



**Interactive  
Advertising  
Bureau**

IAB Platform Status Report:

# A Mobile Advertising Overview

July 2008



*A series of papers that will lead the way to a vigorous  
and healthy industry with commonly adopted terminology,  
practices and standards.*

<b>Table of Contents</b>	
<b>Executive Summary</b>	<b>1</b>
<b>Mobile Market Overview</b>	<b>1</b>
<b>What is Mobile Interactive Advertising?</b>	<b>4</b>
Comparisons with Internet Advertising	4
Comparison With Traditional Internet	5
On-Device Mobile Display Advertising	6
Off-Device Mobile Display Advertising	6
<b>Mobile Ecosystem, Platforms, and Experiences</b>	<b>8</b>
The Role of the Carrier	9
Device Types	9
<b>Common Mobile Creative Types, Placements, and Targeting</b>	<b>10</b>
Creative Types	11
Placements.	13
Targeting	14
<b>Mobile Campaign Pricing Models and Costs</b>	<b>14</b>
Pricing Models	14
Campaign Costs	14
<b>Opportunities &amp; Challenges</b>	<b>15</b>
Opportunities	15
Challenges:	16
<b>The Future</b>	<b>17</b>
<b>Who is the IAB Mobile Advertising Committee?</b>	<b>19</b>
<b>Appendix A: Definitions &amp; Nomenclature</b>	<b>21</b>

## Executive Summary

Mobile advertising is one of the most exciting new frontiers in interactive advertising in the US. As the Internet is reinvented on mobile devices—smaller, more personal and personalized, ubiquitously accessible—established forms of interactive advertising will also evolve as they migrate from PCs to mobile devices. This document offers advertisers and agencies a guide to this emerging platform in the US. Mobile advertising opportunities span a broad range from search to messaging to in-game placements. This first IAB Mobile Platform Status Report will focus on mobile display advertising, examining this dynamic market as it stands during the summer of 2008. It illustrates mobile advertising considerations and outlines advertising opportunities for mobile devices, from the perspective of established interactive advertising on the Web. It will focus on the following questions:

- **WHAT IS MOBILE ADVERTISING?** Understand the mobile landscape, who is using mobile applications, and the key mobile interactive advertising opportunities that exist today.
- **WHAT DOES THE ECOSYSTEM LOOK LIKE?** Learn about the chain of intermediaries that connect advertisers with consumers, and how it is similar to, and different from, the PC-based Web.
- **HOW CAN MARKETERS REACH THE MOBILE CONSUMER?** Differentiate the technical and market factors of mobile advertising to identify the best opportunities for different brands and campaign goals.
- **WHAT DOES THE FUTURE HOLD?** Identify key trends on this evolving platform, with an eye to how mobile advertising opportunities will expand over the next five years.

