

# E-business Strategies for Management stages on the Website

Sok-Hwan Cho\*

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## I. Introduction

E-business managers have been remarkably successful in attracting visitors and shoppers to their sites. Despite the economic downturn, E-business sales increased 48% from 2001 to 2002, with preliminary data indicating another 30% increase for 2003. Recent surveys find that online purchases account for 32% spent on computer hardware and software, 17% of event ticket sales, and 12% of book expenditures. The Website's importance as a retail channel is no longer in dispute; online sales will continue to grow and are one of the brightest spots in a recovering retail industry. E-business retailers are also starting to show positive

returns. In 2002, 70% of Website retailers claimed to be profitable before interest and special charges, and leading industry players such as Amazon.com are headed toward consistent profitability. More and more, stockholders in these firms are debating not whether profits will be realized but when and how much.

What strategies lead to profits from e-business sales? Many first movers seized on the obvious characteristics of the Website: minimal search and low transaction costs. These pioneers concluded that low prices and high volumes would result in consistent profits. With essentially zero selling cost, any revenue, however small, must go to the bottom line. While other firms thought through all of the Website's implications and thrived. Some of

\* Dept. of Business Administration, Pyung-Taek University

these businesses operate solely on line, the so-called "Pure-Play" e-business retailers. Alternatively, established retailers also started Website sales sites, converting themselves into "Brick-and-Click" merchants.

To sort out the implications of these strategies, we needed to understand how e-business retailing really works, so we became "phantom shoppers" and executed over 250 purchases of music compact discs (CDs) from a variety of leading Website music retailers. We recorded the price we paid, the service we received, and the information available from each Web site. We also recorded the retailer's cost for each CD based on information from the wholesaler that filled our orders, using its own inventory. We then computed the retailer's margin by subtracting the retailer's cost from the price we paid.

Website retailers<sup>1)</sup>. It turns out that profitable electronic retailers design their product and service offerings to (see Fig. 1)

(a) attract visitors to their sites with excellent connectivity and cross-marketing and preempt competitors from using low prices to maximize market share and revenues;

(b) convert visitors into customers through attractive inventory selection and product information, allowing retailers to offset competitor prices through a superior ordering experience; and

(c) retain customers with fulfillment services that match compelling performance promises.

Successful Website retailers apply resources selectively to maximize the chance of a profitable sale. Supply chain execution is critical because delivery as promised turns out to be an important part of the quest for positive profit

Pricing Strategies	Revenue Maximizing	-Offline Presence -Online Connectivity -Visibility		
	Meeting the Competition		-Inventory Selection	
	Leveraging			-Superior Fulfillment Services -Delivering on Compelling Performance Promises.
		Attract	Convert	Retain

Figure 1 E-business Management Stages.

In summary, we were able to get complete information on prices, costs, margins, and service for over 250 Website retail purchases. This rich set of data allowed us to model the relationship between transaction margins, retailer-provided information, and order fulfillment for both Pure-Play and Brick-and-Click

margins.

1) DoubleClick, 2003 DoubleClick.(2003). March. Multi-channel holiday 2002 shopping study. Retrieved at <http://www.doubleclick.net>.

## II. E-business Stages

### 2.1. Attracting potential customers

To make a sale, Website retailers must persuade consumers to visit their web sites. Effective marketing communication is the key, adapted for the ubiquitous connectivity of the Website. In an electronic world, the ideal is to be "top of mind" or, even better, "top of search engine". Hence, the huge sums of money some Website retailers have devoted to off-line advertising and the intensity of their efforts to get listed in and linked to the most popular search-engine and complementary-partner sites on the Website. Website retailers have to develop name recognition and a presence in cyberspace to match the branding power of merchants who have visibility on and off the Website. It is no accident that the most profitable dotcom players such as Amazon.com, Yahoo, and Google are now household names; they have used both online and offline marketing tools to become the automatic choice of Website shoppers<sup>2)</sup>.

