affiliate | Merchandise | Business model | Sales | Past year customers | Average 12-month spending | Best Gomez rating |
|---|---|---|---|---|---|---|
| eBay | General | C-to-C English auctions | US$3.5–3.7 billion | 10 million | US$350 | 7.37 |
| Amazon.com | General | Conventional stocking; partnerships | US$1.7–1.9 billion | 12 million | US$150 | 8.40 |
| Dell | Computers | Direct sales manufacturer | US$1.1–1.3 billion | 600,000 | US$2,000 | [a] |
| Buy.com | General | Conventional | US$1.1–1.3 billion | 600,000 | US$250 | 8.25 |
| Egghead.com | Computer products | Conventional (moved from store-based retailing) | US$500–600 million | 700,000 | US$800 | 6.63 |
| Gateway | Computers | Direct and store-based sales manufacturer | US$500–600 million | 350,000 | US$1500 | [a] |
| Quixtar (Amway) | General | Multilevel marketing | US$400–450 million | 600,000 | US$700 | [a] |
| Ubid | General | C-to-C reverse auctions | US$275–325 million | 600,000 | US$500 | 4.30 |
| Barnes & Noble | Books, music | Store-based retailer | US$275–325 million | 3 million | US$100 | 7.63 |
| Cyberian Outpost | Computer/electronics | Conventional | US$200–250 million | 425,000 | US$550 | 5.99 |
| MicroWarehouse | Computer products | Mail order catalog | US$200–250 million | 175,000 | US$1200 | 5.62 |
| Office Depot[b] | Office supplies | Store and catalog retailer | US$175–200 million | 250,000 | US$750 | [a] |
| eToys[c] | Toys | Conventional; partnerships | US$150–175 million | 1.7 million | US$100 | 8.17 |
| Lands' End | Clothing | Mail order catalog | US$150–175 million | 800,000 | US$200 | 6.69 |
| The Spiegel Group[d] | Clothing | Mail order and store-based retailer | US$150–175 million | 450,000 | US$350 | 7.68, 6.36 |
| Fingerhut[e] | Gifts, etc. | Mail order catalog | US$150–175 million | 400,000 | US$375 | 4.92 |
| CDW | Computer products | Direct marketing, own sales force, two retail stores | US$150–175 million | 200,000 | US$800 | 6.70 |
| JCPenney | General | Department store | US$150–175 million | 500,000 | US$300 | 5.74 |
| Gap | Clothing | Store-based retailer | US$125–150 million | 500,000 | US$300 | 5.66 |
| IQVC | General | Cable TV network; seven outlets | US$125–150 million | 550,000 | US$250 | 6.19 |

Source: Adapted from information contained in *www.stores.org* and *www.gomez.com* when accessed in January 2001. Gomez Ratings given here are the latest overall ratings based on a variety of evaluation categories, including ease of use, customer confidence, onsite resources, relationships, and cost.

[a] Indicates that the merchant has met Gomez certified minimum, even though ratings are not available.

[b] Includes Officedepot.com and vikingop.com.

[c] Includes etoys.com and babycenter.com.

[d] Includes Spiegel.com, eddiebauer.com and Newport-news.com. Also Gomez ratings are for the first two.

[e] Includes fingerhut.com, andysauctions.com and andysgarage.com—the last two closed (as of January 31, 2001).

| | PURE-PLAY | TRADITIONAL & CLICKS |
|---|---|---|
| SMALL | Niche Players<br>Hobbies<br>Collectibles<br>Hard-to-Find | Niche Players<br>Hobbies<br>Collectibles<br>Hard-to-Find |
| LARGE | eBay<br>Amazon.com<br>Dell<br>Buy.com<br>uBid<br>Cyberian Outpost<br>MicroWarehouse<br>eToys<br>CDW | Egghead.com*<br>Gateway<br>Quixtar (Amway)<br>Barnes & Noble<br>Office Depot<br>Lands' End<br>The Spiegel Group<br>Fingerhut<br>JCPenney<br>Gap |

*Egghead.com recently announced they were opening 2 stores.

