Online and Mobile Advertising:
Current Scenario, Emerging Trends, and Future Directions

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Abstract

Online advertising expenditures are growing rapidly and are expected to reach $37 billion in the U.S. by 2011. Mobile advertising or advertising delivered through mobile devices or media is also growing substantially. Advertisers need to better understand the different forms, formats, and media associated with online and mobile advertising, how such advertising influences consumer behavior, the different pricing models for such advertising, and how to formulate a strategy for effectively allocating their marketing dollars to different online advertising forms, formats and media. In this article, we address these issues. We provide an overview of the current scenario with regard to online and mobile advertising. We discuss the emerging trends in these areas and offer our view of the future directions.
1. Introduction

Advertising has been an integral part of marketing since the origins of commerce and free enterprise. With the advent of printed word came a new and more widespread medium to bridge the communication gap between the producer and the consumer. To this day, print advertising can be viewed in vehicles such as newspapers, magazines, and catalogs. The next revolution in advertising came with the invention of the radio. Later, the television became a prevalent and dominant augmentation to print advertising. Television, radio, and print advertisements have remained essential to a company’s successful marketing of its products. Today, however, with the explosive growth of the Internet and mobile devices, advertisers have an even greater opportunity to reach a broader audience more quickly. This opportunity comes from online advertising, which is advertising that uses the Internet or more generally, the electronic or online media to deliver marketing messages, attract new customers, and retain existing customers.

Since its inception, the Internet has been a testing ground for different marketing approaches to online advertising. The advancement of Internet technology has propelled online advertising from simple text ads to interactive ads with video and sound. Historically, the widespread use of low bandwidth dial-up connections placed limits on the amount of memory that could be devoted to individual ads. Today, however, public accessibility and high-speed connections have allowed many online advertisers to exploit new and innovative tactics to reach their target markets.

In this article, we review the current scenario with regard to online and mobile advertising and offer our views on the emerging trends and future directions in online and mobile advertising. In the next section, we describe the various formats and forms of online advertising. We then offer an overview of mobile media advertising. In the subsequent section, we discuss the models by which online advertising works. In the following section, we present the various advertising pricing models. After that section, we present three sections in which we discuss the growth and emerging trends in online advertising,
advertising offered by the major players, and a framework for formulating online advertising strategy. We

close by outlining future directions in online and mobile advertising.

2. Formats and Forms of Online Advertising

Online advertisements are of two types, intrusive and non-intrusive advertisements. Intrusive

online advertisements come in many forms: banner, button, pop-up, skyscraper, and online directory

advertising. Non-intrusive advertisements appear in the form of targeted paid search and product

placement.

2.1. Intrusive Advertisements

2.1.1. Banner Advertisements

Banner advertisements have traditionally been the most popular vehicle for advertising on the

Internet. Measuring a slim 468 by 60 pixels, these ads are usually located in the top half of a web page.

An example of a banner ad can be found at https://www.google.com/adsense/banner.

Because many banner ads are the first objects seen on a web page, advertisers view them as

useful vehicles to break through the increasing clutter on web pages and reach their target audience. In

addition to the location advantage, this form of online advertising uses a relatively small amount of

memory, which requires less time to download onto a computer. This short download time was

particularly important in the early stage of online advertising when dial-up-modem was the primary

means of connecting to the Internet. However, as broadband becomes more accessible and affordable to

consumers across regional and national markets, this advantage is becoming less important.

Banner ads have remained the most popular form of online advertising. Barnes and Hair,

attribute this to McLuhan’s concept of the “rear view mirror.” McLuhan’s theory is that society tends to

understand and use new technologies from the standpoint of older technologies. According to this

theory, banner advertising on web sites was initially viewed as the roadside billboard of the Internet

superhighway.
Spending on banner ads has grown significantly over time. A 2007 Nielsen’s NetRatings’ report cited that unique banner ads and leaderboards (a slightly larger banner ad) for the March 26-April 1, 2007 period numbered 28,559 or 32% of all intrusive advertisements.\(^5\) Thus, banner ads continue to be the most popular format.

Although a favorite among advertisers, banner advertisements have come under harsh criticism from advertisers and industry experts alike for their inability to convert viewers to clickers. Because of this problem, many experts cite that banner ads have little value for companies interested in driving sales or raising awareness of individual products. However, they are a very useful tool in driving web site traffic. Studies suggest a significant relationship between companies that consistently advertise with banner ads and increases in the audience size of the company’s web site.\(^6\)

Several trends have emerged in banner advertisements. The predominant trend within the industry is the use of rich media. Rich media refers to online media containing animation or sound. With the increased use of broadband connections to the Internet, faster downloads have allowed companies to become more creative in using banner advertisements to cut through clutter. Advertisers, however, must be careful to use rich media sparingly. Ads that are loud or obnoxious may either cause the consumer to mentally block the advertisement, or even drive the consumer to a different web site in an attempt to escape sensory overload.

In addition to this risk, many consumers who do not have a broadband connection might become impatient and leave the site if downloads of these animated ads take too much time. Often, this problem can be mitigated by assessing the target market’s Internet usage. By analyzing research data such as age and from where consumers access the Internet (at home or work), banner ads can be developed in accordance with the technological capabilities of the target market.

**2.1.2. Button Advertisements**

Button advertisements are similar to banner ads, but are smaller and more compact. The general dimensions of button ads are 120 pixels by 60/120 pixels. These ads generally run down the side of a web page near the navigation bar of an Internet browser. This positioning near the scroll bar allows easy
clicking or accidental clicking when scrolling up or down a web page. In addition, consumers also scan this region near the scroll bar, making the button advertisement more visible. An example of a button advertisement can be found at the following URL: https://www.google.com/adsense/adformats#referral.7

While the location of a banner ad is ideal, the amount of space available to convey a product attribute or call to action is severely limited. With a small picture included in a typical button ad (120 by 60 pixels), there is room for only a few words, unless the advertisement is animated, which invariably increases the file size of the image. This situation poses a challenge to many marketers for integrating these online advertisements into their marketing mix. Many experts, however, see potential for button ads to strengthen brand image or corporate image because they offer an appropriate size for company logos or product pictures. In addition, button advertisements lie in an area of web page space that remains uncluttered compared to the top half of a web page, where banner advertisements are found.

The development of rich media has made button advertisements more attractive to advertisers. Because the greatest disadvantage of the button ad is its small size, rich media allows for the addition of extra frames, permitting more information to be displayed. Marketers must ensure that their message does not become too detailed or require too much bandwidth for dial-up-modem users to download quickly.

2.1.3. Pop-Up Advertisements

Pop-up advertisements come in several standard sizes but are classified by the method of download. Pop-up ads are either downloaded before the page loads (interstitial pop-ups or interstitials) or while the user is viewing the web page (superstitial pop-ups or superstitials).8 Advertisers use superstitial advertisements because they do not interfere with the web page’s downloading, and offer extra time for downloading pop-ups containing rich media. An example of a pop-up advertisement can be found at the following URL: http://www.hypergurl.com/generators/pop-example.htm.9

In addition to their less intrusive download methods relative to interstitials, superstitials have also had more success in marketing campaigns than have interstitials. Because the consumer is not exposed to a superstitial ad until after the entire web page has loaded, the consumer is given the chance to
decompress and view the ad. As a result, approximately 50% of users who view a superstitial advertisement either interact with the ad or view the entire message before closing the ad’s browser window. Due to this high interaction, many marketers have seen the value that pop-ups have in increasing advertisement awareness. In addition, past studies have shown that consumers are twice as likely to purchase a good or service if shown a superstitial than an interstitial pop-up ad.

In addition to their effectiveness, pop-up ads are available in several dimensions, which make it easier to create an advertising message that relates to the campaign. These ads also allow for the use of several technologies such as Flash or JavaScript that enable dynamic ads. However, with this additional technology, there is concern that an ad may become too large in file size which hinders consumer’s downloading of the advertisement. While this may be a valid argument for interstitials, it does not hold for superstitials that allow a consumer to view the web page while the ad continues to be downloaded. This feature allows advertisers to incorporate rich media into their advertisements without the fear of impatient consumers leaving a web page because of slow download times.

