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Designing high click-through Web banner advertising using design principles

Sunghyun Ryoo Kang
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Designing high click-through Web banner advertising using design principles

by

Sunghyun Ryoo Kang

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Major: Art and Design (Graphic Design)

Major Professor: Roger Baer

Iowa State University

Ames, Iowa

2000

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Graduate College

Iowa State University

This is to certify that the Master’s thesis of

Sunghyun Ryoo Kang

has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy
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ABSTRACT

Web advertising is growing faster than any other media. Web advertising has been known for its terrific communication power, and for its clickable and linkable abilities. The banner is one of the most well known forms of web advertising. However, no research has been undertaken to research the design elements in high click-through advertising banners. The purpose of this study is to find out the most effective elements that can make up the high click-through ad banners on the Web. Existing data of high click-through banners are used to find out what kind of design elements and principles are most common in high click through Web advertising banners. The research found that certain principles of design, interface and verbal elements can increase the click through rate, and semiotic approaches such as symbols and icons, visual metaphors and irony, are also found to make a high click-through banner. This research can be a guide for designing high click-through Web banners. In the future, with new technologies, advertising on the Web will become more sophisticated and complex. However, proper use of the design principles to convey the messages and organize information will remain.
CHAPTER 1. INTRODUCTION

A. Thesis Objectives

According to IAB, Internet advertising is continuously growing, and its Internet advertising revenues reached $1.9 billion in 1998. Banner advertising accounted for 52 percent of all online advertisement placed during that year 1998, with sponsorships accounting for 40 percent, interstitials taking 3 percent, and the rest taking 5 percent. As can be seen banner, advertisements are reported as the predominant type of advertising.

Banner is one of the most well known forms of web advertising. They can be defined as "narrow billboard ads that appear at the top of homepages on the web." By clicking on the banner, viewers are able to switch to the advertiser's homepage or the homepage of the product.

Web advertising first began in 1994 on the Hot-Wired Web sites. Since that time the use of banner advertising has continued to rise, as more and more advertisers realize the potential of the World Wide Web as a marketing tool. Banner advertising can be found on most business web sites as well as on search engine sites. Most dot com Web sites have banner advertising.

Jacob Nelson, editor of useit dot com, asserts that most web users don't want to pay attention to any advertising. IAB research on the other hand, indicates that web-advertising banners have a terrific communication power. IAB reports advertising banners could build brand awareness, enhance product perceptions, and improve product purchase via Internet after only one exposure.

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Although some research presents that web advertising has a terrific communication power without link to advertisers’ homepage, its clickable and linkable abilities are even more advantageous aspects of web advertising because they make it different from print and TV.

According to IAB research, the average click-through rates for banner advertising are only about 2 percent.\(^6\) Nielsen’s Netratings reported that weekly number 1 clicked-on banner advertising had a 9-15 percent clickrate.\(^7\) Advertising Age reported some banners’ click-through rates recorded 25 -50 percent\(^8\) of banner clickrate and IAB research pointed out that the audience-related factors have a significant impact on click-through rate, and IAB suggested unbranded ad banners are most likely to be clicked through.\(^9\)

According to the above research, ad banners can have two functions: they can be used as branding vehicles and direct marketing vehicles. Many researchers and organizations are studying web marketing and advertising strategies; however, no research has been undertaken to research the design elements and principles in high click-through advertising banner.

The objective of this study is to find out what kind of the design elements and principles can make up the high click-through ad banners on the Web. Using high click-through ad banners, the author will find out what design elements and principles are most common in high click-through Web advertising banners.

Even though a computer is different from traditional media such as print, it is still concerned with a human being’s visual perception. Bogart, the author of Strategy in Advertising, mentions that “the essential principal of good design apply to TV as they do to print.”\(^10\)

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\(^7\) Ibid., p 48.


The author proposes that design elements and principles should be applied to Web advertising design.

The results of the analysis will be used to create high click-through advertising banner design. Some of the questions to be answered are:

1. What methods have been used in designing web advertising banners?
2. What design elements and principles are used on the high click-through web banners?
3. Why do users click on the web ad banners? Are there specific patterns of users’ behavior in terms of their interaction with a high click-through web advertising banner?

B. Methodology

The methodology begins with an analysis of prior literature within the field of Web advertising design in order to define, classify, understand, and describe web advertising. This research paper consists of five chapters. Chapter one, Introduction, provides the purpose and methodology of the thesis. Chapter two, The Features of Internet Advertising summarizes the measurement of Web effectiveness, currently existing web advertising types, and e-commerce. Chapter three, Differences between Internet and Other Media, describes the different and common factors between Web advertising, broadcasting, and print media. It also discusses characteristics of media, size of audience, communication capabilities, cost and flexibility, and size and length of a message unit. Some research concerning click-through rates of advertising banners has previously been completed. Chapter four, Elements of High Click-through Ad Banner, analyzes the high click-through advertising banners as reflected in existing research. The author examines design and other elements of ad banners that have a high click-through rate according to Four Corners\textsuperscript{12} as well as high click-through banners of

Neilsen's Netratings. From this analysis, the research will compile a list of the most common design elements or principles present in an advertising banner, which has a high click-through rate. Chapter five, the Conclusion, suggests possible web banner design strategies chosen according to the specific goals of direct marketing vehicles.

Web advertising is a new medium for advertisers and consumers. Even though it has a short history of 5 years, the power of Web advertising is tremendous. In addition, the explosive development of web technology and network technology is changing very fast. The banner design has been developed based on the network and computer technology. Ad Resource, the Web newsletter, predicts that new format or technology of web advertising will appear soon that doesn’t exist yet.

So far, banners can have two functions: branding vehicles and direct marketing vehicles. This research does not cover web advertising as branding vehicles. Instead, it is intended to present the elements that make a high click-through advertising banner.

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CHAPTER 2. THE FEATURES OF INTERNET ADVERTISING

A. Measurement of Web Advertising Effectiveness

Webreview, Web newsletter, indicates five basic measures of the online advertising as “a visitor, visit, page view, ad view, and click.” Though there is some confusion in defining the measurement of Internet marketing terms, the concepts of the terms are straightforward. Webreview explains the five basic measures as following:

A visitor is someone who goes to a web site. To advertiser, the value of the visitor information increases as the publisher gathers more information about them, that is their name, age, zip code, visit frequency, etc.

A visit is the act of a visitor making page requests from a single site.

A pageview is the act of visitor viewing a page of contents.

An adview is the act of visitor seeing an ad.

A click is the act of a visitor clicking with his mouse on the linked object.

Thus, a visit is concerned with time spent on a web site. Webreview distinguishes “trial visit,” which means the first visit, and a “repeated visit.” The problem of the page view and adview is that it is difficult to measure whether users are paying attention to the web site or not. According to Aronson, “I/PRO is using the term of ‘adview’ as “the number of the times an ad is requested”, IAB is using the term of ‘adrequest’ to define “the number of times a page with as ad is requested, and AdKnowledge is using another term of ‘impression’ as ‘the number of times 100 percent of ad graphic is download’.” According to Doubleclick, Web advertising company, impression is “the number of

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16 Ibid.
times an advertisement was viewed by Internet users." Thus, the term “impression” has several definitions. In this research, the term of impression is chosen to explain how many times a banner is exposed to the user as well as Doubleclick’s definition. The banner impression is counted each time the banner appears on the user’s web browser, no matter whether they are the same people or not. Because of this reason, the “reach,” which is “the number of individuals exposed to an ad can be different from impression.” Sometimes the impression numbers are high, but the “reach” can have a low percentage or vice versa. Nielsen’s Netratings has measured impression, reach, average time spending per person for specific Web site, and top 10 ad banner viewed for every week. Media Metrix also offers the statistics of Internet users as well as Nielsen’s Netratings.

1. Click-through Rates (CTRs)

Click-through Rate is one of the critical issues concerning the user of banners. Click-through rate is “a percentage of those who are exposed to the ad banner, who click on the banner to connect to the advertiser’s web site.” Click-through rate is decided by how many times a banner is clicked. If click-through rate is 2 percent, it means 1 out of 50 people who visited the Web sites have clicked on it. When the banner advertising appeared on the Web, many advertisers were attracted to the ability of banner advertising to elicit a direct response from users.

Many researchers have pointed out that banners have serious problems. One of the major problems of banners is that the click-through rates is falling. E-marketer pointed out a number of reasons why click-through rates are dropping: the thrill is gone; the traffic is more directed; and users

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don’t want to lose their track.\textsuperscript{23} The fact that click-through rate is falling implies that the user is no longer interested in the banner. For example, when banner advertising appeared on the Web, many users were curious about new hyperlink sites, but the users are no longer curious and therefore do not try on the banner. The other reason is that the users are learning how to find the right information without clicking on the banner when using search engines.

According to Briggs, Vice President of Millward Brown International, “click-through was usually motivated by consumers believing that an immediate need should be satisfied at the moment they saw the ad by clicking on the banner.”\textsuperscript{24} Therefore, if the banner does not have any impact or interest visually and verbally, the user would not click the banner. Some research\textsuperscript{25} offers the tips for designing effective banner ads. Suggested common tips are right targeting, using bright colors, location, using animation, using cryptic messages, calling to action such as “click here,” using rich media such as Java, Shockwave, Flash, and so on. To create a high click-through rate ad banner, one has to consider creativity, content, and target users. This subject will be discussed further in Chapter four.