Fig. 1. The Internet retailing market space.

formance data for the top 20 Internet retailers. Using these retailers, Fig. 1 views the Internet retailing landscape from pure play (Internet only) to traditional and clicks (a combination of either traditional stores, catalogs or direct sales and Internet) on the horizontal dimension and size on the vertical. The large pure plays (lower/left quadrant) are the most problematic at this time. Few, if any, of the retailers in this space are currently profitable. Much of the positive discussion regarding the future of Internet retailing is centered on the large traditional and clicks operations that occupy the lower right quadrant of Fig. 1. Traditional stores are investing heavily in developing an Internet presence. They are hoping that their customers will find shopping benefits by combining elements of traditional and virtual retailing. Although there is a tendency for academics and the media to slight the small retailers in the upper half of Fig. 1, they pose one of the most interesting possibilities for e-tailing's future. With low entry costs and

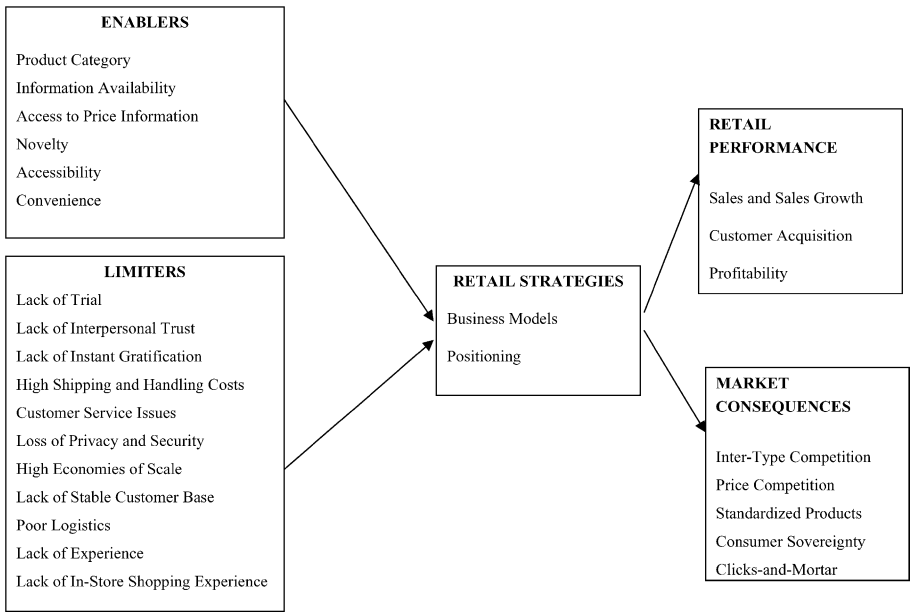


Fig. 2. Internet retailing—the broad view.

constantly improving search engines and shopping bots, smaller niche sources for hard-to-find products, collectibles and hobbies can expand their trade area to the world. These retailers may have established storefronts or play only in the Internet space.

Since it is so difficult to maintain a sustainable competitive advantage on the Internet based on retail format (e.g., merchandise and price), Internet retail success appears due to the business model adopted. From the customer's point of view, e-stores offer the convenience of being able to choose from a wide selection at any time, from home or office, and to have it delivered. However, e-stores cannot always fulfill all of their customers' needs and have more difficulty providing personalized human-contact, prepurchase trial or experience, and low-cost after-sales service (including returns) than do their bricks-and-mortar competitors. Therefore, several factors help or hinder the growth and success of e-tailing, as elaborated below and charted in Fig. 2.

## 3. Enablers of Internet retailing growth

The factors enabling the spread of Internet retailing help establish unique aspects of this retailing method and help understand the types of competencies lacking in conventional store-based retailing. Some of the more important of these factors are discussed below.

### 3.1. Product category

Some categories—such as computer products, books, music CDs and videos—have had strong consumer acceptance, and a few may someday become profitable. However, in other categories, such as home grocery delivery, a very prominent start now appears to have somewhat fizzled out (e.g., Streamline has closed; Webvan is just "hanging on"; Wingfield, 2001). The potential impact that the *type of product* has on customer preferences and buying behavior can be gauged based on its level of Internet sales. It could be argued that products that are clearly standardized and uniquely branded, such as books and CDs, have a higher potential for sales through the Internet, especially since quality uncertainty in such products is virtually absent. Moreover, such products have tangible value propositions and are highly differentiated (Peterson et al., 1997). These properties have also enabled customers to use a variety of search engines and shopping bots (e.g., mySimon.com, bizrate.com) to find the best price for standardized products (e.g., a book).