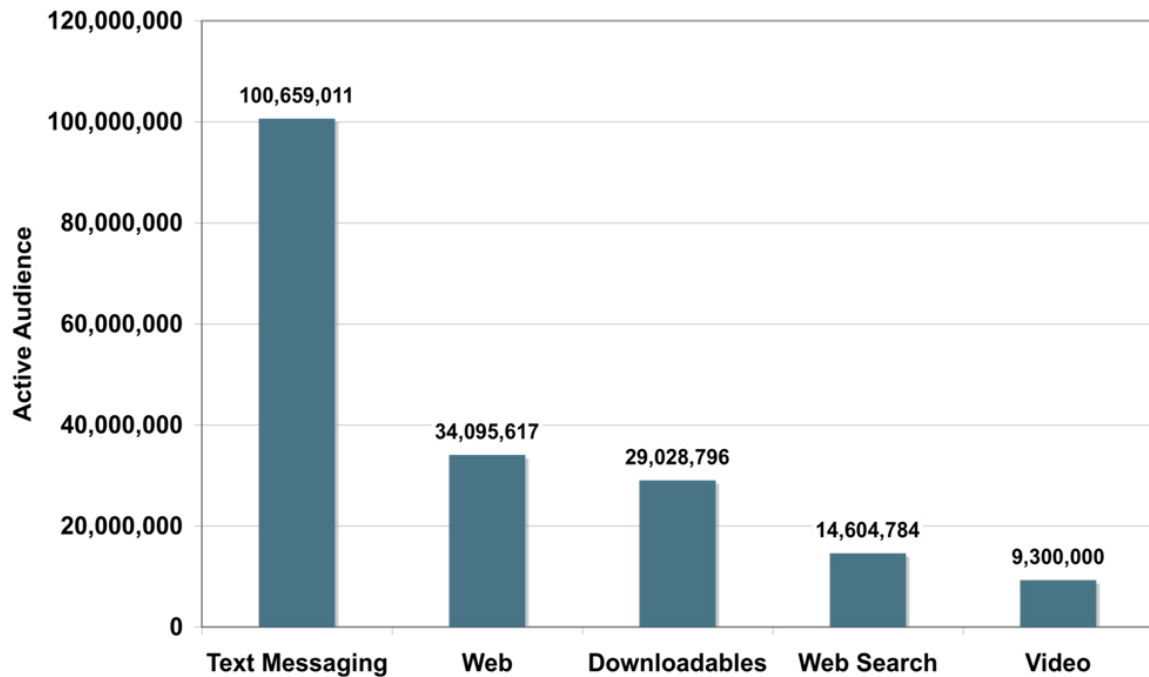
## Mobile Market Overview

According to CTIA: The Wireless Association's Website ([www.ctia.org](http://www.ctia.org)), there were approximately 255.4 million American wireless subscribers, a penetration rate of 84%, as of the end of 2007. Wirelessly connected mobile communication devices, which include data-only devices like older Blackberries along with mobile phones, constitute an increasingly important means by which consumers stay in touch and informed. This report examines US mobile advertising opportunities, with a particular focus on the mobile display ecosystem. It provides a state-of-the-market view as of the summer of 2008, discussing trends and opportunities as they exist today.

By virtue of their ubiquity, utility, and portability, these mobile communication devices have achieved what Jupiter Research refers to as "invisible" status for many consumers—they are carried continuously and unconsciously. Conversely, devices like Motorola's RAZR and Apple's iPhone demonstrate how these gadgets have also come to take on a role as fashion accessories, meant to convey the user's hipness or status. The ability of a mobile device to provide instant gratification—whether communication, information, or entertainment—whenever and (more importantly) wherever a consumer happens to be empowers both advertisers and consumers, and creates a strong likelihood that mobile communication devices will become the next great advertising medium.

Various Mobile Media Already Support Large (and Still Growing) Audiences:

**Active Audience for Key Mobile Marketing and Ad Modalities,  
US, November 2007**

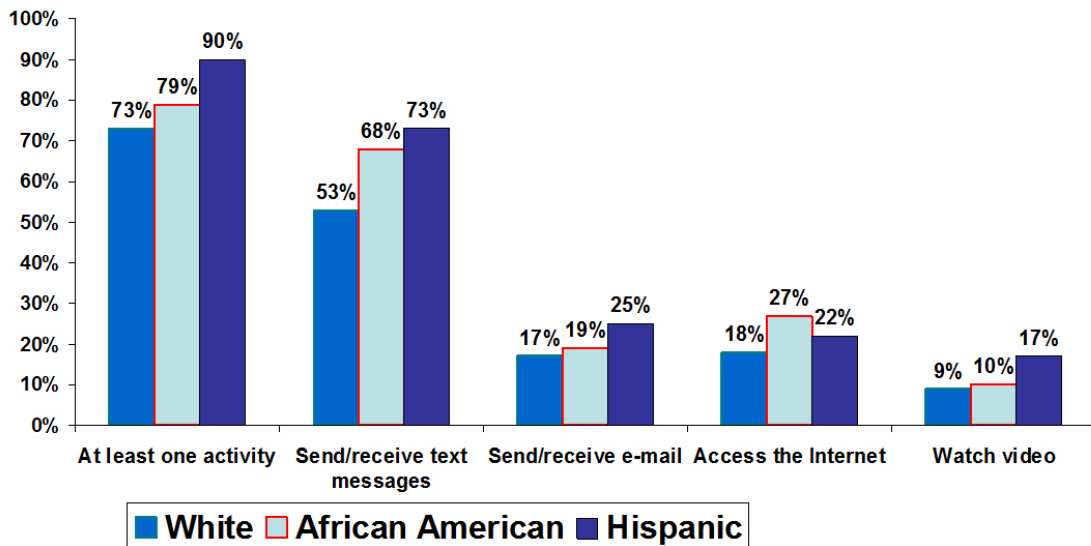


Source: M:Metrics MobiLens survey, 3 mo average ending November 30 2007, n=33,237

The potential addressable US mobile audience is vast. According to data from comScore M:Metrics from November 2007, approximately 100.7 million US consumers used text messaging; 34.1 million used the mobile Web; 29 million downloaded content; 14.6 million used Web search; and 9.3 million viewed Web video.