Although the capabilities of pop-up ads and their interaction with viewers are attractive to a marketer, an increasing number of consumers are downloading and using pop-up ad blocker programs. These programs are designed to block the scripts and codes that launch the advertisement windows into an Internet browser. This trend among American consumers has kept the volume of pop-up ads relatively low. From 2003 onward, approximately 10% of all online advertisers used some form of pop-up advertising. As online advertising continues to evolve, pop-up advertisements will remain a staple in advertisers’ budgets because of their ability to cut through clutter and force user interaction, as well as augment television or radio campaigns by increasing ad awareness. However, the increasing popularity of pop-up blockers will keep pop-up ads from becoming as popular as the banner advertisement. In fact, according to a 2007 report compiled by eMarketer, US Interactive Publishers anticipate that zero percent of their revenue growth could be attributed to pop-up ads. Furthermore, marketers should be cautious about using statistics that evaluate customer click-throughs as a measurement of success of pop-up ads.
because these clicks are typically “false-positives” caused by visitors trying to close the windows rather than actually clicking on them.14

2.1.4. Skyscraper Advertisements

Skyscraper ads are a variation of banner advertisements. These ads are generally 120 pixels wide and run down a web page in column format. Many compare this advertisement to a full column ad in a newspaper.15 Skyscraper ads can effectively deliver several messages or product benefits as users scroll down a web page, making them effective in describing product attributes or advantages. Because of the large size of these ads, advertisers must be careful not to develop ads that are too complex and large. Such ads download very slowly and may not be allowed on certain sites. Skyscraper ads are relatively new, but may grow over time. Nielsen’s NetRatings for the March 26-April 1, 2007 period show approximately five percent of all online advertisers using skyscraper ads.16 About three percent of US Interactive Publishers believe that skyscraper ads will lead to revenue growth in 2007.17

An example of skyscraper ads can be found at the following URL:
https://www.google.com/adsense/skyscraper.18

2.2. Non-Intrusive Advertisements

2.2.1. Paid Search Advertisements

Search Engines such as Yahoo! and Google offer companies the opportunity to bid for placement according to keywords. For example, when a consumer types the search “Flowers” into Google’s search engine, three sponsored links show up before the search results. Advertisers bid on certain search keywords. An example of paid search advertisements can be found at the following URL:
http://www.g3group.com/assets/images/google-search.gif.19

The higher the advertiser’s bid is in relation to others who have bid on the same keyword, the closer to the top of the list of queried results, his/her advertisement will appear. Keywords are typically monitored by the search engine to ensure that the keyword is relevant to the advertisement.
This technology is relatively new, and paid search advertising using the technology was first introduced by Overture Services. It was later adopted by other search engines such as Yahoo!, Google, and Ask. Most of these companies utilize a cost-per-click pricing scheme.\(^{20}\) In such scheme, an advertiser pays the vendor a fixed price for every click on the ad.

Paid search ads are also relatively new, but have become a hot ad vehicle for online advertisers. According to eMarketer, advertisers have budgeted more for paid search advertisements than any other format since 2003.\(^ {21}\) In terms of online spending, US paid search advertising spending is expected to reach $16.2 billion in 2011, up from $7 billion in 2006. In 2007, advertisers will likely pay approximately $8.3 billion for paid search advertisements.\(^ {22}\)

According to a Jupiter Research, 55 percent of all e-commerce transactions originate from a search engine link. Further, a study by E-consultancy discovered that 70\% of users are navigated to web sites from search engine queries through non-paid listings. However, sponsored listings are shown to return a greater amount of sales.\(^ {23}\) Unfortunately, not all searches and clicks may be genuine due to the emergence of a phenomenon called “click fraud.”

Click fraud can be defined as clicking on Internet ads to generate illegitimate revenue for the web site carrying the ads and typically, for those who are doing the clicking. Click fraud can take various forms with varying degrees of severity. In the mildest case, it can come from one individual’s small web site which he/she uses to click ads to generate income. However, large scale fraud is the most concerning issue at hand. Such fraud can occur in several ways. In one method, scripts that can simulate “human” clicks on advertisements, try to pass off as real clicks. This fraud is typically caught because search engines can identify and flag large numbers of clicks coming from one unique location or IP address. An approach that prevents detection based on IP address uses existing user traffic to generate clicks via automatic retrieval of advertisements using JavaScript.\(^ {24}\)

The following hypothetical scenario demonstrates an example of how click fraud can work: Joe’s Bikes, an online retailer of bikes, uses Google’s AdWords to advertise its web site. Joe’s Bikes pays Google each time a visitor clicks on a Joe’s Bikes ad. In return, Google places the ad on its web site as
well as its affiliate web sites, including “domain parking” companies. Affiliate marketing is a popular method of promoting web businesses in which an affiliate is rewarded for every visitor, subscriber and/or customer provided through his efforts. A domain parking site is a site that typically has little or no content except for lists of Internet ads, often supplied by Google or Yahoo. Many such sites are the source of false clicks. The domain parking companies repost Google’s Joe’s Bikes ad to thousands of “parked” web sites. Some of these web sites contain lists of advertisements. Owners of some of the “parked” web sites-fraudulent entities send their web sites to groups of people who are “Paid to Read/Click”. Members of the group often receive payment for clicking the ads on the “parked” web site. For each click, Joe’s Bikes is charged a fee. Fees are shared by Google, the domain parker, the fraudulent parked web-site owner, and the “Paid to Read/Click” members, who are members paid to look or click at other web sites and offers from marketers. These parked web sites are often used to generate fake clicks on parked web sites.

Google believes that not all signs that appear to be click frauds are actually click frauds. Two examples of events cause what the company describes as “fictitious clicks.” First, it can occur when a user hits the browser’s back button after exploring an advertiser’s site through a web page which reloads as the user explores. Second, according to Google, it can occur when “one advertiser’s traffic is counted in another advertisers report even if the advertisers span different ad networks.”

According to eMarketer, spending on Internet ads in the U.S. alone is expected to grow from $12.5 billion in 2006 to $29 billion in 2010. It is estimated that about half of the amount in 2006 was spent for advertisements, using the pay-per-click method. Those who study online advertising estimate that 10%-15% of ad clicks are fraudulent. These fake ad clicks represent roughly $1 billion in annual billings. Of this amount, it is estimated that between $300 million and $500 million is going to the click-fraud industry. Each “Paid to Read/Click” groups can contain hundreds or thousands of members. Participants all around the world can make between $25 and several thousand dollars per month, clicking on ads from their living rooms.
Advertisers are not standing by idly. Both Google and Yahoo have had to settle class action lawsuits by marketers. According to Outsell, Inc.’s blind survey of 407 advertisers, 37% planned to reduce their pay-per-click budgets because of fraud concerns. Major Internet advertisers such as Expedia.com and LendingTree.com are expected to go public with their concerns over click fraud. They are a part of a growing amount of advertisers that are joining together to share information and pressure Google and Yahoo to be more transparent in their methods. The cut back in pay-per-click advertising has opened the door for web companies, including Ebay and Snap.com, to use other ad-payment methods. Some companies are moving toward cost-per-action ads which require a potential customer to perform a certain action such as registering or making a purchase at the site. Only after this action has taken place, will the advertiser owe money to the publisher.

Google and Yahoo are on the defensive. They support their advertising redirection to domain-parked firms and parked sites because they believe that the lists of ads on the sites help point Internet surfers toward relevant information. In addition, they contend that most of the “paid to read” activity is filtered out. However, both the search engine giants refuse to expose their methods based on fears that scam artists will use the information to refine their techniques and further defraud advertisers.

Google unveiled a tool to quell some of the anger surrounding the company’s lack of transparency. The tool allows advertisers to track the number and percentage of potentially fraudulent clicks. The program has the capability to provide click data on a daily basis and was developed as a compromise between advertisers and Google. Unfortunately, while the new system shows that Google is catching invalid clicks, it does not prevent advertisers from being billed for all false clicks. Advertisers are encouraged to report any invalid clicks in which they were billed. This has put the burden on the advertiser to monitor their billing – a cost that can easily negate the savings that many advertisers were seeking from online advertising. In fact, some researchers such as Outsell, an information-industry researcher, are supporting the use of a third-party auditing system. Because Google benefits from click fraud, Outsell, along with many advertising consultants and marketers believe the conflict of interest is too great for advertisers to trust the search engine giant.
A new report published by Click Forensics, operator of the Click Fraud Index, shows a decrease in the amount of Click Fraud on top-tier search sites such as Google and Yahoo. In the second quarter of 2006, the index showed a click fraud rate of 12.8% compared to a rate of 11.9% in the third quarter. These figures include all fraudulent clicks – including those the advertiser believes are fraudulent as well as those for which the search engine did not charge the advertiser. In addition, a Click Forensics report shows that Google and Yahoo are doing much better than their competitors to reduce click fraud. For Tier 1 search engines (Google and Yahoo), the rate is 11.9%, while for Tier 2 search engines (Ask, Lycos, and MSN), it is significantly higher at 23.2%. Tier 3 search engines (Dogpile and Mamma) showed the worst rates at 25.6%.

To better understand and combat the click fraud issue, the Interactive Advertising Bureau, Media Rating Council, Google, Yahoo, Microsoft, Ask.com, LookSmart and others have formed the Click Measurement Working Group. This group seeks to determine guidelines for deciphering valid and invalid clicks. These guidelines will be used to develop an auditing system and certification recommendation for companies that gain revenue from clicks. Representatives from Google and Yahoo support the goals of the initiative. Shuman Ghosemajumdar, Google's business product manager for trust and safety stated, "We've been working to improve transparency about invalid clicks for our advertisers, and we're pleased to join an industry wide effort with the same goal." In a statement by John Slade, senior director of Yahoo Clickthrough Protection, the newly formed group will "ensure that marketers of all sizes are provided the highest possible level of transparency around pay-per-click advertising." He also stated that the guidelines "will be a game-changing step in measuring and fighting click fraud."

