Advertising on the Web: Is There Response before Click-Through?

A study of Web banner advertising that measured attitudes and behavior found important attitudinal shifts even without click-through. By using Millward Brown’s BrandDynamics™ system, along with other copytesting measures, the authors have documented increases in advertising awareness and in brand perceptions to Web banner ads for apparel as well as technology goods.

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*This is the full report of the research conducted jointly between HotWired and Millward Brown International to assess the effectiveness of advertising on the World Wide Web. It was first presented December 2, 1996 to an audience of over 100 representatives of on-line ad agencies, web sites, and the press at the Jupiter Online conference in New York. A summary version of the report was issued at that time, but this represents the full report which includes more details of all the findings touched on in the presentation.*

Since advertising on the world wide web began in 1994, marketers have asked the same question they ask of all advertising in any media: Does it work? More specifically, do banner ads (those small, hyperlinked pixel displays popping up on public Web sites) actually provide a vehicle for effective commercial communication? As marketers are projected to spend billions of dollars on Web advertising in the next few years, this question becomes increasingly important.

Until now, the only available answer has been partial at best. The accepted wisdom suggests that, yes, ad banners do work as direct marketing vehicles—but only when viewers click on them for transport to the advertiser’s own Web site, where a wide range of customized marketing processes begins.

The problem is that only a fraction of all viewers click on the banners they see. As a consequence, a few marketers have elected to pay only for proven click-throughs, while the rest of the marketing community, which pays for ad placements according to CPM (cost per 1,000 impressions), is left to wonder whether the millions of impressions its banner ads generate without click-through are simply wasted.

Are advertisers throwing away money on byte-sized electronic billboards which go unnoticed and un-noted in an environment unfriendly to advertising? Or do Web banners, even without the benefit of click-through, stimulate brand awareness, brand affinity, and purchase interest as effectively as more traditional advertising does?

To answer these questions, two research teams collaborated in an on-line experiment. The researchers came from the research department of HotWired, Inc., the Internet publisher that innovated the ad banner, and Millward Brown International, a recognized leader in advertising effectiveness research. The experiment was the first significant research study on Web advertising effectiveness, a study which dealt successfully with the unique research challenges posed by the Internet environment. This article describes the methodology of this important study and details its findings.

**WHAT TO MEASURE**

Many people have argued that the best measure of advertising response on the Web is the click-through rate. The advantages of this metric are that it is a behavioral response and easy to observe, and that it indicates an immediate interest in the advertised brand. But many other factors are also likely to influence the click-through response, and these factors may have more to do with the original predisposition of the audience than with the advertising itself. Thus the practice of evaluating Web advertising on the basis of click-through is like evaluating television ads for automobiles on the basis of how many people visit a showroom the next day. A showroom visit is an ideal re-
sponse, but hardly the most likely one, since relatively few people will be in the market for a new car on a particular day.

Because most advertising does not evoke an immediate behavioral response, we designed our study to observe and measure both the attitudinal and the behavioral responses to a Web banner. In particular, our objective was to measure whether or not banners themselves have the potential to build brands, by creating awareness and image. We divided the population of our experiment into two cells: an exposed cell, which saw a banner for a tested brand on HotWired's homepage, and a control cell, which did not. Using these two groups, we sought to assess the impact on an advertised brand of one single incremental banner exposure.

**HOW WE MEASURED THE RESPONSE**

The question we then faced was how to define and measure the “impact” of one Web banner exposure. Traditionally, researchers have relied upon measures of awareness, recall, and reported response to indicate whether or not advertising has had an impact. These measures allow us to assess the degree to which an ad has been noticed (a necessary precursor to any more fundamental effect) and the degree to which the advertisement is likely to lead to a purchase. We adapted Millward Brown's proprietary measurement systems to the Web environment to assess the awareness of, and reaction to, the ad banners themselves. However, we sought to go beyond measures of awareness, recall, and reported purchase probability. We sought to determine the contribution the ad banner makes to building the brand. To do this, we adapted Millward Brown's BrandDynamics™ System to work in the context of an online interview (Dyson, Farr, and Hollis, 1996).

**The BrandDynamics™ System**

The BrandDynamics™ System is composed of two modules: the Consumer Value Model and the BrandDynamics™ Pyramid.