Demographically, it is well established at this point that mobile data usage shows a very strong skew toward youth. However marketers should not overlook the fact that substantial shares of older demographics have also started using mobile interactivity. According to the March, 2008 Pew Internet Life study, 96% of 18-29 year-olds with a mobile phone or PDA have used one or more mobile data services, as compared with 85% of 30-49 year-olds, 63% of 50-64 year-olds, and 36% of Americans over the age of 65. These older segments are therefore increasingly easily reached via mobile marketing.


**Race/Ethnicity One Demographic Determinant of Mobile Data Use**



Source: Pew Internet and American Life Project, *Mobile Access to Data and Information*, Data Memo, March 2008. N=1,704 for those with cell phones or PDAs. Margin of error is +/- 3 points. Survey Conducted in English.

The other important demographic skew around mobile data usage relates to race and ethnicity. Again, based on Pew data, 90% of US English-speaking Hispanics with mobile communication devices have used one or more mobile data services, as compared with 79% of African Americans and 73% of whites.

**Introducing the Three Faces of Mobile**

 <b>Mobile Pioneer</b> 15%	 <b>Mobile Wannabe</b> 25%	 <b>Mobile Traditionalist</b> 60%
Forges ahead using advanced features weekly (Internet, Applications, and/or Video) Majority under 35 yrs, 1/3 have smartphone, More likely to be male, single and a minority	Has tried some advanced features but wants to use them more Less than half under 35, 5% own a smartphone	Content to just use mobile for phone calls and texting 2/3 over 35 yrs

Source: InsightExpress

Looking at the mobile audience itself, InsightExpress created three broad segments based on consumers' use of advanced mobile features. This analysis finds that many US consumers 18+ are still happy to simply use their handsets as phones. InsightExpress describes its segments as follows:

- Mobile Traditionalists mostly just use their mobile phone for voice calls and text messages, comprise 60% of mobile users;
- Mobile Wannabes have tried some advanced features and are interested in using more of them, about 25% of mobile users; and
- Mobile Pioneers forge ahead using advanced features (Internet, downloadable applications, and/or video), about 15% of mobile users.

Firms like comScore M:Metrics that have researched mobile data use have reported that, in addition to the demographic tendencies described above, tenure is another indicator of data usage. The longer someone has a mobile phone, the more they are likely to make use of both voice and data services. And as features

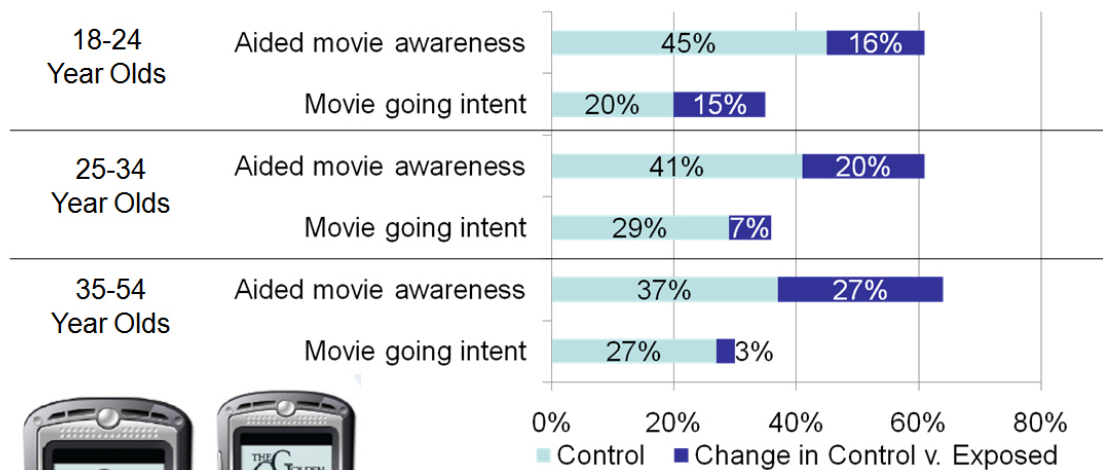
evolve from being rare and costly to being built into every device on the market, the propensity to make use of them will grow broader as well.

