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MEASURING THE EFFECTIVENESS OF INTERNET ADVERTISING

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Abstract

As commercial use of the Internet continues to mature, companies are increasingly looking for adequate measures of the effectiveness of Internet advertising. This study will address the current trends, practices and developments in Internet advertising and methods for measuring the effectiveness of Internet advertising, based on a survey of companies using online advertising aggressively. We will also provide a framework for refining and structuring the process of online ad measurement, giving online marketers the confidence they need to take advantage of the global exposure available on the Internet.

Keywords: Internet advertising, advertising effectiveness, e-marketing, banner ads, rich media advertising

Introduction

Internet advertising (e-advertising) in the US is expected to exceed \$17 billion by 2002. Global e-advertising and direct e-marketing are estimated to be over \$22 billion in 2002, up from a mere \$4.5 billion in 1999 (Russel and Keith 2000). As the amount and value of information on the web increases, advertisers will be willing to pay more to get their potential customers to their web sites as fast and as frequently as possible (Kalakota and Whinston 1997).

Yet, adequate measures of online advertising effectiveness remain lacking. Advertisers have no way of ascertaining the impact of Internet marketing efforts. Ad experts say that online advertising is still far inferior to TV for reaching a mass audience for branding. In addition, a recent Business Week article quotes "Click-through rates on banner ads that account for 50% of Net advertising revenue - have plummeted from 30% for the first banner ad in 1994 to a measly 0.3% today. That is well below the 1% to 1.4% response rate of direct mail. Advertisers say better ways of measuring the impact of online ads and marketing campaigns are needed to get them to spend more" (Green and Elgin 2001). Since advertising is an integral part of any business, whether online or offline, and online advertising is expected to reach \$17 billion by 2002, there is need for systematic study of current practices, challenges, revenue models and measurement metrics for Internet advertising.

This research-in-progress will provide a model for measuring the effectiveness of online advertising. A survey will be conducted of organizations involved in Internet advertising in order to study the current trends, practices and developments in Internet advertising and methods organizations use for measuring the effectiveness of Internet advertising. The study will shed light on the decision making criteria used to allocate dollars on these strategies – is it based on measured effectiveness or on how well a particular ad strategy will yield result in terms of meeting the company's targeted customer base? What is the ROI model followed? We also hope to determine some of the reasons for declining Internet ad revenues.

The results of the study will benefit both practitioners and academicians. Practitioners will know more about how to spend their advertising dollars. The research will also contribute to the body of literature on the measurement of IT investment effectiveness and on the effectiveness of Internet as an additional marketing channel. This research-in-progress article presents the current state of web advertisement measurement and its importance, current methods used to measure the web ad effectiveness, current pricing models, and issues that still need to be addressed.

Importance of Web Site Measurement

In order to decide which web media they should use for their ads, web marketers need to know how effective their online ads are in web sites in which they have been placed. This information often comes from reports provided by the web content-provider itself, making for a conflict of interest (Tassone 1997). Just as traditional media advertisers depend on independent third-party auditors and research firms like the Audit Bureau of Circulations and Nielson to assure the accuracy and integrity of feedback data, online advertisers are recognizing the need to consult third-party auditing firms to monitor the web site traffic data they receive from Web content-providers (Tassone 1997).

Examples of Existing Web Site Measurement Tools

Various types of methodologies for measuring Web site traffic are now on the market (Novak and Hoffman 1996; Arad 1998). WebTrack, an interactive graphical tool, enables web marketers to count visitors to their web page (Cambridge Quality Management, Inc. 1996). For each visitor to the web page, the system provides information about the time of day/day of the week, type of browser and operating systems used, and if they are a return visitor. WebTrack can then analyze the data collected – using drill-down to expand detail, displaying information geographically, creating custom charts and reports as HTML files.

NetCount provides detailed website traffic information, including subject, page, day, and hour. The system also provides audience analysis – demographic information about people who access web sites (Jaffe 1995). NetLine provides daily, weekly, and monthly summaries of traffic levels, trend reports, and comparative reports of site usage (Internet Profiles Corporation 1998).

Lilypad was the first to offer traffic measurement that went a step beyond measuring events within one Web site, such as information about file transfers, hits, peak times, and most popular areas. Lilypad can determine how visitors found out about a site to begin with, whether they clicked on a paid or unpaid hyperlink at another Web site, a search tool, a newsgroup, or a local file on their hard drives. The web activity reporting conducted by most of the existing online ad measurement tools includes the following: (Arad 1998):

- Basic traffic statistics (such as hits, page views, visits)
- Navigation patterns (referrers, next-click, entrance and exit pages)
- Content requested (top pages, directories, images, downloaded files)
- Visitor information (domains, browsers, platforms)
- The fulfillment of the web site's objective (purchases, downloads, subscriptions)

DoubleClick, the online advertising network, recently introduced netScore, which uses sample sizes of more than 1.5 million opt-in users to capture quantitative web traffic information from home, work, school, and international use. It applies a "Buying Power Index" to its traffic figures, to help web publishers understand the value of their visitors based on their actual online purchases across all sites on the Net (Owens 2001).

Lack of Standards for the Measurement of Web Site Traffic

Kalakota and Whinston (1997) comment that in order to be truly useful, measuring systems must help an online publisher determine advertising rates and the popularity of its articles and help an advertiser justify the cost of promoting and maintaining a web site and placing an icon in an online page. The audience measurement device must be third party in nature since the advertiser must be able to rely on the accuracy of feedback data. Unfortunately, there is still no consensus on basic terminology being used in this context, which adds to the overall problem of lack of standards.

Current Pricing Models Used in Web Media Pricing

Exposure models, which measure the number of visitors to a web site displaying the ad banner of an advertiser, are used most widely as pricing models for web advertising (Novak and Hoffman, 1996). Exposure models are based upon flat fees (fixed price for a given period of time) or on CPM (cost per thousand exposures). The *click through pricing model* bases ad banner charges on the number of times a user actually clicks on the ad banner to go the target ad. Unfortunately, research has shown that only 4% of visitors who are exposed to a banner for the first time actually click on it. Only 2% of users click on a banner they see for the second and third times, and less than that when they see it for the fourth time (Novak and Hoffman, 1996). *Interactivity pricing*

models base pricing on the amount of interaction, which occurs between a visitor and the ad. For instance, after accessing the target ad site, how much time does the visitor spent viewing the ad, how many pages of the target ad are accessed and at what depth, and how many times does the user repeat visits to the target ad? *Outcome-based pricing models* are based on the marketing objective of the target ad – does the marketer want the ad to influence attitudes, persuade the user to provide personal/demographic information, or does it want to actually persuade the user to buy the product/service advertised?

The lack of standards for the various existing models presents a complicated situation for web marketers who wish to “shop around” for the best exposure and value from web media suppliers.

Improving Web Site Measurement Metrics

Recent economic downturn has adversely affected the Internet advertising with declining revenues and growing perception at large that this form of advertising may be an unsuccessful business model. The survey is proposed to understand reasons for declining revenues from e-advertising as well as shed some light on current Internet advertising strategies being adopted by companies relying on e-advertising as a large part of their business model. The survey should help us understand how companies determine the effectiveness of Internet advertising and the pricing model. We expect the results of the survey to highlight the decision making criteria used in practice to allocate dollars on these strategies – is it based on measured effectiveness, or on how well a particular medium will yield result in terms of meeting the company’s targeted customer base? What is the ROI model followed? The empirical study will also shed light on how one-to-one marketing and mass customization relate to Internet advertising and impact overall on Internet advertising strategies. The outcome of the study will provide a framework for use in determining what works and what does not work in Internet advertising.

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