### 2.2. Convert visitors to buyers

Once at a site, visitors have to find the product they want at an acceptable price, and research has shown that selection is at least

as critical as cost. Website shoppers tend to stick with the same few sites unless a very large purchase is involved or they cannot find what they want. As a result, offering an appealing inventory selection is a crucial strategy for retailers to convert visitors into buyers.

In the virtual world of the Website, sellers do not have to own and stock excessive amounts of inventory themselves. Some companies offer consumers a wide range of stock-keeping units without holding large inventories relative to sales. The distributor community is an essential support system for these broad-spectrum retailers. Other Website retailers specialize in narrow market segments and work with sources of rare and hard-to-find items for their limited product lines.

Besides inventory access, Website retailers must provide the right product information to drive buying decisions. Website sites cannot match the sensory experience of brick and mortar retailers, but they can offer much more information and allow easy comparisons on price, features, and support across a much wider range of product alternatives. For example, Website can compile both expert opinions and customer testimonials or complaints for a vast range of products. The availability of this information should make purchase decisions easier and maximize Website retailers' visitor-to-buyer conversion rates.

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<sup>2)</sup> Delaney-Klinger et al., 2003 K. Delaney-Klinger, K. Boyer and M. Frohlich

## 2.3. Retain satisfied customers

Repeat customers are critical for long-term success, and website retailers have to manage a more extended buying experience than their brick-and-mortar competitors. In addition to making products readily available and insuring customer access to product information, online retailers have to arrange a timely delivery after the sale. A further complication is that Website typically position shipping and handling charges as an add-on to the purchase price. Customers have to be convinced that fulfillment time and expense, which they perceive as an inconvenience (at best) or a surcharge (at worst), are an acceptable aspect of Website buying. The onus is on the seller to provide service exactly to customer expectation. Since product delivery is the last point of contact between Website retailers and online buyers, it is an important opportunity to cement the customer's perception of the value of Website purchasing.

We found that successful Website retailers "get" this concept and have thought through the realities of home delivery; in fact, the most advanced retailers are leveraging fulfillment performance and charges to hold existing customers, attract new customers, and improve bottom line profitability.

## 2.4. Pricing for profit on the Website

Given the ease of price comparison on the Net, pricing strategy is a make-or-break decision, and Website retailers have adopted multiple pricing strategies to position themselves in the retail space. Identifiable strategies (and the early returns on them) include the following.

### 2.4.1. Revenue maximization

Under this strategy, retailers focus on attracting potential shoppers in order to capture market share and maximize revenue. Many defunct Website retailers focused on attracting customers and generating revenue but set prices that did not cover their costs of goods sold, operational costs, and marketing expenses. Like any other business, an Website retailer has to set prices that can stand comparison with competitors while still covering costs. This balancing act is invisible to the average consumer, who only sees a single-number price and compares it to an internal reference price, based on his or her perceptions of value.

Some e-business retailers on the Website set extremely low prices, thinking that hyper-competition would reward the lowest-priced firm with most, if not all, of the market; however, the reality turned out to be different. Observers have repeatedly found that prices on the Website for identical products can vary dramatically among retailers. Consumers do not simply buy from the lowest-priced retailer; many consumers use a few sites that they

know, while others choose to buy from a limited set of Website retailers with which they are comfortable.

We confirmed the presence of price "dispersion" on the Website. More importantly, we found that this price variation characterized both virtual, or Pure-Play, and multichannel, or Brick-and-Click, retailers. It turns out that Brick-and-Click companies often charge prices well over product cost and generate higher margins than most Pure-Play retail competitors. On the one hand, larger companies like Wal-Mart get better deals from consumer goods suppliers than do startup companies. On the other hand, established physical retailers have instant name recognition when they begin selling on the Website, and their cost to establish the brand is minimal. Brick-and-Click retailers may also benefit from preexisting infrastructure to service Website sales, although this is by no means a given.

Clearly, there is pressure on Pure-Play Website retailers who cannot match Brick-and-Click retailers' cost structures. But, we found that margins also depend on other factors where the playing field is more equal. In particular, Website retailers with more visible, better connected web sites had higher markups and enjoyed margins that equaled or exceeded those of web sites owned by their Brick-and-Click competitors. On the Website, virtual connections are better paths to profits than a lowest price/revenue maximization strategy.