### 3.2. Access to information

Internet retailing fulfills several consumer needs more effectively and efficiently than conventional store-based retailing. First, at an Internet retailing site, consumers can conveniently peruse the entire assortment carried by the retailer with minimal effort, inconvenience and time investment. Second, traditional stores cannot easily match the on-demand provision of merchandise information. Third, consumers can efficiently and almost effortlessly obtain critical educational knowledge about firms, products and brands, and thereby increase their competency in making sound purchase decisions. Fourth, consumers can compare product features, availability, prices and other factors across a range of e-tailers more efficiently and effectively than with bricks-and-mortar stores. Fifth, Internet retailing may provide a level of privacy and anonymity in the purchase of certain sensitive products. Finally, the Internet can provide an extremely high level of convenience for those whose time costs are perceived to be too high to invest in conventional retail shopping. All these increase the acquisition value of the purchase for consumers, i.e., benefits relative to the monetary sacrifice (Grewal et al., in press).

### 3.3. Access to price information

As long as presale objective information, in terms of detail and variety, is more valuable than persuasive information, Internet retailing offers greater acquisition value for consumers as compared to conventional retailing. At the same time, the ability to compare prices across a wider variety of merchants and offerings enhances the e-tailers' transaction value (Grewal et al., in press).

### 3.4. Novelty

Given its relative newness, the Internet provides a unique shopping experience for customers. From a telephone survey of 790 households, Donthu and Garcia (1999) found that Internet shoppers were more impulsive, more convenience seeking, more innovative and less risk averse than non-Internet shoppers were. In traditional retailing, however, such novel experiences are more often provided by changing atmospherics and/or featured merchandise. By contrast, Internet retailing is more versatile; novel experiences are provided not only by site design (the Internet equivalent of physical store layout) but also by varieties of innovation in the shopping formats. Consumers' novel experiences now range from the ability to search for and buy new and used goods from other consumers (such as at ⟨eBay.com⟩) to naming one's preferred price for goods and services (such as at ⟨priceline.com⟩) to buying without detailed information being entered each time (such as in one-click shopping at ⟨Amazon.com⟩).

### 3.5. Accessibility

Internet retailers enjoy a greater trading area, and thus potentially greater sales, than their bricks-and-mortar counterparts because the physical location of stores or distri-

bution centers is of limited or no consequence. Moreover, consumers can access an e-tailer from practically anywhere Internet service is available.

### 3.6. Convenience

The Internet is open 24 h a day, 7 days a week. Busy consumers and those who simply do not enjoy the shopping experience may value the convenience of shopping online. They do not have to get dressed, fight traffic, deal with crowds or salespeople and/or feel like they have wasted time if the store is out of the merchandise they desire or need.

## 4. Limiters of Internet retailing growth

Compelling forces limit the success of Internet retailing. These factors are elaborated below.

### 4.1. Lack of trial

Internet retailing, despite allowing for some multimedia presentation, is inherently deficient in offering pretrial experience and evaluation for a majority of commonly bought products, such as clothing, toys and furniture. By contrast, the products most frequently purchased through Internet retailing remain those with standardized formats, such as books and music. Consumers often require high sensory evaluation and/or trial for products such as clothing, but these cannot be adequately represented digitally.

### 4.2. Lack of interpersonal trust

Internet retailing is inherently limited in its ability to offer high-trust persuasive communication. This type of selling is important for products such as jewelry and other products or services where consumers have difficulty evaluating value. While objective communication is often very well represented online and can be efficiently searched and indexed, customers may require the decision-making assistance that salespeople often provide.

### 4.3. Lack of instant gratification

Internet retailing is structurally disadvantaged to provide the type of instant gratification that can be obtained from simply visiting a conventional store and acquiring the product. Except where content can be paid for and downloaded (e.g., software, information and music), consumers have to wait for a majority of products.

### 4.4. High shipping and handling costs

The higher costs of shipping and handling add considerably to the costs of fulfillment in Internet retailing. These costs are currently borne largely by the retailers themselves, but they may eventually be passed on to consumers. Internet retailers even have to bear the costs for tasks that consumers routinely perform themselves at traditional stores, such as picking from shelves and carting. Moreover, e-tailers bear the costs of warehousing, shelving, bulk breaking, packaging and shipping. These additional costs lessen the presumed savings of not having costly storefronts of traditional retailing.