**Case Study: Golden Compass Raises Cross-Demo Awareness via Greystripe Mobile Campaign**

In November and December of 2007, Greystripe, an ad-supported mobile game and application distributor, ran a mobile advertising campaign for New Line Cinema’s film “The Golden Compass.” Greystripe offers downloadable games, playing fullscreen ads to the audience waiting for their games to load. Greystripe used Dynamic Logic’s AdIndex for Mobile to test the brand impact of New Line’s mobile campaign. Overall, the campaign increased aided movie awareness by 19%, from 42% to 61%. Interest in seeing the film increased from 43% to 53%. More importantly, the awareness impact occurred across the age demographics studied. Indeed, the largest increase in awareness occurred in consumers aged 35-54. Intent to view did not increase substantially among older age groups, not surprising since the movie’s theme and child protagonist may have made it inherently more appealing to a younger demographic.

Running a campaign for an entertainment product alongside entertaining mobile content is a good strategy for reaching engaged consumers. And ads played during game downloads capture the viewer’s attention, as demonstrated by the across-the-board increases in awareness of “The Golden Compass.” Dynamic Logic’s case study concluded that “entertainment advertisers could benefit by continuing to leverage the mobile medium to influence consumers.”

**Golden Compass Raises Cross-Demo Awareness via Greystripe Mobile Campaign**



Source: Dynamic Logic December 2007, n=768 total respondents.

**What is Mobile Interactive Advertising?**

**Comparisons with Internet Advertising**

Mobile Interactive Advertising refers to advertising or marketing messages delivered to portable devices, either via a synchronized download or wirelessly over the air. Although this broad definition potentially includes ads delivered to laptops, media players, and other classes of portable device, in practice the most interesting and potentially revolutionary part of the mobile interactive advertising market lies in delivering messages to non-PC devices—primarily mobile phones, but also including portable media players and game devices. This Platform Status Report will focus on current trends in advertising as delivered to mobile phones.

Mobile interactivity is in some ways similar to the PC-based internet, and these similarities will speed advertisers’ ability to take advantage of the mobile medium. Leveraging accepted Web advertising best practices will facilitate building a successful mobile advertising business. At the same time, the user experi-

ence, interactivity, and expectations of consumers on the mobile web differ from their PC counterparts, and simply transplanting PC-optimized advertising onto mobile devices is unlikely to yield optimal results.

While a broad spectrum of use cases motivates consumers to access the PC-based Internet, consumers today typically use mobile interactivity for one of two main reasons:

- **To save time**, by finding strategic information on the fly and then returning to what they were doing. This use case is like a quick information snack (by comparison, the PC-based internet is the main course). Looking up an address or map are examples of a time saving application, as are checks of traffic or travel information.
- **To fill time**, by engaging with entertaining or informative mobile applications to fill unexpected slow moments in the day. This use case, too, is likely to be short and interrupted unexpectedly; however, a user in this mode is open to—indeed hoping for—amusing distractions. Mobile games and media fit in this category.

These distinct user mindsets characterize the unique benefits offered by mobile interactivity. Marketers planning mobile campaigns will need to consider the ramifications of reaching a user in time-saving versus time-filling mode: Even if it is the same individual, the messages and offers that resonate may differ.

The following table provides an overview of the current status of the mobile Web in comparison with the traditional Internet.

### Comparison With Traditional Internet

	Traditional Internet	Mobile Web
Evolution	Web 2.0 – user generated content, web as a platform, etc.	Currently in early stage, similar to traditional Internet back in mid-1990's but on a much faster pace due to advances being made in traditional programming
Interface	Minimum 15 inch screen size, mouse and QWERTY keyboard	Currently limited by small screens and a majority of non-QWERTY keypads. (interface advances from the iPhone and Samsung Instinct are helping to mitigate this.)
Experience	Standardized Browsers, customizable, and user-friendly.	No standard browsers, limited customization (mostly kept to favorites), and not as user-friendly.
Device presence	Laptops make the PC-based Web portable, but still require conscious decision to carry. Inconvenient to take out, turn on, connect.	Pocketable, always on.
Interactivity	Latency period in driving from offline to traditional online	Drive from offline media to mobile web interaction within minutes of exposure
Consumer receptivity	Click-throughs of less than 1%	Click-throughs of between 2-5%
IAB Role	Grow an established medium, encourage operational efficiency	Help define standards, promote new platform

The mobile world presents numerous opportunities for marketers to reach consumers. Mobile features such as text messaging, ringtone and wallpaper downloads, and mobile video all provide important opportunities for marketing and/or advertising messages. While future IAB reports will delve into these aspects of mobile marketing, this report will focus on mobile display advertisements.

