Panning for Gold: The Power of Customer Segmentation in Online Retailing
Panning for Gold: The Power of Customer Segmentation in Online Retailing

By Darrell Rigby, Chris Zook and Sharad Rastogi of Bain & Company and Randall Hancock of Mainspring

In the American gold rushes of the 1840s, prospectors hiked into the hills, waded into rushing mountain streams, scooped pan-fuls of silt from the stream-beds, and then shook their pans to gradually separate the gold from the silt. For the lucky ones, this “panning” might yield a few grams of gold, just enough to live on. Only the rare prospector found a solid gold nugget and struck it rich. Today, Internet prospectors are playing the same long odds.

Many online retailers are focused on scooping up all kinds of customers, trying to swell their revenues by attracting any and all possible traffic to their sites. The marketing methods they are using include selling products below cost, giving away months of free service, or spending many times their annual revenue on a single Super Bowl advertisement. Some new entrants, such as iWon.com and Luckysurf.com, have even resorted to lottery-type give-aways of millions of dollars simply to attract users to their web sites. Resulting site hits may carry flecks of gold—profitable, loyal customers—but many will carry little value at all. Acquiring a critical mass of profitable, loyal customers is rare.

Instead of this “head for the hills” approach to customer acquisition, online retailers should take a more focused approach to attracting and retaining customers. The reason for this is simple: all customers are not created equal, and it's more important to have a loyal group of the right customers than to have lots of the wrong ones. While it may appear to make sense to acquire a broad set of customers to achieve scale or awareness and then develop a segmentation strategy, this can backfire: Targeting the wrong customers can lead to dissatisfaction and lower future revenue, or to dissatisfaction and higher future cost in returns, service, and bad publicity. The companies that understand customer segmentation in their industry and succeed in attracting and retaining the most profitable customers, while simultaneously sifting out the unprofitable ones, will generate exceptional returns and create the competitive advantage of a superior customer base.

Segment for Profitability

Just how powerful is customer segmentation on the Internet? We conducted a detailed segmentation of more than 2,000 online shoppers in three retail categories—apparel, groceries, and consumer electronics/appliances—and found customer segmentation is absolutely critical to a retailer's economics. Of an extremely wide range of customers shopping at any given site, we discovered only a handful with the potential to find satisfaction and generate profitability. For instance, in the online consumer electronics/appliances industry, only two of the five customer segments identified in our survey generate profits for retailers. These two segments, “Brand Buyers” and “Convenience Spenders,” representing 24 percent of the consumer electronics and appliances customer base, generate all the profits. The retailer actually loses money on the remaining 76 percent of customers. (See Figure 1)

---

1 In a joint survey conducted by Bain & Company and Mainspring, 2,116 online shoppers in three categories (apparel, groceries, and consumer electronics and appliances) provided information on their Internet spending habits and usage patterns.
In online groceries, there is also significant variation in the profitability of customer segments. Once again, of five customer segments identified, Brand Buyers and Convenience Shoppers are the most profitable. These 31 percent of customers generate 65 percent of grocery retailer profits. The other segments—"Casual Buyers," "Relationship Seekers," and "Bargain Hunters"—are considerably less profitable, with Bargain Hunters barely breaking even for the retailer. (Figure 2)

Because there is such a disparity in the profitability of different customer types, a company can generate tremendous economic leverage by being more selective in which customers it serves. To test this, we modeled the economics of two online grocery retailers (names withheld) with significantly different customer profiles. (Figure 3) Fifty percent of the customers of the first retailer, which we'll call Brandmart, are highly profitable Brand Buyers. These are brand label-oriented buyers who value convenience and are not price sensitive. (See Figure 4) Another 10% are Convenience Seekers—high-income households who make large, infrequent purchases and whose primary concern is quick and accurate delivery.

The second retailer, which we'll call Pricemart, has a very different customer mix. Its largest customer segment is Casual Buyers, who are only moderately profitable, and it also has a significant group of Bargain Hunters, the least profitable customer segment.