### 4.5. Lower customer service

Apart from the lack of high-contact pre- and postsales service, there are several customer service issues that are inherently limited in Internet retailing. The issue of the product returns, exchanges and monetary refunds are as cumbersome as the initial delivery of the product. Online retail returns are about 11% of all revenues (Bhise et al., 2000). Customers typically go through a more tedious process of making returns and obtaining refunds, including having to pay for returns and, of course, packing it and taking it to a post office.

### 4.6. Loss of privacy and security

Issues of privacy and security generate greater concerns from consumers in an e-tailing environment. First, Internet transactions are carried out over a public domain. Therefore, issues of encryption, network security, and transactional privacy and security become a paramount concern. Second, privacy policies of various e-tailers vary widely, from those who barter or sell customer information to those who use the information primarily for internal purposes. However, privacy promises made at the time of an initial transaction may not hold in the future. Firms may change their privacy policies, as Amazon.com did recently.

### 4.7. High economies of scale

Despite the myth that Internet retailing is a low-cost retail format, well-designed and well-maintained web site and back-end systems may cost between US$15 million and US$25 million annually (Barsh et al., 2000). With fulfillment as a critical issue for e-tailers, state-of-the-art distribution systems and skilled labor are critical. No wonder so few e-tailers are operating above break-even sales volume (Barsh et al., 2000). Additionally, due to their relative newness, e-tailers have to build brand equity. Although bricks-and-mortar retailers playing in the Internet environment have to build their dot-com awareness, pure plays have to start from scratch. Moreover, incentives offered to convert site visitors to customers also add to the consumer acquisition costs. Customer acquisition costs are in the range of US$50–100 (Barsh et al., 2000), far in excess of store-based retailers (Reichheld and Schefter, 2000). The compounded effects of high acquisition costs, low repeat buys and small orders make the business model

for many Internet retailers—particularly the pure plays—questionable.

### 4.8. Lack of stable customer base

Closely related to these scale issues is the lack of a stable customer base. While e-tailers spend a great deal on customer acquisition, repeat purchases are still low. Simple arithmetic suggests that loyal, repeat customers are required to offset the upfront costs of customer acquisition (Reichheld and Schefter, 2000). Having spent a large amount to acquire customers, many retailers may not be able to afford the additional investments necessary to enhance customer loyalty. Moreover, having acquired customers by offering incentives, it is often difficult to switch the basis of loyalty from pure incentives to other more stable bases, such as customer satisfaction and identification with the firm. Since the incentives that initially bind the customer to the firm are typically economic in nature, it is easy to lose the customer to a competing firm that meets or beats the incentive. Given that prices are more transparent on the Internet, and that switching costs for the customer are quite low, incentives run rampant and customer loyalty suffers. The net effect is the relative absence of a stable and loyal customer base for the Internet retailer. Hence, there is a vicious circle—to acquire customers, e-tailers must provide incentives, yet, those incentives are often not sufficient to assure loyal customers.

### 4.9. Poor logistics

Some Internet retailers give more attention to front-end activities, to the detriment of critical back-end issues, particularly order processing and fulfillment. Part of this skewed concentration may be due to the fact that e-tailers perceive themselves to be more vulnerable at the front end, especially given the absence of a traditional retail storefront. Since most Internet retailers suffer from low consumer awareness, they have placed a greater emphasis on increasing awareness and enhancing their customer base. Further, due to their general lack of experience in retailing in general, many pure plays underestimate the complexity inherent in and the precision required to satisfy the logistics function. Bricks-and-mortar retailers do not have supply chains that are accustomed to filling and shipping one item at a time. Nor are they used to handling the larger number of returns that are characteristic of Internet retailing.

### 4.10. Lack of experience

Over the years, traditional retailers have gained considerable experience with economic upswings and downturns, consumer preferences and shifts in tastes, merchandising challenges, supply chain challenges and intertype competition. In contrast, though they are entrepreneurial and have strong technological skills, many of the new pioneers in Internet retailing lack specific retailing experience. Unfortunately, all of these skills are necessary to succeed in the Internet environment. Strong bricks-and-mortar retailers can buy technological expertise and, to some extent, an entrepreneurial spirit; for pure plays to develop basic retailing skills and the requisite infrastructure in a timely manner is more difficult.