**The Consumer Value Model.** The Consumer Value Model allows us to identify the probability that an individual will choose a particular brand for their next purchase. We call this measure Consumer Loyalty. The prediction of Consumer Loyalty is based on:

- consumers’ claimed brand consideration
- a measure of brand size
- the price of the brand relative to others in the category

The Consumer Value Model has been validated against behavioral data and market share in many different categories in both North America and Europe. A higher average Consumer Loyalty in the exposed cell than the control would suggest that the banner exposure had positively affected the likelihood that people would buy the advertised brand.

**The BrandDynamics™ Pyramid.** Based on a consistent set of survey measures that can be applied across different brands, categories, and countries, the BrandDynamics™ Pyramid allows us to explain the variation we observe in respondents' Consumer Loyalty scores. Each level of the Pyramid is a composite of awareness and imagery measures. We use these levels as building blocks to define an individual’s relationship with a brand, as shown in Figure 1.

As we move up the levels of the Pyramid we describe a deepening attitudinal involvement with the brand. The brand relationship moves from consciousness of the brand (Presence), through acquaintance and examination (Relevance and Performance), to experience (Advantage), and then, finally, to the point where the consumer finds it difficult to consider alternative choices (Bonded). By comparing the percentage of people in the control and exposed cells who attain each level of the BrandDynamics™ Pyramid, we explain any observed changes in Consumer Loyalty.

**Immediate vs. delayed effects**

An important point to note is that the findings reported in this document relate to consumers’ reactions a day or so after exposure. Tracking advertising response in traditional media suggests that the observed increases would erode over time without the reinforcement of further exposure. A positive response to advertising, while obviously desirable, is of little benefit to a brand unless it positively influences the consumer’s choice on the next purchase occasion. Therefore, a key function of advertising is not only to establish but to maintain key brand associations in long-term memory so that they come to mind the next time the person encounters the brand. Unfortunately, it is beyond the scope of this project to evaluate the advertising in this respect. The objective of our study was to identify the immediate effect of one additional banner exposure. However, since exposure is rarely limited to one occasion, we assume there would be additional effect with repeated exposure (and the results of this study suggest as much).

**THE STUDY DESIGN**

We designed our research to address the particular concerns of both the advertiser and the researcher. Advertisers need to accurately measure the impact of advertising. Therefore, we measured the communication value of the advertising banner (i.e., its impact on consumers’ atti-
and September 16, 1996, a random sample was solicited for participation in a short research study, “To Help HotWired Better Understand Their Audience.” Thirty-eight percent of those solicited participated. Respondents completed a seven-minute survey covering demographics and webographics. The survey avoided any indication of the true purpose of the research. Upon submission of the survey, respondents were returned to HotWired’s homepage. Respondents were randomly assigned to Control or Exposed (test) cells. One of three test ads, or a control ad, was randomly placed in the designated advertising space on HotWired’s homepage.

**Second day.** Respondents were sent an email thanking them for their participation and inviting them to participate in a second survey (with the added incentive of a chance to win $100). Respondents were provided a URL (Web address) in the email and directed to link to the Web page in order to participate in the survey. Sixty-one percent of the original respondents participated in the second survey. Respondents from the test cells were served one of three category-specific surveys based on their exposure to the advertisement on the first day. Respondents from the control cell were randomly directed to one of the three exposure surveys. The resulting final base sizes for each cell are shown in Table 1.

There was no special selection process for the creative used in the experiment.

**TABLE 1**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Exposed</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample</td>
<td>1,232</td>
<td>910</td>
<td>293</td>
</tr>
<tr>
<td>Men’s apparel brand</td>
<td>397</td>
<td>301</td>
<td>82</td>
</tr>
<tr>
<td>Telecommunication company ISP</td>
<td>422</td>
<td>312</td>
<td>95</td>
</tr>
<tr>
<td>Web browser</td>
<td>413</td>
<td>297</td>
<td>116</td>
</tr>
</tbody>
</table>
We believe it is possible for advertisers to create banners that compare favorably to the ones tested in this study. What was significant about the ad banners used was that each one represented a brand at a different stage of developing a “presence” on the Web.