Thus, despite the dangers of click fraud, pay-per-click advertising continues to be a sustainable business model for online media companies. As more efforts are made to reduce click fraud opportunities, the pay-per-click approach is likely to grow.

2.2.2. Online Product Placements

Online product placement is a tactic that is used by marketers in which brand names, brand logos, products, or mentions of products appear disguised within online media. Traditionally, product
placements have been seen in television, video games, and movies. A popular example of this is the placement of Reece’s Pieces in the 1982 movie, E.T., the Extra-Terrestrial. Following the release of the movie, Reece’s Pieces reported an increase of sales by 65%. As online capabilities become more media enriched, online product placements have become more common place. One example of this is the online short films created by popular Hollywood and international film directors featuring BMW automobiles. Another example of creative online product placement was shown when Yahoo joined with BMW to promote the BMW 3 series. Yahoo replaced the letter “e” on its section titles with a “3” which when clicked, opened the BMW 3 web page. Figure 1 shows the Yahoo Finance web site with BMW 3 series’ product placement advertisement.

Figure 1

A study by New Media Strategies reports that product placement is generally accepted. According to the study, 70% of online conversations monitored reported positive or neutral feelings
toward product placement. The report states that “online consumers appear to be savvy when it comes to product placement and are willing to accept it if it does not detract from the entertainment experience. Employing subtlety and humor are more effective than blatantly plastering products everywhere.”

2.2.3. Context Ads

Context ads are a form of product placement that is customized to a user. They are targeted ads for the Second Life virtual community (www.secondlife.com), a massively multiplayer role playing game. Selected ads of potential interest to individual end users are transmitted to computers, cell phones and other mobile devices of a user based on the content of the user’s communications in the Second Life environment. The user can click on the ad and will be taken to a relevant web site to shop for items. An advertiser bids on keywords to join the program but is charged only when its ad appears on the user’s device.

2.2.4. Online Directory Listing and Link

Online directories are the online equivalents of the yellow/white pages. These directories can be set up to display basic or enhanced listings. Users search the directory based on a keyword, company name, and/or location. Enhanced listings allow the user to click the listing or a link to that listing to be directed to the advertiser’s web site. Typically, online directory listings are offered in conjunction with listings in printed versions of the directory. An example of an online directory can be found at www.whitepages.com.

2.2.5. Search Engine Optimization

Search engine optimization is a newer alternative to pay-per-click advertising. The goal of this method is to make a web site more likely to be detected by search-engine spiders and crawlers and to be returned in a search engine query as a free or “natural” search result. Based on statistics from Google and Yahoo, searchers are more likely to click on natural search results than on pay-per-click advertisements.
3. Mobile Advertising

Mobile advertising or mobile media advertising refers to advertising delivered through mobile devices or media. With the growth of mobile media through cell phones, personal digital assistants (PDAs), digital music players, and other wireless devices, advertising has found a new medium. The dependence individuals have on wireless devices, as well as the amount of time they spend using them, have enabled mobile media to grow at a rapid rate. Most of the current mobile advertising techniques have employed the SMS (short message services) technology. A notable use of this technology has been displayed in the popular Fox network’s television show “American Idol,” where viewers use SMS text messaging to vote for their favorite contenders, presenting an opportunity to advertise to the users. However, more innovative and interactive delivery methods are rapidly emerging in mobile advertising. The release of Apple’s iPhone, which incorporates full-scale Internet and WiFi in a user-friendly mobile phone, has expanded the platform and reach of mobile advertising.

Mobile marketers, in an attempt to expand revenues, are now offering mobile TV, music, and web surfing. These offerings also provide opportunities to expand revenue through advertisements. Many corporations are taking advantage of these opportunities. MobiTV, a company that provides programming from MSNBC, ESPN, and Fox Sports to Sprint and AT&T Wireless cell phone users has run ads for DaimlerChrysler AG’s Jeep. These ads are not necessarily traditional TV spots. For example, Jeep has its own channel that runs short films about a family that drives a Jeep Commander. According to MobiTV’s chief marketing officer, the demand for mobile advertising is high. In European countries, where cell phone use is more widespread than the United States, companies such as 3UK and MindMatics, are also exploring technologies to stream video content to mobile devices.

The iPod, which has provided another medium for mobile advertisers, has become a hot topic for the major broadcasters and publishers. While the biggest moves have been made by local advertisers on local radio podcasts, major broadcasters and publishers have the most to gain because of their access to content and distribution channels. Premiere Radio Networks, Clear Channel, ABC Radio Networks, and
ESPN Radio have begun to take advantage of the revenue stream that can be generated from subscription based services that include access to radio shows and video segments. Podcasting, originally thought of as a threat to traditional radio, is now seen as an opportunity to expand a traditionally mature service into a new revenue channel.51

Johnson & Johnson uses mobile technology to target optometry patients. A poster asking patients to text in the code “MYEYE” while waiting receives a reminder sent to their cell phone to remind the patient to ask for the Johnson & Johnson brand. The message is conveniently timed so that the patient will likely be in the doctor’s office when the reminder is received.52

In Europe, the 3G operator, 3, has developed a mobile ad campaign to be played on Apple iPods during peak viewing times. The ad, based on roller-skating dancers broadcast during traditional TV prime time, is played on a popular mobile channel that is regularly updated. While competitors such as Orange are following suit by incorporating various mobile advertising techniques, others are more cautious. According to Carat’s account director for digital media, Julie Jeancolas, demographic data, which would reveal the viewers of the ad, are simply not available and therefore investments in these ads are considered very risky.53 In fact, according to Strategy Analytics, the skepticism surrounding mobile advertising relative to TV and direct mail is widespread. This is not only due to the complexity involved in wireless broadcasting, but also due to processing and bandwidth rates required for video and Java programming code.54

Companies such as London’s Maiden Group PLC and Filter UK Ltd. are using transmitter technology as another approach to mobile media advertising. In this approach, transmitters send text messages to Bluetooth compatible cell phones within 100 feet, asking users if they would like to view a video advertisement. In a two week test at a railway station in London, 87,000 phones received the text message and 13,000 opted to view the advertisement. By advertising industry standards, the 15% response rate from the test was very high.55 A concern involving such an approach is the ability to ensure that the ads are decent, accurate, and targeted toward appropriate audiences. In North America, the
number of cell phones with Bluetooth technology is significantly lower than in Europe. However, it has doubled since 2004 and is expected to continue growing at a high rate.

Although mobile advertising has been more common for business-to-consumer advertisers, business-to-business advertisers are also beginning to explore this medium. One example of this is a mobile advertisement for FedEx, which launched a campaign with Vindigo to advertise its FedExKinkos copy and printing centers. The ad included a static logo with information related to the nearest FedEx Kinko’s location. These messages were sent to business executives who chose to receive FedEx messages on their PDAs. According to Rob Dobson, senior VP of Marketing at Digitas, the key to mobile advertising success is delivering information that is relevant and is desired by users. To assist in this initiative, the Mobile Marketing Association has created a committee to develop the best practices and standards of mobile marketing.

The growth of mobile advertising is seen as a concern by the World Wide Web Consortium (W3C) due to the excess cost that could be incurred by consumers. Because download times to mobile devices are paid by the device user, the additional advertising content, sent wirelessly, would be unsolicited by the user at the user’s cost. This is one aspect of mobile advertising that the Mobile Web Initiative group of the W3C is exploring as they develop best practices and a trustmark for mobile web sites.

To take advantage of the potential of the cellular phone market and become major players, companies are strategically aligning themselves with selected partners. For example, Vindigo, a U.S. mobile media company has established a partnership with 24/7 Real Media, a company that specializes in interactive marketing and technology. This team will deliver WAP technology, which will enable mobile phones to access Web sites and their content. This partnership brings together a leader in mobile media with a unique technology that has the ability to enhance mobile advertisers’ ability to target and track advertisement results.

