

# THE USE OF BANNER ADVERTISEMENTS WITH PULL-DOWN MENUS: A COPY TESTING APPROACH

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**ABSTRACT:** This paper examines the effectiveness of Web banner advertisements in terms of several widely employed copy-testing measures. Two groups of subjects were exposed to the same banner advertisement with the exception that the promotional message in one of the ads appeared as part of a pull-down menu. The research indicates that consumers who are exposed to banner advertisements using pull-down menus score higher on measures of attention, novelty, liking, persuasion, and click-through, suggesting that these types of banner ads are more effective than traditional, static banners. It is proposed that key factors contributing to this result are the unique format and greater informational appeal of pull-down ads. Managerial implications are discussed and directions for future research are suggested.

As an indication of the increasing popularity of Internet advertising, overall Web advertising revenue in the United States has grown consecutively for the past eighteen quarters with revenues for the first half of 2000 reaching \$4.1 billion U.S. (CyberAtlas 2000a). Online advertising is manifested in a variety of forms, including pop-up windows, site sponsorship, hyperlinks, interstitial pages, and banner ads. The most frequently visible form of Internet advertising is the banner advertisement (Harvey 1997). Banner ads appear on numerous sites throughout the Web and are responsible for most of the advertising revenue generated in cyberspace (CyberAtlas 2000b).

It has been suggested that online advertising is currently based on a print media model that is likely to develop into an interactive television model in years to come (Murphy 1996). This paper assumes the view that Web advertising is currently more closely associated with a print paradigm, primarily because the medium requires a degree of active involvement on the part of the viewer. Like print media, Web pages are largely text-based and must generally be read. Television, on the other hand, reflects a lower, more passive level of involvement (Krugman 1965). However, the interactive capabilities of the Internet certainly distinguish it from other media (Roehm and Haugtvedt 1999).

Drèze and Zufryden (1997) once suggested that the Internet offers unique but largely unexplored opportunities for advertising research that exist in spite of its popularity as a medium for marketing and promoting products and services. Three years is a long time on the Web, with great strides made in online advertising research during that time. Nevertheless, there is still widespread debate over the effectiveness of various Web advertising formats. Amid frequent claims that "the

banner is dead", it is interesting to note that banner advertising revenue and the number of sites using banner ads have continued to increase (CyberAtlas 2000b).

The emphasis of this study is on the application of copy testing methods to banner advertisements appearing on the World Wide Web. It is specifically concerned with the effect on consumer behavior generated by banner ads containing pull-down menus. These are menus accessed by clicking the computer's mouse pointer on an arrow appearing in the advertisement, thereby opening a menu containing further information or links to a specific Web page. Although banner ads are themselves interactive in nature and therefore somewhat unique, the use of pull-down menus adds a further layer of interactivity. Viewers may click on these to obtain more information before being transferred to the advertiser's Web site.

In this paper, a paired comparison approach is used to examine whether banner ads containing pull-down menus are more effective than conventional banner ads in terms of several widely employed advertising copy testing measures. Testable hypotheses are proposed that will provide an insight into the nature of banner advertising that will benefit both online advertisers and advertising researchers alike.

## LITERATURE REVIEW

There has been considerable debate regarding the most appropriate measures for predicting advertising effectiveness (e.g., Blair and Rosenberg 1994; Haley 1994; Haley and Baldinger 1991; Harvey 1997; Rossiter and Eagleson 1994; Walker and Dubitsky 1994). Clearly, the best indicator of an advertisement's effectiveness is the increase in sales that occurs as a result of the advertisement. However, the use of sales

results as a measure of effectiveness is inherently problematic. For example, aggregation of sales data can be a lengthy process and the figures ultimately provide the advertiser with a hindsight perspective. Advertisers ideally like to know beforehand which advertising campaign to run with in order to avoid costly investment in programs that may not produce as high a rate of sales as an alternative campaign. To address this problem, advertising copy pre-testing measures are often used as a surrogate means of predicting sales winning advertisements, thereby enabling firms to make an informed decision before implementing a particular advertising campaign.

