Yahoo *Consumer Direct* Marries Purchase Metrics to Banner Ads

>Abstract

As little as two years ago, many advertising pundits were bemoaning the inevitable demise of the banner ad on the Internet. But maybe they were too quick to judge. This case reveals how Yahoo!, in combination with ACNielsen's *Homescan*®, has developed a methodology (Consumer Direct) to evaluate the true effectiveness of banner ads, from ad exposure to shopping cart. It also reveals the role Dynamic Logic played in conducting postexposure ad evaluation. **www.yahoo.com; www.acnielsen.com; www.dynamiclogic.com**

>The Scenario

If you are a product manager for a consumer-packaged-goods (CPG) company—for example, you manufacture toilet paper, or soup, or boxed dinners, or bar soap—a large portion of your advertising budget is going into television. "CPG companies have large marketing budgets and, understandably, have been extra careful in their move toward Internet advertising," shares Ken Mallon, Yahoo's director, insights products.[1] "The thinking is that no one goes online to search out information on paper towels. But that doesn't mean that Internet ads can't significantly lift in-store sales." With Internet consumption on the rise,[2] and all other media facing declining consumption as a result,[3] new metrics that showcase Internet ads' targeting efficiency and sales responsiveness were needed. Product managers were facing increasing pressure for strong ROI metrics for media buys, yet they were relying on advertising recall[4] or click stream analysis.[5] They had few ways to measure the true purchase response from an Internet ad campaign.

>The Partnership

This was the scenario that had Yahoo wondering how to track actual purchases of Yahoo visitors following exposure to a CPG ad. It worked to bring about a marriage between ACNielsen's *Homescan* panel (126,000 global households that provide extensive demographic and lifestyle data and allow their purchases to be tracked[6]) and Yahoo's extensive database of Internet visitors. Yahoo envisioned the marriage providing a series of powerful metrics that CPG companies had yet to experience. Yahoo's new research service for CPG companies was named *Yahoo Consumer Direct Powered by ACNielsen* (hereafter referred to as *Consumer Direct*).

>The Research

Nielsen//NetRatings 2003 data indicate the Internet reaches more than 185 million in the United States with year-to-year growth exceeding 7 percent. One question guided Yahoo's thinking: How many *Homescan* households use Yahoo? Neither ACNielsen nor Yahoo had this bit of information. However, based on estimates of Yahoo use among all Internet users, and Internet usage among all households, it was assumed that approximately 29,000 households, or 45 percent of the U.S. *Homescan* panel would be Yahoo users. More than 40 percent of active Internet users use broadband or high-speed Internet access.[7] This sets such households up to be tested for exposure not only to standard media banner ads, but also the "rich media" ads that are increasing on the Internet.[8]

Used with permission of Pamela S. Schindler ©2006.

The next step was to recruit *Homescan* panel[9] members. *Homescan* panelists were asked to opt in to a joint Yahoo/*Homescan* panel in which their Yahoo ad exposure and behavior would be linked to their offline purchase information. To the delight of Yahoo and ACNielsen, 19,000 visitors have opted in to the new panel. "Having ACNielsen know what kind of cereal they bought didn't seem intrusive to them, but we were unsure how many would feel it too intrusive for us to track the Web sites they visited. Clearly, most of them weren't too concerned," observes Mallon.

In order to determine how effective the advertising was, Yahoo needed to construct a comparison control group, a group of households that didn't see the tracked advertising but were members of the *Homescan*™ panel. Test households, when visiting Yahoo® sites, were exposed to tracked CPG ads. "The visitor wouldn't notice any difference, whether they were part of the test group or the control group. They would both see banner ads,[10] just different banner ads," explains Mallon. Today, matching is achieved by selecting people from the Yahoo/*Homescan* panel who match the test participants on key variables such as household size and prior purchase behavior. Approximately 2,000 households are included in the test group for any given tracked ad.

Consumer Direct tracks two metrics on the test group:

(1) ***effectiveness of ad targeting***—are visitors being exposed to the ads the most likely to purchase?

(2) ***persuasiveness of the advertising***—what percentage of households exposed to the advertising actually purchase the advertised product?