According to a survey conducted by Harris Interactive, most people (90%) are not interested in receiving mobile advertisements on their telephones. However, one-third of all adult mobile phone users
say they would be interested in mobile advertising if incentives are offered for receiving the ad.\textsuperscript{59} While these users overwhelmingly prefer cash as the form of incentive (78\%), other incentive forms such as free mobile minutes, entertainment downloads, and coupons are also accepted.\textsuperscript{60} The preferred format for receiving mobile advertisements is text messaging.\textsuperscript{61}

Mobile advertising can take many forms such as text messaging, integrated content, games, and interactive voice response, WAP sites, ringtones and ring-backtones, viral, geo-targeting, advertising on mobile broadcast, sponsorships/subsidizing cell phone costs, and mobile telemarketing (see Figure 2). Estimates compiled by eMarketer suggest that mobile ad spending will be over $900 million in 2007.\textsuperscript{62}
## Mobile Media Advertising Methods

<table>
<thead>
<tr>
<th>Advertising Approach</th>
<th>Summary</th>
<th>Cost</th>
<th>Positive</th>
<th>Negative</th>
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<tbody>
<tr>
<td><strong>Text Messaging</strong></td>
<td>Mobile version of direct marketing can be used for sweepstakes, voting in contests, instant wins, offering consumer stats and other data.</td>
<td>Creative is from free to $3,000 or so, but messages cost marketers $5 to $10 per message sent, depending on volume, down from about $15 per message sent about 10 years ago.</td>
<td>Easiest form of mobile marketing to execute; simple to fold into integrated-marketing campaigns; reaches young target audience; consumers get it and its technical demands don’t overwhelm most U.S. phones. Some marketers report a 30% response rate and 33% conversion rate, all very measurable both in number of responses, how long it took to get a response, what carriers and handsets were used, and where the texting originated.</td>
<td>Consumers unhappy when marketers assume a response to a text message assumes a blast of future messages; somewhat limited from a multimedia point of view.</td>
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<tr>
<td><strong>Integrated Content</strong></td>
<td>Ideal for content providers such as movie studios, media companies, financial or sports teams, with offerings such as custom news alerts.</td>
<td>Cheap, $15,000 to $20,000 and packages often include a bundle of messages, plus $3 to $5 for additional messages.</td>
<td>Upside: Consumer gets relevant, valuable content.</td>
<td>Downsides: Messages not well targeted can be viewed as annoying.</td>
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<tr>
<td><strong>Games</strong></td>
<td>Branded offerings range from simple puzzles to custom multiplier, multilevel adver-games that can take months to develop and can be streamed through. From $10,000 for repurposing standard generic games, say, a racing game, by placing a logo over the cars, to $60,000 for a made-to-order concept.</td>
<td>Marketers investing in well-designed custom mobile games might find consumers willing to pay the $2.99 garnered by some games, making the mobile play a revenue generator.</td>
<td>Currently only an estimated 30 million of the 190 million handsets in the U.S. are equipped for games.</td>
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</tr>
<tr>
<td><strong>Interactive Voice Response</strong></td>
<td>Opt-in consumers receive mobile phone calls from star endorsers or other talent with live updates on events, such as a huffing and puffing athlete announcing he just won a race. Variations include calls from celebrities endorsing products (releasing other content).</td>
<td>A branding play capable of a compelling personal message, with devotees such as young girls making repeat calls, and a nice added dimension for traditional, online and other media.</td>
<td>Messages need to be short, smart and relevant or else consumers hang up.</td>
<td></td>
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<tr>
<td><strong>WAP Sites</strong></td>
<td>Translating existing Web sites into those which are wireless friendly so consumers can easily download and read PC content, download ringtones or wallpaper.</td>
<td>Depends on complexity of site.</td>
<td>Somewhat improved downloads; primarily back-end for text messaging fulfillment.</td>
<td>Difficult to Web surf.</td>
</tr>
<tr>
<td><strong>Ring-tones and Ring-back-tones</strong></td>
<td>Marketers have been giving away brand-related tones and screen savers or wallpaper, but this summer's promotions will up the ante with giveaways of tones previously costing consumers $5 or more.</td>
<td>$15,000 or more when a corporate jingle is a cellphone's ringtone, every phone call to that number is a new broadcast of the jingle.</td>
<td>Marketers assume a response to a ring-back tone; those heard by callers to certain phone numbers, are hosted by carriers and would cost them extra to use for marketing.</td>
<td></td>
</tr>
<tr>
<td><strong>Viral</strong></td>
<td>Promotions designed to spread peer-to-peer such as one for Budweiser that allows Web visitors to send a cellphone message to a friend inviting them for beer at a specific time and place. From $10,000 for repurposing an existing ring-back tone, to $30,000 if thattone and screen savers or wallpaper, but this summer's promotions will up the ante with giveaways of tones previously costing consumers $5 or more.</td>
<td>$15,000 or more when a corporate jingle is a cellphone's ringtone, every phone call to that number is a new broadcast of the jingle.</td>
<td>Marketers assume a response to a ring-back tone; those heard by callers to certain phone numbers, are hosted by carriers and would cost them extra to use for marketing.</td>
<td></td>
</tr>
<tr>
<td><strong>GeoTargeting</strong></td>
<td>Use of GPS to ring consumers waking past a product or store with a special offer or reminder. Location-based marketing is limited but might grow starting next year when more carriers have it available.</td>
<td>Use of third-party list of opt-in numbers can result in a $100 to $150 CPM.</td>
<td>A marketer's dream of reaching the right customer at the right time with the right message.</td>
<td>Privacy concerns and possible consumer backlash.</td>
</tr>
<tr>
<td><strong>Advertising on Mobile Broadcast</strong></td>
<td>Some bumper ads are showing up on video clips. For live TV programming ads will stream through.</td>
<td>No rates yet established, though most rebroadcasts of live TV on mobile phones at this time are allowing for free or inexpensive pass through to mobile.</td>
<td>The TV in your pocket, combined with other technologies such as location-based marketing, could be one of the most powerful marketing tools ever.</td>
<td>Only an estimated 1 million of the 190 million cellphones in use in the U.S. are video-enabled. Consumers also may resent viewing ads when they are paying for video service.</td>
</tr>
<tr>
<td><strong>Sponsorships/Subsidizing Cell Phone Costs</strong></td>
<td>Marketers offset the cost of mobile service, programs or content for consumers who agree to see ads.</td>
<td>The sky's the limit.</td>
<td>Consumers get free mobile phones, service, content, perks, etc.; marketers get benefit of offering something for free. Deals would help carriers hold onto customers longer.</td>
<td>It's not happening now.</td>
</tr>
<tr>
<td><strong>Mobile Telemarketing</strong></td>
<td>Cellphone calling is prohibited under federal regulations, but lists of consumers who have opted in are available.</td>
<td>Lists cost $100 or more per CPM.</td>
<td>Impressive response.</td>
<td>Backlash from consumers if list proves faulty, or consumers forget they opted in. Mobile-phone spam could trigger significant consumer, carrier and government ire.</td>
</tr>
</tbody>
</table>

Source: Advertising Age/IPSH/Freestyle Interactive/OgilvyOne

Figure 2 – Mobile Media Advertising Methods

### 4. A Consumer Model of How Online/Mobile Advertising Works

#### 4.1. Intrusive Advertising

The model of how an intrusive online advertisement works on a consumer is similar to that for an offline print or broadcast ad with the addition of elements that are specific to the online medium.

Consumers are exposed to intrusive online advertisements on an ongoing basis. Among several people who are exposed to an intrusive online ad, many ignore it. Of those who notice the ad, only some...
remember or recall some or all content, including the brand. Of the limited set of people who remember the brand or content, only a few click on the ad. Furthermore, of the few who click on the ad, only a small fraction interacts with the Web site, culminating in an action which could be a query, transaction, or search for the product or service at another channel. Finally, the consumer has a post-action attitude toward the good, service, brand and the online searching and buying experience. Figure 3a captures this process and Figure 3b offers an example of a consumer’s behavior with regard to intrusive online advertising. Figure 3c is a flow diagram of consumer behavior toward intrusive online ads.

**Banner/Button/Pop-Up/Skyscraper/Online Directory/Mobile Media Advertising**

<table>
<thead>
<tr>
<th>Advertisement Awareness</th>
<th>Search Ad/Interest</th>
<th>Click</th>
<th>Interaction</th>
<th>Action</th>
<th>Post-action Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Banner or text advertisement on websites</td>
<td>- Search through search engines</td>
<td>- Experience the website and product/service</td>
<td>- Query</td>
<td>- Satisfied</td>
<td></td>
</tr>
<tr>
<td>- Pop-up advertisements</td>
<td>- Search through blogs, direct product/service websites, etc.</td>
<td></td>
<td>- Transaction</td>
<td>- Unsatisfied</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3a**

| Viewer sees banner advertisement for mobile phone on CNN.com | Viewer is interested in the advertised phone | Viewer clicks on the advertisement | Viewer reads about the specifications, user ratings, price of phone | Viewer purchases mobile phone | Viewer is satisfied with product but unsatisfied with customer service |

**Figure 3b**
4.2. Non-Intrusive Advertising

In the case of non-intrusive advertising, consumer behavior follows a process different from that in the case of intrusive advertising. In this case, the consumer starts with a need and searches for information online on that need or on a good or service that is capable of satisfying that need. Typically, a consumer searches using a search engine, blog, portal, or a combination of these mechanisms. While
searching, the consumer is served a relevant online advertisement. The consumer clicks on that ad with some likelihood, which might be driven by characteristics of the product or service, the brand, the consumer’s characteristics, her past online experience and the like. Because the ad is a targeted ad, the likelihood of clicking on it is generally higher than that for an intrusive ad. Once a consumer clicks on a targeted ad, she interacts with that site and develops an experience on that site of that brand. Depending on the quality of this experience, the consumer may take an action that could range from exit to a simple query to a large transaction. Finally, the consumer may have some post-action attitude toward the good, service, brand and the entire online experience. Figure 4a shows consumer behavior toward non-intrusive advertising and Figure 4b offers an illustration of this process. Figure 4c illustrates that flow of activities in the case of non-intrusive ads.