**Men’s apparel brand.** For reasons of client confidentiality we have used debranded data in this paper. At the time of this study, the men’s apparel brand was preparing to launch their Web site. In fact, the very first Web advertising impressions that were seen for this brand occurred as part of this study. Thus we expected the banner exposure to increase presence (consciousness of the brand) and relevance (perception that the brand might suit their clothing needs). We expected the advertising to sway individuals who identified with the Web toward purchasing the brand that had recently become “wired.” Seeing the advertising might also cause people in this target audience who had previously rejected the brand to reevaluate their opinion, perhaps even to perceive an advantage and then bond with it. This could result in an increase in their likelihood to purchase the brand, as measured by the difference in consumer loyalty scores between the exposed and control cells.

A telecommunication company’s internet service provider brand. While the telecommunication company helped pioneer Web advertising, the ISP brand had not been advertised on the Web prior to our study. Given the telecommunication company’s strong over-arching brand name, we expected that the ad banner might reinforce the parent company’s generic presence rather than generate significant awareness for the ISP brand specifically. And because the telecommunication company’s objective was to create an immediate behavioral response (a click-through), we wondered whether we would observe an attitudinal response at all.

**Web browser.** The latest version of this Web browser was released with a significant Web advertising campaign. The browser was a new product but with pervasive presence and a well-known parent company; therefore, we were prepared to see little response at all to just one more banner exposure. If, however, users did show a measurable response to one additional exposure to the ad banner, then we would conclude that Web advertising has the potential to impact consumers even at higher levels of frequency.

**DID THE ADVERTISING AFFECT ATTITUDES?**

To answer this question, we will start by considering the overall impact of an additional ad banner exposure on the various brands tested using the Consumer Loyalty score. We will then explore the factors that may have caused the observed differences on a brand-by-brand basis.

**Consumer Loyalty**

The Consumer Loyalty score, which measures the likelihood that the consumer will purchase the product on the next purchase occasion, has been shown to be highly predictive of consumer purchase behavior. In each of our three test cells, the Consumer Loyalty score is higher than that for the control cell, suggesting that the extra exposure did have an effect. (When considering the implications of these scores, it is important to bear in mind how they are derived. The basic component of the Consumer Loyalty score is a consideration scale. Another key component is the relative price of the different brands within their category. For the men’s apparel and ISP brands we calculated a perceived relative price from the brand image data. The men’s apparel brand indexes 10 percent higher than the average khaki pants, and the ISP 30 percent higher than the average Internet service provider. To the extent that this perception-based measure differs from the actual relative prices in the market, the absolute Consumer Loyalty will be biased up or down. However, any bias will be consistent between the two cells. In the case of the Web browser, the price index is set to nearly zero, given that it could be downloaded for free.) The difference is most significant in the case of the men’s apparel brand, reflecting the fact that the exposure was the first time the brand had

![Figure 2 Effect on Consumer Loyalty](image-url)
ever advertised on the Web. The impact of a single Web banner exposure on the Consumer Loyalty score ranged from a 5 percent increase for the Web browser to an increase of over 50 percent for the men’s apparel brand as shown in Figure 2.

Why does the Consumer Loyalty score increase so strongly for the men’s apparel brand? Do those who are exposed to the advertising banner suddenly say that this brand is the only brand they will buy? Though the impact of the advertising is not this dramatic, Figure 3 shows how the advertising makes some people a bit more likely to consider this brand compared to other brands. The differences noted are statistically significant. (Statistically significant differences have been marked as follows: 95 percent confidence level denoted with **, 90 percent confidence level denoted with *.)

The first appearance of a banner for the men’s apparel brand seemed to cause some people to move the brand higher up in their consideration hierarchy. A complementary question, designed to determine if the brand might fulfill a specific role in relation to other brands people might consider, demonstrates that exposure to the men’s apparel brand ad banner increased the likelihood that the brand will be bought for a purpose that other competing brands don’t fulfill (exposed: 14 percent versus control: 5 percent).

The ISP and Web browser brands show a different pattern of response, perhaps indicating a degree of diminishing returns associated with increased advertising weight on this particular measurement. Neither brand shows statistically significant increases in the consideration hierarchy. However, those exposed to the ISP banner clearly demonstrate an increased propensity to “buy” the service for a purpose that other competing brands don’t fulfill (exposed: 26 percent versus control: 14 percent).

