

Whither the Click?

How Online Advertising Works

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Online advertising spending in the United States exceeds \$20 billion annually. However, click rates on display advertisements average only 0.1 percent. Are low click rates evidence that display advertisements have no impact on consumer behavior? Or, does display advertising work in a manner similar to traditional “branding” advertising, with multiple exposures being required to effect a change in consumer behavior? This article shows that the click is not an accurate indicator of the effectiveness of online display advertisements. Even when click rates are minimal, display advertisements can generate meaningful increases in site visitation, trademark search, and both online and offline sales.

BACKGROUND

In today’s economically challenging times, advertisers and their agencies appear to be moving their online display advertising dollars from customer relationship management campaigns that require payment based on the number of people exposed to the campaign to “pay-for-performance” programs (“CPC” or “CPA”) that require payment when the consumer performs some desired action such as clicking on an advertisement.

At the same time, however, research is showing that a click may not be a relevant measure of the impact of display advertising. Click rates on static display advertisements fell dramatically in recent years, to average levels of only 0.2 percent in 2006. The comScore studies referenced in this article show that average click rates on display advertisements in 2008 fell even further, to less than 0.1 percent. Other research conducted in Europe has shown similar very low click rates (eMarketer, 2009). Further research has shown that 6 percent of the online population accounts for 50 percent of all clicks and that heavy clickers are not representative of the total online population, skewing heavily toward the 25–44 age group and to households with an income less than \$40,000 (Starcom MediaVest Group Press Release, 2008).

Are low click rates evidence that an advertisement has not had any impact on consumer behavior? Or, does online display advertising work in a similar manner to traditional offline advertising, with multiple exposures over time being needed to effect a change in consumer behavior?

The results presented in this article will show the manner in which online display advertisements work in affecting consumer behavior, revealing that there are, indeed, latency effects, branding effects, and sales lifts—even when click rates are minimal.

DESCRIPTION OF DATA SOURCES AND STUDIES CONDUCTED

This article references results from more than 170 online advertising effectiveness studies conducted by comScore. comScore has built a unique market-research database consisting of two million global internet users (one million of whom are residents in the United States) who have explicitly agreed to the tracking of their online behavior. For each panelist, software was installed on his/her computer to unobtrusively capture the details of their internet activities, including every site visited, content viewed, content entered, time spent, product or service bought, and price paid. Every display

EMPIRICAL GENERALIZATIONS

Even with no clicks or minimal clicks, online display advertisements can generate substantial lift in site visitation, trademark search queries, and lift in both online and offline sales.

and search advertisement that was received by the panelists was also captured, including whether the advertisement was clicked on or not.

The panel was statistically weighted and projected using a variety of demographic and behavioral variables to represent the internet user population, and the data have been validated through comparisons to third-party data. (One such comparison is to the U.S. Department of Commerce quarterly estimates of e-commerce sales, see Figure 1.)

The database was encrypted for complete privacy protection, and no personally identifiable information was released. The data were matched (using name and address) with third-party offline databases producing a "single-source" datamart that contained both online and offline behavior. Panelists had the option of completing customized surveys delivered to them either via email or by a "contextual pop" on their computer screen during their time in the panel triggered by their online behavior—such as visit-

ing a certain site or viewing specific content.

RESEARCH DESIGN

To maximize accurate identification of a specific campaign that was being tracked as part of a study, advertising agencies and/or publishers that were involved in online advertising were provided with a tag, which was appended to the display advertisement. This allowed for the systematic and accurate identification of the consumers who were exposed to a specific advertisement. Depending on the specific requirements of the project, the tag also may have included parameters for segmentation purposes, such as an identification of the site that published the advertisements and the type of creative message used.

Test groups: Based on passively observed exposure to an advertisement, a test group of panelists exposed to the campaign was generated. Test cells could vary depending on the specific objectives of the campaign and could be mixed and matched accordingly.

Control group: A control group of panelists not exposed to the campaign also was generated. This group had no exposure to the advertisements, but exhibited the following characteristics when compared to the test group(s):

- similar historical usage of the internet overall;
- similar historical visitation to the sites where the advertisements were in rotation;
- similar historical total search behavior online;
- similar distribution on the following household demographics: age, income, census region or residence, and connection speed;
- similar historical offline buying behavior (if relevant to the study at hand).