**Paid Search Advertising/Search Engine Optimization**

- **Problem Recognition/Need Arousal**
  - Information Gathering
  - Search Ad/Interest
    - Search through search engines
    - Search through blogs, direct product/service websites, etc.

- **Click**
  - Interaction
    - Experience the website and product/service

- **Action**
  - Query
    - Transaction
    - Seek product at Brick & Mortar store

- **Post-action Attitude**
  - Satisfied
  - Unsatisfied
  - No feeling

**Figure 4a**

- **Need new mobile phone**
  - Talk with friends about various mobile phones
  - Search for mobile phones online
  - Click on link shown for mobile phone distributor
  - Surf the site, learn about distributors phones
  - Purchase the Phone
  - Feel satisfaction from purchase experience and product

**Figure 4b**
Figure 4c
5. Advertising Pricing Models and Metrics

In the infant stages of online advertising, many companies hosting online advertisements charged a fixed monthly or quarterly fee. While most companies have since evolved to a more variable pricing model, some companies still charge on a flat fee basis.

5.1. Traffic-based Model

A flat fee pricing based on a fixed cost per thousand (CPM) ad impressions was the first step in the evolution of the pricing of online advertising. This model was derived from television and print advertising pricing models. Although it can be implemented based on traffic at a site, it has come under criticism from many advertisers because it does not leverage the ability to further track Internet users’ web navigation. In addition, the traffic-based CPM model does not value consumer interaction with the advertisement, which is important in conveying the product message.

5.2. Click through/Pay-per-View (PPV) Model

The Click Through/Pay-per-View model was the next logical step in the evolution of online advertising. The price of an ad in this model is based on the number of users who actually click on that ad. Advertisers pay for each consumer who actively clicks on an online ad. This model provides greater accountability than does the traffic-based model. However, because of click fraud, this model has been exploited by programs that automatically click on advertisements for 24 hours a day, increasing the cost to advertisers. Nevertheless, the click-through method still remains a valuable pricing model that allows advertisers to pay for exactly what they get.

5.3. Size-based Model

The size-based pricing model uses the height and width of online advertisements as the basis for advertising fees. Although not used exclusively often, this model is used in conjunction with other pricing models such as CPM or click through.
5.4. **Transaction-based Model**

The transaction based pricing model is based on the number of transactions resulting from an ad. It is similar to the inquiry-based pricing charged by television stations. In such a model, the advertiser pays a charge to the television station every time a lead or sale is generated from the airing of the advertisement on the station. ⁶⁸

5.5. **Hybrid Model**

Hybrid models combine a flat fee with a performance based figure such as click-through or cost per transaction. ⁶⁹ Hybrid models are complex to design and implement, but because they are more directly related to performance, they are expected to become more popular in the future.

As the Internet evolves, a growing number of independent bodies are developing advertising metrics that are acceptable standards across the entire industry. In mid-2002, a metric was created to provide measures of reach and frequency so that advertisers know how many people view a particular ad. Known as the Advertising Digital Identification (Ad-ID), this metric was developed by the Association of American Advertising Agencies and the Association of National Advertisers. ⁷⁰ This measure, however, is not as widely used as are click-throughs.

6. **Growth and Emerging Trends in Online Advertising**

Today, advertising experts are increasingly looking at the potential of emerging media. Figure 5 shows how US advertising executives plan to allocate their emerging media advertising budgets. ⁷¹
Figure 5 - Percent of Media Budget for Emerging Media

In 2006, U.S. Internet advertising revenue reached $12.5 billion - a 34% increase over the previous year.\textsuperscript{72} However, according to research from eMarketer, online advertising is still only a small portion of the U.S. advertisement market. Figure 6 shows the growth in online advertising as a percentage of total media advertising spending.
Until late 2003, many industry experts in online advertising assumed that the demand for advertising space was smaller than the marketplace supply, making Internet advertising relatively inexpensive. But in recent years, the overall traffic growth of the top 20 Internet sites has slowed down due to saturation. In addition, to reduce clutter, many of these web sites and portals have limited the total amount of smaller ads.  

Until recently, paid search advertising has been described as the next trend in online advertising. However, many industry experts from Forrester Research are predicting that this growth would slow down. Growth estimates are expected to drop from 45% to 30%. Positive growth is expected in online advertising formats that allow advertisers to quantify their return on investment.  

Compared to the traditional media, the online media may be seen as more expendable by companies. During the economic recession from the second quarter of 2001 to the second quarter of 2002, online advertising expenditures dropped from $1.8 billion to $1.5 billion, representing the single
largest decline in advertisement spending in the industry.\textsuperscript{76} However, since then, online advertising is on the ascendancy. According to a Double-Click/Nielsen report, online advertising numbers are expected to grow steadily over the next several years while television and print media are expected to experience flat growth.\textsuperscript{77}

Broadband spending is expected to increase to $18.7 billion in 2007 from $7.8 billion in 2002.\textsuperscript{78} Spending on online advertising is projected to grow to $36.5 billion by 2011 (see Figure 7). This increased availability of high speed will allow online advertisers to take advantage of new technologies such as rich media, which will allow advertisers to develop more complete online advertisements. As mentioned earlier, paid search advertising will continue to grow and will remain the largest percentage of online advertising.\textsuperscript{79}

\begin{center}
\begin{tabular}{|c|c|}
\hline
\textbf{US Online Advertising Spending, 2002-2011 (billions)} & \\
\hline
2002 & $6.0 \\
2003 & $7.3 \\
2004 & $9.6 \\
2005 & $12.5 \\
2006 & $16.4 \\
2007 & $19.5 \\
2008 & $23.8 \\
2009 & $28.1 \\
2010 & $32.3 \\
2011 & $36.5 \\
\hline
\end{tabular}
\end{center}

\textit{Note: eMarketer benchmarks its US online advertising spending projections against the Interactive Advertising Bureau (IAB)/PricewaterhouseCoopers (PwC) data, for which the last full year measured was 2005; online ad data includes categories as defined by the IAB/PwC benchmark—display ads (such as banners), paid search ads (including contextual text links), rich media (including video), classified ads, sponsorships, referrals/lead generation, e-mail (embedded ads only) and slotting fees. Source: eMarketer, February 2007}

\textit{Figure 7 - US Online Ad Spending, 2002-2011}\textsuperscript{80}
Consumers are downloading and using pop-up blockers in large numbers. Nielsen’s NetRatings reported in 2003 that pop-up advertisements account for only 3.5% of online spending. These numbers will continue to remain stagnant because of the programs that block delivery to consumers.\textsuperscript{81}

It has been estimated that nearly two-thirds of television users skip (using DVR technology) or mute television commercials because they find them annoying or irrelevant.\textsuperscript{82} As a response to this finding, Tenafly has introduced MediaCheck, a technology intended to monitor this trend. MediaCheck is a box, much like a cable box that is wired to monitor how audiences respond to live and recorded advertisements. These boxes transmit the data collected to determine TV ad ratings. Based on these ratings, advertisers can determine if ads are effective as well as what time slots are most effective. This technology, and others like it, has captured the ability to quantify viewer engagement. Advertisers use data collected to maximize their advertising budgets. Potential services like MediaCheck could have a major impact on how television advertising is priced. Currently, ad pricing is based on how many viewers are watching a particular show. According to CBS Broadcasting Inc.’s executive vice-president for research and planning, David Poltrack, the future could lead to networks charging advertisers of poorly rated ads higher prices because these ads cause viewers to surf to alternate channels. There is no doubt, however, that the growth of DVR use is a strong threat to television advertising. MediaCheck’s CEO Lee Weinblatt, suggests that his technology could help lure viewers with advertiser promotions and coupons for watching a selected advertisement.

Another emerging trend is the growth of Internet sites that allow visitors to view, and in some cases, rate video clips. YouTube.com is a site where advertisers and amateurs alike can post video clips free of charge. Viewers can search these sites for various clips of interest. For example, Volkswagen posted several new commercials on YouTube.com. Within one week, they had over 700,000 non-paid views. Viewers not only rate the videos, but also discuss them through discussion boards for each clip. The site also allows viewers to easily forward the videos to others or import the video on their personal web site or other sites such as Facebook, MySpace, eBay, and Blogger. Internet video posting in this
manner allows advertisers to capitalize on their commercials by gaining information on viewership as well as viewer feedback for little or no additional cost.83

RSS (“Really Simple Syndication”) feeds are also becoming more prevalent as an advertising channel. RSS is a format that facilitates the distribution and gathering of data from various web sources.84 The process is convenient for users because they are automatically notified of updates made to web sites they choose without having to check each of them individually on a consistent basis. Initially used to create and distribute news feeds, RSS use has become more widespread. Today, the trend has expanded into advertising. For instance, Target Corp. allows visitors to sign up for their RSS feeds, which stream the company’s weekly ad.85 DaimlerChrysler is using RSS to stream information about auto shows and new vehicles to their customers.86 Companies are also using RSS technology to monitor their competitors and target market.

