A Test of the Effectiveness of a Mouse Pointer Image in Increasing Click through for a Web Banner Advertisement

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The objective of this research was to test the effect on click-through rates of a variation in the design of a web banner advertisement placed on a number of high-profile New Zealand websites. The variation involved the addition of a mouse pointer image next to the 'click here' message on the last frame of the advertisement. Previous studies had found that including a 'click here' instruction increased response to banner advertisements but in this study no such effect was found. However, click-through rates for the advertisement varied significantly *across* the sites examined. More research is therefore called for not only to identify whether a pointer image is able to increase click-through rates in combination with other design elements, but also to further investigate the relationship between site content, visitorship and click-through rates.

Keywords: Internet, Banner Advertising, Click-through, Effectiveness

Introduction

Revenue from Internet advertising during 2003 was estimated at approximately $7.3 billion in the United States alone (Interactive Advertising Bureau/PriceWaterhouseCoopers, 2004a) with 21% of that revenue derived specifically from banner advertising. Whilst Internet advertising revenues decreased during 2001 and 2002, this downward trend was reversed in early 2003 and the IAB/PWC reported positive revenue results for each quarter of 2003 and the first quarter of 2004. In fact, the IAB and PWC reported Internet advertising revenues reached nearly $2.3 billion in the first quarter of 2004 (Interactive Advertising Bureau/ PriceWaterhouseCoopers, 2004b).

The growing popularity of the Internet for advertisement delivery has led several researchers to conduct studies examining Internet advertising effectiveness. While the majority of these studies have focused on banner or copy design elements (see Rae and Brennan, 1998; Hofacker and Murphy, 1998; Tuten, Bosnjak, and Bandilla, 1999; Lohtia, Donthu and Hershberger, 2003; Dreze and Hussherr, 2003; Chandon, Chtourou and Fortin, 2003; and Baltas, 2003), a number have also directly compared or considered methods of 'effectiveness' measurement (Dreze and Hussherr, 2003; Chandon, Chtourou and Fortin, 2003).

Studies reported to date have found that a number of factors positively enhance click-through rates. For instance, both Rae and Brennan (1998) and Hofacker and Murphy (1998) found that a 'click here' message improved click-through rates. Baltas, (2003) and Chandon *et. al.* (2003) found that banner size and animation had a positive impact on response as measured by click-through. In an analysis of 8,725 banner advertisement placements, Lohtia *et. al.* (2003) also found that the level of colour, animation, and the use of an emotional appeal all had a significant effect on click-through from banner advertisements.

The study reported here investigated an extension to one feature of copy design found to have increased click-through rates in the past: the 'click here' statement. As such it extends the work mentioned earlier by Rae and Brennan (1998) and Hofacker and Murphy (1998).

Specifically, it was hypothesised that, due to its common visual association with computer navigation, the addition of an image of a mouse cursor as a variation on the 'click here' statement in a banner advertisement would generate an incremental improvement in click-through rates.

Method

Procedure

The research opportunity for this study arose out of a university student recruitment campaign that included the placement of a banner advertisement on three high-profile New Zealand websites. Some aspects of the research's design were determined by the campaign specifications. For instance, the campaign was designed to run over a four week period from 31st May to 27th June 2004, and involved placing banner advertisements on the following sites:

www.NZHerald.co.nz: Managed by New Zealand's leading newspaper, this site consistently enjoys high visit levels. A 'double-tile' advertisement (120*240 pixels) was run in the right hand column on all business story pages for three weeks commencing 31 May, 14 June and 21 June 2004. This site section was expected to deliver more than 400,000 impressions of the banner advertisement. Additionally, a tile advertisement (120*120 pixels) was run on the search result pages of the employment section of the NZ Herald. This site section was expected to deliver 245,000 impressions during the campaign.

www.Seek.co.nz: A 'skyscraper' advertisement (145*400 pixels) was placed in the right hand column of the result pages for Business, Accounting, Sales, and Administration searches on this popular New Zealand recruitment site. Rather than being fixed, the advertisement was rotated amongst those from other advertisers and ran for the four weeks from 31 May to 27 June. This site was expected to deliver over 35,000 impressions during the four weeks of the campaign.

www.Scoop.co.nz: A disintermediated news service, this site provides 'breaking' news from various sources. A fixed 'tower' advertisement (300*200 pixels) was placed in the right hand column of the business section and ran for the four weeks from 31May to 27 June. The site was expected to deliver 11,250 impressions each week.

Instrument

Although website criteria meant that the size of the advertisements varied according to where they were placed, the content remained essentially the same. Specifically, the advertisement employed colour and animation through four main frames of content, with the last frame presenting the organisational logo along with two pieces of text: 'Make a Difference' and 'It's Time You Clicked'. The animation took 13 seconds to run through the four frames.