A commonly voiced criticism of banner ads is that when clicked on, they take viewers away from the Web site where they wanted to be in the first place (Harvey 1997). Some advertisers have attempted to minimize this negative attribute by creating so-called "smart banners" containing embedded forms that provide further information about a product or firm without having to leave the original site (Cleland 1997). It has been suggested that because computers are generally associated with information access, users may require a heightened degree of understanding and knowledge about a product than usual (Schlosser 1997). As such, advertisers may have to provide easier access to detailed information in a Web advertisement than in traditional media. The implications might be extended to banner ads in support of the view that a user should not have to leave a site just to get more information about a banner ad (Williamson 1997).

In an effort to provide viewers with more information or the ability to directly access the most relevant page on a Web site, some advertisers have used banner ads that contain pull-down menus. Such banner types still represent a small minority of advertisements on the Web. Their relative absence would seem to imply that banner ads with pull-down menus are less effective than conventional banner ads. TSource his paper argues to the contrary.

### **Copy Testing Banner Advertisements**

Copy testing is widely used in the advertising industry to assess the effectiveness of a particular advertisement or campaign. Traditional copy testing research methods generally involve exposing consumers to an advertisement and then soliciting responses afterward. Early copy testing methods predominantly used recall as the most important measure of advertising effectiveness (Haskins and Kendrick 1991). However, multiple measures have been used in more recent years, including recall, recognition, personality, brand image,

purchase intent, persuasion, liking, main point communication/playback, and awareness (Cook and Dunn, 1996; Haley and Baldinger 1991; Haskins and Kendrick 1991). These measures are based upon models of consumer behavior (such as the AIDA - attention, interest, desire, action - framework) that suggest consumers may pass through cognitive, affective, and behavioral stages in response to a stimulus (Gelb, Hong, and Zinkhan 1985).

To determine banner ad effectiveness, four copy-testing measures will be employed in this research: 1) attention, 2) novelty, 3) liking, and 4) persuasion. It has been argued that the constructs of attention and novelty are important factors in creating effective advertisements (Grunert 1996; Shimp 2000). Researchers have also claimed that measures of likability and persuasion represent a successful combination of copy testing measures that can be used for predicting the likely success of an advertisement (Haley and Baldinger 1991).

### **Attention**

The function of generating attention in advertising is to increase exposure and then allow the message to influence brand awareness and ultimately consumer decision-making (Rossiter and Percy 1997). Attracting attention alone is usually insufficient to stimulate consumer action, as much that is noted is subsequently discarded by consumers before further processing can occur. However, gaining attention is an essential first step in breaking through advertising clutter in order to facilitate a more detailed consideration of the advertisement. It is reasonable to suggest that banner ads using pull-down menus may provide such a means of attracting attention.

**H1:** Banner advertisements that contain pull-down menus will result in significantly higher attention responses than banner ads containing no pull-down menus.

### **Novelty**

One of the more common means of attracting and holding a consumer's attention is by creating a novel structural execution for the advertisement. In other words, the creative copy should use distinctive, unusual, or unpredictable devices (Shimp 2000). In this way, it is possible to draw consumers' attention not only to the advertisement, but also to key visual and verbal information. The relative absence of banner ads on the Web that use pull-down menus implies a degree of novelty in itself. Consumers may attend to and click on these ads because of their unusual structure, newness, or novelty value. It is therefore hypothesized that:

**H2:** Banner advertisements that contain pull-down menus will result in significantly higher novelty responses than banner ads containing no pull-down menus.

### Likability

The debate over whether ads that are likable are more effective than ads that are less likable has continued for decades (Walker and Dubitsky 1994). Several researchers have claimed that the liking of an ad leads to a more favorable attitude toward the brand or the advertiser (Greene 1992; Haley and Baldinger 1991; Lutz 1985; Moore and Hutchison 1985). Further evidence indicates that ads that are better liked are more likely to be noticed and remembered (Biel and Bridgewater 1990; Walker and Dubitsky 1994). The Advertising Research Foundation's Copy Research Validity Project (hereafter ARF and CRVP, respectively) concluded that ad liking is the single best measure of predicting advertising effectiveness when judging between matched pairs of advertisements (Haley and Baldinger 1991).