Advertisers are using the Internet in increasingly creative ways. Some advertisers, such as Old Spice, have an online application that allows site visitors the ability to cut their own commercial.87 Spotrunner.com, an advertising company, is targeting businesses with small advertising budgets by allowing them to create customizable commercials from various themes. For example, a small pet store owner may choose a generic, high-quality commercial from Spotrunner and customize it at a very low cost.88

6.1. Performance-based Advertising

The performance-based model bases the amount paid by advertisers on data points and other measurements of success. This requires consumers to perform an action, such as entering an e-mail address. While relatively new, this method is of significant interest to advertisers because it would allow them to quantify the effectiveness of their ad campaigns.89

Research by the firm Iprospect suggests that the majority of marketers using online advertising have no metrics for defining success, and those that do rely on click-through rates.90 Advertisers are constantly searching for new ways to measure the value of their online advertisements. As performance-
based advertising emerges, costs are shifting from a cost-per-click method to a CPA, or cost per action method. In the CPA method the consumer must perform some action beyond that of clicking on an ad, such as submit information or purchase a product. By executing a CPA method in online advertising, investments become more quantifiable. However, this method is not infallible because it cannot measure the return on investment (ROI) of future purchases based simply on the customer’s exposure to the ad.\textsuperscript{91} Although some companies claim to be using ROI as a metric for online advertising, this claim actually relates towards just reading basic sales data. This is a dangerous situation because metrics are based on transactions, instead of customers, which have a lifetime value.\textsuperscript{92}

There are significant advantages of using results-based online advertising over traditional mediums. This is due to the increase in Internet usage for leisure activities as well as the increased targeting capabilities. Not only can campaigns be specifically targeted to a group of customers, but they can also be monitored in real time by large portals that track various aspects of the campaign’s market response. In addition, the feedback received from results-based advertising allows more efficient dispersal of advertising funds.

\textbf{6.2. User-generated Advertising}

\textbf{6.2.1. Video-sharing Sites}

As high-speed Internet connections have become more prevalent, the use of video technology transmitted via the web has exploded. Companies such as YouTube (owned by Google), e-Baum’s World, AddictingClips.com, and Break.com have become popular sites for consumers to view and post video clips. These clips typically range between several seconds to ten minutes and can be produced and posted by both amateurs and professionals.\textsuperscript{93}

The popularity of these sites has raised the interest of many advertisers. According to Gary Stein, director of strategy at Ammo Marketing in San Francisco, user-generated video sites have generated significant interest because they are attracting a large and sought-after audience of males between the ages of 18 and 34.\textsuperscript{94} Advertisements that are incorporated into these sites are viewed more as peer...
recommendations than ads, a method which has been proven superior in converting awareness into action.\textsuperscript{95}

Advertisers have begun to use these sites in a traditional Internet advertising manner through banners and text links. YouTube, which has captured 40\% of the video-sharing market, has expanded beyond these traditional methods through a new advertising concept based on user-generated content.\textsuperscript{96} The concept, termed by YouTube as a “Participatory Video Ad” (PVA), is a video that can be posted on the company’s home page. Users can post comments, rate, and embed these PVA into blogs or their MySpace profiles.\textsuperscript{97}

Some advertisers have used the sites to post their video commercials. On November 14, 2006, Nintendo posted a video commercial on YouTube to promote its new video gaming system Wii. In less than a month’s time, the commercial had attracted over 1.3 million viewers and nearly 3,000 viewer comments.\textsuperscript{98} The advantage of advertising in this manner is the ability to target viewers who have an awareness and potential interest in the product or service that is being promoted. Advertisers should be aware that user-generated advertising cannot be controlled in a traditional sense. Viewers can post their true thoughts on the advertisement that may or many not shed a positive light on the product or service. For example, Chevy launched a campaign in the spring of 2006 to invite people to create and post their own commercial for the Chevy Tahoe. While a majority of the 30,000 entries focused on the positive aspects of the SUV, there were several that blamed the vehicle for global warming, social irresponsibility, and even the war in Iraq.\textsuperscript{99} The Chevy team responded by leaving the potentially damaging commercials posted in an effort to retain their credibility and commitment to the new online marketing strategy. The campaign ended as a success, attracting 629,000 visitors and on average, funneling two-thirds of the visitors from the campaign microsite to the company’s homepage, Chevy.com.\textsuperscript{100}

Despite the popularity of video-sharing sites, their sustainability has been questioned. The business models of many of these companies have not clearly been defined. Profitability is the main source of concern. In response, these sites have focused on generating advertising revenue in creative ways which do not deter their audience, who in many cases are seeking to avoid advertisements through
the use of these sites. YouTube has signed deals with companies such as NBC, NBC Universal, Warner Music Group, Sony BMG, CBS and Universal Music Group. Some video-sharing sites have begun to generate revenue by paying their members in return for their profit generating actions, signing deals for sponsored content, or using pre-rolls (short commercials that appear prior to the video clip). Eefoof, a new video-sharing site launched in July 2006, shares a portion of its profits with its members based on how many viewers their posted video clip attracts. The company does not pay users who post copyrighted materials in order to promote a model that does not infringe on intellectual property.

Despite the concern over profitability, these companies have shown value in the market. For example, Google acquired YouTube for $1.65 billion in stock. Google intends to enhance YouTube by using its search technology. Today, Google returns YouTube videos when users search for them through the Google web site. YouTube has also integrated Google’s AdWords, text advertising links, and advertising banners when users search for videos using YouTube’s internal web site search. For example, a query for Coca-cola on YouTube’s search box, returns various video clips related to Coca-Cola and shows a vertical and horizontal banner advertisement for the product. Google intends to keep YouTube as a separate entity. However, Google and YouTube are working together to develop new ways to combine their strengths.

6.2.2. Social Media and Networking

According to the Pew Internet & American Life Project Online Activities and Pursuits Report, 44% of adult Internet users “publish their thoughts, respond to others, post pictures, share files and otherwise contribute to the explosion of content available online.” Social networking sites such as MySpace and FaceBook provide virtual communities by which their members connect to one another. These are also known as consumer generated media (CGM) or social media. These sites are commonly used to join people with similar interests, acquaintances, geography, or occupations. Users create accounts on the sites and post information about themselves. These accounts can be browsed by other
members and, if mutually desired by the members, linked together. There are several major players in the social networking including those listed in the table below (Figure 8). \(^{110}\)

### Top 10 Social Networking Sites* for April 2006 (U.S., Home and Work)

<table>
<thead>
<tr>
<th>Site</th>
<th>Apr-05 UA (000)</th>
<th>Apr-06 UA (000)</th>
<th>YOY Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>MySpace</td>
<td>8,210</td>
<td>38,359</td>
<td>367%</td>
</tr>
<tr>
<td>Blogger</td>
<td>10,301</td>
<td>18,508</td>
<td>80%</td>
</tr>
<tr>
<td>Classmates Online</td>
<td>11,672</td>
<td>12,865</td>
<td>10%</td>
</tr>
<tr>
<td>YouTube</td>
<td>N/A</td>
<td>12,505</td>
<td>N/A</td>
</tr>
<tr>
<td>MSN Groups</td>
<td>12,352</td>
<td>10,570</td>
<td>-14%</td>
</tr>
<tr>
<td>AOL Hometown</td>
<td>11,236</td>
<td>9,590</td>
<td>-15%</td>
</tr>
<tr>
<td>Yahoo! Groups</td>
<td>8,262</td>
<td>9,165</td>
<td>11%</td>
</tr>
<tr>
<td>MSN Spaces</td>
<td>1,857</td>
<td>7,165</td>
<td>286%</td>
</tr>
<tr>
<td>Six Apart TypePad</td>
<td>5,065</td>
<td>6,711</td>
<td>32%</td>
</tr>
<tr>
<td>Xanga.com</td>
<td>5,202</td>
<td>6,631</td>
<td>27%</td>
</tr>
</tbody>
</table>

* Source: Nielsen/NetRatings, May 2006

* Note: This is a custom category and does not appear in Nielsen/NetRatings’ syndicated service. \(^{111}\)

**Figure 8 – Top 10 Social Networking Sites**

Most social networking sites use a classic advertising model of banners and text ads to generate revenue. Research by eMarketer shows that U.S. online social network ad spending is expected to grow tremendously in the next four years (see Figure 9). \(^{112}\) Today, the largest estimated spender of advertising dollars on social networking sites is Vonage (see Figure 10). \(^{113}\) According to MarketingVox, brand managers are also expecting to expand their reach of social network users through six methods: branded microsites, customer reviews and ratings, online customer forums, peer-to-peer transactions, product-focused blogs, and community-created products. \(^{114}\) Nitin Gupta, an analyst with the Yankee Group, points out that a significant and growing value of social networking sites is the information they collect. This information can be incorporated into corporate customer relationship management strategies to identify the needs and desires of customers, as well as gain valuable feedback about products and services. Gupta states, “The future is in finding ways to monetize the online community beyond just traditional web advertising, although it's going to be difficult for online communities, even those behemoths like MySpace.” \(^{115}\)
The low cost of set up, maintenance, user recruitment, and content have made these sites very lucrative for their stakeholders. However, the fast growth and popularity of these sites comes with a great deal of risk. Sustainability is the key issue. These sites often target teen and young adult markets, an audience that tends to be fickle in their interests. To remain successful, social networking sites must remain innovative; consistently increasing site functionality in order to avoid a mass exodus of users to a competing site.  