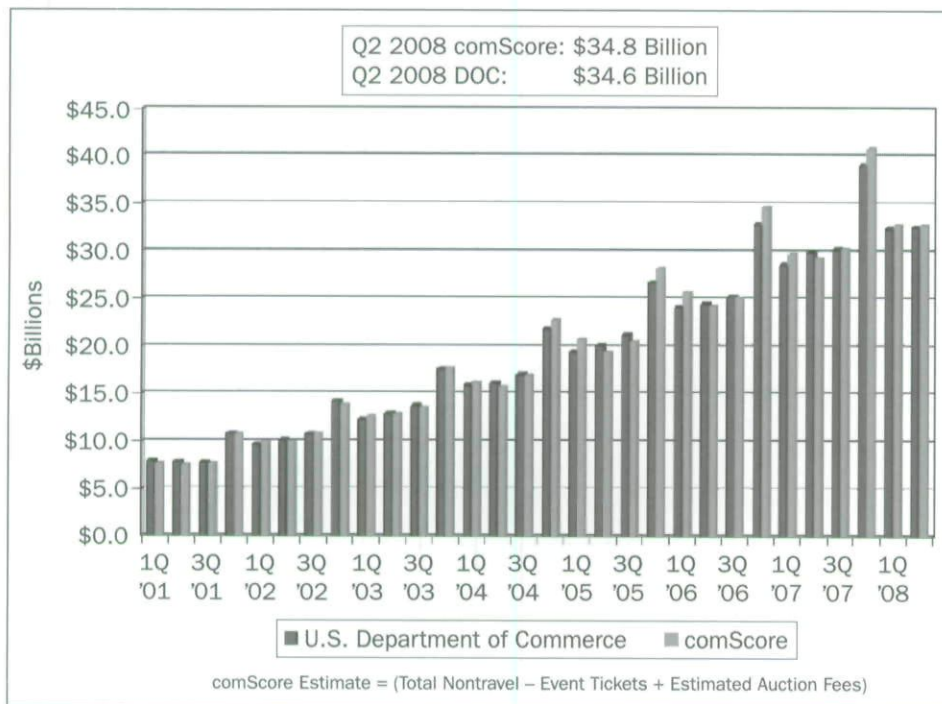


Figure 1 Validation of comScore Sales Data: Comparison of comScore Data to U.S. Department of Commerce

With the exception of the exposure to the online display advertising test campaign, the test and control groups were virtually identical, including their exposure to other forms of media.

Passively collected behavioral data captured the view-through value of the overall campaign by measuring consumers' internet activity across key behavioral metrics. This behavior was measured irrespective of whether an advertisement was clicked on or not.

The database contains data and analysis on more than 200 studies, of which certain subsets are available for various types of analysis. Results included in the database were tested at a 90 percent confidence level using a one-tail t-test. Reportable measures must also have minimum sample size requirements, which vary depending on the type of behavior being analyzed.

DETAILED RESULTS

The impact of display advertisements on visitation to an advertiser's site

Among 139 studies in which consumers' online behavior was monitored following exposure to a display advertisement, the average lift in the number of visitors to the advertiser site (i.e., percent change in reach between the test and control groups after adjusting for any differences that existed prior to the start of the campaign) was 65 percent during the first week following the first exposure to an advertisement.

Not only was there a significant impact within the first week following exposure to an advertisement—low click rates notwithstanding—but past the first week, there was significant lift that would have been overlooked by relying on clicks or by using cookies to track consumer behavior.

The effects of online display advertising continued past the first week in which the advertising exposure occurred, with