Since the ARF's findings were announced, the construct of likability has attracted considerable attention, with some disagreement over its role as a useful measure of advertising effectiveness (Hollis 1995). However, its widespread use in both theory and practice implies that it is certainly an important one.

In a study by Biel and Bridgewater (1990), the authors deconstructed liking into five underlying dimensions: ingenuity, meaningfulness, energy, rubs the wrong way, and warmth. Of these five factors, meaningfulness and energy emerged as the two most important. Greene (1992) suggests that liking is more strongly associated with the informational value consumers ascribe to an advertisement, rather than its entertainment value. This information or content aspect appears to correspond with Biel and Bridgewater's meaningfulness dimension as a significant component of liking. As the primary intention of banner ads containing pull-down menus is to provide viewers with more information without forcing them to leave the current Web site, it is possible to suggest that these types of banner ads will be more likable. Therefore, it is hypothesized that:

**H3:** Banner advertisements that contain pull-down menus will result in significantly higher liking responses than banner ads containing no pull-down menus.

### Persuasion

The CRVP also identified persuasion as a strong indicator of likely sales effectiveness. Indeed, Rossiter and Eagleson (1994) argue that ad liking is not the valid, all-purpose predictor of advertising effectiveness that the CRVP proposes. They claim that persuasion is a more valid measure. Rossiter and Eagleson do support the measure of likability, only not to the same extent as the ARF. The primary focus of this article, however, is to examine the degree to which copy-testing measures are affected by specific types of banner ads, not whether one measure is a better predictor of advertising effectiveness than another is. Hence, likability and persuasion are treated as similarly important variables and debate over which measure is most effective falls largely beyond the scope of this research.

Persuasion is usually measured in terms of attitude shift (Biel 1993; Petty and Cacioppo 1981). Petty and Cacioppo (1983) suggest that those who have high involvement with a product are more likely to be persuaded by the quality of information presented in an advertising communication. They refer to this as the central route to persuasion, claiming that attitudes change as a result of deliberate consideration of information that is central to the beliefs people have regarding the true nature of the product and accompanying message. Banner advertisements containing pull-down menus have the ability to provide increased physical space that can be used to present higher quality information or arguments than that offered by the relatively small, static space of ordinary banner ads. The improved informational quality of banners with pull-down menus implies that they will be more persuasive than those without. Alternatively, if one considers the peripheral route to persuasion (Petty and Cacioppo 1983), the novelty aspect of pull-down menus may also provide more effective persuasion to those less involved in the product category or purchase decision. It is hypothesized that:

**H4:** Banner advertisements that contain pull-down menus will result in significantly higher persuasion responses than banner ads containing no pull-down menus.

### Effect on Click-Through

Given the expectation that banner ads containing pull-down menus will result in higher attention, novelty, liking, and persuasion scores, it is reasonable to expect that they would be more likely to initiate consumer action in the form of clicking on the banner than static banner ads. Hence:

**H5:** Banner advertisements that contain pull-down menus will result in significantly higher click-through rates than banner ads containing no pull-down menus.

## METHOD

### Sampling and Data Collection

The sample for this research was comprised of undergraduate and postgraduate students of an east coast Australian university who had completed or were currently enrolled in an Internet Marketing course at the university in 1999. The logic underlying the choice of sample was that this group would be most likely to respond to an e-mailed invitation to participate in the research. Because the stimulus was a banner ad, it was also essential to use participants who had Internet access for the study. Participants were informed in the class that they would be receiving an e-mailed request to participate in the research within the next week. Additionally, it was reasonable to assume that they would be more comfortable with World Wide Web technology and research than non-Web users.

Three hundred and fifty-six e-mail messages were sent to prospective respondents, requesting them to visit a specified Web address and read the information provided there. Following the reading of this information, respondents were asked to complete an online questionnaire. One hundred and ninety-six people responded to the e-mail requests giving a response rate of 55.1%.

Although this procedure represents a convenience sampling technique, thereby increasing the potential for sampling error and inappropriate generalization to a wider population, students do, in fact, constitute a sizeable proportion of the total Web user population (Georgia Institute of Technology 1999). Hence, the choice of sample is justified to some extent.