Four Corners has surveyed click-through rates from Link Exchange web sites. According to Four Corners, there are many high ranked click-through rates of banners. This research introduced the best click-through rates for non-picture, non-trick banners, the best click-through rates for trick banners, and the best click-through rates for picture banners.\textsuperscript{26} Even though the click-through rate is falling, click-through rate is important in measuring how banners work in terms of direct marketing. It


should be possible to discover what common elements exist in the high click-through Web advertising from those banner examples.

2. Brand Awareness

Brand awareness is very important for a relevant customer. Bogart points out that consumers must be familiar with a product in order to be persuaded to buy it.\textsuperscript{27} To build awareness, advertising should not only have customers' attention but also embedded in customers' memory. According to Millward Brown Interactive, building a brand means "getting consumers to remember the brand and to believe that brand will meet their needs."\textsuperscript{28} Millward Brown Interactive reports that a banner's click-through rate is good for direct marketing, but the banner has much more powerful abilities to build a brand enhancement.\textsuperscript{29} According to 1997 Online IAB Advertising Effectiveness Study, banner advertising has a great communication power. IAB reports that the banner could have the power to communicate to the Web user without clicking on the banner. IAB stresses that "banner exposure itself is responsible for 95 percent of the brand enhancement, while a click-through only contributes to 4 percent. Click-through may be an important element of some online campaigns, but with an industry average of 2 percent, the real communicative power is where the majority of the audience can see the message."\textsuperscript{30} Millward Brown Interactive Research claims that in banner advertising, when "it comes to communicating a straightforward branding messages, click-through has little to no relevance. Exposure alone has brand-enhancing value."\textsuperscript{31}

\begin{footnotesize}
\begin{enumerate}
\item Leo Bogart, pp 74-75.
\item Rex Briggs, "A Roadmap to Online Marketing Strategy"
\item IAB online advertising effectiveness study 1997, p 10.
\item Millward Brown Interactive, "Evaluating the Effectiveness of the Comet Cursor,"
\end{enumerate}
\end{footnotesize}
Thus, Web advertising banner can be used not only as a direct marketing tool but also as an advertising tool. Advertising banner design strategies should depend on the specific goals of individual markets, but the appeal of the creative design may play a pivotal role for users.

**B. Types of Web advertising**

Millward Brown International distinguished three broad kinds of advertising on the Web; placed ads (including banners, Rich Media ads, pop-ups, and animated cursors); sponsored elements within sites; and company marketing sites. The types of banner in this paper are categorized as a banner, sponsorship, interstitial, and webmercial.

1. **Banner**

Since the first banner advertising (Figure 1) appeared, there have existed other types of banners. In this research, animated banners, static banners, classified banners, interactive banners, and microsites are found as currently existing banners.

Sometimes, a banner of the same company appears in different colors but uses the same logo and a similar composition. Doubleclick reports that after the fourth impression, response rates drop from 2.7 percent to under 1 percent.

![Have you ever clicked your mouse right HERE?](image)

Figure 1. First banner from AT & T on the Hot Wired Web site

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Also, Four Corners reports "if a consumer hasn't clicked on a banner after seeing [it] three times, a response is unlikely." For this reason some companies have been using different banners even through the banners are on the same web site. The Figure 2 shows two banners of Improvenet that are in a different style from Netratings' top 10 ad banner viewed in the period from July 26 to August 1, 1999.

Many banners use animation that has a visual sequence. Figure 3 presents Chrysler's animated banner. These three plates keep changing in contrast to a static banner which does not have animation.

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Figure 2. Web Banners of Improvenet

Figure 3. Animated Banners of Chrysler
Figure 4 presents an interactive ad banner where a user can select the menu without linking to advertiser’s homepages. A user can select a favorite car from the banner. The advantage of the interactive banner is in the fact that it can show the view without linking to advertiser’s homepage, and the user doesn’t need to worry about losing track by clicking.

Figure 4. Interactive Banner of Lowestfare.com

The classified banner’s site (Figure 5) is easy to overlook. It functions like a newspaper’s classified advertising that a user looks at for a particular kind of advertising. The advantage of the classified banner is that a user can find much information at once, without surfing the Web for an extended period time.
A microsite, called minisite, is a separately prompted part of larger Web sites. A microsite is designed to meet a separate objective and has a separate web address for its homepage. Typically, a microsite resides on the same web server and reflects the branding and overall visual design of the larger site with which it is associated. In Figure 6, Beatrice’s Web Guide site is a microsite of women.com. It seems that women.com and Beatrice’s Web Guide homepage do not have any relationship. They are, however, sharing information.
2. Interstitial

An interstitial (something “in between”) is “a page that is inserted between two pages and which disrupts the normal flow of editorial content structure of a Web site for the purpose of advertising or promotion.” Most interstitials are animated advertising tools that pop up in the browser window while a page is downloading. An important fact about the interstitial is its file size. If the file size is bigger than 20k, its download speed will be slower than that at a parent Web site. Figure 7 shows Penny.com’s interstitial. Because the interstitial is exposed to the user before the parent page, it has a greater chance and more power to convey advertising messages than a placed banner.

3. Sponsorship

The term sponsorship is “used to describe any media deal where the sponsor provides a name and money, without an overt message.” Sponsorship advertisement is more concerned with branding relationship than click-through rate. The sponsorship supports information or entertainment based on

![Figure 7. Interstitial of Penny.com](image-url)

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web sites and includes the sponsor’s signature or banner on the sites. Figure 8 is the Clickz.com’s Web site, which is sponsored by Adauction.com. From ClickZ, the user can conduct research and get some information, but every page shows that it is sponsored by Adauction.com. While searching for information, the word of Adauction.com is exposed many times.

Figure 9-a is the Claus.com’s homepage, which is sponsored by six different companies. When the user clicks one of the houses, a toy sale banner appears at the top of the page with other information about toys (Figure 9-b). When the bunny in the Figure 9-b is clicked, the site that has a sponsor’s name appears without any other information (Figure 9-c). There are some different approaches between Clickz and Claus sites. Claus.com site seems like in between the banner and sponsorship advertising, but does not emphasize advertiser’s name. However, sponsorship works better for branding rather than direct marketing.

Ad Resource predicts that sponsorships would overtake banner as the top online advertising vehicle by the end of year 2001.39

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Figure 9. Claus.com’s Sponsorship Banner
4. Webmercial

Webmercial is “a kind of television commercial adapted to the web.”\(^{40}\) KMGI, a web advertising company, has been developing Webmercials. According to KMGI, Webmercials “combine the look and feel of TV commercials with the interactivity.”\(^{41}\) KMGI presented the Webmercial at the Internet and Electronic Commerce Expo in New York on April 27\(^{th}\) 1999. Figure 10 shows a demonstration of a Webmercial on the KMGI site. When clicking on the small-animated banner, it turns to the full screen advertising.

The Gamesvill web site uses a Webmercial, called E-mercial. During breaks in the game, it plays like a commercial on television. The games are designed and programmed to last 8 minutes, and a new game begins every 10 minutes. Thus Gamesvill has a 2 minute interval between each game. During the 2 minutes, Gamesvill offers an E-mercial which is a full screen advertising. Gamesvill offers free games, but to access a game, users must register their personal information such as name, gender, age, education, house income and so on. This means the advertiser will have information about users to make the right targeting. The appearance of advanced new technology such as Shockwave and Flash can make the creation of Webmercials possible. KMGI uses the Flash, based on the vector graphic, which means the minimal bandwidth and file size can be viewed.

C. E-Commerce

About 165 million online addresses exist throughout the world.\(^{42}\) According to Michael Tchong, in January 1993 there were less than 50 Web sites in existence. As of January 1998,

there were an estimated 1.8 million sites. Thus, Web is growing very fast and e-commerce is one of the biggest online issues because of its interactive power as a marketing tool. Understanding users’ behavior on the Internet is necessary to develop web-advertising strategies.

GVU has been surveying Internet shopping as one part of its research. According to GVU, browsing without intent to buy is a common action among the respondents. Expert users are more likely to browse without intending to buy than are novice users. Among the respondents who browse without any intent to buy, more than three fourths of average respondents answer that they will continue to browse without an intent to buy.

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44 GVU’s WWW User Survey, “Result of GVU’s 10th World Wide Web User Survey,” (14 May, 1999), <http://www.cc.gatech.edu/guv/user_surveys/survey-1998-10/tentreport.html>. GVU (Graphic Visualization and Usability Center of Georgia Institute of Technologies) has done research about the community of users of the Web since January of 1994. Since then GUV Center has conducted the user survey every sixth months. The tenth edition of this research marks the completion of five years of web user survey.
This result shows the users want to surf web sites to get information about the product; changes in cost, how its technology has advanced, and so on. Also about three fourths of average respondents answer that they have already searched the web sites without the intent to buy. According to these survey results, many of the Internet users like to search the web sites to get product information before they decide whether or not to purchase a particular product. According to the survey about shopping experience, about 97.5 percent of average respondents buy products online. Items and purchased in the Table 1 show the products and services that the average respondent purchased from online. Items and frequencies in the Table 1 show the products and service that respondents want to browse ‘Without Intend to Buy’ and ‘Intent to Buy.’ Hardware and software items are the most commonly reported items that were browsed among the users who intend to buy or without intent to buy and are the most purchased items from the Web. Books and Music are followed next in all categories.