It is important to note that the differences reported refer to future purchase consideration. There is no difference between the exposed and control cells in terms of prior brand experience or ownership for any of the three brands, confirming that exposure to a single additional advertising banner has the potential to increase purchases.

**Name recognition**

Given that a basic function of all advertising is to increase the presence of the advertised brand in the marketplace, and that the men’s apparel brand had never advertised in this medium before, it is not surprising that awareness of the men’s apparel brand is higher in the exposed cell than the control, as shown in Figure 4. This result is also observed with the Web browser, despite the fact that the level of awareness of that brand is already extremely high.

It appears that, in addition to increasing the Consumer Loyalty scores, the advertising increases passive name recognition as well. So, how does the advertising appear to affect the levels of the BrandDynamics™ Pyramid for each brand?

**THE BRANDDYNAMICS™ PYRAMID: MEN’S APPAREL BRAND**

All levels of the pyramid increased from the Control to the Exposed cell, with the largest effect observed at the Presence level (see Figure 5). The score at each of the...
Pyramid levels is a composite of awareness and image measures. By looking at the individual measures which comprise each level, we can further diagnose the effects of the advertising. This increase in Presence is driven entirely by an increase in just one of the measures used to define Presence—endorsement of the statement, "Comes readily to mind when you think about (clothes)." (Fifty percent of the exposed agree with this statement, compared to thirty-two percent of those in the control cell.) The increase of the Presence dimension then fuels the majority of the increase at higher levels of the Pyramid, suggesting that many people held latent good opinions of the men's apparel brand which emerge upon exposure to the advertising banner. There are also some modest increases observed for attributes that affect the higher levels of the Pyramid. These are shown in Figure 6.

As can be seen from the chart, the largest difference is in the attribute "just the same as other brands." While not expressly used to build the Pyramid, this attribute contrasts "offers something different," which is used, in part, to derive Advantage and Bonding. This finding suggests that the advertising has a positive affect on perceptions as well as Presence, by creating a distinctiveness for this brand among the Web audience.

The hypothesis that Web advertising can positively impact perceptions is confirmed by the fact that other diagnostic measures also exhibit a difference between the exposed and control cells. Out of 18 adjectives which might describe the men's apparel brand with which people can agree or disagree, 5 are higher in the exposed cell compared to the control (see Figure 7).

For this brand, the findings appear conclusive. The effect of its first exposure on the Web has a strong immediate effect on the brand. Consumer Loyalty and brand Presence increase, perceptions of the brand's personality are positively impacted, and the advertising helped to differentiate the brand from its competition. We attribute these effects both to the context in which exposure takes place and the power of the banner on the target audience. The Web and the HotWired site have strong positive images for these people; HotWired delivers content they find relevant through a medium—the Web—which they find exciting. Advertising on the Web transferred some of this excitement and relevance on to the men's apparel brand itself.

**THE BRANDDYNAMICS™ PYRAMID: ISP**

As might be expected from the Consumer Loyalty results, we do not see quite the same degree of impact resulting from the first exposure to the ISP banner (see Figure 8).

The results for this brand may suggest that increasing brand awareness for new products and services (especially when branded under a strong parent name) may take more than a single banner impression to have a dramatic impact on consumers' perceptions and purchase intentions. While there is little change in the overall Pyramid, there are two individual attributes that exhibited a significant difference.

One measure, "is growing more popular," helps define perceptions of Advantage and Bonding (38 percent of the exposed cell agreed with this statement compared to 26 percent of the control). The other attribute, "is a good Internet service provider," helps to define the Performance level of the pyramid but only among those who have first achieved the level of Relevance. Overall, 43 percent of the exposed cell agrees that this ISP would be a good Internet service provider versus 31 percent among the control. The increase we observed in these two measures occurred among people who had failed to qualify for either the Presence or Relevance levels of the Pyramid.

The effect of its first exposure on the Web has a strong immediate effect on the brand.
Are just the same as other brands of clothes

You have a higher opinion of than other brands

Appeal to you more than other brands

Are better than others

Figure 6 Apparel Brand Attributes

THE BRAND DYNAMICS™ PYRAMID: THE WEB BROWSER

The overall Pyramid and its underlying attributes provide intriguing insight into consumer perception of the parent brand, as well as the advertising for this particular product (see Figure 9).