Mobile display advertising generally takes two major forms: display ads delivered on the device itself (within a mobile Web browser or some other phone-based application), or display ads in other media that feature a mobile call-to-action (typically sending a message via text messaging shortcode).

### On-Device Mobile Display Advertising

On-device display ads take forms that have immediate analogs on the PC-based Internet, and include formats such as:

- Text ads (either static or clickable)
- Graphical banners (either static or clickable)
- Graphical banners with associated text links
- Video preroll
- Traditional TV Commercials at standard lengths

Outside of mobile video ads, these formats are generally clickable or otherwise interactive, as with ads on the PC-based Internet. However, the results of a “click” can range beyond just taking the viewer to a landing page, and include initiating a text message or call, depending on the capabilities of the device being used.

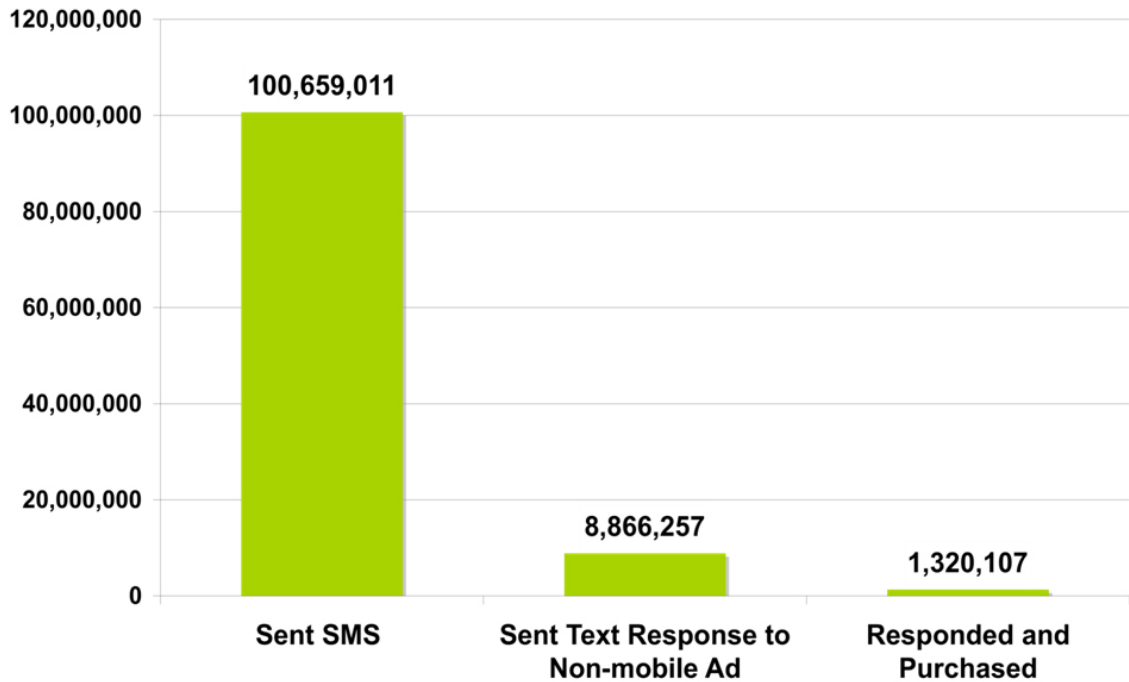
On-device display ads can serve the same spectrum of functions as display ads on PCs, ranging from pure brand building to pure direct response.

### Off-Device Mobile Display Advertising

In addition to delivering display advertising on the device itself, mobile interactivity is uniquely able to activate traditional offline advertising (e.g., outdoor, live event, television, etc.), or even PC-based ads, with an interactive, measurable call-to-action via SMS, MMS and/or WAP push. According to comScore M:Metrics, as of November 2007 almost 9 million people reported responding to an ad in a traditional medium (e.g. print or outdoor) by sending a text message, and over one million actually responded or purchased based on that interaction.

