Deciphering the Internet Advertising Puzzle

What should you know about banners, e-mail, and sponsorships to develop an advertising campaign?

By Sandeep Krishnamurthy

Total spending on Internet advertising has exploded, rising from $29.9 million in the first quarter of 1996 to $1.2 billion in the third quarter of 1999. In 1998, the Internet overtook outdoor advertising (e.g., billboards) in total expenditure.

Moreover, the Internet is no longer a medium for only online firms. The latest data from the third quarter of 1999 shows that consumer-marketing firms accounted for 32% of all ads in comparison to 27% for computer and telecommunication firms combined. Procter and Gamble has announced that by 2003, 80% of its advertising budget may be spent on Internet advertising. Many traditional advertisers, including Sprint, Eddie Bauer, Visa, Toyota, Adidas, and British Airways, also have unveiled major Internet advertising campaigns.

EXECUTIVE briefing

Internet advertising presents a puzzle to advertisers. On the one hand, total spending on Internet advertising has exploded and everybody (including your competition) seems to be advertising on it. On the other hand, click-through rates on banners have dropped to about .5% and the most basic measures of ad viewership and effectiveness have been called into question. This article provides some guidelines on how to think of Internet advertising. The author summarizes the measurement problems with banners and introduces the concepts of permission and viral marketing. He also supplies six prescriptions to keep in mind when you are putting together your campaign. The Internet is evolving rapidly and managers interested in advertising on it must be prepared to adapt in real-time if they are to be successful.

However, in addition to all this good news, there is a lot of bad news. The most widely used metric for testing the effectiveness of banner advertising is the click-through rate or the proportion of viewers who clicked on a banner ad to visit the advertiser's Web site. These rates have steadily diminished with the latest data suggesting an average click-through rate of about .5%. In addition, a recent study conducted by Xavier Dreze and his colleagues at the University of Southern California observed the eye movements of consumers as they browsed the Web. Their study shows that consumers pay scant attention to banners and may actually be actively avoiding them. Moreover, the most fundamental measures of ad delivery are suspect. For example, getting a reliable estimate of the number of consumers who actually viewed an ad is problematic.

For many managers, this is a puzzle. On the one hand, total Internet advertising expenditure has exploded and many leading firms have unveiled advertising campaigns on the Internet. On the other, the Internet is still an unproven medium with shaky measurement systems and seemingly poor results. How does a manager making advertising decisions balance these seemingly contradictory pieces of information in designing an effective campaign?

Why the Internet?

Let us first consider the most common arguments made for advertising on the Internet. First, the Internet promises advertisers access to a sophisticated audience. Since all Internet users should know how to use a computer today, the audience is sophisticated and global. Media Mark Research Inc., an audience research firm, reported that in fall 1999, 76.2% of American Internet users had attended college, 41.4% had annual household incomes in excess of $75,000 and 40.7% were between the ages of 18-34.

Second, the Internet has provided advertisers with the ability to precisely target their customers. Most mass media (e.g., TV) are not very good in their targeting. The Internet allows for precise targeting using two different approaches. In the covert targeting approach, consumers do not realize they are being targeted. But, they can be targeted on the basis of a variety of variables. For example, an ad for the IBM Thinkpad may only be shown to users who visit Yahoo! and search for "laptop computer." In the overt targeting approach, also referred to as permission marketing, the voice of the customer shapes the targeting scheme. For example, only those customers who say they are interested in receiving ads for detergents will receive Tide ads.

Finally, the Internet provides advertisers a quick-response capability to kill ineffective advertising. Ad testing is a cumbersome process for media such as TV and radio that consumes a lot of effort, time, and costs. As a result, not enough ad testing is done. However, with Internet-based ad placement, an advertiser can initially launch 10 different creatives on a thousand sites. Based on the click-through responses in the first two hours, the advertiser can conclude that two creatives work well. Then, the other eight can be dropped, which leads to a lower advertising cost.

What Are the Options?

There are three elements of advertising on the Internet: banner ads, sponsorships, and e-mail. Banners are small rectangles that appear on the top, bottom, and sides of the content in a Web site. When a consumer visits a Web site, he or she views the banners. When a user clicks on a banner, he or she is automatically taken to a Web site that has been picked by the advertiser. Two important variations of the banner ad are interstitials and pop-ups. An interstitial banner ad appears when the user transitions from one Web site to another. It occupies the entire computer screen. It can either be automatically timed out or the user may be asked to initiate closure. Similarly, pop-up ads appear abruptly when a consumer first visits a site or at any other point during the browsing experience. The key advantage of interstitials and pop-ups is they catch users by surprise. However, they also are likely to annoy customers.