### Procedure

Two separate Web pages were created containing the same short news story and posted to a commercial Web site. Half of the e-mail recipients were randomly assigned one address and the remainder another address. At the top of each page, a banner advertisement for a prominent travel agency network was displayed. The company concerned has an established Internet presence and provides online reservation and payment functionality. The banner ads were identical in every respect except that the promotional message appearing in the bottom half of the first banner was replaced with a pull-down menu displaying the same message in the second banner ad.

This was done to ensure there were no extraneous effects generated by different promotional messages.

Information regarding the nature of the research was deliberately withheld from the participants in order to minimize potential bias as a result of any preconceptions. Respondents were asked to read the Web page in an effort to simulate normal viewing and were in no way directed to consider the banner advertisement specifically. One hundred and seventy-eight of the e-mail messages - precisely half - directed readers to the page with the conventional banner ad (hereafter Site 1) while the remainder directed readers to the page containing the banner with the pull-down menu (hereafter Site 2). The groups were randomly separated based on an even gender split. Given that all respondents were students, no major differences between the groups were noted across key demographic variables such as age, income, or education. There were ninety-two responses from those who viewed Site 1 and one hundred and four from those who viewed Site 2.

After visiting the sites, subjects were asked to complete an online questionnaire that included measures of the constructs discussed earlier. Zinkhan, Locander, and Leigh's (1986) Attitude Toward the Ad (Evaluation Judgements) scale was used to measure likability. This four-item, summated scale was created by modifying an earlier and longer scale developed by Burke and Edell (1986), used to measure consumers' evaluation of an ad rather than how the ad made one feel. Reliability of both scales had been established in previous research using Cronbach's alpha. An alpha of 0.95 was reported by Zinkhan, Locander, and Leigh indicating the scale's reliability (Nunnally 1978). The alpha reported by the current study was also 0.95.

The novelty construct was operationalized using Schlinger's (1979) scale for measuring familiarity with an advertisement. The less familiar the respondent, the more novel the ad. The items were modified to reflect consumers' familiarity with the type of advertisement rather than the specific ad itself. Schlinger reported reliability of the scale with test-retest correlations ranging from 0.87 to 0.97. The three-item scale also exhibits high reliability in the present study ( $\alpha=0.83$ ). Consumer attention given to the advertisement was measured using Duncan and Nelson's (1985) three-item, summated scale. In their original study they demonstrated the scale was reliable ( $\alpha=0.71$ ). The measure exhibited good reliability in the current study, with the value of Cronbach's alpha being 0.76.

A single, univariate persuasion item measured in terms of attitude toward the brand developed from Haskins and Kendrick (1991) was used to operationalize the persuasion construct. The item read, "Based on the banner ad you just saw, how would you rate the company in the ad on an overall basis?" The item was anchored by "very poorly" and "very highly". All scale items contained in the questionnaire were presented in a seven-point Likert-type format.

## RESULTS

Hypotheses 1 to 4 proposed the relationship between banner ad type and its effect on attention, novelty, liking, and persuasion. To test the hypotheses, independent samples t-tests were conducted on each of these variables. T-tests were used to determine if there was a significant difference between the responses of the two groups. One-tailed t-tests were employed as the likely directional nature of the hypotheses had been established. Since there were four hypotheses being tested, the level of significance was set at  $p < .0125$  to reduce the potential for Type I error according to the Bonferroni correction method (Kleinbaum, Kupper, and Muller 1988). Hypothesis 5 was tested using Chi-square analysis.

Attention to the banner advertisement was the subject of Hypothesis 1. The mean of the summated responses to this scale was 3.5 for those who viewed Site 1, based on a seven-point measurement range (no pull-down menu). This was significantly lower than the mean of 5.1 for those who viewed Site 2, indicating that the banner ad used for this group attracted more attention ( $t = 3.39$ ,  $p < .0125$ ). Hence, H1 is supported.

Hypothesis 2 suggested that consumers would view the banner ad containing the pull-down menu as more novel than those who were exposed to the static ad. The mean of the summated responses for the novelty scale was lower for those who viewed Site 1 ( $M=3.7$ ) than those who viewed Site 2 ( $M=6.4$ ). This difference was also found to be statistically significant ( $t = 4.5$ ,  $p < .0125$ ), thereby supporting H2.

