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DoubleClick Research

In-Direct Response to Online Advertising: *Best practices in measuring response over time* *Continental Airlines Case Study*

Executive Summary | Overview

While click rates have become the de-facto measurement of the direct effectiveness of online advertising, the debate has continued over the true value of the impact over time (or “in-direct response”) of online advertisements. Current technology enables marketers to track consumers who saw an online ad and then also track user behavior in terms of actual online conversions on the marketer’s website (sales, registrations, etc.). This post-impression conversion activity (users saw an ad, did not click on it but ultimately did the activity designated as a conversion) is referred to as a “view-through” and is typically measured for one month post the impression being viewed. View-through activity has been an available metric for quite some time, but there has been little investigation into its validity. If a consumer on the Internet sees an advertisement for a website, but does not click on it, can the fact that this person visited that website later be directly attributed to seeing that ad? There are certainly other factors that drive visitors to websites, including other forms of media, but what is the true impact over time of online advertising? Determined to discover what the real effect of this in-direct response is, DoubleClick, along with Continental Airlines and their online media buying agency, Arc Worldwide (formerly Semaphore Partners), conducted a test to help in evaluating view-through activity and response over time to online advertising.

Methodology

Individuals on the Internet were exposed to either test or control ads during the February 2004 Continental Airlines online media campaign. Both sets of ads were running during the same time period as part of the same media buy. Impression levels and frequency were controlled for in both groups. View-through activity was tracked for sales and registrations occurring 1 hour, 1 day, 7 days, 14 days and 30 days after exposure. The data was then analyzed for the control group to establish a baseline to determine the effectiveness of the test group results. The differences between the control and test group were analyzed at the campaign as well as creative level. There were 3,588,870 unique users in the study. There were 1,467,239 in the control and 2,121,631 in the exposed group.

Key Findings

Test results suggest independent effects of exposure to online creative on subsequent conversions. The test creative placements consistently performed better than control:

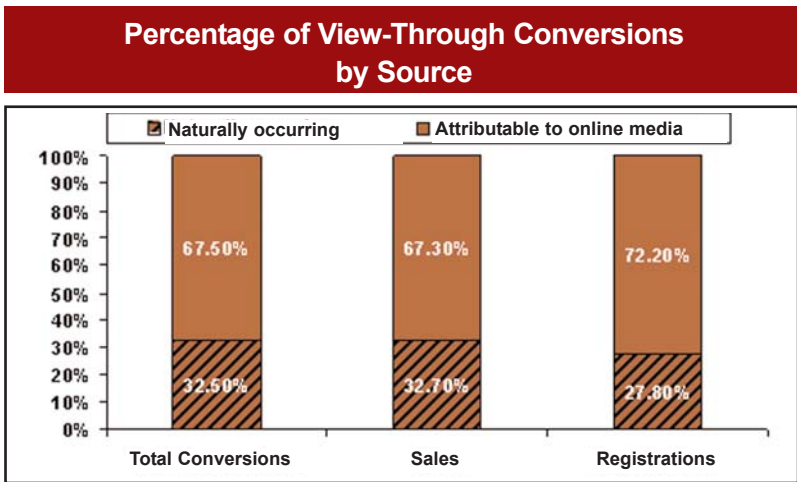
- For this test campaign, 67.5% of the test group's view-through registrations and sales are attributable to online creative

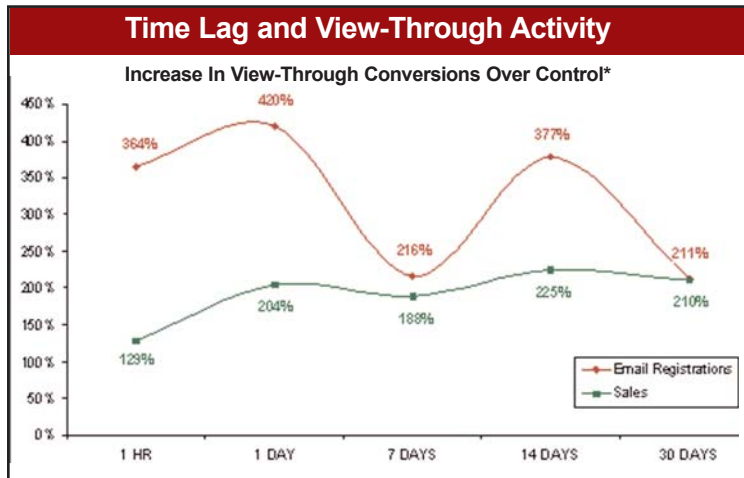
- The study shows significant impact of exposure to online creative for most of the above defined time lag intervals after exposure.
- Impressions volume and site/placement are identified as significant factors in indirect response to online advertising, with impressions being the most significant factor.