Assume, for example, a product has a six-week purchase cycle. The test participants are exposed to an ad for an eight-week campaign, followed by the absence of exposure for an additional six weeks. Using prior *Homescan*™ data, a household's purchases in the category are extracted for both the test and the control groups for the 52-week pre-ad interval. Then purchase data are tracked during the ad exposure period and for six weeks after the ad exposure period. If purchases are higher following exposure than they were in the 52-week pread interval and compared to the control group's purchases, then the ad is considered to have generated sales "lift.". ANCOVA—analysis of covariance—methods are used to compare the ad-exposed group with the control group. Postexposure (or non-exposure) purchase is compared adjusting for precampaign purchase levels and adjustment variables.

Once the data are collected, it takes about two weeks to analyze the data and prepare the executive summary, which can exceed 30 pages. Then the clients participate in an oral presentation and discussion of the analysis.

Yahoo also partners with Dynamic Logic to provide advertisers with five more metrics critical for CPG success:

- ***Ad awareness***—Have you see advertising for (_____ product) in (time frame)?
- ***Brand awareness***—Have you seen advertising for (____ brand) in (time frame)?
- ***Brand favorability***—Participants rate brands on a preference scale.
- ***Message association***—Which brand uses the message: (sales message, slogan, etc.)?
- ***Purchase intent***—How likely are you to purchase (____ brand)?

As with the *Homescan*-based metrics, participants are in two groups, those who are exposed to the tracked advertising and those who are not. Initially participants were recruited into the Dynamic Logic/Yahoo survey through a pop-up—"*Tell us your opinion…*" or "*Win $X by answering a few questions*"—during their participation in the *Consumer Direct* research. Today, as Yahoo no longer supports pop-ups on its network, it uses recruiting media on the Yahoo network to attract participants for this aspect of the research.

>Using the Research

Ultimately the goal of *Consumer Direct* is more efficient and effective Internet advertising. "Yahoo wants to help its advertising clients more effectively target ad content to those more likely to purchase. Using the browsing patterns of high-purchase households in the *Consumer Direct* research to model behavior, we then apply this knowledge to the Yahoo database to identify 10 million households that exhibit similar browsing behavior," explains Mallon.[11] Whether a low-penetration product has moved from 2 percent to 7 percent of households purchasing or a high-penetration product (purchased by more than 75 percent of households) experienced a purchase increases of 5 percent, every single *Consumer Direct* client has experienced sales lift. Clearly Yahoo is collecting the information it needs to help its clients get effective use from their Internet advertising.

>Discussion

1. Describe the research design for *Consumer Direct*.
2. Discuss the strengths and weaknesses of the research design.
3. How has the use of panels affected the research design?
4. How have ethical issues influenced the research design?
5. Define the various measurements collected in *Consumer Direct*.
6. What analysis would be appropriate for the data collected through *Consumer Direct*?

>Notes

[1] Ken Mallon, director insights products, Yahoo, interview February 17, 2004.

[2] SRI-Knowledge Networks' Media Scan Spring 2003 shows that among women age 25 to 54, Internet consumption rose from 10 to 13 percent, from fall 2000 to spring 2003.

[3] Forrester Research, September 2003, shows decreases in use of radio (10 percent), newspaper (16 percent), TV (21 percent), and magazines (13 percent) among women 25 to 54 since going online.

[4] Ad recall metrics measure a participant's response to whether he or she has seen ads for products within a particular category (unaided) or from a specific brand (aided or unaided) in the prior 24 hours to 30 days.

[5] Click stream analysis, or click analysis, measures where a participant clicks once he or she has entered a tracked Web page. Such measures as number of "hits" received by a Web page are included in this category of measurements.

[6] "ACNielsen Homescan," ACNielsen, downloaded February 17, 2004 (http://www.acnielsen.com/products/reports/homescan/).

[7] Phil Cara, "Online Market Research: Trends and Technology," American Marketing Association, WebEx event, February 5, 2004.

[8] "Rich media" ads are programmed to include sound, movement, and even interactivity, unlike standard media banner ads, which look like billboard advertisements.

[9] ACNielsen updates the demographic and lifestyle information of its panel on a quarterly basis.

[10] Due to anonymity issues, ads would not be delivered by e-mail, and Yahoo guidelines prohibit pop-up ads.

[11] Two months after the foundation interview for this case, Mallon joined Dynamic Logic as its vice president of product development. In this new position, Mallon works with Dynamic Logic's *MarketNorms* database, the industry's most comprehensive database for measuring online advertising and marketing effectiveness.

>Source

This case was developed for *Business Research Methods* 9/e ©2006 from interviews with the Ken Mallon and from materials drawn from ACNielsen, Nielsen Net//Retatings, and Yahoo websites.