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Customer acquisition is one of the biggest challenges facing on-line companies today. Success requires a fresh approach to managing the marketing mix.

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TODAY, MORE THAN 1.6 million commercial sites operate on the Web, all in fierce competition for the attention of potential buyers. E-tailers are finding that it takes enormous marketing expenditures to set themselves out from the crowd, inspire Web shoppers to visit their sites, and then get them to actually make a purchase.

Many e-tailers, in fact, are averaging more than $100 to acquire a new customer, and some are spending upwards of $500. If a merchant is selling high-ticket, high-margin items, or if it can be sure of a steady stream of repeat purchases, those costs may make economic sense. But for most, they're suicidal – their average customer acquisition cost is higher than the average lifetime value of their customers.

Until recently, e-tailers have been able to convince investors that sky-high spending on marketing is necessary to stake out a position in the Internet space. But the day of reckoning is now approaching. Those companies that have been able to bring their customer acquisition costs down to earth will have the best chance to thrive. Those that haven't will die.

We've been studying on-line marketing for seven years, and in the course of our work, we've seen companies experiment with many different approaches to customer acquisition. One company that stands out in our research is CDnow, the music retailer. Although the company, like other e-tailers, has struggled to earn a profit amid the Web's cutthroat pricing, it has been a highly popular site since its founding in 1994. It was the fourth most-visited shopping site in the fall of 1999, racking up 700,000 visitors and 5 million page views every day. During the third quarter of 1999 alone, it attracted 314,000 new customers. CDnow is currently the most powerful on-line music brand; in February it surpassed Amazon.com as the leader in total on-line buyers with more than 1 million a day.

The company was one of the first to develop a multifaceted, integrated customer acquisition strategy that reflects a sophisticated understanding of the economics of an on-line business. Whatever CDnow's ultimate fate, other virtual merchants can learn a lot by taking a close look at its strategy.

The Problem with Banner Ads

When Jason Olim was 19, a friend introduced him to Miles Davis's classic album *Kind of Blue*. Entranced, Olim went searching for more of Davis's recordings but was met with poor service and limited selection in traditional bricks-and-mortar retail stores. Out of that frustration was born a vision of a better way for music buyers to connect with music.

Some six years later in August 1994, Jason and his twin brother, Matthew, created CDnow in their parents' Ambler, Pennsylvania, basement to provide music buyers with knowledgeable recommendations, convenience, and a large selection. In its first month, CDnow made a $14 profit from $387 worth of business.

At the time, the Web was only beginning to emerge as a platform for commerce, and the main way to promote a site was to get it listed on NCSA Mosaic's "What's New" page or on the Global Network Navigator's Whole Internet Catalogue site. Then, as more e-tailers began to set up shop, attention shifted to banner ads as a way to attract traffic. Like many e-tailers, CDnow initially saw banner ads as a great way to promote its site to Web surfers.

But many of those early on-line selling efforts were conducted by magazine salespeople who didn't really understand how the new medium worked. Thinking of banner ads in the same way as they thought of a 30-second television spot or a print ad in a magazine, they sought to base their prices on the number of people who would see an ad – what in the trade is called "exposure-based cost-per-thousand pricing." (The shorthand is CPM, with M being the Roman numeral 1,000.) As with conventional broadcast and print advertising, this approach measures only the amount of advertising delivered, usually expressed in terms of "exposures" or "impressions," broken down, at best, by demographic or psychographic segments.

In effect, CDnow turned its affiliate-marketing partners into a virtual commissioned sales force.

CDnow representatives found that the script for such purchases went something like this: The salesperson would say, "Take this magazine, which has 100,000 readers. Our Web site has 100,000 visitors. The magazine charges $10,000 for a full-page ad. Our Web site charges $10,000 a month for a banner ad."

As the Olims very quickly realized, this approach does not capitalize on the unique advantages of the Internet. On the Web, it's not only possible to measure the amount of advertising *delivered,* it's also possible to track the amount *consumed*. Specifically, it was possible for the Olims to follow a prospect who clicked through on a banner ad to the CDnow Web site and to an actual purchase in a way that is not possible with advertising in traditional media.

But when the Olims tried to factor that into the deal, they didn't get very far. The CDnow rep would say, "Okay. What will I get for that $10,000 a month? For example, how many people will visit my site each month?"