Online advertising's share of view-through activity

Overall, for the Continental campaign, approximately 67.5% of conversions generated by online advertising are attributable to online marketing. The percentage of registrations attributable to online marketing is slightly higher than the percentage of attributable sales. This is most likely due to the fact that Continental Airlines already has such a strong brand in the market such that people are naturally likely to go the website and purchase airline tickets regardless of online advertising.

In order to determine what share of activity actually came from online advertising, the effective conversion rates (ECR) for both the control and test groups are calculated. The ECR for the control group is used as a baseline to discount the ECR of the test group and determine the share of conversion directly attributable to online creative. While some activity counted as in-direct response occurred as a result of other factors, it is clear that there is a significant impact of response over time to online advertising.





*All results are significant at the 95% confidence level or higher; however there was no statistically significant difference between the test and control groups for sales occurring within 1 hour

Impact of Time Lag on In-Direct Response

For almost every time period, there is significant difference between the test and control groups. While the volume of view-through email registrations directly attributable to online advertising was higher than the corresponding activity for sales, the impact of online advertising on sales increased over time while the opposite is true for registrations. Over the course of the 30 day period the impact of delayed response on email registrations decreased by 50% after one day, while the impact on sales transactions increased by 3% during the same period. The difference between these two events is most likely due to the fact that there is a longer decision process when it comes to making airline ticket purchases. When you combine all the view-through activity for these two events, the impact of time mirrors that of the sales transactions since sales accounted for 96% of the view-through conversions.

Factors Influencing In-Direct Response Subscriptions and Transactions

The test results showed that there was a strong correlation (.94) between view-through email registrations and sales, so they must be caused by the same factors. Three key factors were at the core of the increase in delayed response sales and, based on correlation analysis and regression, email registrations:

- Exposure to campaign creative (as opposed to control)
- Increased volume of impressions was the most significant factor after exposure, with some signs of diminishing returns
- Site placement: Creative placements on specific regional sites related to Continental's "hub" city and homepage placements generated more sales

Other variables, such as section content and ad size, were examined to measure their impact of sales and email registrations, but their impact was either insignificant compared to other factors in this campaign or there was not enough data to make any conclusions at this time. Creative was one variable that was limited by the fact that not all of the ad sizes ran in multiple sites and placements.

The results from this test reinforce the importance of larger campaigns (impressions) as well as reaching consumers in the right places (sites/placements). The regression models show that increasing the volume of impressions has a positive affect on the indirect response, but there is a point of

limitation where diminishing returns start to play a factor. With the data available, it is not possible to determine exactly where diminishing returns start for this campaign. Regardless, the point of diminishing returns will most likely vary for different campaigns and it should be addressed on a case-by-case basis. Likewise, while the aforementioned sites show positive influence on this campaign, these variables could vary for different campaigns, brands and objectives.

Conclusions

Even with a well-established brand such as Continental Airlines, online creative has a significant role in in-direct response activity attributed to view-through. Some portion of activity counted in view-through is directly attributable to the online advertising even though the degree of impact may change due to the brand, the campaigns goals, time and the ads utilized. For most advertisers, the only option currently available is to attribute all or none of the view-through activity to the online campaign, but the actual performance lies somewhere in between. Advertisers need to understand that while other media and outside influences will contribute to website activity, consumers are affected by online advertising both immediately in terms of clicks and over time in terms of view-through activity. It is up to advertisers to now examine their own campaigns to determine how much of a latent impact they are getting from their online creative.

The DoubleClick Strategic Services Group is available on a project or retainer basis for custom online analytics work including assessments like appropriate view-through attribution. For more information, contact: strategicservices@doubleclick.net

Next Steps

Individual advertisers should conduct their own tests to measure the volume of view-through activity attributable to their campaigns. However it is even more important to conduct further industry wide studies to examine the view-through activity across a wider sample to develop an accepted industry average of view-through activity attributable to online advertising and to determine what factors have the greatest influence on in-direct response in varying situations.

NOTES:

In-Direct Reponse - The reponse to an online ad that occurs over time without the action of a click

Test Ad - Any Continental Airlines advertisement

Click-through - the interaction with an online advertisement that redirects the user to a designated URL

Control Ad - Any non-Continental Airlines advertisement, including but not limited to media sites' house ads and DoubleClick ads

Control Group - Internet users who were never exposed to test ads over the course of the campaign and the following 30-day period.

Effective Conversion Rate (ECR) - the total number conversions (sales and/or email registrations) per impression (conversions, impressions)

Test Ad - Any Continental Airlines advertisement

Test Group - Internet users who were exposed to test ads over the course of the campaign. Note: the test group could have been exposed to control ads during the test period

View-Through - A metric in the DoubleClick DART system that captures website activity that occurs when a user has been exposed to, but did not click on, an online advertisement, visits the website later on by typing in the URL or any other method, and performs an activity designated by the advertiser as a conversion

For more information on DoubleClick's online advertising solutions, call 1.866.806.7843
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