#### Text Messaging as Upstream Path for Traditional, Non-Interactive Ads

**Text-Response to Non-Mobile Ads, US, November 2007**



Source: M:Metrics Mobilens survey, 3 mo average ending November 30 2007, n=33,237



Advertisers tapping into mobile interactivity for offline display media view the mobile phone as a “mobile mouse” allowing the consumer to self-select and activate traditional media and drive a new interactive channel. Examples of this “offline interactive” capability include:

- Mobile coupons to help drive to POS
- Mobile PINs to help drive to Web
- Mobile ticketing to help drive to an event
- Mobile option to onward-going CRM

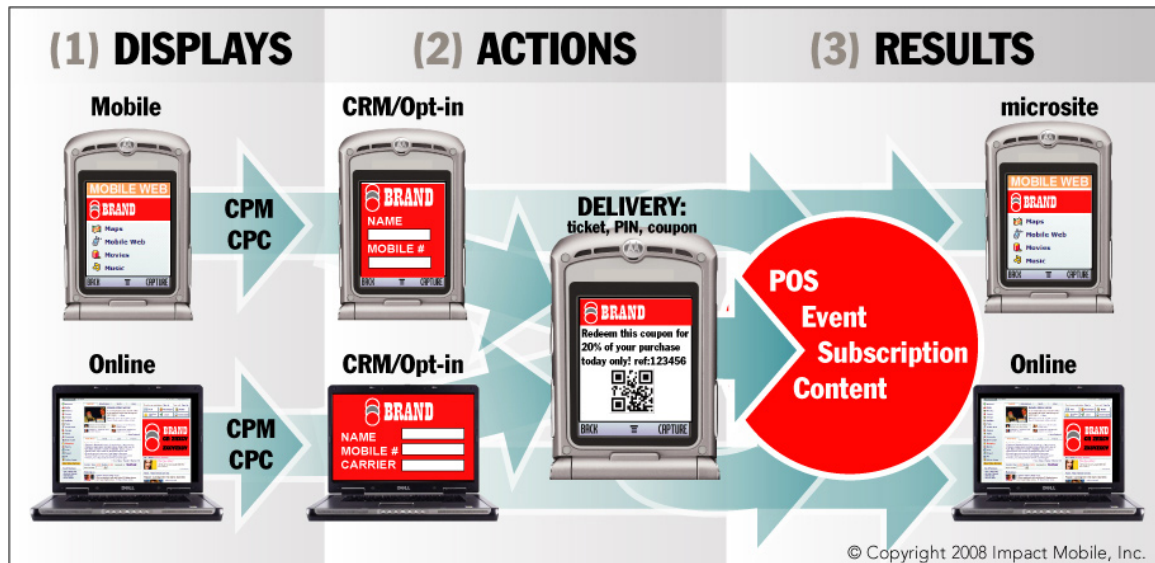


Integrating mobile marketing into other campaigns, rather than treating it as a standalone platform, can prove highly effective for traditional advertisers. Tapping into the communication possible with users on their mobile phone can establish deeply personal relationships between brands and consumers. The mobile phone is the one device consumers are likely to always have with them, giving it a unique ability to knit together messages delivered via other media.

Mobile activation refers to the alternative ways that mobile devices can be used to facilitate or enable consumer interaction with advertising, regardless of its delivery medium or platform. In some ways this is similar to click-throughs and other direct response channels on the PC-based Web; however, mobile offers marketers several unique channels, which can potentially unlock new and deeper customer relationships.

Activation options include:

- SMS PINs for internet redemption
- WAPpush or MMS coupons, barcodes/QR codes for POS or gate redemption
- Game/ application downloads
- Ringtone downloads
- Image downloads
- Downloadable applications