Figure 2 Advertiser Site Reach

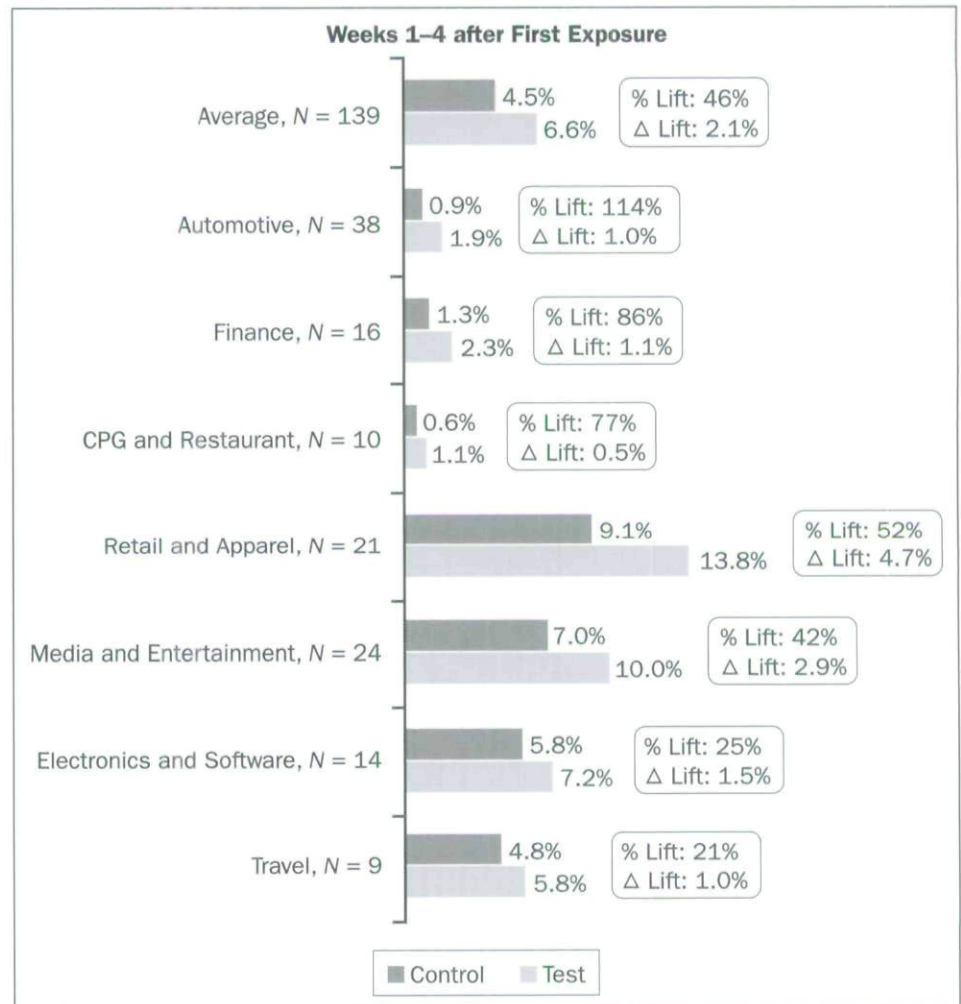


Figure 3 Advertiser Site Reach by Industry

the biggest difference in site visitation between the control and test group occurring closest to the initial exposure (see Figure 2).

These lifts varied greatly across industries, with Automotive advertisements generating the greatest percent lift in visiting to the advertiser site among the categories studied. It also is the industry with the smallest base values, however, with advertisements that typically refer users to highly specific auto-model websites. In general, industries where baseline visitation to the advertiser site is low generated the highest percent lift. But, even where site visitation is high, there were substantial (20–50 percent) increases in site visitation caused by the display campaigns; it is clear, therefore, that lift is not simply being caused by low site-visitiation levels.

The Retail and Apparel (+4.7 points), Media and Entertainment (+3.0 points), and Electronics and Software (+1.4 points) industries generated the greatest absolute increase in reach lift.