Table 1. Items and Frequencies of Without Intent to Buy, Intent to Buy, and Purchased

<table>
<thead>
<tr>
<th>Items</th>
<th>Without Intent to Buy</th>
<th>Items</th>
<th>Intent to Buy</th>
<th>Items</th>
<th>Purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>77.8%</td>
<td>Hardware</td>
<td>76.9%</td>
<td>Software</td>
<td>58%</td>
</tr>
<tr>
<td>Hardware</td>
<td>76.3%</td>
<td>Software</td>
<td>73.6%</td>
<td>Hardware</td>
<td>48.5%</td>
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<tr>
<td>Books</td>
<td>68.7</td>
<td>Books</td>
<td>63.1%</td>
<td>Books</td>
<td>52.6%</td>
</tr>
<tr>
<td>Music</td>
<td>62.2%</td>
<td>Music</td>
<td>55.7%</td>
<td>Music</td>
<td>41.4%</td>
</tr>
<tr>
<td>Travel</td>
<td>59.2%</td>
<td>Travel</td>
<td>51.6%</td>
<td>Travel</td>
<td>30.2%</td>
</tr>
<tr>
<td>Electronic</td>
<td>46%</td>
<td>Electronic</td>
<td>36%</td>
<td>Electronic</td>
<td>30.2%</td>
</tr>
<tr>
<td>Videos</td>
<td>34%</td>
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<td>27.1%</td>
<td>Videos</td>
<td>15.8%</td>
</tr>
<tr>
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<td>22.6%</td>
<td>Magazines</td>
<td>14.9%</td>
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<td></td>
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<td>Insurance</td>
<td>21.2%</td>
<td>Flowers</td>
<td>13.3%</td>
</tr>
</tbody>
</table>
CHAPTER 3. DIFFERENCES BETWEEN THE INTERNET AND OTHER MEDIA

Web advertising is only 5 years old and is growing very fast. Therefore, we need to examine what are the characteristics of the Internet which cause advertising to be attracted to it and the differences between the web and other media, such as print and television. Bogart mentioned that “media may be differentiated in terms of size characteristic of their audience, their communication capabilities, cost and flexibility of usage by advertiser, and the environment they provide the advertising message.” Differences between Internet and other media are analyzed in this paper based on Bogart’s perspective.

A. Characteristics of Media

Sometimes people are confused between Web and Internet. Jacob Nielsen defines the Internet as a client program on the computer that allows any computer in the world to exchange data with any other computer in the world. The Web on the other hand, is a document browser, a hypertext system that runs over the Internet as one of its services. (The term “hypertext” means it can link to the other sites by means of hypertext links.)

The characteristic of the Web is described by Katherine MaCoy as “hyperfluid and six-dimensional, incorporating real-time, motion, sound and interactivity in addition to traditional X and Y coordinates.” The first prominent advantage of web advertising is the ability to link to other sites. Secondly, the Internet is an interactive medium that users (customers) can respond to immediately and is a personal medium through which advertiser can reach the individual customer. The Internet

45 Leo Bogart, p106.
can be used easy to update information more easily than any other medium. Overall, the advantages of the internet can described as follows; (1) reaches a large audience; (2) interactive; (3) 24-hours global accessibility; (4) a message delivery system combining sound and visual images; (5) linkable; (6) easily updated information; (7) ability to track and count the number responses.

As well as the Web, print has a heterogeneous visual context. It uses pictures and written words. The reader has a special purpose to read the content of print media. It is known that people accept magazine and newspaper ads as a part of print media. Text magazines are read for a longer period of time and picked up more often than picture books. Print is two-dimensional, which means it has interfaces such as table contents, page turning, and an index. But it is not interactive.

On the contrary, television has a one-dimensional flow. A message is dispersed in time and channel or station positions throughout the day. The viewer or the listener does not need to have a program for the purpose of hearing or watching a commercial. In addition, a television program doesn’t offer any interface to the user. The user can not review the previous program without video recording. The positive side is that animation and special effects can create fantasies for the audience. A large screen will offer more compelling and vivid images. Overall, television commercials demand a higher level of conscious awareness from the viewer than do print media.

In the beginning, there were no significant characteristic trends among web sites. Even though they had different information and functions, such as dot com and dot edu, most web designers did not give any special attention to the function of the site. However, with the appearance of e-commerce on the Web, companies have tried to build interactive web sites. Many advertisers are now beginning to include URLs in their print ads and television commercials. According to Lynda Maddox and Darshan Mehta, URLs in advertisements in traditional media are noticed, especially on television. 48 This research showed that “one out of eight who remembered seeing an ad actually

visited the web site". The reasons why they visited the web site that they saw in the traditional ads was to seek detailed information and interest in a particular product or a brand. Millward Brown Interactive’s research also reports that “the online and offline ads were working synergistically.” This research suggests that Web advertising will need to consider the role of the Web in conjunction with the other media. As seen from the above examples, to make advertising effective, mixed media will have more advantages than a specific kind of media.

B. Size of Audience

According to Bogart, “98 percent of American households have one or more television sets, and 84 percent of the adults watch television for an average of 4 hours on a given a day. Over the course of five weekdays, 85 percent of all adults read a paper, 62 percent read one on an average day. At least one single weekly or monthly issue of the current magazines is read by 90 percent of the adults." According to Nielsen-Netratings, in January 1999, 35 million US households had Internet access, which is approximately 34 percent of households. These households represented approximately 97.1 million people, or 36 percent of total US population. If the research took into account the users who access the Internet in a public place, such as the workplace, a library, or a school, the number of people who use the Internet will be expanded.

49 Ibid.
50 Ibid., p 56.
52 Leo Bogart, p 106.
C. Characteristic of Audience

Bogart mentioned that the print media makes a greater appeal to society with the highest education and social status than does television.\textsuperscript{54} The GUV survey\textsuperscript{55} shows that 89.8 percent of respondents of Internet users are highly educated, possessing at least some college experience and 59.3 percent having obtained at least one degree. In terms of the relationship between a person’s skill level and Web use, GVU reported that some Internet experts are still in high school and some novices have Ph.Ds. The average household income of Internet user of USA is $58,700. The GVU survey shows that there is a relationship between a high skill use of the Internet and an average income, and that the most proficient users also belong to the highest income level. The average age of Internet users in the USA is 38.5 years old.

D. Communication Capabilities

When people read the print media, reading involves eye movements which allow for selectively choosing information objects. Reading information on the Web in addition to selectively choosing information objects involves active actions such as scrolling and clicking. Thus, both print and web, media can be an active mind to the audience. On the contrary, when an audience views television, their mind becomes less active. Despite of this disadvantage, Bogart mentioned three advantages of the television commercial for an advertiser as follows: “1) of all the media, it comes closest to the intensity of interpersonal confrontation. 2) It generates huge audience at the same moment in time; 3) It permits the advertiser to encounter the consumer in a relaxed frame of mind.”\textsuperscript{56}

The most significant advantage of television is that it has a more dynamic quality of information

\textsuperscript{54} Leo Bogart, p 106.
\textsuperscript{55} GVU’s WWW User Survey, “Result of GVU’s 10th World Wide Web User Survey.”
\textsuperscript{56} Leo Bogart, p 108.
because of the combined sound and animation. The audience can relax without any pressure while watching television. When people surf web sites, however, they have a special purpose to find specific information, more so than do readers of print media.

Internet advertising is the most interpersonal medium of all other media. Personalization of the communicative power of the Web can have more direct marketing power than any other media. Using a well-maintained personal database or a purchase history of the online, purchasing advertisers can reach the right target audience. Another power of the Internet is that it can reach the global audience which has an access to computer networks.

E. Cost and Flexibility of Usage

According to IAB, online advertising revenue for 1998 was an estimated $1.9 billion, which grew 112 percent from $906.5 million for 1997. Compare to other advertising media, web-advertising still has a smaller percentage of total revenues. However, web-advertising revenues are increasing faster than any other media. (Table 2)

Table 2. Advertising Revenues

<table>
<thead>
<tr>
<th>Media</th>
<th>Spending (Billions)</th>
<th>Annual Growth</th>
<th>Media</th>
<th>Spending (Billions)</th>
<th>Annual Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper</td>
<td>$44.3</td>
<td>6.2%</td>
<td>Magazines</td>
<td>$10.4</td>
<td>5.5%</td>
</tr>
<tr>
<td>Direct Mail</td>
<td>$39.7</td>
<td>7.5%</td>
<td>Cable TV</td>
<td>$8.6</td>
<td>13.0%</td>
</tr>
<tr>
<td>Broadcast TV</td>
<td>$39.5</td>
<td>7.0%</td>
<td>Business Papers</td>
<td>$4.4</td>
<td>7.0%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$25.5</td>
<td>7.2%</td>
<td>Internet</td>
<td>$1.9</td>
<td>111.8%</td>
</tr>
<tr>
<td>Radio</td>
<td>$14.6</td>
<td>8.2%</td>
<td>Outdoor</td>
<td>$1.6</td>
<td>7.9%</td>
</tr>
<tr>
<td>Yellow pages</td>
<td>$12.0</td>
<td>5.0%</td>
<td>Farm Pubs</td>
<td>$0.3</td>
<td>4.6%</td>
</tr>
</tbody>
</table>


The cost of each media can be subdivided into different categories such as cost of production, cost per thousand impression, and cost of reach. David Yodar, executive media director at Anderson and Lemke, reports the comparison between costs for the web and for other media. According to Yodar, the average cost to produce a single banner is about $2,000. The average cost to produce a television commercial is about $300,000, and for magazines it is about $40,000.