![US Online Social Network Ad Spending, 2006 & 2010 (millions)](image)

**Top 10 Advertisers by Estimated Spending**

<table>
<thead>
<tr>
<th>Advertiser</th>
<th>Total Estimated Spending</th>
<th>Impressions (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vonage Holdings Corp</td>
<td>$37,962,100</td>
<td>16,897,475</td>
</tr>
<tr>
<td>2. GUS Plc</td>
<td>$28,150,700</td>
<td>16,950,398</td>
</tr>
<tr>
<td>3. United Online, Inc.</td>
<td>$21,842,000</td>
<td>7,244,330</td>
</tr>
<tr>
<td>4. Netflix, Inc.</td>
<td>$14,370,300</td>
<td>7,173,759</td>
</tr>
<tr>
<td>5. LowerMyBills.com, Inc.</td>
<td>$14,236,300</td>
<td>2,700,334</td>
</tr>
<tr>
<td>6. Verizon Communications, Inc.</td>
<td>$12,987,200</td>
<td>3,836,843</td>
</tr>
<tr>
<td>7. Apollo Group, Inc.</td>
<td>$11,513,400</td>
<td>3,235,280</td>
</tr>
<tr>
<td>8. NexTag, Inc.</td>
<td>$11,508,200</td>
<td>4,743,402</td>
</tr>
<tr>
<td>9. E*TRADE FINANCIAL Corp.</td>
<td>$10,337,500</td>
<td>2,708,051</td>
</tr>
<tr>
<td>10. Scottrade, Inc.</td>
<td>$8,855,200</td>
<td>1,695,014</td>
</tr>
</tbody>
</table>

Source: Nielsen/NetRatings. * Estimated spending reflects CPM-based advertising online, and excludes search-based advertising, paid fee services, performance-based campaigns, sponsorships, barters, partnership advertising, advertorials, promotions and email. Impressions reported exclude house ads, which are ads that run on an advertiser’s own or related property and co-branding relationships.  

Figure 9 – Social Network Ad Spending

Figure 10 – Top 10 Advertisers by Estimated Spending
7. Online Advertising through the Major Players

The two dominant players in online advertising market are Google and Yahoo. In the rest of this section, we examine their online advertising services.

7.1. Google

Google is the number one search engine in the U.S. based on Nielsen/Net Ratings (8/06) based on the total number of unique visitors. Google.com is one of the five most popular sites on the Internet with 380 million global unique users per month. More than 50% of traffic comes from outside the United States. The vast majority of Google’s revenue comes from online advertising. Google classifies its advertising programs into two distinct areas: Adwords for Advertisers and AdSense/Web Site Services.

Adwords for Advertisers uses the cost-per-click pricing model. In this way, the most relevant ads are displayed first. It takes only $5 to create an Adwords account. Adwords also incorporates state of the art technology that allows prices from some clicks to be adjusted based on their expected value. This technology ensures better performance for advertisers while keeping costs as low as possible and keeping the ad’s position above a competitor’s ad. Ads can be targeted by location and are coupled with tools that assist advertisers in optimizing their accounts. If a web search returns the criteria for a particular ad to appear, the ad will be labeled in the “sponsored links” section of the page. In case of technical difficulty, advertisers are able to manage their own accounts or, for larger advertisers, Google’s account team will assist and monitor the campaigns. Customers of this program include Sony, Cisco, Alamo Car Rental, Ameritrade, Amazon.com, Canon, Disney, General Motors, L.L. Bean, Nordstrom, Sears, Smith & Hawken, Sprint, Volvo, and Xerox.

Google AdSense places relevant Google ads on independent web sites based on the content on the site. The program is free and pays the owner of the web site based on a pay-per-click and pay-per impression pricing model. AdSense works by targeting its advertising based on a searcher’s keyword(s) and also dynamically analyzing content on the web site in order to display relevant ads. Support is offered in two different ways: Publishers can manage their own accounts or, if the site receives more than
20 million views per month, a dedicated sales team can customize programs for the site. Customers of AdSense include USATODAY, ABC.com, Forbes.com, 60% of the comScore Media Metrix top 100 sites, as well as thousands of other specialty content sites.121

Google Search Services allow publishers to provide a link to the Google web site as well as a Google site search on their own independent web sites. This process can also be combined with the AdSense for Search program to generate more revenue. The links and the site search are hosted by Google but can be customized. Results from the site search feature are available in HTTP, XML, or Google’s protocol. Publishers have access to reports that detail the number of hits, top queries, and other information. Customers of Google Search Services include Washingtonpost.com, AOL/Netscape, Palm, Fujitsu NIFTY (Japan), NEC BIGLOBE (Japan), NetEase (China),Yam.com (Taiwan), Vodafone Global Platform and Internet Services Group (U.K.), Retivision (Spain), Sapo (Portugal), and Virgilio (Italy).

Google also seeks to implement “Click-to-Call” icons next to its text ads or sponsored links. This technology would allow users with internet phone service to call a toll-free number for more information about the ad or to talk to an ad sponsor’s representative. While advertisers are not currently flocking to this technology, companies such as Vangard, are beginning to show interest.122

7.2. Yahoo!

Yahoo Search Marketing offers several online advertising products and services including Sponsored Search, Local Advertising, Search Submit, Product Submit, Travel Submit, and Directory Submit.

Bidding on a Sponsored Search enables a business to become linked to several popular Internet search engines within the Yahoo network. The popularity of using online searches is increasing considerably in recent years. According to surveys of online consumers, 88% of people who purchased online used some search engine.123 When an online user conducts a search for a particular product that a business sells, a title and short description provided by the business appears on the list of search returns. These descriptions appear in the search return list in order of the highest bid. Also included is a list of
linked keywords chosen by the client, which directs a potential customer looking for a certain keyword to the business’s link. Another feature of this product is a content match which brings up the client’s link whenever an online user searches for a keyword related to the products sold by the client.

Local advertising consists of local sponsored searches and local listings. Local sponsored searches are similar to the regular sponsored searches, but they also allow a business to connect with online users who are specifically looking to buy in the business’s area. When an online user searches for a local service or product, a local sponsored search will appear with links to a locator page. The locator page can contain information about the client business, including the business name, address, phone number, business description, hours of operation, accepted forms of payment, links to the company website, driving directions, and a map showing where the business is located. One unique benefit of this program is that the client is not required to have a website to connect to local online shoppers. For about ten dollars per month, a business could also set up a local listing. Local listings include basic business contact information, a business message or tagline, and two customizable links to coupons or other special features available on the client website. Yahoo has a similar service called local sponsored searches which allows advertisers to narrow their target market geographically. Advertisers can limit the radius of deployment for search ads from .5 to 100 miles.

Search Submit comes with two available options, Search Submit Express and Search Submit Pro. With Search Submit Express, businesses can include their information in non-sponsored algorithmic searches. The Express option also automatically refreshes every 48 hours to ensure that customers are viewing updated business information. Being included in algorithmic searches allows businesses to supplement their sponsored search and increase the number of potential hits on their website link. Another key feature of this option allows the client to analyze data regarding the top keywords and click-through rate for their content. This allows the business to reconfigure their advertising intelligently and decide which approach will be most efficient.

Search Submit Pro is much like Search Submit Express, but also features increased content control, extended analytical tools, and an account manager. Businesses can now include websites in their content that would not otherwise be allowed or found in algorithmic
searches. Some of these are sites that “require cookies or session IDs, sites with Flash content and information stored in content management systems, or sites that aren't well crawled because of Web site design.”

Submit Pro includes customizable reports that can be tailored to the individual business’s metrics. This in-depth information tells a business when and how users find their web sites, the frequency of keywords and queries used to find their web sites, and can tell the client about the return on their marketing investment. Another feature that makes the Submit Pro unique is that an account manager is included in the program price. A business can contact their account manager any time, day or night, and find assistance with questions, technical support, or account management. These features help take the guesswork out of designing a marketing approach.

The Product Submit program allows businesses to have their products featured in Yahoo Shopping and Yahoo Product Searches. Pricing for this program is based on usage. The business is only charged from their account when a customer clicks on their product and goes directly to their web site. Product information and new product listings can be added easily by the client. Access to account data and performance reports is available at anytime. Another feature is that businesses can set up e-mail alerts that will allow them to monitor their individual program account. Detailed descriptions of client products can be listed on a relevant buyer’s guide page for similar products. Clients can also become members of the Yahoo! Buyer Protection Program which instills greater consumer confidence in the business and its product.

The Travel Submit program is complimentary to the Product Submit program and is designed specifically for travel sales. Almost all of the features are identical to those of the Product Submit program. The business can update their information to include new deals, rate changes, etc. at any time. The client business’s travel offers will be displayed in the Yahoo! Travel Deals marketplace and listed in Yahoo! Travel Guides which contains “travel information, resources, ratings, and reviews for over 20,000 destinations and more than 100,000 hotel properties.”