Figure 1 presents shots of the four main frames for the treatment without the presence of the mouse pointer image next to the 'click here' instruction. The second treatment for each advertisement (regardless of size) presented the same content, but included the mouse pointer (arrow) image next to the 'click here' instruction in the last frame.

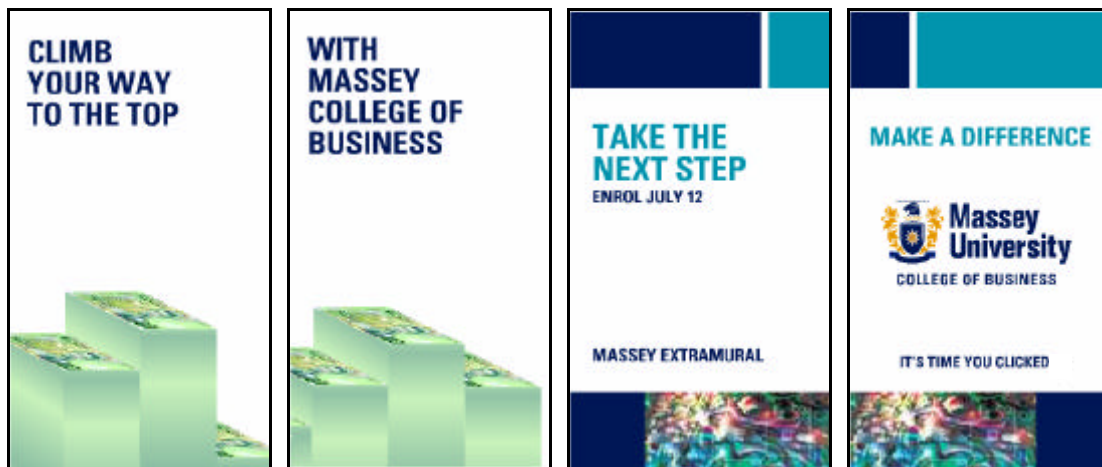**Figure 1. Key elements of the web advertisement**

Figure 2 presents the two treatment frames next to one another for comparative purposes.

Figure 2. Advertisement frames with and without the mouse pointer image

On each of the websites the advertisement treatments were randomly rotated so that exposures were distributed relatively equally across both time and site visitors.

Effectiveness Measurements

'Impressions' and 'click-through' rates are two metrics often employed to gauge Internet advertising audience size or effectiveness. 'Impressions' are defined as the number of times an advertisement is served to a web browser, while a 'click-through' can be described as a "user-initiated action of clicking on an advertising element, causing a redirect to another web location" (Interactive Advertising Bureau/ PriceWaterhouseCoopers, 2002, p. 17).

Recently, there has been some debate about the utility of click-through rates as an effectiveness metric, initiated in part because of plummeting click-through rates over the last few years. Dreze and Hussherr (2003), Lohtia *et. al.* (2003), and Baltas, (2003) all suggest that more emphasis should be placed on traditional measures such as awareness and recall when considering Internet advertising effectiveness.

For a number of reasons, this research employed click-through rates as the metric in evaluating the effectiveness of the mouse pointer image despite these reservations. First, it was not feasible to collect awareness and recall information as the 'real-world' nature of the advertisement delivery meant we could not identify those who had been exposed to the banners. Second, as a direct behavioural measure, click-through provides a gauge that we judged to be suitable for comparing response across the two treatments, especially given that the design element under examination related specifically to an attempt to get those exposed to the banner advertisement to click on it. Finally, click-through rates have been a common metric employed in the effectiveness studies cited earlier and our approach is therefore consistent with prior work in this area.

Results and Discussion

The results for the campaign, as outlined in Table 1, do not support the central hypothesis of the study. That is, the addition of a visual cue such as a mouse pointer to the "it's time you clicked" message does not appear to have improved the click through rate of the advertisement on any of the websites examined, at least in this specific design implementation.

It is worth noting that the two advertisement treatments appear to have been randomly exposed to visitors at New Zealand Herald and Scoop, as evidenced by the very similar levels of delivered impressions for the treatments at those sites. However, at Seek, only the treatment containing the pointer was presented during the first few days of its run and, so, the treatments at that site received a widely different number of exposures. Although this situation is not ideal, there is no known reason to suspect impressions during the first few days of the campaign were delivered to visitors or placed amongst content that differed substantially from that in the remaining days. Hence, the Scoop results have been analysed without alteration.

Table 1. Comparison of click-throughs by advertisement and website.