In the cost per thousand, according to Yodar, prime time television is about $7 CPM, magazine costs are about $4 CPM and web costs on the average are $30 CPM. Compared to other media, the Web is far more expensive. Cost-per-thousand comparisons reflect the communication value and quality of particular target audiences. The reason for high CPM of Web is that the web can reach a right target audience.

F. Size and Length of the Message Unit

A television message unit is based on time. A thirty second television commercial is standard. Since 1983, according to Bogart, “the television networks have accepted 30-second commercials split to advertise two different products of the same advertiser.”

A magazine advertisement is based on its space. The units of advertisement are variable in the magazine space. Usually a magazine advertisement has one-quarter, half, full, and double page units.

Table 3 represents the standard banner sizes suggested by IAB. The most general form of banners on web sites is the full size banner. The banner’s message unit is based on the pixel, which reflects the space it occupies.

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60 Leo Bogart, p 146.
### Table 3. Standard Banner Size Suggested by IAB

<table>
<thead>
<tr>
<th>Pixel</th>
<th>Name of banner</th>
<th>Pixel</th>
<th>Name of banner</th>
</tr>
</thead>
<tbody>
<tr>
<td>468 x 60</td>
<td>Full Banner</td>
<td>120 x 90</td>
<td>Button 1</td>
</tr>
<tr>
<td>392 x 72</td>
<td>Full Banner with vertical Navigation Bar</td>
<td>120 x 60</td>
<td>Button 2</td>
</tr>
<tr>
<td>234 x 60</td>
<td>Half Banner</td>
<td>125 x 125</td>
<td>Square Button</td>
</tr>
<tr>
<td>120 x 240</td>
<td>Vertical Banner</td>
<td>88 x 31</td>
<td>Micro Button</td>
</tr>
</tbody>
</table>
CHAPTER 4. ELEMENTS OF HIGH CLICK-THROUGH AD BANNER

Generally speaking, any advertising in the print media consists of a headline, body copy, images, and a company logo. Since banner advertising has the limitation of size, its design also has to have some limitations. Usually, the banner doesn’t have body copy, but it can have an interactive button or a hypertext, and a combo box. Four Corners did some research about the click-through rates. Every month the company reported its findings and click-through rates from the Link Exchange web site. Neilsen’s Netratings reports the high click-through ad banner every week and every month. Yahoo, Double Click, and Millard Brown Interactive also conducted research concerning high click-through banner design.

A. Visual Elements

As mentioned by David Lauer, author of Design Basics, the design elements and principles might differ from each designer’s point of view. For this research, Wong and Lauer’s design elements and principles are mainly applied. Wong, author of Principles of Form and Design, describes four groups of design elements; conceptual elements; visual elements; relational elements; and practical elements. The conceptual elements are invisible such as dot, line, plane, and volume. When elements are visible, they belong to the category at the visual elements. The visual elements will have size, texture, shape, and color. Visual elements have an interrelationship in their direction, position, space, and gravity. The practical elements are concerned with the content of design, such as its meaning and function. Combining these basic design elements with design principles will allow the creation of a well-organized and balanced design. To create a well-organized and balanced design,

one must consider design principles such as visual unity, variety, balance, rhythm and proportion relationship, and spatial relationships.

Repetition, similarity, proximity, and continuity of visual elements contribute to the visual unity of the design. If there is too much unity, the design will be boring. To avoid visual tedium, visual contrast, anomaly, and concentration or emphasis on visual and relational elements is applied to the design. The most important point lies in how a designer manages the balance and harmony between the unity and variety. Sometimes, designer might emphasize unity more than variety and vice versa. It will depend on the content of the messages for communication.

1. Proportion

Proportion is concerned with the relations between the elements of the contents. According to Lauer, “proportion refers to the relative size, size measured against other elements or against some mental norm or standard.”64 Thus, proportion reflects the ratio of one part to another part, or one part to the whole or of the whole to another whole. While good proportion such as the Golden mean (Figure 11) is well known for creating visual pleasure, many Greek buildings and arts, Renaissance arts, and others are good examples that show how mathematical numbers are related with aesthetic perception. The ratio of the Golden Section is known 1: 1.618. Le Corbusier developed the most famous exposition of the Golden section in the modular theory. Le Corbusier explained the Golden section using a human body. It is not difficult to find well-proportioned architectural buildings, paintings, in our environment, including nature. High click-through banners show well-proportioned relationships between the image and the text, and the whole banner length.

The first and second banner in Figure 1265 shows that the ratio is approximately 8:5 between

64 David Lauer, p 66.
the whole length and the yellow area. The ratio 8:5 means that it is close to Golden Section’s 1:1.618. The first banner’s click-through rate is 1.03 percent, the second banner’s click-through rate is 0.91 percent, and the third banner’s click-through rate is 0.55 percent. When comparing the first banner and the third banner, which does not have the Golden Section ratio, the first banner has higher click-through rates.

According to Neilsens Netrating’s, the banner in Figure 13\(^6\) had 10.3 percent of click-through rates during the first 6 months of 1999. Compared this to the fact that the average banner’s click-through rates at 2 percent, CapitalOne’s banner has very high click-through rates.

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{golden_rectangle}
\caption{Golden Rectangle}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=0.8\textwidth]{garage_com_banners}
\caption{Garage.com’s banner in the Bannertips BT 002}
\end{figure}

This banner also shows the ratio of 8:5 between the whole length of banner versus length of the title.

Figure 14 shows the top ad banner during the time period from May 17 to 23. Most banners show similar 8:5 ratios of the whole length versus the empty area, the image area or the text area. Proportion is not the only element to have high click-through rates, but it should be one aspect to consider when designing an advertising banner.

Figure 13. CapitalOne’s banner

CTR=10.3%

Figure 14. Neilsen’s Netrating Top Ad Banner Viewed from May 17 to May 23, 1999

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2. Type Size and Style

The first banner’s click-through rate in Figure 15 is 3.03 percent, and the second banner’s click-through rate is 1.55 percent. The only difference between the two banners is the typographic treatment. When a banner has italic type, click-through rate is higher than when it has a standard roman. The click-through rate is almost doubled with the italic headline. Most web sites don’t use an italic style in the body text. A viewer may notice when a banner has the italic type because it is in contrast to the rest of the page and acts like an anomaly.

The first banner’s click-through rate in Figure 16 is 0.43 percent, and the second banner’s click-through rate is 0.32 percent. The difference between these two banners is the type size. The first banner’s type size is 18 point and the second banner’s type size is 13 point. The bigger the type the more attention it will attract. Most banners from Netratings top ten banners in Figure 14 have a large type size that is used to draw attention to the banner. Thus, using a large size type for a title design of banners is recommended to get high click-through rate.

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CTR=3.03%

CTR=1.55%

Figure 15. Garage.com’s Banner in the Bannertips BT 004

CTR=0.43%

CTR=0.32%

Figure 16. Four Corners’ Bannertips BT 015

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The first banner’s click-through rate in Figure 17 is 0.43 percent, and the second banner’s click-through rate is 0.37 percent. Four Corners point out that people read English left to right. Only when users read the banner, they will act on it. The location of a link such as “click here” should be considered as to the users’ behavior towards reading and interface.

CapitalOne’s banner in Figure 13 also has a summit icon on the right side of the banner. Real Network’s banner in figure 18 has 14.3 percent of click-through rate. It had 1.5 millions impressions during the first months of 1999. The “click here” was located at the end of the text with its rounded edge. Even though the type of click here is small, the eye direction moves to the lower right corner.

Figure 17. Four Corners’ Bannertips BT 015

Figure 18. Real Network’s Banner

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70 Ibid
71 Ibid.
72 Four Corners, “Best CTRs of 1999.”
4. Negative and Positive Space

Like other two-dimensional advertising, space in Web banner is merely an illusion even if it has an animation. Most of banners don’t have an illusion of depth. A banner usually does not use overlapping and transparency effects. Wong defines a positive space as surrounding a negative space, and a negative space as surrounding a positive form.73 Other words used to describe a negative space and a positive space are used by Arnheim as figure and a ground.74 The negative space is important to integrate the design elements as well as the positive form. Sometimes the negative space is surrounded by very unorganized positive forms. The texts on the left side in Figure 1975 are making the negative space in a stair shape, and this stair shape is not incorporated by the vertical line between the white and the yellow backgrounds. Also, the texts on the right side are creating a complicated negative space. Therefore overall design is not well organized in comparison to the first banner in Figure 12 (page 28). Most banners in Figure 2076 use a line up between each element to avoid visual noise. As Arnheim points out that “simplicity affects not only the shape of a pattern, but also its spatial orientation,”77 the relationship between positive and negative shapes can either create clear and ordered banner design or not.

![Figure 19. Garage.com’s banner](image)

CTR=0.55%

73 Wucius Wong, p 127.
75 Four Corners, “Banner Tips Issue # 002.”
76 Nielsen/Netratings, <http://www.netratings.com>
77 Rudolf Arnheim, p 231.
Figure 20. Neilsen's Netrating Top Ad Banner Viewed from August 2 to August 8, 1999

5. Color

Color is one of the powerful tools in communication. Screen colors are composed from primary color lights: red, green, and blue, and consists of pixels. Each pixel delivers specific color information provided by its bit resolution. The color on the monitor differs by its platform and monitor manufacturer. It depends upon the user's own color setting, a kind of monitor and its lighting circumstance, and the web browser. Even with same Web sites, the colors can be very different on the user's peripherals.