The response would be, "No guarantee on click-throughs. No guarantee on impressions."

Although the Web publisher would quickly give in and agree to guarantee some number of exposures, Web publishers, borrowing again from traditional print-advertising norms, would try to justify their prices by talking about their "circulation," which in this context actually meant their unaudited number of unique visitors.

It didn't take long for CDnow to determine that the CPMs being offered at that time were inflated and an obvious bad buy. Consider the following. Suppose the Web publisher demanded a $70 CPM – that is, it charged CDnow $70, a fairly common figure at the time, for every 1,000 visitors who were exposed to its banner ad. That meant CDnow was paying seven cents for each person exposed to its banner. Then suppose that 1% of the people who saw the ad clicked through to CDnow's site. That would mean CDnow was paying $7 for every visitor to its site. Not bad, perhaps. But then consider that only a very small percentage of those visitors to CDnow through that particular link were actually converted into paying customers. Assuming that conversion rate was also 1%, the cost to acquire the new customer became $700.

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Now consider the net result of such expenditures over the lifetime value of each customer. We can't share CDnow's actual numbers, which are proprietary. But take this hypothetical, and representative, example: For the sake of argument, let's assume that the average on-line customer spends $50 at an e-tailer's Web site on his or her initial visit. Say the e-tailer's gross profit margin is 20%, so that the average customer contributes a $10 profit on that initial transaction. Now let's assume that half of the e-tailer's customers return for another visit and click their way through to an additional $100 worth of purchases. That would produce another $10 of gross profit. If 10% of those customers come back and conduct yet another $100 worth of business, that's $2 more, and so on. In this way, the total gross profit per customer approaches $25. As long as advertising costs per customer are below $25, there's no problem. But in this context, $700 per customer is disastrous.

That's how the Olims saw it, and so they began to think creatively about other ways to drive buyers to their site that would take better advantage of the Internet's nature. It didn't take long. In November 1994, only three months after the company was founded, CDnow began its BuyWeb program, the first application of what has come to be known as "affiliate" or "associate" marketing programs.

On to Affiliate Marketing

The idea began with a partnership program with Geffen Records. In 1994, Geffen was operating a Web site promoting its artists and their recordings. It wanted to offer fans an easy way to buy music as well, but it had no interest in building a fulfillment operation. It contacted CDnow to see if it might take on the actual sales functions.

The two companies soon agreed that Geffen would put links on its site to carry fans directly to the Web pages devoted to Geffen artists at CDnow's site. It was a simple win-win arrangement that enabled both partners to sell more CDs, one at wholesale, the other at retail.

Jason Olim saw that the concept underlying the Geffen arrangement had much broader implications as a marketing tool. CDnow could start up a program that would motivate other Web sites to put up links to its site – not only record labels but also much smaller sites that discussed or reviewed music. Thus was born BuyWeb (later rechristened the Cosmic Music Network), the Web's earliest – and arguably most successful – affiliate program.

Over time, the BuyWeb program grew. By the end of 1994, it had a dozen or so members. By the end of 1995, that number had grown to a few hundred. At that time, CDnow launched a revenue-sharing arrangement: when a customer clicked through from an affiliate's Web site to the CDnow Web site and actually bought a CD, CDnow gave 3% of the revenue from the sale back to the affiliate. That gave member Web sites the inducement they needed to join the program and provided them with an important opportunity to make money on the Internet. In effect, CDnow turned its affiliate-marketing partners into a virtual commissioned sales force. (For a general discussion of the spread of revenue-sharing programs on the Internet, see the sidebar "Revenue-Sharing Marketing Strategies: A Webwide Trend.")

In this way, small Web sites like Lauri's Dreamy World and Mass Confusion Music created value for CDnow by recommending various compact discs to their cyberbrowsers that they could then purchase at CDnow's site. The links that such sites placed next to their music reviews gave their visitors the option to effortlessly purchase the reviewed disc on the CDnow site. Lauri's Dreamy World and Mass Confusion Music received value in the form of the commission paid by CDnow each time a visitor clicked on the CDnow link and purchased the highlighted CD.