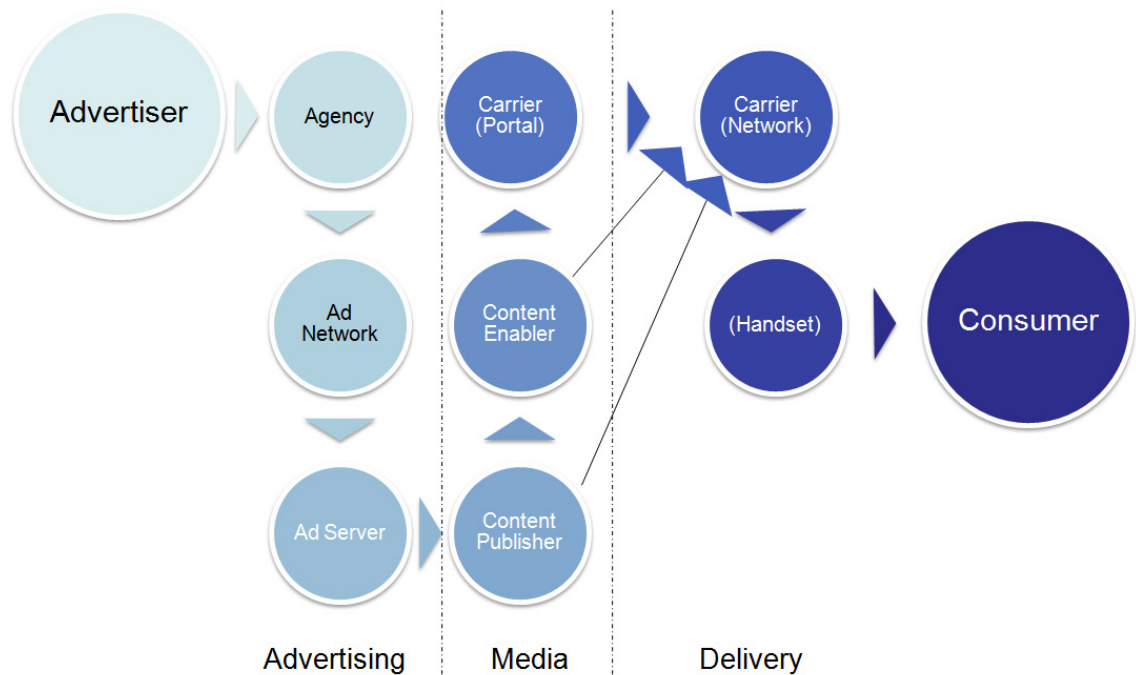
Mobile activation can help marketers on both PCs and mobile phones move consumers into proximate-location POS, events, and to specific online destinations, uniting displays, actions, and results. Additionally, it enables brands to invite consumer opt-in to onward going CRM activity.

**Mobile Ecosystem, Platforms, and Experiences**

Delivering consistent media experiences on PCs has been fairly easy for publishers and advertisers, despite different processor speeds, monitor resolutions, browser brands and versions, and PC operating systems all influencing the ways users view and interact with content. Such influences are minimal compared to the complexity created by the diversity among carrier networks and devices. Navigating this complex landscape is critical for advertisers seeking to effectively reach the largest possible mobile audience.

The mobile ecosystem requires a diverse array of intermediaries that all have a role in delivering a market-er’s message to its intended audience.

**Mobile Ecosystem Has Many Players Between Advertiser and Consumer**



Much of the mobile advertising ecosystem will be very familiar to anyone who has experience with advertising on the PC-based Web. Ad networks and ad servers are analogous to their Internet counterparts. The “content enabler” category, which may be less familiar, comprises companies like mPortal that offer transcoding services, assisting publishers in ensuring that their content is viewable and usable across the myriad of mobile devices on the market today. Two other aspects of the value chain are worth examining in more detail.

Mobile carriers play dual roles in the mobile landscape: they offer their customers content portals (in which publishers can optionally participate), and they provide the network via which subscribers access all mobile content. The role of the carrier in the publisher/content delivery value chain at least indirectly affects advertisers as well.

Additionally, handset makers, or more precisely the broad array of devices they offer, also complicate the mobile advertising landscape. Marketers must design campaigns to support different user interfaces, processor capabilities, and displays.

### The Role of the Carrier

In general, US mobile operators play a role far closer to that of early online services (e.g., CompuServe or the original incarnation of AOL) as opposed to ISPs: they play an active role as intermediaries between consumers and content.

This intermediary role creates what the industry calls a “walled garden.” The garden surrounds the user, and while there may be gates out to the wider world, things in the garden are nearby, presented attractively, and are much easier to get to. The effort required to leave the garden may mean a smaller audience if most users are satisfied by what they get within its walls.

Another phrase commonly used in this context is “on-deck.” A collection of mobile browser (WAP) pages is called a “deck,” and so “on-deck” refers to being a part of the carrier’s portal. Users can still browse to “off-deck” or independent pages, but must manually input a mobile URL or receive a link via WAPpush, text messaging, or e-mail on their device.

Increasingly, both direct ad buys and buys via mobile ad networks include placements on carrier portals and on off-deck content.

The gateway role played by carriers makes them an essential part of the ecosystem. Whether the status quo remains or changes over time is currently unpredictable. One scenario holds that the carriers evolve like the PC-based ISPs did, lowering barriers and eventually “unwalling” the garden. At the other extreme, carriers become vertically integrated media companies, like cable operators, controlling both the connections and the channels of content available over them. While the market could evolve in either direction, it is hard to overstate the importance of the carriers’ role in today’s mobile media ecosystem.