According to the author's research, many Web sites use monotone colors for their

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78 Sunghyun Ryoo et al, "The research of new multimedia design development on Internet," Journal of Korean Society of Design Studies, Vol.11, No.2(May, 1998), pp 144-152. The research was conducted during January 3-February 15, 1997, and 185 web sites were randomly selected using Netscape Navigator.
background. About 65 percent of Web sites use monochromatic colors and 35 percent of Web sites use the pattern for the background. Among the monochromatic colors, white takes 70.7 percent, black takes 9.7 percent, and gray takes 4.9 percent. In the overall usage of color, achromatic color backgrounds occupy 56.6 percent. The reason is that the light color of the background for the black text is 37.5 percent, white is 11.5 percent and gray is 5.7 percent. For the hypertext, the blue tone is the most popular and next it is the red tone. Thus, the achromatic usage was very widely incorporated on the Web sites. The author assumes that bright color light makes the users’ eyes more fatigued compared to achromatic colors or monochromatic colors of pastel tone, but bright color will have more attention than achromatic color or monochromatic colors of pastel tones.

In Figure 21, the gray background shows click-through rate 1.53 percent, the red background 1.33 percent, and the yellow background 1.07 percent. The result was surprising because most banner tips were recommend using bright colors to get the high click-through rates. The bannertips come to the conclusion that the fact of that “gray was the highest ranking color is consistent with the fact that it’s the color of some system error messages, so people are probably trained to look at more quickly than other color.”

Another test from the Four Corners shows in Figure 22 that gray backgrounds with the black text banners have higher click-through rates than the white and black backgrounds. In Figure 22 the gray background with the black type has higher click-through rates than the gray background with the orange type and than the white or black background. The first background’s click-through rate is 3.03 percent, the second banner’ click-through rate is 2.52 percent, third banner’ click-through rate with the white background is 2.20 percent, and the last banner’s click-through rate with the black background is 2.16 percent.

However, Most of Netrating’s top 10 viewed banners in Figure 14 and 20 (page 29 and 33) are very colorful. Moreover, in Figure 23, the banner’s click-through rate with the red background and a purple text is 16.9 percent, and the yellow background and a black text is 11.2 percent. Webreview and Double click report that people respond better to bright colors such as blue, green, yellow, or certain color combinations, colors such as white, red, and black are less effective. Figure 23 shows that an unusual color combination such as red and blue has a higher click-through rate. The author assumes that the combination of yellow and black has a strong impact in the CMYK mood, which is a pigment color, different color light have a different impact on the user.

There are two different opinions that exist in the color usage of banner advertising. Four Corner’s banner test’s results show that the combination of a gray background with the black color has a higher click-through rate than orange and yellow background. Other research shows that bright and unusual color combinations attract more users’ attention.

The color in a banner will work with its visual and verbal context, not only banner itself. Currently the commercial Web site uses too much color to make information dominant. If every element is dominant then there are no dominant elements. And only visual chaos exists.

6. Design style

The term design style can be described as “the means by which aesthetic ends are achieved, the values reflected in those ends, and the culture within which those values prevail.”

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Figure 21. Garage.com’s Banner in the Bannertips BT 003

CTR=1.56%
CTR=1.33%
CTR=1.07%

Figure 22. Garage.com’s Banner in the Bannertips BT 004

CTR=3.03%
CTR=2.52%
CTR=2.20%
CTR=2.16%

Figure 23. Best CTRs for Picture Sites

CTR=16.9%
CTR=11.2%
The same message can be presented in many different styles such as clean and simple or complicated and hybrid. Hamlin mentions that design is one of the important aspects in creating effective banner advertising. A creative design can make the difference between a low click-through rate and a high click-through rate. According to Hamlin, "a creative design doesn’t have to mean flashy graphics, and an effective design can just as easily mean a two word pitch on a white background." Thus, the banner design needs to be kept simple in verbal and visual aspects. The Four Corners also reports that "a simple and distinctive design compels visitors to explore, discover and be part of the vision."

Figure 12(page 28) shows that a few words and simple design compositions have a higher click-through rate than many words and complicated compositions. Simplicity, according to Arnheim, is "the subjective experience and judgement of an observer who feels no difficulty in understanding what is presented to him."88

The banner size is limited on the given screen size, and banners are located with other information. To achieve a simple design, a banner designer should consider organizing the structure as well as unifying the elements in design. A simple and refined banner will be easy to recognize among the given complex environment. Moreover, clear information will be noticed easily.

For instance, a current banner running on the Web shows few words and a simple color combination in Figure 24.89

7. Hierarchy

Hierarchy is concerned with the visual relationship of each part to another part. When hierarchy is not clear, visual complexity will occur.

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86 Scott Hamlin, "10 Tips for Designing Effective Banner Ads."
88 Rudolf Arnheim, p 55.
A reading sequence in an effective design should be reflected follow by a well-refined hierarchy from the most prominent to least prominent information.

In figure 25, both banners can divide four groups of information: dollar symbols, titles, subtitles and “click here”. In the first banner, the hierarchical relationship between the title and the subtitle is clearer than in the second banner. In the second banner, the visual weight between the title and subtitle is too similar to make a clear hierarchy.

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Figure 25. Four Corners’ Bannertips BT 014

8. Similarity and Repetitions

Wong defines similarity as “a relationship of forms resembling one another in shape. Similar forms can vary in size, color, texture, direction, and/or position.” Similarity can be achieved in the same shape with a different size or color, texture direction and so on.

In Figure 26, the first banner’s click-through rate is 0.55 percent and the second banner’s click-through rate is 0.47 percent. The only difference between these two banners is that the first banner uses the dollar symbol in varying sizes, and the second banner uses symbols for different currencies. Four Corner points out that a dollar symbol is more clickable than other currencies. The author assumes that the users are more familiar with a dollar symbol which can lead to higher click-through rates than other currencies symbols. Apart from familiarity, combining different currencies have no visual unity or repetition in terms of form and size to organize the information.

Repetition, according to Lauer, is “something repeated in various parts of design to relate those parts together.” Repetition is one of the simple methods to create a visual unity. According to Wong, “repetition of unit forms usually conveys an immediate sense of harmony.”

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91 Wucius Wong, p 348.
93 David Lauer, p 8.
94 Wucius Wong, p 51.
The first banner in the Figure 27 shows the repetition of the click here message with the same size and color. This banner shows that a verbal repetition as well as a visual repetition has a power to make a high click-through rate compared to other banner examples in Figure 27.

The other banners in Figure 27 do not create the feeling of repetition even if the photographs are the same size, and these banners show lower click trough rates than the first banner because of their lack of repetition.

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Figure 26. Four Corners’ Bannertips BT 014

CTR=0.55%

CTR=0.47%

Figure 27. Four Corners’ Bannertips BT 006

CTR=0.91%

CTR=0.52%

CTR=0.19%

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9. Contrast

Wong defines contrast as “relating forms the components of forms to emphasize their differences in one or more aspects, such as shape, size, color, texture, direction, and/or position.”\textsuperscript{96} With contrast, design can achieve the visual emphasis or focal point to grasp users’ attention.

The banners in Figure 28\textsuperscript{97} were tested by on the same keyword search, at the same day, and the same time of the day on Yahoo. These three banners are all animated and have the same message for “Starship Troopers”. In the first banner, the visual hierarchy is clearer than other banner. The contrast of the type size and the color make a visual emphasis and the color of the click here button is brighter than on the other banners to attract users’ attention. The second and the third banners don’t have a clear hierarchy. When compare to average click-through rates, the first banner shows a very high click-through rate. Even though all these banners have a size contrast, the method of organizing information makes it difficult to read the banners.

When a banner has a hierarchy, contrast, and a simply organized structure, it should have a higher click-through rate than others.

![Click here](image1)

**CTR=20%**

![Click here](image2)

**CTR=9%**

![Click here](image3)

**CTR=8%**

*Figure 28. Yahoo’s banner test*

\textsuperscript{96} Wucius Wong, p 345.

10. Context, Location, and Circumstance of Advertising Banner

DoubleClick\(^98\) suggests that putting the banner at the top of the Web page in order to increase click-through rate. Double Click says that ‘the best possible scenario is having banners placed both on the top and on the bottom of a page.” Another research reports\(^99\) (Figure 29) that “the placement of the ad on the side of the page, next to the right scroll bar, increased click-through on average of 228 percent over placement at the top of the page. The author assumes the reason that the banner at the top is ignored by users due to the fact that it occupies the placement of the title, or the browser toolbar. The placement of the banner near the scroll bar is more convenient to make a click in terms of interface use and partially explains the high click-through rate.

![Top Banner CRT=1.4%](image1)

![Side Banner CTR=3.4%](image2)

![Top Banner CRT=0.7%](image3)

![Side Banner CTR=1.8%](image4)

**Figure 29. Banner Placement Study**

\(^98\) Double Click, “Research Findings: Banner Effectiveness study.”