Over the four weeks after an initial exposure to a display advertisement, the lift in site visiting generated by exposure to advertisements from a Retail and Apparel advertiser dropped the least (see Figure 3). In contrast, the resulting lift in reach in visiting to CPG and Restaurant sites dropped sharply past the first week and continued to drop through the four-week period (see Figure 4).

Considerations for this analysis and topics for further study. There are additional factors that may affect the rates of lift over time that are not addressed in this article. The most obvious include the length and frequency levels of each campaign. The average (mean) length of the campaigns included in this study was 42 days. The shortest campaigns ran over a single day, and the longest campaign ran for 108 days.

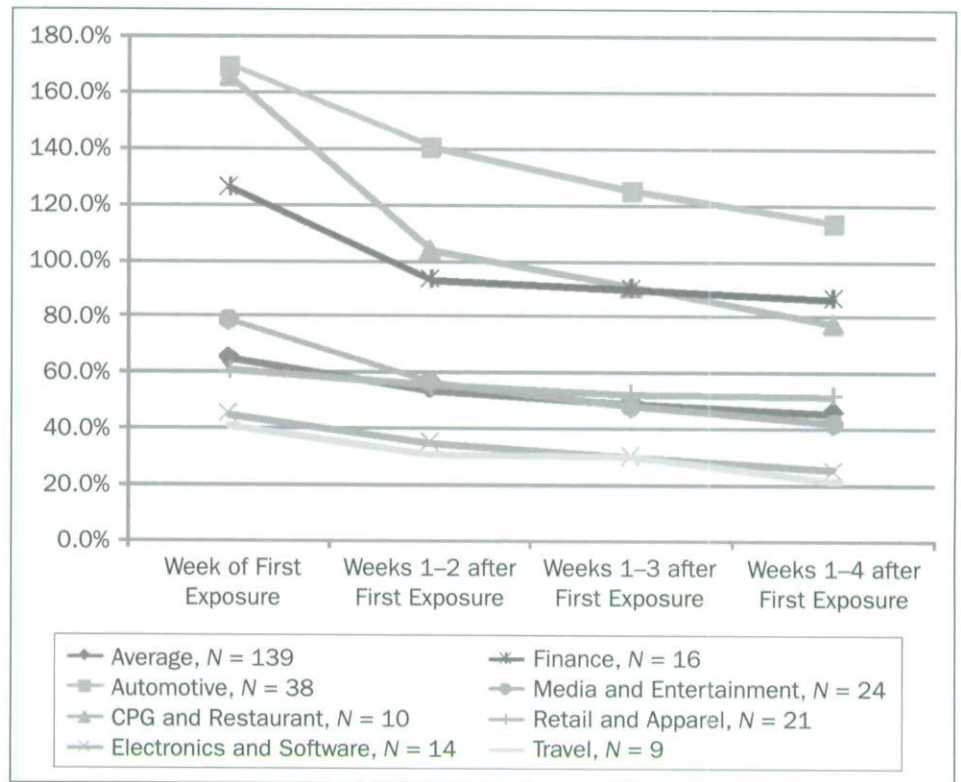


Figure 4 Percent Lift in Advertiser Site Reach

Another consideration is the purpose and type of the creative message. “Call-to-action” or direct-response advertisements that are typical of sale-related retail campaigns can be expected to generate a different and more immediate level of response than “branding” advertisements designed to elevate awareness and build a brand over time.

Since Brand Metrix analyses are time aligned to the first exposure of a panelist to a display advertisement, this article is unable to draw conclusions about the “decay rate” of a campaign and the resulting ROI after the campaign has ended.

