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METHODOLOGY



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I. INTRODUCTION

CrossMedia Research studies utilize best practices to quantify the effectiveness of integrated marketing campaigns that combine the Internet and offline media channels (Print, TV and/or Radio). The research provides valuable insight into the performance of cross-media campaigns, providing answers to questions such as:

- Which media were most effective in increasing metrics such as Awareness, Message Association, Favorability and Purchase Intent?
- Did the combined impact of online/offline exceed their respective contributions?
- Which audiences were most influenced by the respective media channels?
- Against what metrics was each medium most effective?

II. BACKGROUND

Over the past several decades, various methodologies have been developed and employed to measure the effectiveness of different marketing platforms within an integrated campaign. When measuring offline marketing channels only, these methodologies can be valuable in determining the relative efficiency of various efforts. However, many of these methodologies were developed before the advent of online marketing and were not designed to quantify the Internet's contribution. Therefore, they can be inadequate in measuring Internet marketing activity.

The following are some examples of methodologies that were designed for the evaluation of offline marketing activity. Dynamic Logic developed its approach after a careful review of these traditional methods.

Media Mix Modeling – Media mix modeling analyzes the efficiency of marketing activity by correlating data such as attitudes and sales with marketing spending and promotional activity. Since online marketing spending, however, is generally a very small proportion of marketing budget, these methodologies usually cannot accurately measure the Internet's contribution to the media mix. Modeling is also very expensive and cost-prohibitive on the campaign level.

Split (or Matched) Market Testing – This methodology measures the effect of marketing activity in a test market and compares sales results to matched market in which there is no marketing activity. This methodology cannot effectively be employed with online advertising, however, because geo-targeting on the Internet is not yet sufficient to saturate a specific market with online advertising and block advertising from a matched region.



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Telephone Tracking – Using telephone-based tracking for day-after-recall and other metrics is common, but it has drawbacks for when online advertising is in the mix. The most significant drawback is the difficulty in using Random Digit Dial (RDD) methods to locate exposed respondents to online campaigns, which generally do not achieve high national reach.

Artificial/Laboratory Testing – Research in which respondents are recruited and asked to view programming with advertising online and offline, thus “forcing exposure” to the ads, avoids some of the problems associated with other methodologies. This approach has been criticized, however, since the exposure is not “natural”, potentially causing memory-priming or advertising sensitization among respondents. In general, methodologies that measure advertising effectiveness without changing the audience’s natural media consumption habits are preferred.

Dynamic Logic’s CrossMedia Research studies were designed to accurately account for the impact of online media, while addressing the deficiencies of the above approaches. The methodology is also more cost-effective.

Using the Internet’s unique strengths in both tracking and recruitment, CrossMedia Research studies provide advertisers, agencies and publishers with an accurate way of evaluating the separate and combined impact of various elements in a cross-media marketing campaign.

III. METHODOLOGY

CrossMedia Research studies are based on live, in-market tests that measure a campaign’s impact on the audience to which the campaign is targeted, both online and offline. Recruitment is done over the Internet. Combining Dynamic Logic’s proprietary AdScout tracking system and a specially-tailored survey instrument, the research correlates advertising “opportunity to see” (OTS) with brand attitudes, utilizing a control/exposed research design.









More details on the methodology are in Section IV.

Research Design

The research is based on comparisons of respondent groups who have exposure opportunity to different combinations of media. Each of these groups is compared against a baseline control group.

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Various combinations of media can be measured and compared. The most basic research design features four cells: Web-only, Offline-only, Web+Offline and Control, as illustrated by the following chart (Fig. 1).

<i>Statistically similar groups</i>	Were They Exposed to the Web Advertising?	Were They Exposed to the Offline Advertising?
Web-only Group 		NO
Offline-only Group 	NO	
Web + Offline Group 		
Control Group 	NO	NO

Determining Exposure Opportunity

CrossMedia Research studies use the most accurate method available for determining advertising exposure opportunity online and offline. The methodology is based on measuring advertising opportunity to see (OTS), the standard basis for most advertising effectiveness research.

To determine exposure opportunity to online creative (online OTS), the studies utilize AdScout, a patent-pending cookie technology that is part of Dynamic Logic's AdIndex system. When survey respondents enter the survey, the system recognizes whether or not they have been served any online ads in a given campaign. In addition, the system identifies exactly which creative or combination



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of online creative was served, on what sites the creative was served, as well as exposure frequency and recency.

Offline advertising OTS is survey based and measured by self-reported media usage. The offline media schedule is reconciled with media usage reported by the respondent to determine if they had an opportunity to see or hear the advertisement.

The survey instrument is customized to adapt to the campaign media plan. The following examples show how offline exposure opportunity is measured for different media.

Print (Magazines)

Due to its visual nature, the Internet is well suited for gathering self-reported, magazine media consumption data. While respondents may have trouble remembering whether they read a particular issue when prompted by a date, showing them the cover of a particular issue enables them to recall readership with a high degree of accuracy.

Below is an example of a survey question for print. Magazine cover images can be added mid-recruitment as they hit the newsstands and shipped to subscribers.