Yahoo! Directory Submit provides opportunities for businesses to be listed in Yahoo’s directory and thereby reach a much greater market. Yahoo!, one of the world’s most popular web sites claims that it
“reaches over 330 million unique users--potential customers for your business--each month on a local and global level.” This accessibility to greater markets is coupled with an easy application process and rapid response. Within seven business days of a client’s directory submit request, the Yahoo! editors will send a response for a $299 review fee. If the listing is included in Yahoo! Directory, then an annual fee of $299 will accrue each additional year. This program also features Yahoo’s new Online Account Management Center, where clients can view invoices, submit requests for additional directory listings, upgrade their current listings to become sponsored listings, request changes to current listings, and update their billing information.

Yahoo has also expanded its reach by allowing individuals and advertisers to create their own advertising applications. Yahoo’s Widget Engine allows individuals to create and download “widgets” that have many capabilities. Basic uses have ranged from alarm clocks, stock quote streams, local weather updates, and WiFi strength indicators. These widgets are handy because they can sit on a user’s desktop without dependence on a browser. Advertisers are using this technology for various useful and fun purposes. For example, usefulness can range from the UPS Shipment tracker or the Amazon.com Ticker Shopper to the Staples Easy Button.

8. Effective Advertising Strategy Framework and Examples

An effective online advertising strategy framework aims at targeting the right person at the right time online. It is based on developing effective answers to five questions.

8.1. Who to Advertise to?

An effective online advertising strategy should focus on not only on the demographics and psychographics of users as in the case of traditional advertising, but on their Internet usage characteristics as well. A web site should segment users into different groups such as guests, registered users, and first-time visitors to understand their different needs. It could use clickstream data (data collected on a web site using cookies to track visitors’ progress) to identify the differing needs of different segments and target the appropriate segments of users.
8.2. What to Advertise?

Marketers are often criticized for using online advertising more for enabling online transactions and not for offering enough information about their goods or services or brands. More consumers use the Internet for information search rather than for purchasing goods and services. However, due to size limitations of online ads relative to print advertisements, it is hard to design an advertisement that can offer all the information, as well as a call to action. Therefore, online advertisers need to make judicious a judicious trade-off between information content and call to action.

8.3. How to Advertise?

This question refers to the choice of type of ad (e.g., banner, pop-up, and paid search). It depends on the overall advertising strategy for the brand and the product. Given the pros and cons of these different types ads as discussed earlier, an online advertiser should pick one or more of these types for the particular brand and product.

8.4. Where to Advertise?

This question addresses the media vehicle or web site (e.g., Yahoo, CNN, AOL) on which to advertise. One of the challenging tasks in developing an online advertising campaign is to determine the sites that form the source of a firm’s online traffic and to advertise on those sites. A simple strategy is to advertise on portals and search engines for maximizing reach, but it can be very expensive, especially with escalating prices for prime locations on the web sites of portals and search engines. By determining which web sites are directing traffic to the firm’s site, the firm may be able to increase traffic flows while decreasing its total online advertising expenditures.

8.5. When to Advertise?

This question refers to the place and time when online ads should target consumers. Should consumers be targeted when they access the Internet at work or at home? Often, the answer to this question depends on the product and the demographic characteristics of the consumer. In addition, after a consumer reaches a firm’s web site, when should he/she be targeted for an online ad? With regard to pop-
up ads, the time immediately after a consumer reaches a web site may be the most effective time to advertise.

8.6. Corporate Online Advertising Strategies

Corporate online advertising strategies vary significantly by company size and advertising budget. While the methods may be the same, ad placement, ad size, technology used, and management may vary significantly.

For small businesses, online advertising is an excellent way to market the business at a fraction of the cost of traditional advertising. There are many ways small businesses can efficiently advertise online. The first is to link the site to exchanges. This can be done by finding businesses a complementary service or product online and trading ad space with them. The second way is to make use of search engine keywords such as Google AdWords or Yahoo Sponsored Search. These approaches allow for tight control over the amount of advertising money spent as well as a useful way to keep track of the advertisement’s success.

Large organizations also use search engine keywords advertising campaigns. However, with much larger budgets, they are able to afford more common, and typically more expensive, keywords. Most major online search engine advertising providers also assist large businesses with the management of their advertisement campaigns due to the significant investment involved. Large companies also have the ability to afford higher technology such as streaming video and rich media. In addition, many have the means to advertise using larger ad spaces on high traffic web sites such as CNN.com.

An example of a large company’s online advertising strategy is that of DaimlerChrysler, which has a $2 billion advertising budget, ranking as the sixth-largest advertiser in the nation. Chrysler has allocated more money to online advertising campaigns over the past few years. In 2004, 10% of its advertising budget was spent online. The following year, the amount increased to 18%, representing an increase of about $360 million. In 2007, U.S. online advertising spending is expected to grow to $19.5 billion.
9. Future Directions in Online and Mobile Advertising

The role of online advertising in the marketing mix continues to evolve. In 2001, Nielsen research data showed that while TV advertisements account for 56.1% of all advertisement spending, only 8% was used for online advertising. In recent years, however, online advertising has grown significantly and is expected to be an integral part of many companies marketing plans. Several industries have transitioned large portions of their advertising budgets to online advertising. Among the most active of these industries are employment/recruitment agencies, technology, and publishing/media.

The model for online advertising has evolved from revenue based to a model that focuses on retaining customer information and facilitating the exchange of information. When generating a campaign, targeting users online helps facilitate a relationship with the consumer across several channels. Companies such as American Express, Reebok, and BMW have models similar in concept to this. As a result of these campaigns (Superman, Terry Tate: Office Linebacker, and BMW Films respectively), these companies learned more about their audience and generate increased awareness which resulted in a buzz marketing campaign driven primarily by consumers.

As the world becomes more technologically advanced and consumers become technology-savvy, companies continue to place greater emphasis on the role of online and mobile advertising in the marketing mix. According to Nielsen data, approximately 50% of all U.S. consumers perform an online search of products before purchasing that product. This active search for information will continue to remain an integral selling point for the need of online advertising. Companies are realizing the importance of extending marketing dialogs across different channels and media, including the mobile media. By sending consumers unified messages across different channels, relationships with consumers can be further cultivated.

Several recommendations can be made to improve the effectiveness of online and mobile advertising. First, online and mobile advertisements should be further standardized to reduce clutter and improve noticeability and readability. To reduce ad clutter, the Interactive Advertising Bureau has
released recommended ad unit sizes. As a result, larger sized advertisements are being used more frequently and total ad clutter has been reduced.\textsuperscript{139} However, there is room for more ads to follow the recommend sizes.

Second, advertisers should continue to innovate, keeping up with advancements in online technologies. An example of this advancement is rich media. As broadband becomes more readily available to consumers in America, the use of rich media will be used to augment advertising campaigns online. Because of its ability to use “Flash” technology to send multiple messages that either visually or audibly engages the viewer, rich media is seen as a viable advancement. Nielsen and DoubleClick data show that the use of rich media has grown parallel to broadband growth. The ability to attract and maintain the attention of the advertiser’s target market is essential to the continued success of advertising online. Continued innovation in online advertising will ensure fresh new approaches to targeting the market and ROI measurement that goes beyond what society has experienced thus far. Keeping ahead of the technology will allow marketers to anticipate technological advancements changes that may prohibit the market from receiving ad messages (e.g., pop-up blockers).

Third, improved measurement systems are key to better targeting and the growth of online and mobile advertising. The growing popularity of paid text search is due to improved accountability. Future growth in rich media advertising will depend on more accurate measurement systems and greater accountability of online and mobile advertising expenditures.

Fourth, increased interactivity is critical to generating consumer interest and involvement in online and mobile advertising. Successful advertising campaigns in the rich media will be more of a two-way process than a one-way process of communication. Advertisements that engage the target customer and induce them to interact with the firm to add customer value will likely be more effective than ads that simply promote brand name and brand recognition in the online and mobile media.

Fifth, the emergence of powerful social media and social network has important implications for the future of online advertising. Firms are better off providing consumers with interesting relevant information about their products, letting the consumers interact among themselves in their online
communities and generate their own ads, while observing and gaining insights into their behavior. The challenge is to come up with a method to measure the effectiveness of advertising in such a context.

Successful online and mobile advertisers will be those that keep abreast of the technological and sociological developments, track both existing and emerging consumer behavior online and offline, and formulate a sound online and mobile advertising decision framework. Such a framework will likely be driven by long-term thinking, but will be flexible enough to leverage short-term opportunities and trends. Firms should be prepared to continuously innovate with regard to the type and intensity of advertising campaigns and media. Rather than waiting to learn from the results of new online advertising initiatives by other firms, they may want to proactively experiment different emerging online and mobile advertising technologies, platforms and methodologies. By continuously experimenting, learning and developing fresh online marketing strategies, firms will likely succeed in their online and mobile advertising initiatives in a sustainable manner.
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