#### 2.4.2. Meeting the competition

Since price comparison is virtually effortless on the Net, it is necessary to be "within range" to appeal to price-conscious shoppers. For online commerce, however, the biggest opportunity to convert browsers into buyers lies in moving brick-and-mortar purchases from retail stores onto the Website; therefore, pricing should reflect the overall value of an Website purchase vs. buying in a traditional retail setting<sup>3</sup>).

Online retailers use inventory selection and superior information to offer value that physical stores cannot match. Retailers known for their large assortments should attract more visits and, presumably, more purchases or conversions of visitors to customers. Of course, there are high operating expenses involved in working from a broad inventory. As Amazon and others have demonstrated, the best inventory strategy is a combination of focused availability for popular items and easy access for harder-to-find goods. An appropriate inventory-selection decision supports pricing and margins that generate superior returns.

Good product information on retailer sites is critical in order to entice visitors to complete a purchase. Profitable retailers understand that visitors often do not know exactly what they want and that margin opportunities lie with consumers that are open to suggestion. Our research indicates a payoff for providing services and information that help browsers find

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3) DoubleClick, 2004 Double Click.(2004). January, Multi-channel shopping study-holiday 2003. Retrieved at <http://www.doubleclick.net>

exactly what they need or, if necessary, suggest substitutes so that these visitors become paying shoppers. Customer reviews, industry commentary, etc., can differentiate Website retail offerings and convince customers to buy without extensive price comparison.

**2.4.3. Leveraging fulfillment**

Shipping and handling charges are the main reason most online customers abandon their shopping carts before completing online purchases. Recognizing this, Website retailers have adopted one of two strategies to make fulfillment a marketing and customer retention lever. Some retailers charge consumers well in excess of actual fulfillment (delivery) costs but offer superior service. The hope is to charge high enough prices to cover any increased shipping and handling costs, and still increase consumer loyalty through this superior fulfillment service.

approach to the opportunities in the electronic retailing channel. Revenue maximization is a bet on the Website as a perfectly competitive market. Under this strategy, retailers attract visitors and create volume sales through either offline or online retail presence and low prices. Not surprisingly, margins are low and success has been elusive. Meeting the competition means paying attention to both online and physical competitors for the consumer's money. Here, the retailer's ability on the Website to provide inventory selection and cheap information is pitted against the traditional retailer's advantages of geographic proximity, stock displays, and other perceptual cues. Results are mixed, and it appears that online retailer success in converting browsers into shoppers is contingent on both information and smart choices about the inventory offering. Leveraging fulfillment has been successful for a number of Website retailers. Fulfillment and

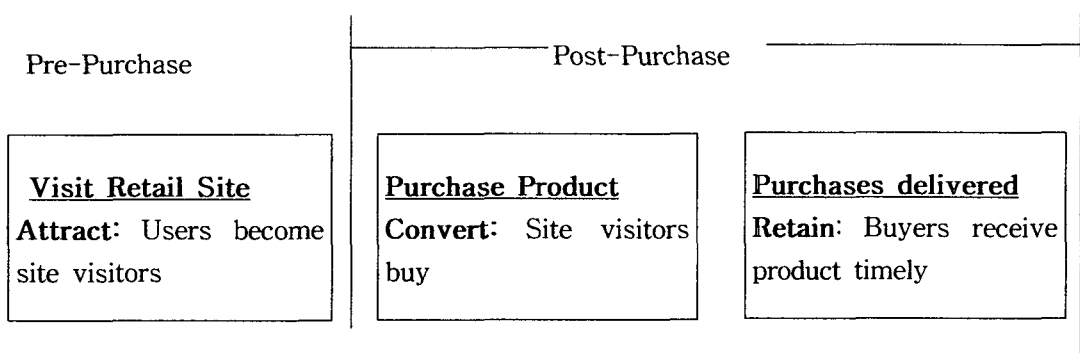


Figure 2. Profitability across e-business

The above pricing strategies are represented in our retail sample, and each is a different

its associated charges are very visible to Website customers, and shrewd retailers have

recognized that this visibility can also make prices a big lever in changing consumer habits and fostering customer retention.