Read or Looked Through: <u>Entertainment Weekly</u>					
5/31/02	6/7/02	6/14/02	6/21/02	6/28/02	7/5/02
			Magazine Not Yet Available	Magazine Not Yet Available	Magazine Not Yet Available
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Read or Looked Through: <u>Newsweek</u>					
6/03/02	6/10/02	6/17/02	6/24/02	7/01/02	7/08/02
			Magazine Not Yet Available	Magazine Not Yet Available	Magazine Not Yet Available
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Television and Radio

Exposure opportunity for television and radio advertising can be determined by asking respondents whether they watched or listened to programming where the campaign advertising ran. If advertising is running on a single, specific event, then respondents who report listening or watching the event are determined to have the opportunity for exposure.

When advertising is running for periods of time across TV or radio programming, respondents are asked about frequency of viewing/listening of consumption of that programming. The weight of the advertising running during the programming determines the threshold of consumption at which OTS is indicated.

Below is an example of such a question for both radio and television exposure opportunity.

Please rate how often you watch the following shows on ESPN.

	I rarely miss it	I watch it occasionally	I hardly ever watch it	I never watch it
NFL Countdown	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NFL PrimeTime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sportscenter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NFL 2Night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fig. 3. – Media Synergy Studies, Sample Broadcast Question

Print (Newspaper)

The questions used to determine advertising exposure opportunity for newspaper advertising are developed based on the insertion schedule of the advertising. Questions determine newspaper readership at the issue level as well as determining readership of particular sections of certain issues, if appropriate. Images of certain issues/sections may be used as well.



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Recruitment

Recruitment for CrossMedia Research studies is done over the Internet in order to obtain a sizeable sample of respondents exposed to the online advertising. Respondents are recruited on sites where the online advertising is running. A pop-up recruitment creative is randomly served to every nth visitor to the Web sites where the online advertising is running, reflecting a random sample of the online audience of the online element of the campaign. Normally, a cash sweepstakes incentive is offered to respondents.

Survey Development

Questionnaires are based on AdIndex Vertical Enhancement (AV's) surveys, which contain standard questions relevant to the advertiser's industry. Specific AV's have been developed for eleven industries such as Finance, Travel, Auto, CPG, and Pharmaceutical. In addition to questions about media consumption, surveys contain segmentation questions, as well as blinded questions about the campaign's brand and brand competitors. Depending on the campaign industry, branding metrics may include:

- Aided and Unaided Brand Awareness
- Advertising Awareness
- Message Association
- Sponsorship Awareness
- Brand Favorability
- Brand Attributes
- Purchase/Behavior Intent

Analysis

The aggregate results analysis is based on a comparison of attitudinal scores for each of the respondent groups. The average scores for each exposed cell, representing respondents who were determined to have an opportunity to see advertising on one or more media channels, is compared to the control baseline. Percent increases are calculated and tested for statistical significance using a one-tailed z test for population proportion.

Additional analysis is done on target segments. Specifically, the influence of each media channel between the aggregate and target segment is analyzed, which indicates any differences in sensitivity to the various media channels between the target and overall population. Analysis of the impact of different levels of online advertising frequency among the Web-only sample is also provided.



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IV. RESEARCH CONSIDERATIONS

There are a number of considerations that have been addressed in the development of the methodology. The following are some questions frequently asked about Dynamic Logic's approach.

Internet Recruitment

Question: What about people who are not online? Are they part of the sample, and if not, why?

Answer: Recruitment for CrossMedia Research studies is done on the Internet. Therefore, people who do not access the Internet are not part of the sample.

Since CrossMedia Research studies are designed to evaluate specific cross-media campaigns of which the Internet is a part, it is not necessary to recruit non-users of the Internet. Advertisers use this research to explore the potential benefits of reaching an audience that is both online and offline, and to evaluate a campaign across these channels. People who never access the Internet do not represent a potential audience for such cross-media campaigns, and thus it was not necessary to make non-Internet recruitment (by mail or telephone) part of this methodology.

Media bias

Question: Is it possible that the research design can introduce media biases, and if so, how is that controlled for in the analysis?

Answer: Using media usage as an independent variable can, in some cases, skew the statistical similarity of the control and exposed groups relative to offline media usage. Respondents who consume certain programming may have different characteristics and baseline attitudes than those who do not; in these cases, comparing the two groups in a Control/Exposed design can be misleading.

This potential media bias can be addressed by ensuring that both the control and exposed groups, relative to the offline media, both have the same media consumption habits. This is accomplished by the use of a pre- post- design, where all respondents are consumers of the same media. In this way, respondent groups are similar; the only difference is the potential exposure opportunity due to the presence of advertising, based on the date that the respondent was recruited.

Respondent data can also be weighted or filtered by demographics or other variables.



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Non-addressable media plans

Question: What about media plans where asking questions about specific programming choices is not a practical or accurate way to determine the opportunity to see the offline component?

Answer: The characteristics of some offline media plans make it difficult to directly address potential advertising exposure in the survey questionnaire based on consumption of specific programming. It is impossible to use programming-specific questions to determine exposure opportunity when a media plan is high-reach and scheduled run-of-network across a large number of channels, or placed in local, non-syndicated content.

In these cases, overall levels of consumption of the media in which the advertising is planned is used to determine exposure opportunity. Questions are designed to reconcile media weight among high, medium and low consumption respondent groups relative to the campaign. Using recruitment waves, changes in these three groups over time indicates the degree to which the offline media plan changes attitudes among pre-specified audience groups.