\(^99\) Graduate students at the School of Business Administration at the University of Michigan, in cooperation with Athenia Associate, “Banner Ad Placement Study,” Webreference, (22 April, 1997), <http://www.webreference.com/press/970422.html>. 
An individual appeal to the user motivation is important to achieve the user's attention. For instance, if the user accesses a search engine to find information, banner advertising can be made to match the information that the user wants to seek. Figure 30 shows the result when a user types in the word 'car' in the search engine on Yahoo. All banners on this page show car-related businesses. Internet World suggests that "Keep ads in context". Making the banner match the contents of the web page (which means a targeted banner) will lead to getting more attention from users.

![Figure 30. Search Engine on the Yahoo.com](image)

11. Animation

Many research sites have reported that an animated banner will achieve a much higher click-through rate than a static banner. Double click reports that "animation can help catch a user's eye. Using simple Java or GIF animation can increase response rates by up-to 25percent."101 An animated banner has a file size that will be bigger than a static banner. Four Corners tested an animated title banner versus static banner. In figure 31, the first banner is static, and the second banner's title is animated.

101 Double Click, "Research Findings: Banner Effectiveness study."
As the result, there is no significant difference in the design, while the second banner's file size is twice bigger than the first banner's. However, the first banner has only 0.4 percent higher click-through rates than an animated banner. Although there is no big difference in the click-through rates, the comparison still shows that a small size banner has a more click-through rate than a bigger file size banner. Hamlin agrees that an animated banner works to increase the users' response, but he also recommends that banner size be small.¹⁰³

![Banner #2 (2068 bytes)](image1)
CTR=0.76%

![Banner #1 (5698 bytes)](image2)
CTR=0.72%

Figure 31. Four Corners' Bannertips BT 015

### B. Verbal Elements

Advertising is based on ideas. According to Runyon, "a good advertisement is a gestalt, a single, unified impression."¹⁰⁴ These ideas will communicate through signs such as words, phrases, pictures, and animations to convey the meaning. The main means of interacting between human being is through language. Letters as the written language have the power to represent an idea, thought, and communication. The verbal elements in a banner can be a headline, bodycopy, company name, and a URL (Uniform Resource Locator). The banner usually does not need to have all these elements in one

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¹⁰³ Scott Hamlin, “10 Tips for Designing Effective Banner Ads.”
design. Sometimes only one headline can convey a strong message. Thus, a word itself without any visual images can convey a strong visual message.

1. Headline

The headline is a major element in advertising. To get people’s attention, headlines could convey the essence of the message. The headline in a banner design seems different from print advertising. To get a higher click-through rate, Doubleclick tips suggests one use a cryptic message. But the message will depend on the banner’s purpose, branding or a direct marketing. If the banner that says, “Toyota be good to yourself” will carry the brand image, it will get a lower click-through rate the banner that says, “Click here for a cool car”. Figure 32\textsuperscript{105} shows that a short headline without any description has a higher click-through rate than long headline.

2. Click here and Free stuff

Many researches pointed out that ‘Click Here’ message will increase the click-through rate. The phrase such as ‘Click Here’ can evoke an action. According to Double Click, ‘Visit Here’ and ‘Enter Here’ tend to improve response rates by 15 percent.\textsuperscript{106} Four Corners’ banner test in Figure 33\textsuperscript{107} shows the same result: when add the ‘Click Here’ message is added, the click-through rate is higher than without ‘Click Here’.

Figure 34\textsuperscript{108} presents the results of the comparison of the Neilsen’ Netrating Top 10 Ad Banners viewed the week ending June 27, 1999. Most banners include the ‘Click Here’ message.

\textsuperscript{105} Four Corners,”Banner Tips Issue # 002.”
\textsuperscript{106} Double Click, “Research Findings: Banner Effectiveness Study.”
\textsuperscript{107} Four Corners,”Banner Tips Issue # 003.”
Currently ‘Click Here’ is the most well known verbal form of the banner design used to provoke a response. Jim Sterne mentions that the next most powerful thing after ‘Click Here,’ on the banner will be ‘It’s free.’ Many banners use the word ‘Free’ without any explanation and a free offer attracts people click on the banner. The banners from Link Exchange shows the word ‘Free’ without any other information or a message has a power to make a high click-through rate. (Figure 35\textsuperscript{109}) If a banner offers some kind of free stuff or services related to the target user, the click-through rate will increase.

3. No URL

Four Corners tested banners with URL and without URL (URL is the address of a Web). As the result shown in Figure 36\textsuperscript{110} says a banner without URL has a higher click-through rate than the one with URL. As Double Click mentions, cryptic messages can intrigue people. The URL usually represents the characteristics of a company. Therefore, when users look at the URL, they can guess what the Web site is for, and then may lose their curiosity.

Figure 32. Four Corners’ Bannertips BT 002

\begin{figure}
\centering
\includegraphics[width=\textwidth]{bannertips.png}
\caption{Four Corners’ Bannertips BT 002}
\end{figure}

\begin{center}
\begin{tabular}{cc}
\hline
\textbf{CTR=1.03\%} & \textbf{CRT=0.60\%} \\
\hline
\end{tabular}
\end{center}

\textsuperscript{109} Four Corners, “Best CTRs Non- Picture Banners.” (Accessed 26 August,1999), \textless http://www.bannertips.com/bestctronpic.shtml\textgreater.

\textsuperscript{110} Four Corners, “Banner Tips Issue # 011.” (May, 1999), \textless http://www.bannertips.com/BT011_answer.shtml\textgreater.
Figure 33. Four Corners' Bannertips BT 003

CTR=1.07%

CTR=0.82%

Figure 34. Neilsen's Netratings Top 10 Ad Banners viewed From June 21 to June 27, 1999

CTR=7.8%

CTR=5.9%

Figure 35. Best CTRs for Non-Picture Banners
C. Technical Elements

File size is an important issue in designing Web banners. Typically, when designing a banner, a small file size is required because the banner has to be loaded faster than any other information on the web page. Otherwise, users won’t wait for unexpected information.

1. Small Size: Pixel and Byte

The recommended file size for a banner is about 10-15 kilobyte. The size of a banner is decided by pixels, and the file size is decided by PPI (point per inch) and by the amount of information that the banner contains. Pixels are the individual dots that are used to display an image on the computer monitor. Bits, binary digits, are the smallest units of information on a computer. One byte is equal to eight bits, one-kilobyte is equal 1024 bytes, and one megabytes is equal 1024 kilobytes.\textsuperscript{111}

Four Corners tested the size of six banners in bytes. All banners are visually the same, the only difference is the file size, which affects the download speed. Amazingly, the results in Figure 37\textsuperscript{112} show that the smallest file size of banner has a highest click-through rates, and click-through rates reduce with the increase of file size.


\textsuperscript{112} Four Corners, Banner Tips Issue # 009,” (March, 1999), <http://www.bannertips.com/BT009_answer.shtm>.
2. GIF animation and Rich Media

An animated banner has known a higher click-through rate than a static banner. GIF (Graphic Interchange Format) is widely used to create animated banners. "GIF is an 8-bit format, which means a GIF image can contain a maximum of 256 colors." Now, a monitor can display thousands or millions of colors, but only few years ago, a monitor can display only 256 colors. To create an animated web design, GIF is used as the most popular tool. Using the GIF 89a format, it is possible to make an image transparent, which allows the designer to remove the image’s background. It is also possible to use interlacing, which allows the image to be displayed by progressive renderings. The advent of Flash, Java, and Shockwave give a great opportunity to create animated and interactive banners.

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113 Elaine Weinamnn and Peter Lourekas, p 317.
The effectiveness of Rich Media, which allows using sound, motion, and interaction, was researched by Millard Brown Interactive. The study tested three Rich Media banners, Novell, Intel Corp., and barnesandnoble.com (Figure 38) and compared them to a GIF animation. Novell’s banner in the study was created using Macromedia’s Flash, Intel and barnesandnoble.com where made using Java based- animation. The results demonstrate that the Rich Media banners increased the click-through rate. The average click-through rate for the control banner was 0.98 percent and for the test banner, it was 4.32 percent. Also, this study found that the Rich Media banners are more noticed than animated GIF banner. This study reported that 61 percent of the survey population from the average of the tested banners noticed Rich Media banners, while 30 percent of the control population, noticed an animated GIF banner.

D. Interface

The term “interface”, according to Laurel, a manager of human Interface Group, “is taken to be a discrete and tangible thing that we can map, draw, design, implement, and attach to an existing

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bundle of functionality."115 The interface is a contact surface between two regions, persons and messages or persons and things. In the beginning, the banner didn’t have an interface function except being clickable. However, the interface in the banner is something beyond a simple click and getting more powerful in achieving user interaction by the advent of high technology such as Shockwave and Java. The banner is an interactive method to take orders, search information, and play games without accessing other pages.

1. Use Radio and Push Button

According to Four Corners, the click-through rate of a banner that has a radio button is higher than the click-through rate of other banners. In Figure 39,116 three different types of banner are used to present the same content. The first banner uses a radio button and a push button, and the second banner, though divided into two parts still has radio and push buttons. Through the comparison, it is clear that these two banners have higher click-through rates than third banner. The Four Corners claim adding user friendly interface elements is the best way to increase the click-through rate.

CTR=0.68%
CTR=0.34%
CTR=0.26%

Figure 39 Four Corners’ Bannertips BT 011

116 Four Corners, “Banner Tips Issue # 011.”
2. Use Interactive Graphics

The Real Networks banner in Figure 18 (page 32) featured an interactive graphic button, however, the function of the button is not interactive, which means it looks like an interface button but is not working. Many banner designers have been applying fake interactive buttons; because they still contribute to the high click-through rate. This kind of interface makes people to click on the play or forward button, no matter where the location of the click spot is, it will link users to the advertiser’s homepage.