Hypothesis 3 examined the relationship between banner ad type and liking of the ad. The mean of the aggregate responses to the liking scale was higher for the banner ads containing pull-down menus than those without, suggesting they are better liked (Site 1 = 3.6; Site 2 = 5.1). The difference between these means was found to be statistically significant ( $t = 3.02$ ,  $p < .0125$ ). Hence, H3 is supported by these results.

Hypothesis 4 investigated the relationship between banner ad type and persuasiveness of the ad. The mean of the responses

to the persuasion item was higher for the banner ads containing pull-down menus than those without (Site 1 = 2.6; Site 2 = 3.9). The difference between these means was also found to be statistically significant ( $t = 2.87$ ,  $p < .0125$ ). Therefore, H4 is supported by these results. The results of all t-tests appear at Table 1.

**Table 1. t-Test Values for Viewers of Different Types of Banner Ads**

Variables by Group	Means	t-scores	d.f.	p
Attention Banner with pull-down Banner without pull-down	5.1 3.5	3.39	2,194	.002*
Novelty Banner with pull-down Banner without pull-down	6.4 3.7	4.5	2,194	.0001*
Liking Banner with pull-down Banner without pull-down	5.1 3.6	3.02	2,194	.006*
Persuasion Banner with pull-down Banner without pull-down	3.9 2.6	2.87	2,194	.008*

\* Significant at  $p < .01$

All items measured using a seven-point Likert-type format. The closer the mean to seven, the greater the attention, novelty, liking, and persuasion score for a group.

Hypothesis 5 was concerned with a comparison of the click-through rates of the two groups. It was hypothesized that respondents who were exposed to the banner ad with the pull-down menu would be significantly more likely to click on the advertisement than those from the second group. Frequencies were calculated for the two sets of respondents. Interestingly, 20% ( $n=18$ ) of those who viewed Site 1 (no pull-down menu) clicked on the banner whereas 56% ( $n=58$ ) of those who viewed Site 2 clicked on the ad. The results of a Chi-square analysis reveal that significantly more consumers did, in fact, click on the ad employing the pull-down menu than the static ad ( $=6.64$ ,  $df=1$ ,  $p < .01$ ).

## DISCUSSION

This study was developed as a means of copy testing banner advertisements in terms of their attention, novelty, likability,

and persuasion effects. Evidence has already suggested that banner ads contribute to brand awareness and brand strength (Briggs and Hollis 1997). This may be due, in part, to the sheer publicity effect of advertising (Moran 1990). However, copy testing different banner ad formats may offer a unique opportunity to determine their advertising effectiveness or lack thereof. The limited presence of banner ads using pull-down menus on the Web may be construed in one of two ways: 1) they are simply less effective than conventional banner ads and this is reflected in their minority use, or 2) they are slow to be recognized as advertisements that are more effective. Overall, the results of this study provide considerable support for the latter, with the outcome suggesting that banner ads with pull-down menus result in significantly higher scores on the copy testing variables utilized.

As expected, banner ads with pull-down menus are viewed as more novel and tend to attract more attention than static banners. This is not surprising given the comparatively unique structural format of ads containing pull-downs menus. Results from Hypothesis 3 suggest that banner ads containing pull-down menus are more liked than those without them are. One explanation for this may be that the increased informational content of the advertisement is preferred by consumers. This is consistent with other research by Greene (1992) and Biel and Bridgewater (1990) which produced similar conclusions, albeit in different media. Further research is needed to replicate the findings; however, the likability of pull-down banner ads is strongly supported by the data.

Hypothesis 4 posited that banner ads utilizing pull-down menus have a stronger persuasive impact than conventional banner ads. Persuasion may be enhanced by the increased quality of information made available to consumers by the pull-down menu. This increase in quality corresponds with Petty and Cacioppo's (1983) claim that high involvement is affected by the quality of information presented. It is also possible that the novelty of the ad may have influenced those who were less involved in the product category.