The impact of display advertisements on visitation to competitive sites

Visiting competitive sites also increases as a result of exposure to display advertising. In general, the increase in visiting a

site’s competitive set is lower than the lift generated in visitation to an advertiser’s own site (see Figure 5), but the differences in those levels vary greatly by industry.

Display advertising in the Retail and Apparel, Finance, and Automotive industries causes competitors’ site visitation rates to increase the most (see Figure 6). This implies more comparison-shopping activity in these categories and, perhaps, a more challenging task for advertising to quickly and easily build brand loyalty.

The proportional change in the uplift decreases slightly as time passes following the online exposure (see Figure 7). The exposure affects site visitation for the advertising brand; the competitor site visitation also is affected by that exposure. There is some variation in the effect on the focal brand and the competitor sites, depending upon the product category.

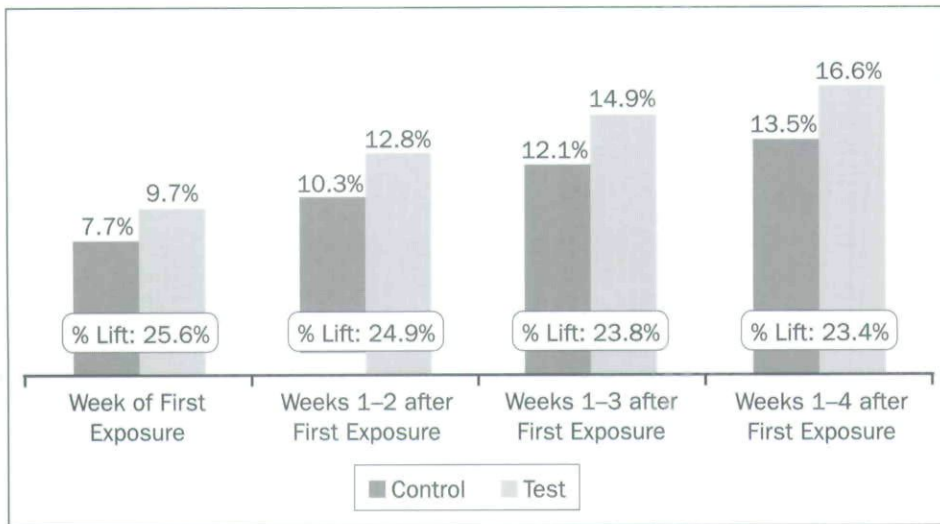


Figure 5 Competitive Site Reach

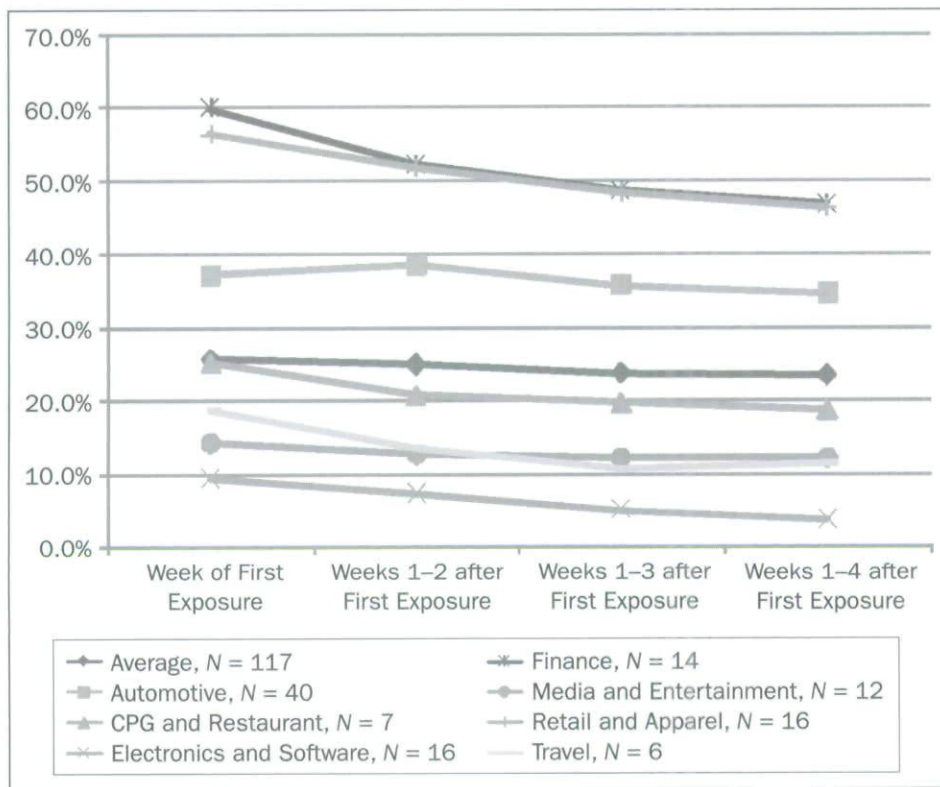


Figure 6 Percent Lift in Competitive Site Reach

The impact of display advertisements on brand, generic, and competitive searches

A relatively small percentage of users exposed to an online display advertisement

subsequently conduct a search using an advertiser's Trademark/Brand term (see Figure 8). This dynamic is important, however, because of the synergy between dis-

play advertisements and search (see below) and because a trademark or a brand search can be a significant indicator of purchase intent (Google and comScore, 2006).