Website	Treatment	Delivered Impressions	Click-Throughs	Click-Through Rate %
Seek	No Pointer	18,790	68	0.36
	Pointer	22,306	67	0.30
NZ Herald - Business	No Pointer	202,140	126	0.06
	Pointer	201,918	146	0.07
NZ Herald - Employment	No Pointer	159,362	30	0.02
	Pointer	159,055	34	0.02
Scoop	No Pointer	31,742	99	0.31
	Pointer	31,742	105	0.33
Total	No Pointer	412,034	323	0.08
	Pointer	415,021	352	0.08
	Overall	827,055	675	0.08

At an aggregate level, just over 800,000 impressions were delivered during the four weeks of the campaign and these resulted in 675 click-throughs, giving an overall click-through rate of just 0.08%. Although possibly coincidence, the click-through rates for the Seek and Scoop sites reflected the average reported by Chandon *et al* (2003, p 218) in their study of around 0.34%. Thus, they could be said to be within the range advertisers and researchers should expect nowadays. By contrast, the click-through rates for the NZ Herald sites were substantially lower at 0.06% and 0.02% respectively.

Of the total number of click-throughs there was an almost even split (352/323) between the advertisements with the pointer and those without, and none of the treatment click-through rates were significantly different at the 95% level at any of the websites used.

It is, of course, possible that website visitors clicked on the advertisement during the first three frames and that the use of both the 'click' message and the mouse pointer image were redundant because they were not seen. Future research will need to address this potential problem to discount it as a possibility. However, given the animation took 13 seconds to run through its cycle, it seems likely that visitors would view the entire advertisement before deciding whether or not to go ahead and click for further information.

It is worth noting that, although the design treatments did not deliver significantly different click-through rates, the different websites did. Specifically, the New Zealand Herald pages generated significantly lower click-throughs than both the Seek and Scoop pages. This could have occurred for a number of reasons, but may be due to increased clutter associated with the New Zealand Herald site because of its dramatically higher visitor numbers (and, hence, attractiveness to advertisers). Alternatively, it could be associated with visitor behavioural differences in things such as average time spent on each page at a site. Whatever the case, it seems that factors independent of the advertisement itself, such as the serving site's content and visitorship, have a substantial impact on rates of click-through, and consequently deserve further research attention.

Conclusions and Directions for Future Research

This research focused very simply on the potential for a mouse pointer image to increase click-through rates to a banner advertisement incorporating animation, colour, and a 'click' message (all elements found previously to positively effect click-through rates). It was found that, at least in the specific implementation examined, the pointer did not lead to a better click-through response from those exposed to the advertisement.

The results of the research are limited, as only one advertisement was tested on a small number of sites and there are multiple alternative ways in which a pointer image could be presented that were not examined. However, the consistency of the result across all four websites examined does suggest that a pointer image used in a fashion similar to that in this research is unlikely to add substantially to click-through rates. Research examining alternative implementations of a mouse pointer, in addition to other commonly used banner advertisement visual components, is required to better establish the relative efficacy of each in improving click-through rates or other metrics of effectiveness.

Additionally, the results obtained highlight significant differences in click-through rates between the websites studied, independent of the advertisement design employed. To the extent that click-through rates measure at least one aspect of an advertisement's

effectiveness, it therefore appears that research specifically examining the influence of advertisement-independent factors on effectiveness, such as site content and visitor behaviour, is warranted.

References

Baltas G (2003). Determinants of Internet advertising effectiveness: an empirical study. *International Journal of Market Research*, 45 (4), 505-513.

Chandon JL, Chtourou MS, & Fortin DR (2003). Effects of configuration and exposure levels on responses to web advertisements. *Journal of Advertising Research*, June, 217-229.

Dreze X, & Hussherr FX (2003). Internet advertising: Is anybody watching?, *Journal of Interactive Marketing*, 17(4), 8-23.

Hofacker CF, & Murphy J (1998). World wide web banner advertisement copy testing. *European Journal of Marketing*, 32 (7/8), 703-712.

Interactive Advertising Bureau/ PriceWaterhouseCoopers. (2004a). IAB Internet advertising revenue report: 2003 Full-Year and 4Q Results. *Interactive Advertising Bureau*. April. http://www.iab.com/resources/adrevenue/pdf/IAB_PwC_2003.pdf

Interactive Advertising Bureau/ PricewaterhouseCoopers. (2004b). IAB Q1 2004 Interactive Advertising Revenues Tops Record. *Interactive Advertising Bureau.* May. http://www.iab.com/news/pr_2004_5_24.asp

Interactive Advertising Bureau/ PriceWaterhouseCoopers. (2002). IAB Internet advertising revenue report: 2001 Full-Year Results. *Interactive Advertising Bureau*. June. http://www.iab.com/resources/adrevenue/pdf/IAB_PWC_2001Q4.pdf

Lohtia R, Donthu N, & Hershberger EK (2003). The impact of content and design elements on banner advertising click-through rates. *Journal of Advertising Research*, December, 410-418.

Rae N & Brennan M (1998). The relative effectiveness of sound and animation in web banner advertisements. *Marketing Bulletin*, 9, 76-82.

Tuten TL, Bosnjak M, & Bandilla W (1999). Banner-advertised web surveys. *Marketing Research*, Winter, 17-21.

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