Fig. 2 summarizes the strategies that are associated with higher margin at each stage of the online sales process. The best Website retailers formulate order management strategies that lead to high-price margins based on an understanding of costs, especially fulfillment costs, combined with insights into online and offline competition. These results emerged from combining our "phantom shopper" exercise with wholesale and retail price data for each CD purchased.

The shopping process involved 275 purchases of a variety of music CDs from 11 online retailers. CDs were purchased one at a time, and the standard delivery service level via the U.S. Postal Service was requested. The 275 CD titles were a random sample based on previous sales data. Each title was assigned to one of the 11 retailers. Purchases were made in four roughly equal waves in March, April, June, and September of 2002. Average fulfillment time from order to delivery was 8.0 days, with 3.3 days spent in order preparation and 4.7 days in transportation. Once received, CDs were checked to make sure each was the title and label originally ordered. The research team recorded a detailed set of product and service measures for each CD purchased. The specific items collected are shown below.

## 2.4. E-business management strategies and Website margins

Order management is a term that includes all physical and informational aspects of transactions between buyers and sellers. As "phantom shoppers", we had detailed information on the order management process for each CD purchased. We also had access to estimated margins on each CD purchased by site. We used a correlational model to investigate the relationship between order management strategies and margins. The analysis below proceeds through the successive stages of the sales process (Fig. 1).

## 2.5. Attracting visitors: The value of brand, scale, and visibility on and off the website.

We bought CDs from 11 different retailers and calculated the average markup received by each. Fig. 3 shows the average markups by retailer for our purchases. Brick-and-Click retailers have physical stores and Website sales, while Pure-Player retailers have no physical locations. The last line in Fig. 3 shows the margins obtained for all purchases from Pure-Play and Brick-and-Click retailers, respectively. (40K)

Pure Play % Markup			Brick-and-click % Markup		
P1	omCdnw.com	33.7%	B1	Samgoody.com	39.6%
P2	Amazon.com	31.3%	B2	Fye.com	38.6%
P3	Cduniverse.com	15.6%	B3	Bestbry.com	36.7%
P4	Alphacraze.com	13.8%	B4	Towerrecords.com	35.1%
P5	Alldirect.com	-7.7%	B5	Barnesandnoble.com	26.4%
			B6	Walmard.com	
AVG 17.2%    AVG			AVG 33.6%		

Fig. 3. Play vs. Brick-and-Click Website retailer average markups.

On average, Brick-and-Click retailers have much higher markups than their Pure-Play competitors. Parent company brand and purchasing power seem to confer a systematic advantage. Only two Pure-Play Website retailers, Amazon.com and Cdnw.com, had markups comparable to Brick-and-Click retailers. Both were early entrants in Website retailing and are well-established brands on the Website. The importance of scale also seems undeniable; in fact, Amazon.com and Cdnw.com have recently struck an alliance to increase economies of scale and generate synergies.

## 2.6. Converting visitors into customers

### 2.6.1. Inventory

Website retailers do not share the physical limitations of conventional retailers, and they can offer nearly unlimited access to both inventory, (i.e., broad product assortments) and information, i.e., expert and popular opinions and cheap previews. Website retailers must choose how to exploit these advantages and turn visitors into buyers.

We were interested in any associations be

tween inventory strategies, information strategies, and overall profitability. To quantify potential relationships, we characterized inventory assortment with two dimensions: (1) CD time in market and (2) CD popularity averaged over several indicators. Information content was measured based on reviews and sample tracks per CD for each retail site. Details can be found in the Data Collection sidebar.

The group of companies that supplied the more popular CDs (listed on the reader's right) had lower average markups of 20.25% on these sales, including Alldirect, the only retailer selling below cost. The group which sold less popular CDs had higher average markups of 31.01% on their sales. This result is not too surprising, since it is consistent with loss leader strategies that are popular in conventional offline retailing. Time in market, which we had expected would be a factor in margins, does not seem to be significant. Average margins by retailer, even after controlling for popularity, do not seem to vary systematically with the age of the CD title. In our sample, retailers charged higher margins for less popular items, so breadth of assortment seems to be a potential lever for Website retailers<sup>4</sup>.