The BuyWeb program evolved into "Cosmic Credit" in the spring of 1997. Unlike high-profile Web portal sponsorship deals, CDnow's Cosmic Credit program targets low-volume, nonprofessional sites of music fans. In late 1999, CDnow created the Cosmic Music Network on top of the Cosmic Credit program. The Cosmic Music Network builds on the success of the Cosmic Credit program by allowing unsigned artists to put up a Web page at the CDnow site, upload music that fans can download for free, and link their work to more well-known bands elsewhere in the CDnow store. Today, CDnow pays referring sites anywhere from 7% to 15% on a sliding scale based on volume when visitors click through and make a purchase on the CDnow site.

As efficient as the affiliate program is, it does only reach potential customers who are already on-line.

The Cosmic Music Network is significant for several reasons. First, it gives CDnow a staggeringly large number of potential marketing partners. Second, the program, which has over 250,000 members, is one of CDnow's most significant sources of customer acquisition, allowing the company to advertise to potential customers it would otherwise not be able to reach. No way could CDnow afford the administrative burden of buying advertising on all 250,000 of these sites, nor could an intermediary do so cost-effectively. The mere administrative expense of filing that many insertion orders would be prohibitive. But members identify and sign themselves up automatically for the Cosmic Music Network with a few clicks on CDnow's site, so the system is not only affordable but grows naturally. As the Web expands, so can this strategy, which means that CDnow can potentially enroll millions of members into the program.

Third, and most important, unlike banner ads, revenue-sharing programs are "webby" by nature. They build on the interconnections intrinsic to the Web and on the Web's ability to monitor and track activity in real time. With the Cosmic Music Network, CDnow knows for a fact

Revenue-Sharing Marketing Strategies: A Webwide Trend

CDnow pioneered what is rapidly becoming an important new form of marketing. But it is far from alone in relying on a pay-for-performance program to contribute to its on-line revenue. Amazon.com's Associates program, launched in 1996, now has some 400,000 affiliates. By one estimate, 16% of on-line marketers participate in a revenue-sharing affiliate program. And although CDnow and Amazon have amassed the largest number of marketing partners, thousands of other sites, including the successful on-line marketers REI.com and Dell Computer, have strong affiliate programs as well. Barnesandnoble.com is catching up with its rapidly growing program. Its commissions range from 5% to 7% and, by mid-1999, it had well over 100,000 affiliates.

Indeed, Forrester Research estimates that by 2004 half the projected $33 billion in worldwide on-line advertising spending will be performance based. Jupiter Communications further estimates that, by 2002, fully 25% of Internet retail sales will be acquired through sites using the affiliate-advertising model.

Affiliate programs are an important profit source for many sites. Payment is either by flat fee or by commission. Most commissions fall in the 8% to 12% range, although some can go as high as 25%. In just the third quarter of 1998, the popular technology site CNET, for example, facilitated over $80 million in sales for dozens of its on-line advertisers, receiving a flat fee for each and every referral in the process.

What's more, the programs are becoming increasingly sophisticated. Third-party networks like LinkShare and Be Free offer commercial Web sites the management systems, services, and software necessary for navigating the details of an affiliate program. In one of the latest evolutions, companies like Vstore.com provide Web server space and design templates to mom and pop vendors that want to set up shop on the Internet but don't possess the requisite technical know-how and resources to do so independently. Such firms pay their affiliates commissions on each sale of Vstore goods generated through their storefronts.

Critical to the success of revenue-sharing programs is their lack of exclusivity. Most affiliate programs are open to any site that wishes to participate. Details of the program are posted on the Web advertiser's site for anyone to read. The process of becoming an affiliate is straightforward: the prospective affiliate reads the contract, accepts the terms, and fills out a registration form. Typically, the affiliate then controls the content and placement of the ad.

An open program encourages appropriate Web publishers to identify themselves to the relevant Web advertisers. Since the Web publisher now bears the opportunity cost of an advertisement that fails to deliver the desired result, he or she must carefully evaluate potential advertisers to determine which ones offer the best opportunities for generating the desired market response. Therefore, open agreements, ironically, increase Web publishers' opportunities to target their marketing precisely by maximizing the potential number of solely appropriate Web publishers – those that can deliver customers.