Exposure to a display advertisement generated a greater average lift in search reach (percent of users conducting a search query) using generic terms rather than trademark/brand searches (see Figure 9). This may seem counterintuitive, but it does not necessarily follow that display advertising is ineffective or inefficient in generating searches that may eventually lead to a purchase. Research has shown that the majority of prepurchase search activity (both in terms of searches and clicks) actually involved generic terms, not the merchants' brands (DoubleClick Research, 2005). The percent lift in the percent of users who searched using a competitive brand term typically tracked well below that of brand and generic searches (see Figure 10).

Over the studies where these types of searches were tracked after exposure to a display advertisement, we see that the largest lifts in reach were among users who made a search using a generic term related to the category of the display advertiser.

The impact of display advertisements on sales

For eCommerce sites, it has long been a challenge to quantify the impact of online advertising on sales. Because click rates are so low, it is commonly known that a purchase rarely takes place during the same session as an exposure to an advertisement, and even more rarely as a result of a click. It is therefore critical to observe the latent effects of advertising exposure on purchasing, which often extend to days or even weeks beyond the exposure. This has historically been difficult to measure because the deletion of cookies by internet users (30 percent per month) means

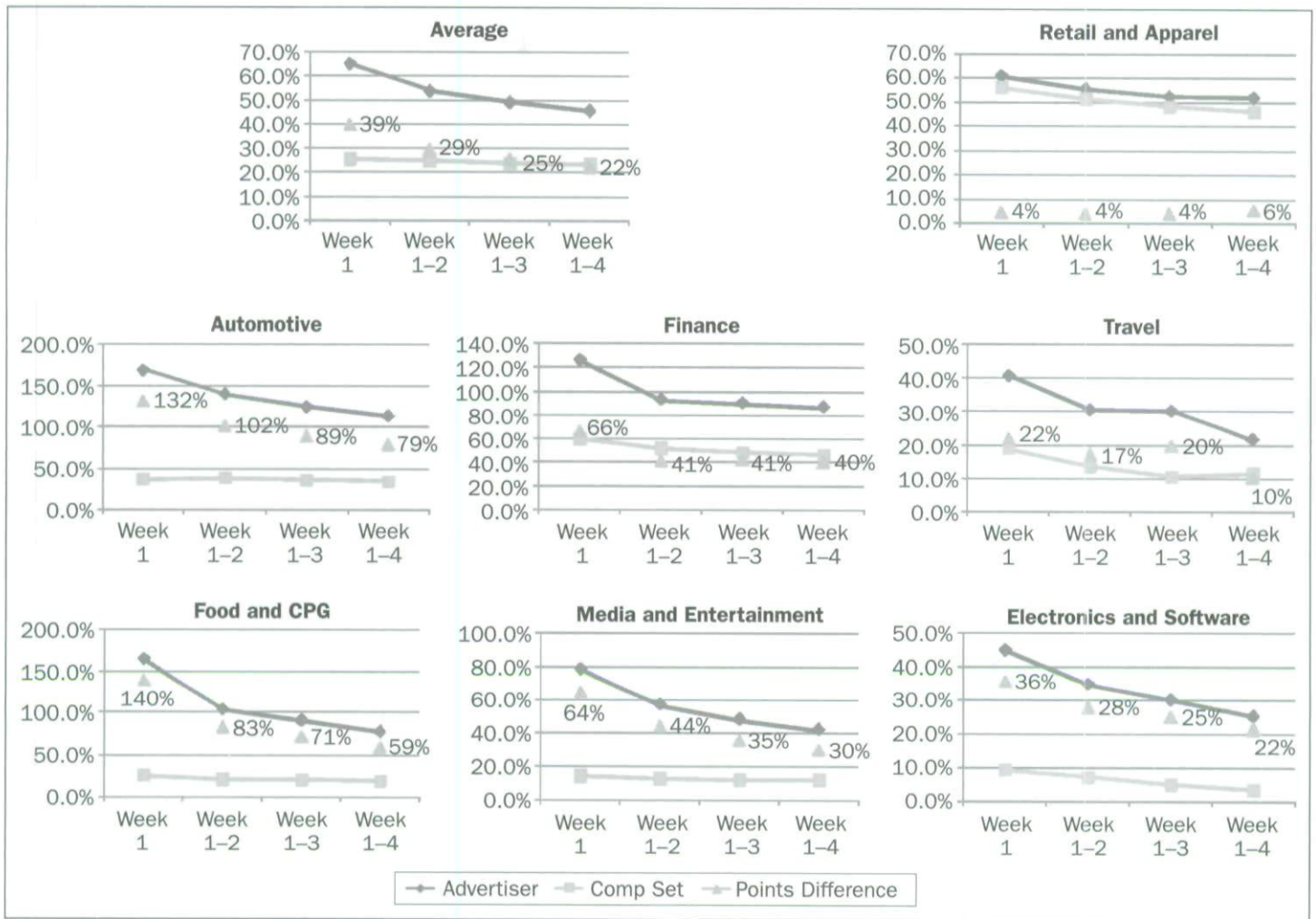


Figure 7 Advertiser versus Competitive Set Percent Lift in Site Reach

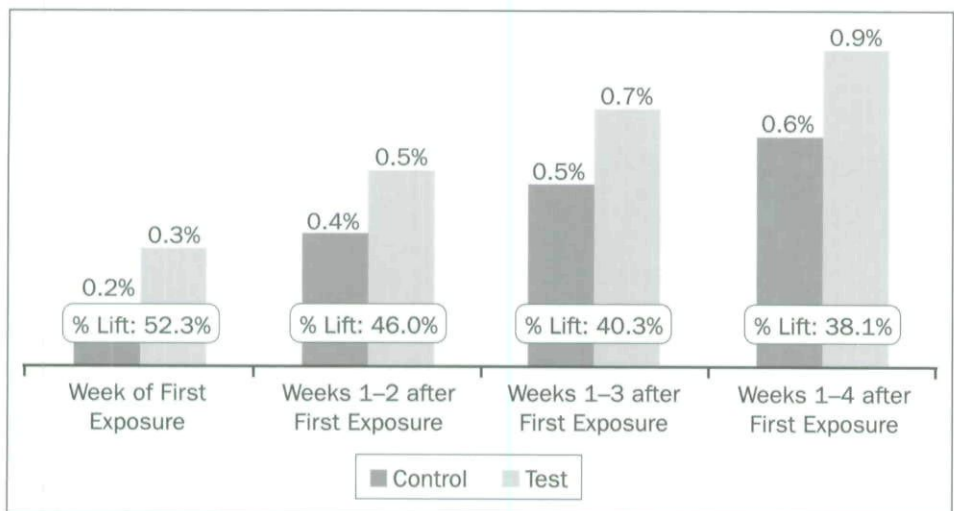


Figure 8 Percent Making a Trademark or Brand Search

that cookies cannot be used to accurately track the behavior of computers over time (comScore Press Release, 2007).

For bricks-and-mortar retailers, the challenge extends even further, to the necessity of quantifying the effects of online advertising on offline sales. The magnitude of the lift in offline sales generated by online advertising is significant and would certainly not be captured by a pay-per-click cookie-based measurement approach. The current lack of visibility into offline purchasing consistently leads to dramatic underestimation of display advertising ROI.