### 4.11. Lack of in-store shopping experience

Some people like to shop. They like the "theater" of retailing—the sights, sounds and smells. They enjoy interacting with salespeople and mingling with crowds. They take pleasure in the social interaction they have while shopping with friends and family. Although e-tailers are trying to create an enjoyable shopping experience, it is still perceived by many to be rather sterile in comparison to a traditional store.

## 5. Internet retail strategies

In order to adapt to the enablers and limiters, e-tailers have adopted different business models and positioning strategies.

### 5.1. Business models

In Internet retailing, a business model could be viewed as the primary method of organizing retailing activities. Differences in Internet retail business models may be due to location on the market space, pricing method, integration with traditional (physical or direct mail) retail activities or some other method of differentiating from other retailers. Among the extensive list of business models noted by Rappa (2000), the ones most visible are the following.

#### 5.1.1. Virtual malls (or portals)

The virtual mall or portal is an Internet site that hosts several merchants. Prominent examples include Yahoo! Shopping and AOL Shopping. Portals typically operate on the principle of brokerage, and charge set up and transaction fees from the merchants they host (Rappa, 2000).

#### 5.1.2. Aggregators

Aggregators collect potential trading partners at one site, based on the requirements of individual buyers and sellers. Buyer aggregators collect buyers for specific products and attempt to obtain volume discounts from sellers (e.g., Mysimon.com). Sell-side aggregators collect sellers and provide these options to potential buyers (e.g., Pricewatch.com).

#### 5.1.3. Auction brokers

Auction brokers bring together buyers and sellers for specific products and enable a bidding process. The broker charges the seller a fee (e.g., eBay.com).

*5.1.4. Reverse auctions*

Buyers specify their own prices for specified goods and services, and the broker seeks fulfillment from interested vendors (e.g., Priceline.com).

*5.1.5. Search agent*

Search agents, or intelligent software agents, such as pricescan.com, search out the best price for a specific product and hard-to-find information for the buyer.

*5.1.6. Virtual merchants*

Such merchants are usually "pure play" in the sense that they have no other presence, except that on the virtual market space. Some pure-play retailers have extensive warehousing and fulfillment capabilities (e.g., Amazon.com), while others may simply be small entrepreneurs. The latter are more likely to team up with portals and aggregators.

*5.1.7. Catalog merchants*

Several catalog companies have made an effective transition to the web, primarily because of their expertise in cataloguing products as well as the lower marginal costs of publishing their catalogs on the Internet (e.g., Landsend.com, fingerhut.com).

*5.1.8. Bricks and clicks*

These are traditional physical store retailers who may include Internet retailing into a well-integrated organization or operate Internet retailing divisions separately (Gulati and Garino, 2000). Prominent examples include officedepot.com and barnesandnoble.com.

*5.2. Positioning*

While traditional stores place an appropriate amount of importance on the positioning of their store image (e.g., upscale vs. discount), most of the early entries into the e-tailing world were positioned as low-priced providers. Given the price transparency enabled by the Internet and facilitating search mechanisms, the emphasis on low prices was not misplaced. However, other positioning strategies failed to develop, and even where they did, such as in the failed initial entry of Boo.com, which positioned itself as an upscale fashion store, there was little that one could do with the Internet to convey "upscale" store image. In fact, web design could not be used as a major signal of status, since any retailer could usurp it. Current technology does not effectively allow Internet retailers to convey the status differentiation of their stores.

## 6. Retail performance

The way in which e-tailers have assessed their performance has heretofore been sharply different than the way it is done in traditional retailing. For the physical stores, the usual performance criteria are various ratios, such as net profit margin, asset turnover and return on assets—used to evaluate overall performance; gross margin, inventory turnover and gross margin return on investment (GMROI)—used to evaluate merchandising decisions; and sales per square foot and sales per employee per hour—used to evaluate store performance. Many of these traditional measures, such as sales per square foot, would not make sense in the virtual environment. Others would call too much attention to Internet retailers' lack of profitability. Thus, e-tailers have chosen to use alternative performance measures that have been based more on the traffic generated (e.g., number of unique customers), average spending per customer, average order size and measures of abstract loyalty (e.g., proportion of repeat customers).