There are no theoretical restrictions, economic or otherwise, on the potential number of sites a company can use to distribute its message to consumers. Thus, the revenue-sharing model follows directly from the many-to-many communication model underlying the Web. This contrasts with the one-to-many broadcast model that rewards only those few marketing channels that can attract the largest number of visitors.

What's more, in the revenue-sharing mode, the price of advertising is a function of the desired response by the market. Measurable market responses include key marketing objectives like unit sales, software downloads, qualified leads, product inquiries, and so on. Thus, the results-oriented model is the answer for marketing managers who are being asked to justify the sums earmarked in their budgets for Internet advertising.

Compare this strategy to the perverse situation in the broadcast television medium, where despite declining audiences, advertisers are forced to pay the networks ever-higher rates to reach fewer and fewer mass-market households. This situation persists only because advertisers have no obvious way to demonstrate declining outcomes.

Impression-based advertising in the mass media will likely never completely disappear on the Web. But as the Internet continues to mature, advertisers will continue to seek out specific target segments of potential customers and the corresponding Web sites that can deliver those customers. That will contribute to the continued explosion in open revenue-sharing advertising programs. As pay-for-performance programs continue to proliferate, more and more mom and pop Web sites will be able to participate in the profit potential of the Web. That will bring more large commercial entrants, and more customers for those entrants, into the on-line marketplace.

PHOTO: PHOTODISC

how many visitors arrive from each member's site and how many visitors are converted into buyers. Armed with the number of visitors, the number of new customers, the number of repeat customers referred from each member's Web site, and its own data on the average profit per customer, CDnow has everything it needs to estimate the lifetime value of a customer by source of acquisition. And with that figure, CDnow has a very powerful yardstick by which to measure the effectiveness and determine the proper mix of all its marketing efforts.

An Integrated Strategy

As efficient as the affiliate program is, it does, after all, only reach potential customers who are already online. As CDnow grew and gained access to more capital, it found itself in a position to go after potential customers in the physical world as well. Reaching that physical market involved investing in more traditional media – targeted magazine, radio, and television ads – avenues in which the connection between marketing expenditures and customer acquisition has never been and could never be as direct as Internet technology allows. But CDnow found that it could use its calculation of the lifetime value of a customer to work out how much of its resources it could afford to invest in the more risky gamble of traditional marketing.

CDnow currently acquires customers from seven different sources. At one end of the scale is the Cosmic Music Network, for which CDnow spends a comparatively small amount of money and only when a customer makes a purchase. At the other end are television ads, which risk a great deal of money with no guarantee that any sales will result. In addition to its Cosmic Music Network, CDnow also uses:

Radio, Television, and Print Advertising. For any company, advertising in the mass media is the most expensive and least direct way to acquire customers. But it's also the way to reach the widest possible market. CDnow's ads are targeted to some degree even here, including national television commercials during the Grammys and the American Music Awards; print advertising in music-related publications such as *Rolling Stone*, *Spin*, and *Variety;* and radio spots on the Howard Stern show.

On-Line Advertising. Like traditional advertising, the link between banner advertising and sales is highly indirect. But the average price of banner ads has plummeted from the $70-per-thousand-viewers figure CDnow first confronted to around a somewhat more reasonable $30. So the company does buy banner ads on the sites of major Internet content and service providers, including CNN Interactive and AOL, as well as some more-targeted music-related sites like Billboard.

Strategic Partnerships. CDnow also has strategic, often exclusive, alliances with America Online, Excite, and other powerful Internet content and service providers. For example, CDnow entered into an alliance with AOL that gives CDnow the exclusive right to place music banner ads and integrated links to the CDnow store on certain pages of the AOL service. Such exclusive deals are more efficient than general banner ads or advertising in mass media for channeling customers to

Divvying Up the Marketing Effort at CDnow

CDnow acquires customers from seven different sources that range from the highly expensive TV, radio, and print ads, which contribute few paying customers, to the very inexpensive Cosmic Music Network and word of mouth, which bring in the most customers.