In examining the impact of display advertisements on buyer penetration

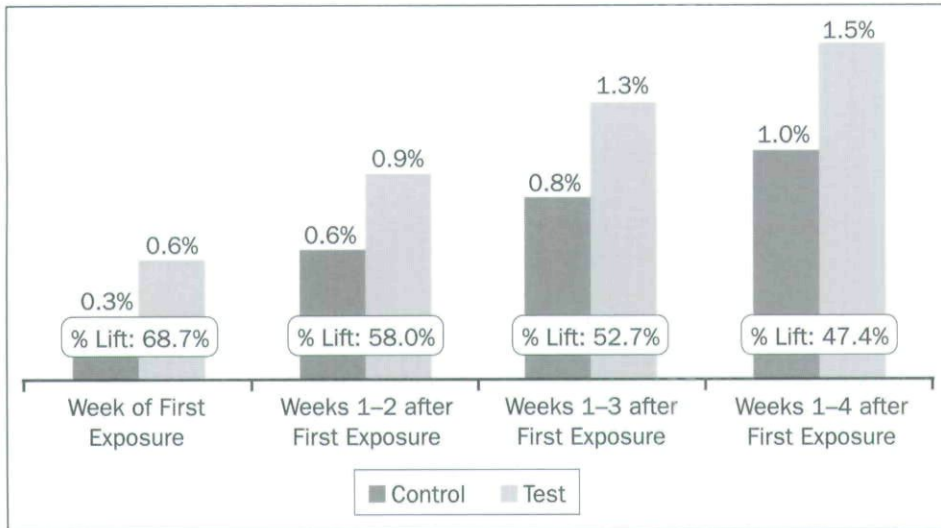


Figure 9 Percent Making a Generic Search

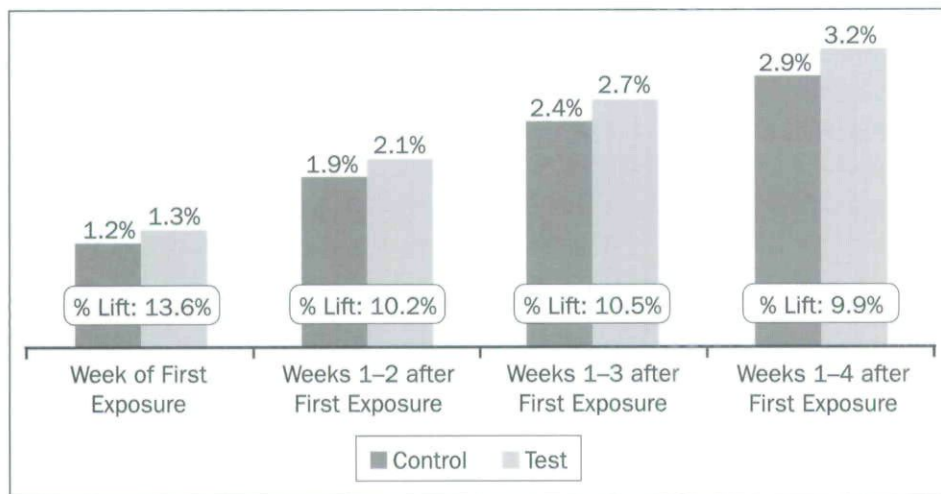


Figure 10 Percent Making a Competitive Search

(see Figures 11 and 12), we see that the percentage lift is much higher online than offline, with an average online buyer penetration lift of 42.1 percent, compared to a lift of 10.1 percent in offline buyer penetration. However, because the bases are larger for offline purchasing, the net impact in new or additional buyers is larger offline than online.

Per-buyer purchasing both on- and off-line show minimal gains (see Figure 13).

The synergistic impact of display and search advertisements on sales

In this series of studies, we examined the impact of search and display separately as well as in combination. The impact of search advertisements alone on consumers' buying behavior was found to be clearly greater than that of display advertisements alone. This is true both in terms of the advertisements' impact on online buying as well as the impact on offline sales. This is not surprising

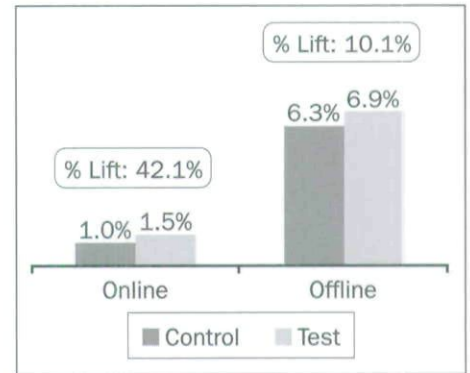


Figure 11 Buyer Penetration

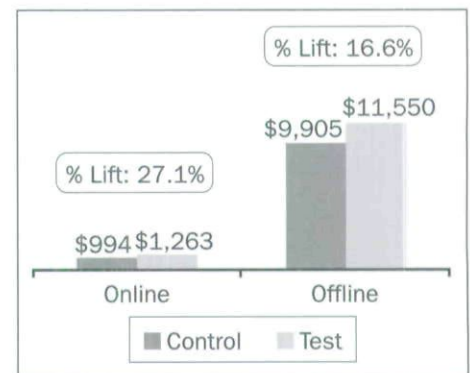


Figure 12 Dollars per Thousand Exposed



Figure 13 Dollars per Buyer

because consumers responding to search advertisements are much more likely to be "in the market" for buying the advertised product.

It must be remembered, however, that the reach of display advertisements is typically much higher than that of search advertisements. For example, in the studies conducted, approximately 81 percent of the consumers who saw an advertisement received only a display advertisement, while a much lower 8 percent received only a search advertisement. When the lift factors are weighted by the reach of a campaign, display advertisements typically emerge as being able to generate a higher total lift in sales.

Conventional wisdom says that media work best when multiple programs are used together, and we do indeed see clear synergies between search and display (see Figure 14). Both in terms of the impact on buyer penetration and dollar sales (per thousand consumers exposed), it is clear that the combination of search and display together is greater than the sum of the impact of display and search advertisements separately.

The effects of the combination of search and display on in-store sales are equally dramatic (see Figure 15). The incremental lift in buyer penetration generated by the combination of search and display advertisements is 4.8 points in-store, compared to 3.2 points online. In terms of dollars spent on a per-exposed user basis, the combination's impact on off-line sales clearly has the potential to make a larger impact on a retailer's bottom line.

EMPIRICAL GENERALIZATIONS AND CONCLUSIONS

The empirical generalizations established in this research are as follows:

EG1: Even with no clicks or a minimal click rate of 0.1 percent, online display advertisements can generate substantial lift in site visitation, trademark search