Starting with these customer mixes, we grew the respective grocer's customer base over time, and simulated the economics, also over time, of the two retailers.2 Our simulation assumed differing profitability, purchase patterns, referral rates, and retention rates for each segment. This approach gives a very different answer than the path of least

---

2In addition to differing spending habits, each customer segment has different loyalty and referral patterns. Customers of a particular segment were assumed to stay with the retailer for the average tenure of their customer segment. Customers of a particular segment were also assumed to refer customers with the same characteristics as their own to that site. These assumptions were held constant for each customer segment across both web sites.
Figure 2: Grocery Customer Segmentation

Note: Profit pool is the NPV of each customer's profits times the number of customers in each segment
Source: Bain/Mainspring Online Retailing Survey (Groceries, n=2116), December 1999

Figure 3: Grocery Customer Profiles

Source: Bain/Mainspring Online Retailing Survey (Groceries, n=297), December 1999
resistance, taken by many Internet companies, of projecting returns based on an average consumer. The long-term economic impact to the retailers of these different customer mixes is dramatic. (Figure 5) At Year 1, Brandmart, not surprisingly, is more profitable than Pricemart, and over time this disparity widens. Brandmart breaks even in Year 3 and goes on to reach sustainable levels of profitability. Pricemart, on the other hand, never becomes profitable, and its returns actually worsen over time as many of the customers it acquires defect to other retailers, and the remaining unprofitable customers refer more unprofitable customers.

**Become a Better Prospector**

Clearly, having the right customers can make all the difference to the bottom line. Brandmart's results are better than Pricemart's as a result of more profitable customers, and Brandmart's customers are more profitable as a result of adopting a very different business model and means of customer acquisition. The variation in types of customers who are attracted through different acquisition channels can be seen in Figure 6. This chart shows the drivers of awareness for customers who shop at online grocers. The right bar shows from what source Brand Buyers and Convenience Seekers, the two most profitable customer segments, became aware of their online grocer. The left bar shows the same data for all grocery buyers.

There is a significant distinction between the segments: the most profitable customers were far more likely to have heard of the site through direct mail, word of mouth, or television/radio. The average (and far less profitable) grocery buyer was more likely to have heard of the site through a banner ad or e-mail from the retailer. And although direct mail, TV, and radio are more expensive means of advertising, in the grocery category the returns easily justify the expense.

---

**Figure 4: Grocery Customer Segment Descriptions**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>NPV Per Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience Seekers</td>
<td>- Value convenience in delivery, ordering</td>
<td>Highest</td>
</tr>
<tr>
<td></td>
<td>- High income</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Long relationship, large referrals</td>
<td></td>
</tr>
<tr>
<td>Brand Buyers</td>
<td>- Brand buyers, not price sensitive</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>- Highest income, more often male</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Expensive to acquire but buy most initially and refer more</td>
<td></td>
</tr>
<tr>
<td>Casual Buyers</td>
<td>- Not concerned with perishables or delivery time windows</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>- Small spending growth, resell</td>
<td></td>
</tr>
<tr>
<td>Relationship Seekers</td>
<td>- Influenced by retailer brand, suggestions, and promotions</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>- Low income</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Small spending growth/referral</td>
<td></td>
</tr>
<tr>
<td>Bargain Hunters</td>
<td>- Price is primary and perishables are not important</td>
<td>Lowest</td>
</tr>
<tr>
<td></td>
<td>- Low income</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Small purchases</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bain/Mainspring Online Retailing Survey (Groceries, n=2116), December 1999
Figure 5: Grocery Profitability Model

<table>
<thead>
<tr>
<th>Years</th>
<th>Brandmart</th>
<th>Pricemart</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>—</td>
</tr>
</tbody>
</table>

Note: Grocery retailer model assumes rapid customer acquisition in the first years, slowing to sustainable rates.
Source: Bain/Mainspring Online Retailing Survey (Groceries, n=297), December 1999

Figure 6: Grocery Customer Acquisition Channels

Note: Does not include respondents who “don’t remember” how they became aware of the retailers online presence.
Source: Bain/Mainspring Online Retailing Survey (Groceries, n=297), December 1999
Seekers and Brand Buyers) place the highest value on quick delivery, accurate order execution, and having perishable, high quality products delivered directly to their homes. Trying to attract and retain these high-value customers without investing in best-in-class order fulfillment, delivery, and product selection is simply wishful thinking.