Even with ubiquitous advertising levels, there is a modest positive increase in Presence as a result of one more exposure to the Web browser’s ad banner on HotWired’s homepage. We also see some marginal increase at the levels of Performance and Advantage. The Bonding score, however, declined. This decline may have been caused by the negative press surrounding the brand during the time of the advertising effectiveness test.

To a similar point, the Presence level comprises not just an active awareness of the brand, but an active awareness of the brand promise (defined by an acceptance or rejection of the notion that the brand is relevant to the individual’s needs). In the case of the Web browser brand, the awareness component for the exposed cell is higher than the control cell (47 percent versus 41 percent). However, active rejection is also 5 percentage points higher (12 percent in the exposed cell versus 7 percent in the control cell). Similarly, when we turn to the higher levels of the Pyramid, “have a higher opinion of than other Web browsers” is lower among the exposed cell (6 percent versus 12 percent among the control). This increase in active rejection, in part, accounts for the reduced score at the Bonding level.

Overall, it would appear that the single additional advertising exposure increased the awareness and Presence of the brand among some viewers; however, it also reminded a few of their negative views of the parent company, which may have been generated by the intense scrutiny focused on the security provisions within the product.

These findings suggest that exposure to an ad banner on HotWired’s homepage can have an immediate impact on consumer perceptions of the advertised brand. We now turn to the advertising-specific data to better understand these reactions.

Figure 7 Apparel Brand Personality

REMEMBERED EXPOSURE: BRAND-LINKED AD AWARENESS

We know that all those in the exposed cell had one more opportunity to see the ad banner than those in the control cell. This additional exposure should result in those exposed having both a higher level of brand awareness, in general, and a higher level of ad banner awareness specifically.

We will now assess the results for specific brand-linked ad awareness, a measure that has been found to have a strong predictive relationship with sales in traditional media (Hollis, 1994). Figure 10 confirms that the proportion of people who claimed to remember seeing the tested brand advertised on the World Wide Web in the past seven days was higher in all cases. The chart shows that the increase in ad awareness varies by brand. This variance is a function of the overall power of the banners, diminishing returns related to the individual brands’ Web advertising weights, and the original level, the “base,” from which ad awareness had been increased.

To properly understand the last factor, we need to consider the fact that it must be incrementally more difficult to raise awareness from a base level of 73 percent than from 7 percent. Millward Brown’s FORCE score (the First Opportunity to see Response Created by the Execution) (Dyson...
RESPONSE BEFORE CLICK-THROUGH?

Figure 8 BrandDynamics™ Pyramid—ISP Brand

Figure 9 BrandDynamics™ Pyramid—Web Browser

and Farr, 1995) accounts for the effects of diminishing returns and consequently allows a like-for-like comparison of the three banners ability to create brand-linked ad awareness.

Millward Brown utilizes the FORCE score in traditional media such as television and print. As the FORCE score models out the effects of time, exposure weight, diminishing returns, and base level, FORCE scores can be directly compared across media types. While time-series modeling is normally employed to calculate the FORCE measure, in this case it was not necessary. The aspects of time, exposure weight, and base level were all controlled for by the test design and a simple calculation can be used to allow for the diminishing returns effect.

As the median FORCE score for television advertisements is only 10 percent the scores reported in Figure 11 (an average score of 20) suggest that the Web banners we tested compare very favorably to TV in its ability to create brand-linked awareness of advertising (Farr, 1994). The median FORCE score for print ads is 18 percent, as can be seen in Figure 12.

While TV has the advantage of being more intrusive (moving visuals, sound, etc.), it is nonetheless a passive medium. The content is displayed to the viewer irrespective of whether they are actually attending to it. Conversely, Web- and print-based media both have the advantage of active reader involvement. The consumer actively engages with the content as they peruse it and search for items of interest. This engaged state, that the nature of the Web encourages, seems to result in higher initial recall of advertising than might otherwise be expected.

We have now observed that, overall, Web advertising can create strong increases in brand-linked ad awareness, the necessary precursor to the changes in brand-related measures. But how do the individual banners compare?