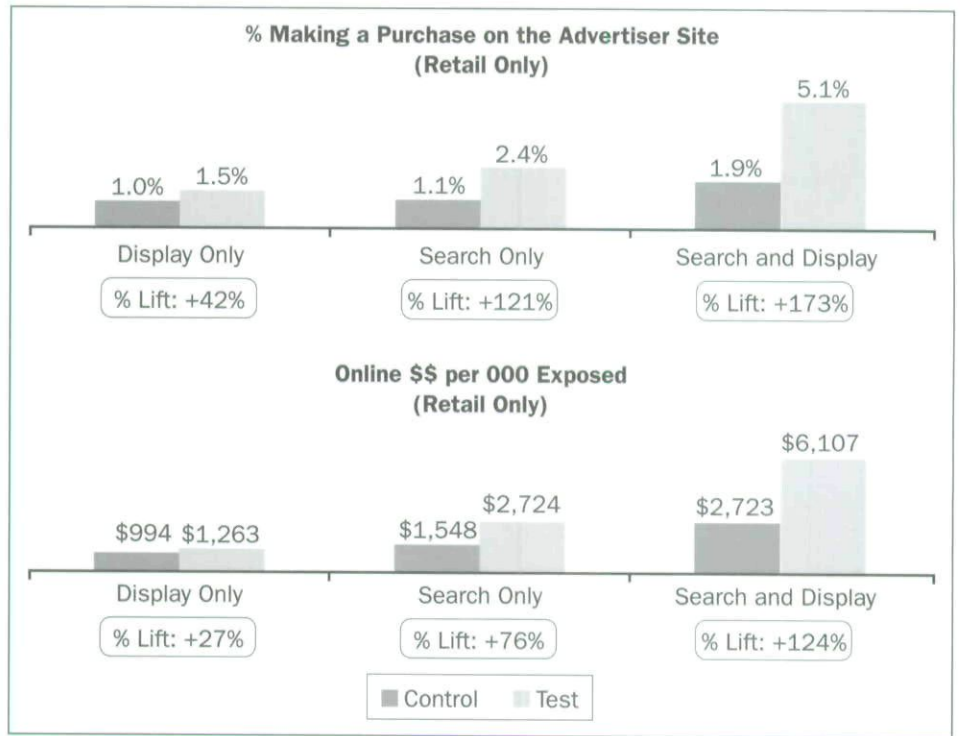


Figure 14 Search and Display Synergies Online

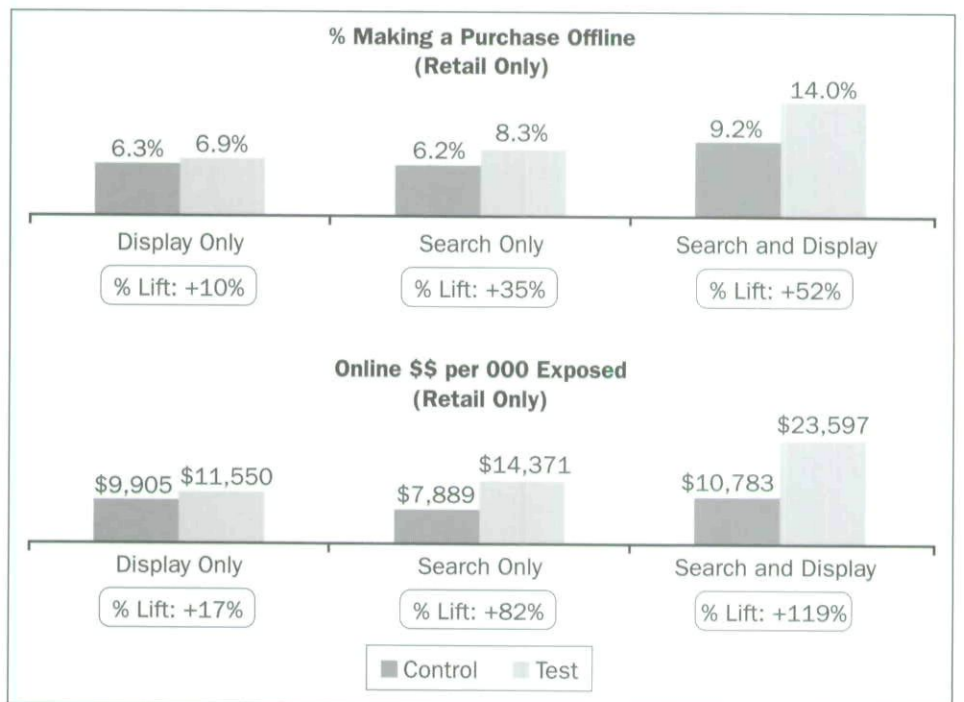


Figure 15 Search and Display Synergies Offline

Among 139 studies in which consumers' online behavior was monitored following exposure to a display advertisement, the average lift in the number of visitors to the advertiser site was 46 percent.

queries, and increases in both online and offline sales.

EG2: For retailers, search advertising generally causes a greater lift in sales among those exposed to search advertisements than an online display advertising campaign does among those exposed to the display campaign, but the higher reach of display advertising campaigns typically means that they are able to generate larger overall sales increases than search campaigns.

EG3: Overlaying a retailer's display advertising campaign on a search campaign produces synergy, with the effect of the combination being greater than the sum of the two separate campaigns.

Our results show that a low level of clicks does not mean that online display advertising is having no effect. By examining 139 online display advertising campaigns conducted across a variety of vertical industries (including Retail and Apparel, Travel, CPG and Restaurant, Finance, Automotive, Consumer Electronics and Software, and Media and Entertain-

ment), we show that display advertising, despite a lack of clicks, can have a significant positive impact on:

- visitation to the advertiser's website (lift of at least 46 percent over a four-week period);
- the likelihood of consumers conducting a search query using the advertiser's branded terms (a lift of at least 38 percent over a four-week period);
- consumers' likelihood of buying the advertised brand online (an average 27 percent lift in online sales);
- consumers' likelihood of buying at the advertiser's retail store (an average lift of 17 percent).

In the Retail category, it is also clear that while the lift in sales from a display advertisement is lower than the lift from a search advertisement, the reach of a display campaign is typically far higher than that of a search campaign. When the sales lift is weighted by reach, display campaigns generally outperform search campaigns. The combination of a display and search campaign, however, delivers substantial synergy, with the sales lift from the combined strategy being greater than the sum of the individual components. **JAR**

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