In site sponsorships, advertisers sign long-term agreements to obtain constant coverage on a given Web site. Then, their logo is displayed at all times on the Web site. Just like banners, consumers can click on the logo to visit the sponsor's site. For example, visitors to www.quicken.com will always encounter the logo for Morgan Stanley/Dean Witter, Amazon.com, Stamps.com, and Fidelity Investments.

Finally, e-mail advertising has emerged as an important advertising tool, since it's cost-effective and direct. Firms now use e-mails regularly to interact with marketers. The contents of the e-mail do not necessarily have to contain a simple text message. Marketers can now send e-mails using the HyperText Markup Language (HTML) where an entire Web page is sent to the consumer. E-mails with audio and video clips also can be produced inexpensively. Such advances continue to enhance the strength of e-mail as a marketing tool.

In the latest data available, for the second quarter of 1999, banners represented 59% of all spending, sponsorships accounted for 28%, and e-mail for 1% of all advertising.

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The Banner Ad

The reader must understand that no consumer visits the Web to view a banner ad. The focus of the consumer is on reading the news or buying a book. The banner ads are, therefore, incidental to the browsing experience of the consumer. They are most closely comparable to billboards where viewing the message is incidental to the consumer's driving experience. This means that consumers will rarely pay close attention to the message of the ads. Hence, creative strategies that use imagery, animation, and succinct slogans will work best.

The banner ad is best thought of as a brand-building device that works well to improve brand awareness and attitude. Immediate consumer action is rarely generated by a banner and will only be generated if it is accompanied by a sizeable promotion.

Banners can be targeted to the individual user by an advertising network such as Doubleclick. In most cases, banners must be placed on multiple Web sites to obtain access to a sufficient number of target consumers.

The greatest challenge with banner advertisements is measurement. First, there is no standard term to define the number of consumers who viewed a banner ad. Three terms related to this are hits, impressions, and page views. Each time a Web server sends a file to a browser, it is recorded in the server log file as a "hit." Hits are generated for every element of a requested page (including graphics, text, and interactive items). If a page containing two graphics is viewed by a user, three hits will be recorded—one for the page itself and one for each graphic. Valid hits are a refinement of hits and they exclude error messages and other useless information. Page views refer to the number of times a user requests a page that may contain a particular ad. They may overstate ad impressions if users choose to turn off graphics and, hence, they need to be adjusted for this. Finally, impressions refer to the number of times an ad banner is downloaded and presumably seen by visitors. If the same ad appears on multiple pages simultaneously, this statistic may understate the number of ad impressions, due to browser caching. (This is a practice where recently used pages are stored on a local server to increase access speeds to the Web.) There is currently no way of knowing if an ad was actually loaded. Most servers record an ad as served even if it was not.

Most advertising is bought on a cost per thousand (CPM) impressions basis. Since impressions are not reliable measures of the number of ads downloaded to users, many advertisers are leery of the Internet.

Second, many sites use IP addresses as a means of identifying "hits." Since IP addresses are not uniquely assigned to individuals, it may lead to as much as 39% underestimation of visits, a 64% overestimation in page views, and a 79% overestimation in the time spent on each visit. Naturally, this also waters down the targeting of the ads.

Third, many leading advertisers seek to place their banner ads on the leading sites (e.g., portals). This is analogous to advertisers placing their TV ads on the networks. There are two leading firms that measure the traffic ratings of Web sites (i.e., the top 25 Web sites in any given week). They are Media Metrix and Nielsen's Net Ratings. Both companies recruit participants who install software on their PC to monitor their browsing patterns. There are significant problems in the way this data is collected. For one, it significantly under-counts two populations—users who browse the Internet from work (only 7,000 of Media Metrix's 40,000 sample users have a PC at work) and global users. This is likely to make the data less reliable.

There are also significant differences in the methodology used by these two firms. Net Ratings enumerates the universe of Internet users on a monthly basis and uses single panel recruitment and data collection method. On the other hand, Media Metrix sporadically updates its universe estimate and uses multiple recruitment and collection methods (tracking software and a PC meter).