While these measures may have been appropriate while Internet retailing was in its nascent stages, the lack of emphasis on profitability, or even on sales, has taken a serious toll on the various constituents with which e-tailers interact. The traditional retailing performance measures are unambiguous and objective. Thus, managers can be fairly evaluated by their firms, and their shareholders and analysts can evaluate firms. On the other hand, the emphasis on evaluation characteristics that are unobservable to outsiders, such as the proportion of repeat customers, renders performance a victim of corporate public relations and public disbelief. For example, critics have charged that Internet retailers do not disclose all their performance statistics fully and attempt to obfuscate important performance metrics in favor of customer statistics that cannot be readily verified by the outside public (Williamson, 2000).

Recently, however, e-tailing managers, journalists, consultants and investors have begun to obtain profitability data and study its antecedent factors. Internet retailers' customer acquisition and fulfillment costs have been gauged to be exceptionally high (Barsh et al., 2000; Hoffman and Novak, 2000). Experts have advocated that a reduction in these costs coupled with an increase in customer order size and repeat purchases could make some e-tailers profitable (eRetailnews, 2000). A series of similar studies jointly conducted by Bain & Company and Mainspring concluded that customer loyalty was crucial for online retailing and that building customer loyalty is more profitable than a focus on transactional metrics, such as number of visitors (CyberAtlas, 2000). Given the increasing lack of support for nontraditional measures of performance, it is only a matter of time before Internet retailers will have to report performance in traditional terms, viz. revenues and profits.

## 7. Market consequences of Internet retailing

The extent to which Internet retailing gains momentum and market share depends upon a number of factors, including the competitive challenge from traditional retailers and the ability of e-tailers to quickly move down the

learning curve. Despite the uncertainties that the future has in store for pure-play e-tailing, some of the broader impacts that can be readily observed are the following.

### 7.1. Increase in intertype competition

Internet retailing as a distinct retail format has contributed to an increase in intertype retail competition. Consumers increasingly buy products, such as books, music, computers, securities and airline tickets over the Internet. According to several estimates, these shifts in consumer buying are likely to continue in certain categories. The positive impacts of such an increase in intertype competition fostered by Internet retailing include greater overall economic efficiency in the retail sector, as well as greater choice and, therefore, increased consumer welfare.

### 7.2. Increase in channel conflicts

Because the Internet is viewed as another distribution channel, manufacturers and suppliers face the prospect of increased channel conflict. Existing retailers face the threat of increased intertype competition and disintermediation when manufacturers and suppliers add the Internet as a channel. For example, Sony recently angered its existing retailers by providing links to its own Columbiahouse.com site on its web site (Weiss, 2000).

### 7.3. Increase in price competition

The transparency of prices charged by Internet retailers is a pervasive impact. Shopping bots (What are "bots"?) and price comparison tools can tap into most e-tailers' prices. In addition, several e-tailers consciously partner with a variety of search engines so that they can appear price competitive. Customers can "price shop" the Internet to determine a reference price and then purchase at a traditional store. Thus, the heightened price competition caused by the Internet also impacts the bricks-and-mortar world.

The merchandise categories that are currently the most popular purchases over the Internet, quasi-commodities like books and CDs, are most prone to price competition. Given that most e-tailers of these popular Internet products are relatively similar, price will continue to be a critical factor for customers who shop these categories. As a result, price will become an even more important competitive factor for e-tailing in the future. At the same time, however, e-tailers are recognizing that low prices can result in large losses. Some, like bluefly.com, are attempting to increase margins without loosing their customer base.

### 7.4. Increased attention to standardized products and brand names

In general, "touch/feel" products—those that require sensory experience, evaluation and trial prior to purchase, such as clothing and fashion goods—are less likely to gain increased sales from Internet retailing compared to standardized products, such as books, music and computers (De Figueiredo, 2000). Standardization and strong brand images reduce consumer risks in the evaluation and purchase of products. However, those retailers and catalogers with strong brands, e.g., The Gap and L.L. Bean, are expected to do well. Purchasing from these firms is relatively low risk because the consumer "knows what to expect" in terms of size, color, quality and customer service. The synergy between Internet retailing and traditional stores and catalogs will provide greater exposure to brands, strengthen known brand images and, therefore, increase the importance of brand names in consumer retail purchases.