As in bricks-and-mortar retailing, the task of retaining the right customers is complicated by the relative anonymity of new customers. Once customers have actually executed one or more transactions, retailers know much more about how much and how frequently customers buy, what products they prefer, and what services and functionality they value. By compiling a database of individual transactions, retailers can begin to segment their customers, identifying the habits that distinguish profitable customers from unprofitable ones, and loyal customers from fickle ones. For instance, there may be a group of customers who only purchase items that you place on sale, rendering them unprofitable to you. Or you may learn that the customers who have been with you the longest also make the largest purchases. With care to address consumer privacy concerns, much of this information can be married with direct customer research to refine the segmentation and tie different customer segments to specific acquisition channels.

This does not mean that online retailers in all product categories should have the same advertising strategy. Our research shows, for instance, that online retailers of consumer electronics/appliances should not invest in direct mail. It is an expensive medium, and the shoppers it attracts are no more profitable than those attracted by other methods, yielding lower value per customer.

The point, then, is not that there is one “right” way to reach the most attractive customers, but that retailers must be aware that significant differences exist in the quality of the customers they will gain from different acquisition sources. Furthermore, what works in one industry may not work in another. But by adjusting where they direct their customer acquisition investments, retailers can affect their customer mix for the better. Indeed, the most effective lever for attracting good customers, word of mouth, requires little or no direct investment. Customers referred by friends tend to be both loyal and profitable. You can invest by offering your customers bounties for each additional customer referred. Or you can simply work to make your customers love your site—for the same elements that attract them will stimulate referrals: good service at a fair price, reliable and quick delivery, and user-friendly functions. Make your best customers happy, and they will multiply.

Sift Out the Silt

Thoughtful investments in customer acquisition will increase the odds of attracting the right customers. But just as in prospecting, no river is made purely of gold. Internet retailers need to establish a business model consistent with their customer strategy and learn to identify and retain the customers they most value. The right approach will lead to a value proposition that satisfies the needs of the best customers and deflects the worst. In groceries, for example, the most profitable customers (Convenience

Trying to attract and retain high-value customers without investing in best-in-class order fulfillment, delivery, and product selection is simply wishful thinking.
In the short term, these tactics can help a company sift out the silt and keep more of the gold. In the longer term, attracting and retaining more of the right customers requires marrying these tactics with strategic decisions to fundamentally adjust the business model by investing in certain web-site attributes. Our recent study of customer loyalty on the Web showed that four aspects of web-site performance are particularly important to building loyalty (and gaining an edge in customer segmentation). Improvements in order fulfillment and dependability, customer service, web-site functionality, and competitive pricing had the largest impacts on customer loyalty. (See Bain/ Mainspring eStrategy Brief “The Value of Online Customer Loyalty”)

Monday at 8 A.M.: Getting Started

Customer segmentation can be a crucial factor in the economics of online retailing. So how can you become a better prospector and quickly capitalize on segmentation to create competitive advantage? Although there is no single right answer for every company, there are some clear and immediate steps that retailers can take:

- **Understand the variable and fixed economics of your business.** Do you really know what makes a customer “profitable” or “unprofitable” to you? Knowing this requires understanding in-depth the variable and fixed costs of your transactions; the profitability to you of individual products under various prices, shipping profiles, delivery windows, and other variables; and the variable and fixed costs of customer acquisition. What is the smallest transaction upon which you can actually make money? What are the real costs of expediting an order? What are the carrying and delivery costs for “special order” products, such as...
perishables for online grocers? What does it really cost to acquire a customer through a print ad? A television ad? A banner? Until you understand your economics in depth, you won't know whether a given new customer is hurting or helping you.