Finally, the majority of advertisers still measure banner effectiveness using the click-through. This is flawed because it is an intermediate behavioral measure that lacks meaning in and of itself. Some consumers who click on ads do so inadvertently. Others are perplexed by the lack of a clear post-click action. Hence, even after they click, they do not take a meaningful action.

We know that mere exposure to a banner leads to some improvement in the awareness and attitude of consumers. The most recent effort has been to measure these attitudinal measures in real-time using a sample of target consumers (e.g., Dynamic Logic).

The bottom line is that many large advertisers are avoiding the Internet since the profitability of investments on banner ads cannot be established with any degree of reliability. Overcoming this problem will be key for the long-term viability of the banner.

Sponsorships

Unlike banner ads, which are placed on a variety of sites based on user characteristics, sponsorship refers to a long-term promotional agreement with a few sites. In other words, the tradeoff is between breadth and depth.

The main purpose of the sponsorship is to leverage the traffic and brand strength of a Web site to obtain traffic for one's own site as well as to buttress one's own brand. Hence, the leading portal sites such as AOL and Yahoo! are the leading candidates for sponsorship deals. However, in addition to these portals, many smaller sites may be able to provide access to a more targeted set of consumers.

Given the problems with banner advertising, sponsorship has emerged as a more important alternative.

E-mail Advertising

E-mail is a direct communication tool. In comparison to the banner ad, which the consumer may or may not see when they are browsing the Internet, the e-mail ad arrives in the inbox of consumers, increasing the chances of being observed.

Managers interested in using e-mail for advertising must understand two key terms—permission marketing and viral marketing.

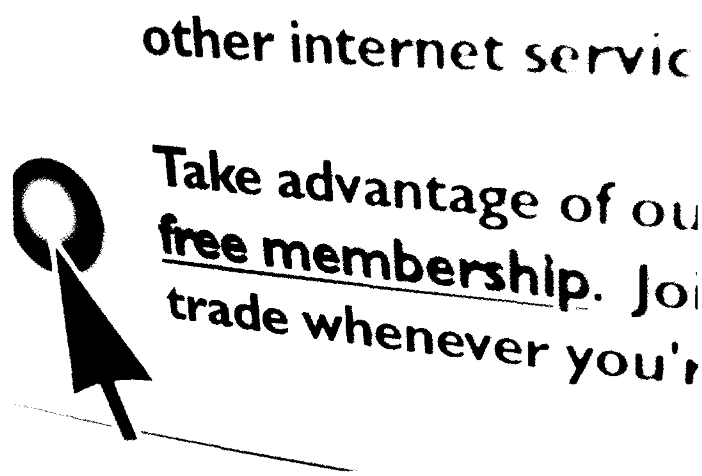
Unsolicited commercial e-mail (also referred to as spam) is not considered to be a viable option for legitimate marketers. To see why, one must understand that on the Internet the marginal cost of obtaining a new e-mail address and the marginal cost of sending one additional e-mail message are both nearly zero. Also, it is possible to easily disguise the source of the e-mail. Therefore, if unsolicited commercial e-mail becomes the norm, individual consumers are likely to receive a tremendous volume of e-mails on a daily basis. This is likely to reduce the effectiveness of e-mail as a promotional tool and will "kill the golden goose."

Permission marketing overcomes this problem. Here, consumers initially fill out a form indicating the categories that interest them. Then, advertisers send out promotional e-mails to consumers interested in any given category. The idea is consumer-initiated targeting (i.e., consumers target marketers they would like to receive promotional messages from and not vice-versa).

However, the current implementation of permission marketing leaves a lot to be desired. In many cases, consumers are asked to opt into categories that are very broad and not very descriptive. Moreover, getting consumers to update their information is a challenge. Finally, we observe the phenomenon of "permission creep" where permission marketers send out ads that fit in the categories only tangentially. Managers must pay close attention to these problems when implementing such a program.

Viral marketing is widely touted as the new way to increase market penetration and build brand awareness in the Internet space. Hotmail is the classic example. It grew by leaps and bounds by doing something simple. At the bottom of each e-mail message, there was a small line promoting Hotmail that read, "Get Your Private, Free Email at http://www.hotmail.com." The recipient of a message quickly understood that he or she could get an account easily by visiting hotmail.com. This led to a phenomenal growth of more than 12 million individuals being signed up in the first one and a half years. The success of Hotmail has led to viral marketing being seen as the means to build traffic and Web site awareness cheaply. Examples of viral marketing are increasing. For example, gazooba.com offers individuals incentives when they recommend Web sites to others. It has become common to provide a "tell a friend" icon next to a description of new products or services, product reviews, and the like.