### 7.5. Greater consumer sovereignty

The Internet opens a new channel of distribution for manufacturers and retailers, thereby increasing channel options for consumers. The ability of the Internet to personalize shopping experiences and service along with providing greater choice through enhanced retail competition increases consumer welfare. In addition, the amount of information obtained freely over the public domain on product and brand choices, reviews of features and performances of existing models, prices charged by various retailers and the evaluation of retail service and product availability with various retailers all add to the control the consumer now has over the shopping process (Tedeschi 1999). Such enhancements in consumer choice, information and control translate to greater consumer sovereignty.

## 8. Future e-tailing strategies

In terms of the conventional life cycle curves, Internet retailing is beyond the introduction stage. In the more advanced stages of Internet retailing, e-tailers have a better sense of the enabling and limiting properties of the Internet, are more aware of performance considerations and face an increasing threat from bricks-and-mortar stores and catalogs. Consequent to this evolving future, e-tailers are reacting with the following strategies.

### 8.1. Give increased attention to fulfillment

Concentrating on back-end fulfillment issues is important in any retailing organization, particularly for e-tailers. First, stockouts cost retailers sales and customers. Efficient inventory management and logistics systems assure timely delivery of merchandise. Second, given that back-end operations are different for e-tailers than for bricks-and-mortar retailers, and that all retailers except those engaged in other direct-to-customer operations such as catalogs have had relatively little experience sending small parcels one at a time to individual customers, strong opportunities are avail-

able for creating innovative and efficient fulfillment systems. In particular, e-tailers are investing in larger and more sophisticated warehouses and more efficient order handling systems and equipment (Deutsch, 2000). For example, given the pressures of the 1999 Christmas season, where the top problem for most online shopping was stockouts (Guensey, 2000), wine.com made a substantial increase in its warehouse size and trained new workers in advance of the 2000 Christmas season.

### 8.2. Offer business services to other retailers

Successful Internet retailers could either use their excess capacity, or expand by offering business services to other online retailers. Such services could include technological expertise in web design and inventory management, fulfillment of orders and customer service. For example, toysrus.com outsourced its fulfillment to Amazon.com in exchange for a 5% stake in its online operations because Amazon is known for its fulfillment prowess. Federated Department Stores purchased Fingerhut, the third largest US catalog retailer, because they believe that their sophisticated systems will help them compete in the e-tailing environment (Bounds and Coleman, 1999).

### 8.3. Go physical at the front end

Internet retailers could open up a limited number of physical outlets for a variety of reasons. For example, Yahoo! has opened a promotional store in Rockefeller Center in New York where passersby can stop and try out Yahoo!'s shopping site. estyle.com has launched a semi-annual printed mail order catalog. On the other hand, retail sites could also be used for exhibiting the company's products (Weintraub, 2000). If firms like autobytel.com went beyond referring automobile customers to dealers and offered financing and delivery as well, the dealership would simply be a place to see the product and test drive it. In addition, physical sites could also be used for returns and payments. For example, in Argentina, like in many other countries outside the US, few people have credit cards, and those who do are often afraid to use them on the Internet. Altocity.com allows its web customers to pay at local shopping malls, thereby allowing customers the convenience and benefits of Internet shopping without requiring a credit card (Helft, 2000).

### 8.4. Integrate into clicks-and-bricks

A more complete physical strategy open to pure plays would be to partner with a bricks-and-mortar store or expand into store-based retailing, thereby reaping all the advantages of utilizing multiple selling channels. For example, the online brokerage firm, Webstreetsecurities.com, opened its first store in Beverly Hills in 1999, and the firm plans more physical stores within the US, as well as abroad.

### 8.5. Pursue "niche" strategies

As the Internet becomes more prevalent, and as consumers overcome their concerns about shopping over the Internet and perceive real benefits to doing so, the existing customer base will exhibit greater preference diversity. As a result, pure price-based strategies will become less effective in comparison to other methods of establishing a sustainable competitive advantage. Under these conditions, e-tailers should segment their markets and target to a few profitable niche segments just as they have in traditional retailing.

## 9. A future research agenda

Certain forms of Internet retailing are here to stay. Some e-tailers who have reached substantial scale levels (e.g., eBay and Amazon) and clever niche players are likely to be in the field for a long time. Understanding this new retailing channel and developing theoretical insights is an important and rewarding academic pursuit.