### 2.6.2. Information

Website retailers can provide considerable information about their offerings at relatively low cost. But, can they get paid for this service? To understand the value of information, we measured two kinds of information for each purchase: peer-supplied information and industry-supplied information. Peer supplied information includes reviews by other customers and the number of CDs purchased by other customers who bought the same title. Industry supplied information includes editorial and expert reviews and sound clips available for each CD. Eight of the retailers had significant numbers of reviews and sound clips on their sites, while two had relatively few.

One group provided little information and had very low margins: only 3.26% for the group as a whole. A second group made available considerable amounts of industry-supplied information (reviews, clips, etc.) but little or no peer-supplied information. This group, which is dominated by Brick-and-Click operators, enjoyed an average markup of 31.45%. Amazon.com provided the most information of all and had a markup of 31.34%, similar to its second-group competitors. Information is associated with higher margins, but we cannot say definitively whether scale enables information or information promotes growth and brand awareness. Amazon.com has been providing large amounts of product information from its inception, suggesting that information is at least a competitive requirement for building an

Website business. Clearly, retailers in our sample believe they can gain better markups if they provide peer and industry evaluations.

## 2.7. Retaining online shoppers: Leveraging fulfillment for profitability

Buyers have a simple definition of good fulfillment service: they expect retailers to keep their promises, whether that means having goods on the shelf in the offline world or delivering them as promised for Website purchases. Twenty years of surveys have confirmed the initial research in this area: on time delivery is more important than speed. Consistently meeting consumer expectations should lead to increased customer loyalty, repeat purchases, and, ultimately, higher margins.

The promised days to delivery and the actual days to delivery were recorded for each purchase. We subtracted the promised days from the actual days needed to fulfill the order and divided the difference by the promised days to get a consistency measure or index. The index is negative when a shipment arrived earlier than promised, zero when the shipment was delivered as promised, and positive when the shipment was delivered late. Finally, we calculated the average promised days, actual days, and the consistency index averaged across purchases from each retailer.

We wanted to see if retailers set margins based on promised performance, actual performance, or both. Based on consistency, re-

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4) Mayer, 2002 R. Mayer, Shopping from a list.

tailers fell into two groups. In the first group, under promise and over deliver, retailers promised, on average, but average delivery time was about 8 days. In the second group, fulfill as promised (FP), retailers promised an average fulfillment cycle of less than 9 days and performed almost identically to that promise.

In fact, the two groups promised different fulfillment performance but provided equivalent performance on average. In retrospect, the results are not too surprising. For small shipments such as CDs, there are only few transportation options: USPS, UPS (ground), ABF, and FedEx (ground). As for order processing, different Website retailers share a few common wholesalers. Although various sites have different service promises, reputations, and selections, they use comparable service providers for fulfilling customer orders.

But why the different service promises? Further investigation showed that, in most cases, the firms in the under promise and over deliver (UO) group had a lower median markup, 19.6%, than the median percent markup for all retailers, while the fulfill as promised (FP) retailers typically had a higher markup, 31.3%, than the group median. We also ranked the retailers by markup, with Sam Goody, the highest markup retailer, ranked 1. The UO group had an average rank of 7.2, while the FP group averaged 4.8. The 11 retailers are too small a group for definitive statistical tests, but the results suggest that retailers may associate lower markups with less stringent service promises. We also found that the UO

group had more streamlined processes for getting orders to the wholesaler. If these tighter processes are also lower cost, the UO retailers are apparently passing the savings on to their customers.

### III. summary

(1) Firms in the FP group tend to offer good service and charge accordingly, presumably also covering fulfillment promotion (free shipping) costs that are part of their operating expenses. Firms in this group seem to use fulfillment consistency to help justify higher margins.