Viral marketing offers two new insights. First, it envisions a world where marketers can build a customer base with (nearly) zero acquisition cost. Second, it argues for a move from marketer-to-consumer communication to consumer-to-consumer communication. Receiving a promotional message from someone you know can have a greater impact than an ad received from a distant marketer.



Viral marketing is a possibility today because of three reasons. First, entire social networks have migrated to the Web. Second, the marginal cost of contacting one individual on the Web is virtually zero, thus enabling large-scale contact in a short period of time. Third, the network effect plays an important role—as more people sign up, they can contact many more people.

However, there are some problems with viral marketing as well. First, there is a certain loss of control of the message, which can lead to an inconsistent brand image. For example, in certain cases, consumers can modify the message before sending it on. Second, measurement of effectiveness can be a problem. Typically, one has to wait for a behavioral outcome (e.g., signing up for an account) before passing judgment on effectiveness. Finally, viral marketing can lead to spam issues. Enthusiastic consumers may send unsolicited mail, for example, to all their co-workers. In this case, the advertiser may see a virulent backlash leading to a drop in consumer attitude. Managers must address these problems when implementing a viral marketing program.

Prescriptions

The Internet provides several interesting possibilities as an advertising medium. However, it is still an emerging area. There are six guidelines to keep in mind when thinking of the Internet as an advertising medium.

1. **Use multiple advertising approaches.** The Internet is a versatile medium. It offers banner and sponsorships, which are indirect approaches to advertising, and e-mail, which is a direct method. Smart managers will realize they have to use multiple approaches to successfully reach their audience. For example, a sponsorship at a leading portal will lend the advertiser immediate credibility. However, banner ads may be necessary to shape the identity of the brand and e-mail may have to be used in order to actually communicate new deals. Consumers who receive a promotional e-mail from a company whose logo they have seen at a major portal will respond better than those who haven't.

2. **Develop effective creative.** Develop several banner creatives varying the colors, size, fonts, execution styles, and so forth. Similarly, develop different e-mail creatives by varying the number of links, the placement of the links, and the length of the text. Test these creatives out in real-time and pick the ones that work the best. Rich media technology provides some ideas on improving banners. These banners can have a built-in order area, expandable order forms, and secure server technology to protect credit card transactions. It all happens from within the banner. The downside is that rich media banners cost more to produce and place and they can slow down Web page loading times. However, this is something to keep in mind. We are only beginning to see techniques that have been used very effectively in other media on the Internet—for example, the use of humor and celebrities. In the future, banners will use these and other techniques.

3. **Measure, measure, measure.** As mentioned earlier, the click-through on a banner is an intermediate measure with no intrinsic meaning. Make sure that you conduct marketing research to assess ad effectiveness using affective measures (e.g., awareness, recall, attitude) and cognitive measures (e.g., product knowledge). At the same time, link clicks to actual actions. When you approach a publisher, make sure you understand exactly how they measure traffic to the site and the number of people who viewed the ad. If you are tracking effectiveness over the long run, make sure you compare apples with apples (e.g., net ratings with net ratings).

4. **Build a customer database.** Develop a permission-based customer list. Obtain detailed profiles of who your customers are and what they want from you. Build customer trust.

5. **Don't put all your eggs in the Internet basket.** Advertising on the Internet does not mean that one should abandon other media. Instead, think of synchronizing the message across different media to come up with a well-designed advertising campaign.

6. **All industries are different.** When advertising in the business-to-business context, a more factual and information-rich message may be more effective. However, in the business-to-consumer context, brand building is most important.

The Internet is an evolving medium. We know advertising on the Internet will be very different in a few years due to major changes in technology (e.g., The Wireless Internet, Convergence, and Broadband). Managers interested in advertising on this fluid medium must be prepared to adapt in real-time in order to be successful. ■

About the Author

Sandeep Krishnamurthy is assistant professor at the University of Washington, Bothell, where his current research focuses on electronic commerce. Krishnamurthy serves on the advisory board of several Internet startups, including 180Solutions, a new Internet advertising agency. He also has consulted with other Internet firms including chooseyourmail.com and cool.com. Krishnamurthy has worked with the Association for Interactive Media (a wing of the Direct Marketing Association) in delivering workshops on e-mail marketing. He may be reached at sandeep@u.washington.edu.