Research is needed for an understanding of the various drivers of Internet retailer profitability (or lack thereof), especially since the operations and issues in this type of retailing are somewhat different from store-based retailing. Using data from the top 50 Internet retailers, researchers could assess the performance of each one by examining their enablers and limiters. This research would uncover the salient performance measures for "pure-play" retailers, as compared to brick-and-clicks and bricks-only stores (e.g., awareness, revenues, profitability, efficiency and effectiveness).

Recent research on bricks-and-mortar retailers has assessed the efficiencies of their operations using data-envelopment analysis (e.g., Grewal et al., 1999). Similar analyses performed on various e-tailing processes may help better identify which e-tailers are efficient on what processes (e.g., procurement, fulfillment, communication of value proposition). Follow-up analyses on the identified efficient Internet retailers may aid in better understand the mechanism (and processes) that need to be followed in order to be successful.

Consumers are consumers, whether they are shopping in a traditional or a virtual store, yet, the way in which people shop and the propensity to shop online may be different than in traditional stores. It is important to assess consumers' shopping patterns and behaviors in the e-world. Installing tracking devices could collect data on users' PCs or collecting data from a company such as DoubleClick. Alternatively, individual Internet retailers could record the traffic patterns of consumers. Valuable insights into the way in which consumers shop and the profitability of those shoppers could be gained by linking these traffic patterns and the duration of visits to revenues and repeat purchase behaviors.

Internet retailing demonstrates a number of unique shopping nuances. To illustrate, research is needed to uncover types of customers engaging in online shopping, their

strategies for search and reducing information overload and their shopping preferences for a variety of retailer types and web site designs. Furthermore, research could provide valuable insights into how consumers compare prices and use intelligent agents or shopping bots.

Given that poor customer service is currently one of the major problems in e-tailing, research needs to uncover how technology can provide greater service so that consumers do not need human-based services. On the other hand, for those who seek service, technology should also be able to assess the information needs of the customer and to be able to tailor information to meet their needs (Burke 1997).

One key consequence of the emergence of Internet retailing is the ways in which, and the degree to which, bricks-and-mortar retailers have embraced this new channel. Research should be undertaken to better understand the role that pure-play e-tailers have performed in spurring the relatively low-tech bricks-and-mortar retailers to embrace the latest technologies. Further, researchers should ask how e-tailing has changed the market structure, the relative strength of traditional retailers and the competitive situation in various retail industries.

This paper defines the space in which e-tailing can be successful and the relative strengths and weaknesses of this method of distribution. Although the stock market and venture capitalists may have given up on various e-tailing business models, benefits for academics to explore whether any of these heretofore unsuccessful e-tailers could tweak their strategies enough to become profitable exist. For instance, is it possible to successfully retail expensive and unique touch/feel items like diamond jewelry over the Internet? It would also be important to understand why the stock market, which professes to behave rationally, invested in business models that were apparently unsound.

Finally, it is important to understand how various functional and organizational issues impact the integration of traditional bricks-and-mortar retailing with e-tailing. For instance, from a logistics perspective, how should sales orders be fulfilled? Should separate organizations and distribution centers be set up to handle the small orders and high returns inherent in any e-tailing operation? How could third party logistics intermediaries such as private warehouses and UPS be most efficiently utilized? From an organizational behavior perspective, can or should e-tailing operations be integrated with traditional stores? What incentives can be given to store managers to give up customers to e-tailing divisions? The cultural impact of the old and new economic and business models is not as simple as it appears to be on the surface. Different organizational formats may be needed.

## 10. Conclusion

The history of retailing, if summarized concisely, is an endless search for convenience. Early on, department stores were predicted to be the place for one-stop shopping, then it was the shopping malls that received such accolades. More recently, the supermarket was considered to be the one-stop store, where consumers could not only shop for groceries and dry goods, but also rent videos, drop-off/pick-up dry-cleaning and fulfill their banking needs. To an extent, such superstores have been successful in small pockets of the US, Europe and South America, while by and large, most supermarkets still stock only grocery items.

The future of Internet retailing began with predictions that it would supplant the physical world of retailing, and many convincingly stated that it would revolutionize the way we shop. The same was said of TV home shopping. Whether Internet retailing will remain a stagnant business with negligible market share, such as TV home shopping, or whether it will become as ubiquitous and enduring as the department store, remains to be seen.

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