	Media	Type	Budget allocation (%)	Contributed customers (as % of total)
expensive	Radio	off-line	16	8
	TV	off-line	16	7
	Print	off-line	16	5
	Strategic Partnerships	*on-line*	*24*	*20*
	On-Line Ads	*on-line*	*24*	*5*
		Subtotal:	**96%**	**45%**
cheap	*Cosmic Music Network*	*on-line*	*2*	*15*
	Public Relations	off-line	2	5
	Word of Mouth	off-line	0	30
	Free Links	off-line	0	5
		Subtotal:	**4%**	**55%**
		Total:	100%	100%

Note: Italicized media represent "tagged" sources of customers. Unitalicized media represent "untagged" sources of customers. A tagged customer is a new customer that CDnow can specifically identify as having been acquired through either the Cosmic Music Network, one of its strategic partnerships, or a banner ad. (Figures used, while proportionally correct, are hypothetical examples only.)

CDnow's site but remain very expensive, costing millions each year. For instance, in 1997 CDnow agreed to pay another large portal $4.5 million over two years for the right to be its exclusive on-line music retailer.

Word of Mouth. As for many successful on-line retailers, word of mouth accounts for the lion's share of CDnow's customers. And considering that it involves no direct costs, it's easy to see why the company views it as its most powerful source for acquiring new customers. In fact, it is in this context that the big investments in ads and partnerships make sense – as a way to fuel very lucrative word of mouth in the off-line world.

Free Links. CDnow benefits from a trivial number of free links that it does not purchase directly or obtain by entering into a specific relationship with a site.

PR. Traditional public relations efforts also help to generate word of mouth and influence sales.

The different marketing programs have very different economics, and by using a carefully balanced mix, CDnow is able to optimize its overall marketing productivity. To get a feel for the trade-offs involved in CDnow's various marketing efforts, take a look at the chart entitled, "Divvying Up the Marketing Effort at CDnow." Although it does not use actual figures (which CDnow also considers proprietary), it does give a feel for how the company divides its marketing investments among the programs, and what proportion of customers each program delivers. And it clearly shows how far CDnow has come from its original strategy of direct customer acquisition through BuyWeb.

CDnow distinguishes between those customers it can "tag" and those it cannot. A tagged customer is one that CDnow can specifically identify as having been acquired through the Cosmic Music Network, one of its strategic partnerships, or a banner ad. Untagged customers are those who go directly to CDnow's site on their own or follow a free link. Powerful, although largely unaccountable, forms of off-line advertising – television and radio ads, word of mouth, publicity campaigns – undoubtedly influence those customers. Untagged sources, in fact, account for 60% of new CDnow customers.

So it's not surprising that the company regularly buys advertising on the basis of exposures and visits – whether banner ads or in traditional print or broadcast media – despite the high cost. In fact, as the chart shows, almost all of CDnow's advertising budget – 96% – brings in only 45% of its new customers.

It can afford those expenditures as long as the total cost of customer acquisition averages out to less than the total average lifetime value of its customers. Because the costs of such programs as the Cosmic Music Network are so very low, the total customer acquisition expenditures average out to below the total lifetime value of CDnow's customers.

As sophisticated as CDnow's highly comprehensive marketing strategy is, the company is nevertheless finding that, over time, its pure CPM buys are disappearing. Even with its biggest and most powerful partners, CDnow is sliding back toward the revenue-sharing end of the deal spectrum. Contributing to this shift is the fact that both traffic and conversion rates from its revenue-sharing partners are steadily increasing. And once CDnow acquires those customers, they are highly likely to reenter its site directly at a later date, further increasing the revenue stream. So for CDnow, the value of the Cosmic Music Network will only increase with time.

What's true for CDnow will probably be true for other retailers on the Web. Pay-for-performance arrangements like CDnow's affiliate programs are important for e-tailers in general because they suggest a new business model for Web-based commercial efforts. Characteristically, revenue-sharing agreements extend into perpetuity, allowing commission rates to change as market forces dictate. Results-oriented marketing, therefore, tends to focus management's attention on the development of a long-term marketing strategy, as opposed to short-term tactical investments in advertising.

Internet marketing is still a work in progress. Every day, new experiments are tried and new data collected. It's impossible at this point to say what the "best" marketing strategy is. CDnow's experience, though, shows the power of the Internet as it applies to marketing. The Web belies John Wanamaker's oft-quoted lament: "I know half the money I spend on advertising is wasted, but I can never find out which half." With its ability to allow a company to draw a direct line from advertisement to sale, the Web offers for the first time in the history of media a chance to know which half really works.

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