E. Semiotic Approaches and The Others

Nadin and Zakia, the authors of Creating Effective Advertising Using Semiotics, define that “advertisement is a semiotic activity.”\(^\text{117}\) Semiotics, according to Nadin and Zakia, “is the theory of how different signs are constituted and classified according to their uses and interpretations.”\(^\text{118}\) The semiotic interpretation of a message might be different from the intended interpretation based on characteristics of people’s cultural, social, and psychological backgrounds. The Web, as a global medium, needs to connect many different countries and people.

The banner as a mediator between the advertiser and the users can be interpreted as a sign. The sign involves three things such as “how a thing is presented to us, what is presented, why it is presented.”\(^\text{119}\) The sign can be simple or complex depending on the visual forms, intentions, means, and so on.

\(^{118}\) Ibid.
\(^{119}\) Ibid., p.5.
1. Icon and Symbol

An icon, which represents an “object based on conventions of resemblance or likeness,” can convey its meaning rather more directly than an abstract symbol. Millward Brown research reports that the comet cursor is effective in increasing the click-through rate. According to the results, the click-through rate of the banner without a comet cursor was 2.76 percent, while the click-through rate of the banner with comet cursor was 4.86 percent. In figure 40, a comet cursor is shown in the shape of tooth. When the mouse moves onto the banner, the regular shape of the cursor is changed to an icon. The relationship between the icon and the toothpaste makes a strong visual context. Thus, making a more memorable and interesting banner will increase the click-through rate.

Figure 40. Comet Cursor of Crest ad banner

A symbol, according to Nadin and Zakia, represents “an object or concept based on agreed upon conventions.” The identity mark of the company is one of the most representative symbol forms. A symbol has a great power to communicate when it has a brand loyalty. In Figure 41, The banner with the symbols of the companies show a higher click-through rate than the banner that has photography with the text of company names. Building a good branding of the company will be another factor in making a high click-through rate banners.

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120 Ibid., p 140.
122 Ibid., p 140.
123 Four Corners, “Banner Tips Issue # 014.”
2. Visual Metaphor

Nadin and Zakia define a metaphor as "a figure of speech that provides an understanding of one thing in terms of another." A metaphor begins with understanding familiar an element in unfamiliar way and connecting people's ideas and things that were not previously connected. A metaphor takes place in semiotic contexts based on common knowledge and understanding of objects. In figure 42, the underlined title represents a linkable ability. Web users have been educated that an underlined text means a hyperlink. Thus, an underlined text on the web has become a metaphor to represent a hyperlink. As a result, when banner is shown with an underlined title, it has a higher click-through rate than without an underlined title. If the designer can present a visual metaphor to convey the meaning behind the banner, the author assumes that it will increase the click-through rate.

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124 Mihai Madin and Richard Zakia, p 140.
125 Four Corners, “Banner Tips Issue # 014.”
3. Irony

Irony is defined as “the expression of one’s meaning by using words of the opposite meaning in order to make one’s remarks forceful.”\(^\text{126}\) An ironic meaning has usually been described as “the opposition, negation or contradiction of the sentence meaning.”\(^\text{127}\) The surface meaning of the sentence in Figure 43\(^\text{128}\) is different from the underlying meaning. The intent of the first banner in Figure 43 is to make people click on it, but its surface meaning says that it is not. In the second banner in Figure 43, on the other hand, the surface and underlying meanings are the same, therefore, there is no hidden meaning. Thus, irony can make people click on the banner.

![NO, you can not click here. CTR=6.02%](Image)

![YES, you can **click** here CTR=unknown](Image)

Figure 43. Banners from Banner Olympics

4. Others/Entertainment

Since the time when Hewlett-Packard offered an animated game banner, called Pong, many advertisers have offered other game banners. According to Netratings, Treeloot banner in Figure 43 recorded 12.7 percent click-through rates during the first six months of 1999. A game with some kind of award especially makes people click on the banner. All banners are clickable, and even if users click on the white space of the banner they will still be taken to the advertiser’s homepage.

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Figure 44. Trecloot’s Banner on the galaxy.einet.net
CHAPTER 5. CONCLUSION

Currently, a banner is the most popular form among the existing kinds of Web advertising. During the course of this research, the author found that principles of design, interface and verbal elements could increase clickability of the banner. Semiotic approaches such as symbols and icons, visual metaphors and irony, were also found to make high click-through banner rates. The assumption that users don’t want to wait for a slowly downloading banner was validated by this study, and most users were likely click on the first exposed banner.

The author’s findings in this research suggest that applying design principles to a banner design can create a higher click-through rate, adding an interactive interface will also improve the click-through rate. As suggesting in this research, the contents of banner design can be improved through typographic and semiotic approaches. In addition a small file size for a quick loading time and rich media based on new technology are suggested to improve the click-through rate. Right targeting and using the context of the content can be other factors in increasing the click-through rate that is suggested in the visual elements.

In this research, existing data are used to analyze the banners. The click-through rate should be different according to its number of impressions and external variables such as contents, location, and context of banners. The click-through rate could be changed by using different external variables. Because some research data shows different results, more profound research is required that includes the study of color and placement the banners on the Web site.

The computer, beyond being a tool, became a communication medium. The Web with the advent of the World Wide Web and advertising can be a pipeline to convey the messages quickly and effectively. Through this electronic pipeline, a print magazine becomes an E-zine, a newspaper becomes a digital newspaper, and a television commercial becomes an E-mercial. The current state of
the Web can deliver any kind of information including sound and video. In the future, with new
technologies, advertising on the Web will become more sophisticated and complex. However, the
author believes that proper use of the design principles to convey the messages and organize
information will remain.

The author's findings are summarized as in tables 4-8.

Table 4. Visual Elements

<table>
<thead>
<tr>
<th>Findings</th>
<th>Examples</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion</td>
<td></td>
<td>Golden mean</td>
</tr>
<tr>
<td>Type Size and Style</td>
<td><img src="example1.png" alt="Example" /></td>
<td>Bigger typesize and italic style</td>
</tr>
<tr>
<td>Order and Placement</td>
<td><img src="example2.png" alt="Example" /></td>
<td>User reads from left to right</td>
</tr>
<tr>
<td>Negative and Positive Space</td>
<td><img src="example3.png" alt="Example" /></td>
<td>Negative space is important as positive space.</td>
</tr>
<tr>
<td>Color</td>
<td><img src="example4.png" alt="Example" /></td>
<td>Two different opinions exist. More research is needed.</td>
</tr>
<tr>
<td>Design Style</td>
<td><img src="example5.png" alt="Example" /></td>
<td>Simple and clean design</td>
</tr>
<tr>
<td>Hierarchy</td>
<td><img src="example6.png" alt="Example" /></td>
<td>Clear hierarchy</td>
</tr>
<tr>
<td>Similarity and Repetition</td>
<td><img src="example7.png" alt="Example" /></td>
<td>Shape repetition and similarity</td>
</tr>
<tr>
<td>Contrast</td>
<td><img src="example8.png" alt="Example" /></td>
<td>Size and color contrast</td>
</tr>
</tbody>
</table>
### Table 4. Visual Elements (continued)

<table>
<thead>
<tr>
<th>Context and location</th>
<th>Two different opinions exist regarding location. More research is needed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animation</td>
<td>File size is a concern.</td>
</tr>
</tbody>
</table>

### Table 5. Verbal Elements

<table>
<thead>
<tr>
<th>Findings</th>
<th>Examples</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headline</td>
<td><img src="image1" alt="Example Image" /></td>
<td>Short headline</td>
</tr>
<tr>
<td>Click here and Free stuff</td>
<td><img src="image2" alt="Example Image" /></td>
<td>Add action</td>
</tr>
<tr>
<td>No URL</td>
<td><img src="image3" alt="Example Image" /></td>
<td>Do not add URL</td>
</tr>
</tbody>
</table>

### Table 6. Technical Elements

<table>
<thead>
<tr>
<th>Findings</th>
<th>Examples</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>File size</td>
<td><img src="image4" alt="Example Image" /></td>
<td>Small as possible</td>
</tr>
<tr>
<td>Rich media</td>
<td><img src="image5" alt="Example Image" /></td>
<td>Shockwave and Java based on animated banner</td>
</tr>
</tbody>
</table>
Table 7. Interface

<table>
<thead>
<tr>
<th>Findings</th>
<th>Examples</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Radio Button</td>
<td><img src="image_url" alt="Image" /></td>
<td>Use company’s symbol rather than name.</td>
</tr>
<tr>
<td>Use Interactive graphics</td>
<td><img src="image_url" alt="Image" /></td>
<td>Icon as a comet cursor increases the CTR</td>
</tr>
</tbody>
</table>

Table 8. Semiotic Approaches and The Others

<table>
<thead>
<tr>
<th>Semiotics</th>
<th>Examples</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icon and Symbol</td>
<td><img src="image_url" alt="Image" /></td>
<td>Use company’s symbol rather than name.</td>
</tr>
<tr>
<td></td>
<td><img src="image_url" alt="Image" /></td>
<td>Icon as a comet cursor increases the CTR</td>
</tr>
<tr>
<td>Visual Metaphor</td>
<td><img src="image_url" alt="Image" /></td>
<td>Visual metaphor will increase the CTR.</td>
</tr>
<tr>
<td>Irony</td>
<td><img src="image_url" alt="Image" /></td>
<td>Irony will increase the CTR.</td>
</tr>
<tr>
<td>Others/Entertainment</td>
<td><img src="image_url" alt="Image" /></td>
<td>Games will increase the CTR.</td>
</tr>
</tbody>
</table>
APPENDIX. FOUR CORNERS’ BANNER TEST