Click-through rate is an important factor in online advertising with many firms' billing now based on clicks generated rather than the conventional cost-per-thousand exposures (CPM) model. The data suggest that banner ads that use pull-down menus are more likely to be clicked on than static banner ads; hence, advertisers would be advised to use this format more frequently. It is evident that the click-through rates of both groups of respondents are very high when compared with commercial advertising click-through rates. These fluctuate

depending upon Web site and page placement with the norm around 2% (Hofacker and Murphy 1998). They are rarely higher than 10% and the inflated result of this study may be a consequence of respondents' awareness that this was a research project. They may thus have directed more attention to the advertisement than would otherwise have been the case. However, the difference in click-through between the two groups was still statistically significant, and suggests that the pull-down format is more effective than using conventional, static banner ads.

Although not hypothesized, the impact of attention, novelty, liking, and persuasion on click-through was also examined. The relationship was tested using backward stepwise discriminant analysis with analysis performed only on data garnered from those who viewed Site 2. On the assumption that hypotheses one to five were supported, it was of interest to determine which of these variables, if any, influenced consumers to actually click on the banner with the pull-down menu.

Results indicated that only novelty could discriminate between those who clicked on the ad with the pull-down menu and those who did not (Wilks' Lambda=0.589,  $F [1,194]=18.19$ ,  $p < .01$ ). This may be an important finding and supports the earlier argument that novelty is an effective means of attracting attention and breaking through advertising clutter. Even though the variables of liking, persuasion, and attention did not have a significant relationship with click-through, they may nevertheless be useful measures of banner ad effectiveness. This effectiveness should not be judged solely on click-through, as research suggests that banner ads can also increase brand awareness, brand strength, and consumer loyalty (Briggs and Hollis 1997; Elliott 1996).

#### PRACTICAL IMPLICATION

The results obtained from this study lend weight to the argument that banner ads with pull-down menus provide a better alternative to conventional, static banner advertising. They offer consumers the means of gaining more product information without having to leave a Web site and are clicked on more than conventional banners, thereby focusing greater attention on these ads. Although they are still relatively simplistic, like much current Web advertising, these types of banner ad may mark the first steps in a new online advertising paradigm that is based on providing detailed, personalized information to the consumer.

As a communication tool, advertisers, agencies, and researchers should consider the benefits of using pull-down menus in more banner ads. Future developments should bear in mind the informational aspect of banner ads and their potential for providing important and more detailed information before taking consumers away from their current Web site. In addition, it is clear that the novelty impact of these types of banner advertisements can strongly influence click-through rate and this benefit is probably being under-exploited in the online advertising industry. The banner ad may be much maligned as a form of creative advertising, but it is likely to be with us for some time yet as bandwidth limitations are still impeding the delivery of high quality moving images and sound similar to television. Advertisers should capitalize on the most effective means of utilizing this communication vehicle, which may well involve the use of pull-down menus as a prominent promotional tool.

#### LIMITATIONS AND FUTURE RESEARCH

There are four obvious limitations to the research outlined here. First, due to the convenience nature of the sample, the results should be applied with caution when generalizing to a wider population. Replication of the study is a priority, using a larger and more representative sample. Second, the study was restricted to a comparison of only two types of banner advertisement. It is suggested that similar research may be used to compare multiple banner ad formats. For example, advertisements that use motion were not included and this may represent an avenue for future research. Specific language communication effects were also not investigated as copy-testing research in this area has already been initiated (Hofacker and Murphy 1998). Third, the persuasion data was only collected after subjects had viewed the site, and was therefore measured in terms of self-reported rather than actual attitude shift. However, this approach has been adopted in previous research (Haskins and Kendrick 1991). Fourth, some bias may have been introduced through respondents perceiving they were taking part in an experiment. Attempts to reduce this effect were made by providing minimal information to participants regarding the nature of the study. Furthermore, such bias tends to be inherent in most forms of experimental social research.

In conclusion, this paper has argued the case for including pull-down menus in banner advertisements as they have a positive impact on attention, novelty, liking, persuasion and click-through rate. These measures of advertising effectiveness have been shown to have significant predictive properties and

can be used with some confidence in the absence of hard sales data.

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