(2) Firms in the UO group are likely to promise longer delivery times. Some of these companies, such as Walmart and Bestbuy, may be under promising as part of an overall low price image, although their markups are respectable. The smaller members of the group may be under promising and then passing any savings to their customers. This would allow them to compete on price against larger companies that have more leverage with suppliers. In any case, our results suggest that some retailers are far surpassing their fulfillment promises, while others have aligned promise and performance.

## IV. Conclusion

Amazon.com and its Website retail competitors are just starting to see profitability. Consumers love the convenience of skipping a trip to the store, but pricing on the Website is potentially hyper-competitive. Thanks to industry partners and an organized "phantom shopping" exercise, we were able to match markups on Website sales with strategic choices made by Website retailers. It appears that companies with the best margins share several strategies.

First, there are at least two ways to use branding to support high margins. Being the "click" part of a Brick-and-Click operation is associated with higher markups. Online retailers who share their brand identity with a physical chain almost certainly enjoy economies of scale in other areas as well. For pure Website retailers, brand building and higher margins come at least partly from being connected to the right search engines, shopping services, etc. In any case, being "top of mind," "top of search engine," or both leads to higher margins on the Net.

Second, web-enabled services offering product attribute information separate high-margin and low-margin Website retailers. Several retailers provide excellent information and product previews, and their markups reflect that service. Firms like Amazon.com neutralize the physical advantages of Brick-and-Click retailers by going the "extra mile" in product

information.

Third, product mix has some influence on retail profitability. Popular products do not command premium prices; if your favorite site does not have them, another site will. If a popular product is available at all, it can be located and is therefore not scarce. High-margin sites choose niches and establish their reputations by appealing to niche audiences who are willing to pay for special access and expertise. Amazon.com is the apparent exception here, but notice that it provides access to both popular and scarce items as well as offering selection to many product categories beyond CDs.

Finally, many high-margin e-tailers promise what they can deliver and expect to get paid for it. Another group of Website retailers, some with very low margins, delivers the same service but promise less. The difference is that the high-markup group promises good service upfront before purchases are finalized. Small package delivery in the U.S. is effectively an oligopoly, as is the CD distributor community, so service levels are uniform. Low margin retailers may as well take advantage of this by upgrading their delivery promises, as customers are getting the benefit anyway. Assurances such as these are so crucial that even small companies, which sell CD cases, are putting in proactive customer notice systems to automate the process.

The best Website retailers are executing good retail practices, should charge for the service values they provide, and align their

promises with service realities. This is particularly true for Website retailers regarding a key service they offer consumers: substituting delivery for trips to the store. Even on the Website, searching has some cost, so e-tailers should pay attention to identity and brand awareness. Similarly, e-tailers with better information can charge more since they are saving consumers time and making it more likely that customers will get exactly what they want. Website retailers should beware of chasing popular items, which invites the price comparisons that the Net makes easy. The better option would be to choose niches and cater to customers who need access to the unusual and unique.

If all of this sounds familiar, it is because Website retailing is still about selling the right stuff to customers who are willing to pay a fair price, and then taking care of these customers over time. Being on the Website will not shield managers from bad product choices. In fact, the retailers we bought from continue to struggle because their core business, CDs, is being rendered obsolete by the very medium through which they have based their businesses. However, buying physical products on the Website will continue to grow, and the need for sharper pricing, more focused information, brand building, smart product selection, and focused fulfillment service will become more important as the virtual marketplace takes over.

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## E-business Strategies for Management stages on the Website

Sok-Hwan Cho\*

### Abstract

E-business managers must make a profit on the goods and services they sell. But e-business retailers are still searching for strategies that work. To test current practices, we became "phantom shoppers" and bought a randomly chosen set of CDs from a variety of E-business manager. Our findings suggest that order management and logistics skills are pivotal for selling profitably on the Website. In this article, we show how e-business managers can deploy resources creatively to attract the right shoppers, convert these shoppers into buyers, and improve the chances of repeat purchase while maintaining profit margins.

Key words: E-Business, Management Stages, Website

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\* Dept. of Business Administration, Pyung-Taek University