Four Corners’ Banner Tips Issue # 002

Banner #3, CTR = 1.03% (97:1)

Start up . . . Kick butt . . . Cash out! [Click Here]
garage.com
we start up startups

Banner #5, CTR = 0.91% (110:1)

Turn your garage into a multi-billion dollar company! [Click Here]
garage.com
we start up startups

Banner #4, CTR = 0.83% (120:1)

Start Up
Kick Butt
Make History [Click Here]
garage.com
we start up startups

Banner #1, CTR = 0.60% (167:1)

Need money for your startup company?
Want to invest in startups? [Click Here]
garage.com
we start up startups

Banner #2, CTR = 0.55% (182:1)

Start up
Kick butt
Cash out [Click Here]
garage.com
we start up startups

Banner #6, CTR = 0.53% (189:1)

Start up
Kick butt
Cash out
Hewlett & Packard did it. So can you. [Click Here]
garage.com
we start up startups
Four Corners' Banner Tips Issue # 003

Banner #4, CTR = 1.56% (64:1)

Start up ... Kick butt ... Cash out! garage.com
we start up startups

Banner #5, CTR = 1.33% (75:1)

Start up ... Kick butt ... Cash out! garage.com
we start up startups

Banner #6, CTR = 1.23% (82:1)

Start up ... Kick butt ... Cash out! garage.com
we start up startups

Banner #2, CTR = 1.07% (93:1)

Start up ... Kick butt ... Cash out! garage.com
we start up startups

Banner #1, CTR = 1.06% (95:1)

Start up ... Kick butt ... Cash out! garage.com
we start up startups

Banner #3, CTR = 0.82% (122:1)

Start up ... Kick butt ... Cash out! garage.com
we start up startups
Four Corners' Banner Tips Issue # 004

Banner #2, CTR = 3.03% (33:1)

Start up . . . Kick butt . . . Cash out!

Banner #3, CTR = 2.52% (40:1)

Start up . . . Kick butt . . . Cash out!

Banner #4, CTR = 2.20% (45:1)

Start up . . . Kick butt . . . Cash out!

Banner #5, CTR = 2.16% (46:1)

Start up . . . Kick butt . . . Cash out!

Banner #1, CTR = 1.55% (64:1)

Start up . . . Kick butt . . . Cash out!

Banner #6, CTR = 1.43% (70:1)

Start up . . . Kick butt . . . Cash out!
Four Corners’ Banner Tips Issue # 006

Banner #4, CTR = 0.91% (110:1)

Banner #2, CTR = 0.50% (200:1)

Banner #3, CTR = 0.52% (192:1)

Banner #6, CTR = 0.43% (232:1)

Banner #1, CTR = 0.35% (286:1)

Banner #5, CTR = 0.19% (526:1)
<table>
<thead>
<tr>
<th>Banner #1 (2477 bytes), CTR = 2.60% (38:1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose what you want to do:</strong></td>
</tr>
<tr>
<td>☑ Create Like a God</td>
</tr>
<tr>
<td>☐ Work Like a Slave</td>
</tr>
<tr>
<td>☐ Command Like a King</td>
</tr>
<tr>
<td>☐ Read Rules For Revolutionaries</td>
</tr>
<tr>
<td><strong>OK</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Banner #2 (5161 bytes), CTR = 2.32% (43:1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose what you want to do:</strong></td>
</tr>
<tr>
<td>☑ Create Like a God</td>
</tr>
<tr>
<td>☐ Work Like a Slave</td>
</tr>
<tr>
<td>☐ Command Like a King</td>
</tr>
<tr>
<td>☐ Read Rules For Revolutionaries</td>
</tr>
<tr>
<td><strong>OK</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Banner #3 (6630 bytes), CTR = 1.35% (74:1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose what you want to do:</strong></td>
</tr>
<tr>
<td>☑ Create Like a God</td>
</tr>
<tr>
<td>☐ Work Like a Slave</td>
</tr>
<tr>
<td>☐ Command Like a King</td>
</tr>
<tr>
<td>☐ Read Rules For Revolutionaries</td>
</tr>
<tr>
<td><strong>OK</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Banner #4 (7422 bytes), CTR = 1.29% (77:1)</th>
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</thead>
<tbody>
<tr>
<td><strong>Choose what you want to do:</strong></td>
</tr>
<tr>
<td>☑ Create Like a God</td>
</tr>
<tr>
<td>☐ Work Like a Slave</td>
</tr>
<tr>
<td>☐ Command Like a King</td>
</tr>
<tr>
<td>☐ Read Rules For Revolutionaries</td>
</tr>
<tr>
<td><strong>OK</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Banner #5 (9742 bytes), CTR = 1.18% (83:1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose what you want to do:</strong></td>
</tr>
<tr>
<td>☑ Create Like a God</td>
</tr>
<tr>
<td>☐ Work Like a Slave</td>
</tr>
<tr>
<td>☐ Command Like a King</td>
</tr>
<tr>
<td>☐ Read Rules For Revolutionaries</td>
</tr>
<tr>
<td><strong>OK</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Banner #6 (10149 bytes), CTR = 1.12% (89:1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Choose what you want to do:</strong></td>
</tr>
<tr>
<td>☑ Create Like a God</td>
</tr>
<tr>
<td>☐ Work Like a Slave</td>
</tr>
<tr>
<td>☐ Command Like a King</td>
</tr>
<tr>
<td>☐ Read Rules For Revolutionaries</td>
</tr>
<tr>
<td><strong>OK</strong></td>
</tr>
</tbody>
</table>
Four Corners’ Banner Tips Issue # 010

Banner #2 (333 bytes), CTR = 0.66% (151:1)

Click Here for FREE Internet Marketing Newsletter

Banner #5 (2045 bytes), CTR = 0.56% (178:1)

FREE Click Here for FREE Internet Marketing Newsletter

Banner #6 (1916 bytes), CTR = 0.54% (185:1)

FREE Click Here for FREE Internet Marketing Newsletter

Banner #1 (9053 bytes), CTR = 0.44% (227:1)

Click Here for FREE Internet Marketing Newsletter

Banner #3 (3191 bytes), CTR = 0.42% (238:1)

Click Here for FREE Internet Marketing Newsletter

Banner #4 (1876 bytes), CTR = 0.34% (294:1)

FREE Click Here for FREE Internet Marketing Newsletter
Four Corners' Banner Tips Issue # 011

Banner #3 (2500 bytes), CTR = 0.68% (147:1)
What kind of web hosting do you want?
- Free Shopping Cart
- 24/7 Tech Support
- Inexpensive

Banner #1 (6301 bytes), CTR = 0.34% (294:1)
Free shopping cart creator!
Click here

Banner #5 (5307 bytes), CTR = 0.34% (294:1)
E-commerce has never been so easy...
Free shopping cart creator!
Click here

Banner #4 (5550 bytes), CTR = 0.30% (333:1)
E-commerce has never been so easy...
Free shopping cart creator!
Click here

Banner #2 (5292 bytes), CTR = 0.26% (385:1)
E-commerce has never been so easy...
Free shopping cart creator!
Click here

Banner #6 (6233 bytes), CTR = 0.20% (500:1)
E-commerce has never been so easy...
Free shopping cart creator!
www.virtualis.com
Click here
Four Corners’ Banner Tips Issue # 014
Four Corners’ Banner Tips Issue # 014

Banner #2 (4148 bytes), CTR = 0.55% (182:1)

$ Earn Money With Associate Programs $  
Free Newsletter Shows How → Click Here

Banner #3 (4025 bytes), CTR = 0.47% (213:1)

$ Earn Money With Associate Programs $  
Free Newsletter Shows How → Click Here

Banner #4 (5454 bytes), CTR = 0.47% (213:1)

$ Earn Money With Associate Programs $  
Complete directory and free newsletter explain the best programs out there → Click Here

Banner #1 (4031 bytes), CTR = 0.42% (238:1)

$ Earn Money With Associate Programs $  
Free Directory. Easy To use. → Click Here
Four Corners’ Banner Tips Issue # 015

Banner #2 (2068 bytes), CTR = 0.76% (131:1)

**Warning!**

Web Marketers Alert: Profit from RISK FREE advertising Now!
(click here now!)

Banner #1 (5698 bytes), CTR = 0.72% (139:1)

**Warning!**

Profit from RISK FREE advertising Now!
(click here now!)

Banner #4 (3347 bytes), CTR = 0.43% (232:1)

**RUN YOUR OWN** revenue-sharing affiliate program.
So easy to use you won’t believe it!  *Click here!*

Banner #3 (3357 bytes), CTR = 0.37% (270:1)

**RUN YOUR OWN** revenue-sharing affiliate program.
*Click here!*  So easy to use you won’t believe it!

Banner #5 (2887 bytes), CTR = 0.32% (312:1)

**RUN YOUR OWN** revenue-sharing affiliate program.
So easy to use you won’t believe it!  *Click here!*
BIBLIOGRAPHY


Macoy, Katherine. *The Second Computer revolution: Taking the Leap into New Media.*


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