As the men's apparel brand banner had not run anywhere else on the Web prior to the study, we are able to see a true picture of the effect of one exposure. Seven per-
The Effect of Diminishing Returns

What is the incremental value of the additional ad banner exposure? Analysis of Web server-log files by one Web media company suggests that diminishing returns on the behavioral click-through begin immediately and that, at a frequency of three exposures, little to no additional click-through benefit is garnered. If this suggestion is correct, does the brand communication value generated from the exposure of the banner exhibit a similar pattern?

To fully analyze the diminishing returns function requires a tightly controlled experiment which measures the effect at multiple levels of exposure for each banner ad. While this type of measurement is beyond the scope of this study, the following analysis does provide some insight into the incremental benefit one might expect to find at different levels of frequency. The analysis is based on a comparison of the single exposure for the three different ads tested. On average, the Web banners we tested compare very favorably to most TV ads in terms of creating brand-linked ad awareness.

The telecommunication company’s banner generated a 29 percent increase in general awareness of advertising for the brand on the Web. The higher base level and the increased impact of diminishing returns account for the difference in the size of this increase relative to the one observed for the men’s apparel brand, since it started with a low level of awareness.

The results for the Web browser’s FORCE score stand out from the others. Though the base awareness level in the control cell is extremely high in comparison to any point-in-time measure for traditional media, it is clear that an extra exposure on HotWired’s homepage is capable of improving even on that high level of awareness. The FORCE score indicates that the browser’s banner created a high level of brand-linked memorability—a level far higher, in fact, than the averages for television and print. The publicity and other marketing activity surrounding the browser’s introduction may well have played a part in the increased attention that people paid to this ad, but the score is dramatic nonetheless.
these brands have different levels of weight ranging from the men's apparel brand (no previous exposure) to the Web browser (significant exposure on average).

For instance, specific banner awareness (elicited by showing people the actual ad banner) displays a classic diminishing-returns function consistent with findings from traditional media. Initial banner awareness is highest for the Web Browser (see Figure 13), since many of these people are likely to have been exposed to this banner, or one like it, elsewhere, but the incremental benefit of one additional exposure is the lowest of the three (see Figure 14). The converse can be seen for the apparel brand. Initial awareness is lowest, but one additional exposure results in the strongest increase. The suggestion that there may be diminishing returns does not preclude the fact that there is likely to be (as in the cases tested) measurable incremental effects at higher levels of frequency. Whether the incremental benefit warrants the cost of exposure is a question that can only be answered on a brand-by-brand basis.

A key finding is that the benefits are likely to be derived even after multiple exposures. In addition, findings for the men's apparel brand seemed to indicate that the communication power was potentially a function of the surrounding program context.

AD REACTION
The questions employed to understand consumer reaction to the advertising banners themselves were adapted from Millward Brown's Link copy test. The results reinforce the notion that the Web is a unique medium. It resembles traditional print media in some respects but exhibits some similarities with outdoor advertising in the way people describe their reaction to the content.

The main finding in this area is the lack of variation in response to the ad banners. It tends to confirm that part of the ad awareness increase observed for the Web browser's banner could be due to synergy with other marketing activity and exposure. While the lack of variation in this diagnostic data might be a function of the banners tested, it does suggest that the high-involvement, prominent placement aspects of advertising on the Web dominate the differences in creative impact.

An example of this uniformity of response can be seen in how the banners exhibit little difference in the degree to which people thought they were "eye-catching," as shown in Figure 15. The similar results are especially noteworthy given that the men's apparel brand and ISP were animated banner ads, while the

...ad banners are similar to direct mail envelopes, enticing the recipient to open it up, browse further, and take action.

Figure 13 Baseline Specific Brand-Linked Awareness
Web browser was not. The power of an advertisement to hold a consumer’s attention and be remembered at a later date varies widely in other forms of media, even given a constant level of exposure. The main causes of the variation differ by medium. In print, category interest is key, since people are actively searching for items of interest; the creative power of an ad plays a supporting role. For TV advertising, creative power dominates and viewer involvement is key. (Viewer involvement is a function of enjoyability and the degree to which attention involves active processing rather than passive) (Hollis, 1995). Our results from this study suggest that the Web is far more similar to print than TV in this respect.