- **Track customer transactions.** If you don’t already, begin tracking visits and transactions by individual customer. Cookies can help you track customers individually. Log-in pages are even better, and may also net you some useful demographic information. With a detailed database of transactions you can start analyzing and segmenting your customer base. Look for those customers who shop frequently with you and are particularly profitable, and on the flip side, those that you’d prefer not to do business with. Understand what your customers buy and what they don’t buy, how often they shop with you, and the size of their transactions. Do some respond to specials, while others buy only name brands? Meaningful characteristics and behaviors can help you begin developing a powerful customer segmentation.

- **Learn more about your best—and worst—customers.** Once you have identified a broad segmentation based on transactional behavior, contact some of your customers, through e-mail or more formal surveys, to learn more about them. Identify the different segments of customers based on their differing needs and observed purchasing behavior. Understand the different acquisition channels that draw in each of these groups of customers. External surveys could also be used to identify customer segments that you may be missing entirely.

- **Experiment with different acquisition channels, and track the results.** Once you have an idea of where your best customers come from, experiment with different investment levels in those acquisition channels. If your current best customers tend to have heard about you through print ads, try boosting spending in that medium for a short period and watch the results carefully, tracking not only the number of new customers, but what they buy. A simple line on a log-in or transaction page for first-time users asking “Where did you first become aware of this web site?” can give you insight into the power of each channel. Or, you can gather the same information non-invasively by investing in clickstream-tracking software.

- **Adapt your business model to meet the needs of the target segments.** Once you have identified your profitable customers and understood their needs and buying behavior, examine your business model and see how it meets customer requirements. Adjust your value proposition to attract and retain the most profitable customers. It is not enough to attract profitable customers through marketing gimmicks or even effective marketing techniques. The key is to have the right business model which will not only attract the right customers but also make them return to your sites.

The Internet reigns as the Klondike of the new millennium, and capital markets are echoing the “Eureka!” of many entrepreneurs. But as the market matures, investors, analysts, and shareholders are beginning to look more carefully at the bottom line of online retailers. The companies that excel, both in the short and long term, are those that are not only thoughtful about where they acquire customers, but also learn to quickly segment the profitable, loyal ones from the fool’s gold of bargain hunters.
Mainspring

eStrategy Consulting

Mainspring is the leading eStrategy consulting firm that focuses exclusively on developing actionable Internet strategies. It enables Fortune 1000 companies to protect, evolve, and transform their business for sustained competitive advantage by offering an integrated process of business, customer, and technology strategy planning. Its proprietary process hinges on the following activities to help guide clients effectively through eStrategy development:

- Building the Business Model
- Creating the Customer Experience
- Defining the Solution Architecture
- Commercializing the Business Plan

Working with Mainspring, companies identify, define, and formulate a portfolio of strategic Internet initiatives that are customized for their business and designed to create sustainable competitive advantage.

Mainspring’s core services include eStrategy Consulting, eStrategy Direct, and the eStrategy Executive Council. These services are provided to companies in the financial services; retail and consumer goods; technology, communications, and media; and manufacturing industries. Mainspring was founded in 1996 and has offices in Cambridge, Massachusetts and New York City.

By Darrell Rigby, Chris Zook and Sharad Rastogi of Bain & Company and Randall Hancock of Mainspring

Bain & Company:

Strategy for sustainable results

Bain is one of the world's leading global business consulting firms. Its 2,500 professionals serve major multinationals and other organizations through an integrated network of 26 offices in 18 countries. Its fact-based, “outside-in” approach is unique, and its immense experience base, developed over 27 years, covers a complete range of critical business issues in every economic sector. Bain’s entire approach is based on two guiding principles:

1) working in true collaboration with clients to craft and implement customized strategies that yield significant, measurable, and sustainable results, and

2) developing processes that strengthen a client’s organization and create lasting competitive advantage. The firm gauges its success solely by its clients’ achievements.

Bain & Company’s global e-commerce practice helps businesses achieve outstanding results in the new economy. We work with traditional companies to launch and manage online operations, and with pre-IPO clients to hone business models and accelerate to market. We also work with entrepreneurs to incubate new ideas into viable businesses, in some cases taking equity stakes through our bailab subsidiary. Our e-commerce practice professionals work around the globe in every major industry.