**DETERMINING FACTORS OF CLICK-THROUGH**

A focus of the Web advertising debate has centered on the value of click-through. Click-through on ad banners transports readers from content focused Web sites to advertiser sites where direct marketing can occur. From this point of view, ad banners are similar to direct mail envelopes, enticing the recipient to open it up, browse further, and take action. Using this logic, many people have argued in favor of the click-through rate as the best measure of advertising response on the Web. However, we believe that the click-through response is determined by five basic factors, three of which relate to the predisposition of the audience, not the advertising itself.

Audience-related factors are:

- innate tendency to click on advertisements
- immediate relevance of the product to the audience
- preexisting appeal of the brand or company

Advertising-related factors are:

- immediate relevance of the message to the audience
- involvement or intrigue created by the ad

The results of this experiment indicate that those who click through had, as might be expected, actual recall of the ad banner (which they may have seen in locations other than HotWired). More importantly the brand had immediate personal relevance to the user. People who remembered the ad and who said the product category was of interest to them were three times more likely than the average to claim to have clicked-through. The fact that we observe little difference between the reported click-through rates for any of the banners tested indicates that click-through in itself may not predict the level of brand building likely to be realized.
... the use of click-through rates alone are likely to undervalue the Web as an advertising medium.

While more extensive studies need to be conducted to fully understand other factors that might drive click-through, these findings suggest that ad agencies and content providers who agree to be remunerated solely on the basis of click-through rates are tying their revenues to current levels of interest in the advertised brands of their clients. Since our study has proven that advertising on the Web has sizable effects on brand loyalty and attitudes which are not reflected in click-through, the use of click-through rates alone are likely to undervalue the Web as an advertising medium.

If this finding proves to be a general one, then tactics designed to generate click-through may also underutilize the power of Web advertising. The practice of running "unbranded" banners, which has been reported to yield high click-through rates, surely runs counter to the concept of brand building through ad banner exposure. In short, click-through certainly has value (especially if the goal is to create an immediate behavioral response such as downloading software), but the click-through rate itself is unlikely to be indicative of the overall value of a banner exposure.

CONCLUSIONS
So what do our findings tell us about Web banner advertising? Our results tell us, simply and unequivocally, that it works. Moreover, it works with or without the added benefit of click-through. One single banner exposure generated increases in Consumer Loyalty scores ranging from 5 percent for the Web Browser to 50 percent for the men's apparel brand. Advertising awareness increased from a low of 12 percent (for the brand with the highest base of ad awareness) to a high of 200 percent for the previously unadvertised men's apparel brand. The FORCE scores we calculated for the three banner ads suggest that Web banners may rival or surpass TV and print advertising in producing brand-linked ad awareness. We observed, as expected, a diminishing returns factor associated with levels of advertising weight. This factor dampened but did not extinguish the advertising effects.

In addition, our findings to date suggest that the high-involvement nature of the Web and the prominence of the advertising seemed to play a larger role in defining ad effectiveness than did consumer reaction to any particular execution we tested. In this respect advertising on the Web appears to work similarly to print rather than TV. A combination of factors appear to generate click-through, the primary one being the nature of the audience and the inherent interest the product category holds for them. The appeal of the creative plays a secondary role at best.

The Web offers unique and undeniable advantages over other media in terms of targeting and direct marketing. One such advantage is the ability of advertising banners to serve as gateways to an advertiser's own Web site. But our results suggest that the ad banner is a legitimate advertising vehicle in its own right. This experiment shows that banner ads on the HotWired Network have a significant impact on their viewers, an impact that demonstrably builds the advertised brand. Banner ads remind people of a brand's existence, stimulate latent or dormant brand associations, and can cause people to change their attitudes toward the brand, thus increasing their likelihood to purchase. The unique marketing power of the on-line environment and the established communication benefits of traditional advertising combine to make the Web a powerful new advertising medium with real potential for brand building.

The Web offers unique and undeniable advantages over other media in terms of targeting and direct marketing.
He has had papers published in the *Journal of Advertising Research*, Admap, planning and analyse, and the *Journal of the Market Research Society*.

**REFERENCES**