### Device Types

Another key difference between the PC-based Internet and the mobile Web lies in the wide spectrum of capabilities of different handsets on the market. In general, handsets fall into one of three categories, and one exception:

- **Basic Mobile Phones.** Basic phones (e.g., the Nokia 6010) are cheap (free with calling plans from carriers). Their media capabilities are typically limited to text messaging and a rudimentary WAP-based browser. Once the standard, these devices are now increasingly in the minority.
- **Feature Phones.** Feature phones (e.g., the Motorola RAZR) are becoming the most common consumer mobile devices. These include a varying combination of functionalities and features, typically including: a moderately large color screen; a browser; the ability to purchase and download ringtones, games, and potentially other media over the air; and a camera. Less universal features (but growing more common) include video capability, Bluetooth, and the ability to store and play back MP3 or other digital music files.
- **Smart Phones.** Smart Phones are user-extensible (permit the addition of new applications and functionality), and almost always offer full Qwerty (or similar) keyboards. These devices are highly optimized for e-mail and/or browsing the internet. Examples of Smart Phones include Research in Motion

(RIM)'s Blackberry, and Windows Mobile devices like the Samsung Ace or the Motorola Q.

- **iPhone.** Among media-optimized smart phones, Apple's iPhone has been a gamechanger in the US market. The successful launch of the 3G iPhone in July 2008 suggests a strong consumer appetite for a multifunctional media player with a sophisticated touch-based user interface that greatly facilitates interacting with media on a small screen.

### Common Mobile Creative Types, Placements, and Targeting

The more that consumers in the US look to their mobile devices for information, entertainment, and communication beyond just phone calls, the greater the opportunities to deliver compelling mobile advertising to those consumers as well. As with any other platform or medium, a successful mobile campaign requires a solid media plan and effective creative targeted to the right audience at the right time.

Given the fairly high level of engagement and click-through rates, direct response campaigns tend to be dominant. Goals for such campaigns can include any of the following:

- Driving click-through to an informational page
- Driving calls to a call center
- Collecting phone numbers
- Delivering coupons
- Fielding product interest or information request surveys
- Collecting e-mail addresses
- Offering a store locator

Mobile is a strong medium for branding as well, and vendors like InsightExpress and Dynamic Logic offer brand effectiveness studies on mobile devices to help quantify mobile's impact there.

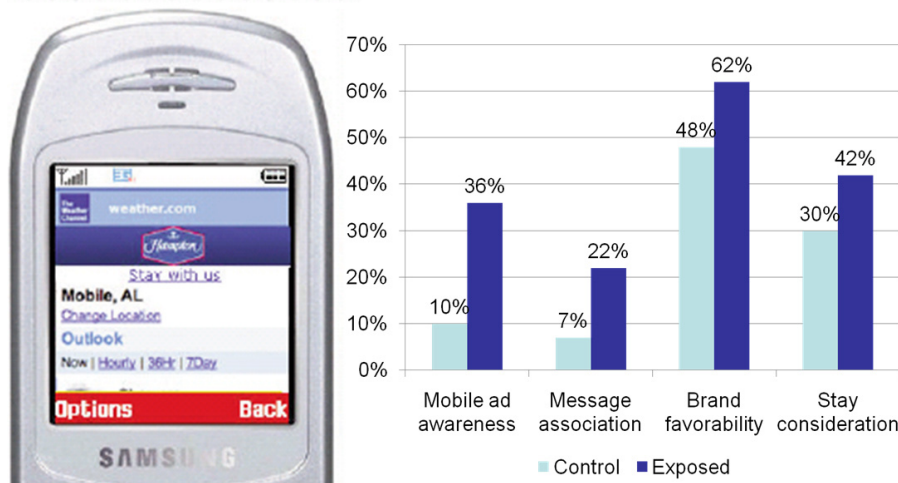
#### Case Study: Hampton Hotels Finds Business Travelers Via Weather.com's Mobile Site

In July 2007, Hampton Hotels launched a branding campaign targeted at business travelers via a display campaign on Weather.com's mobile WAP site. Weather.com worked with Dynamic Logic to evaluate the impact of the Hampton campaign.

Dynamic Logic's study, based on its AdIndex control-exposed methodology, found significant increases in key brand metrics for those consumers who saw Hampton's mobile campaign: a 14.6% increase in message association; a 13.2% increase in brand favorability, and an 11.4% increase in stay consideration.

Dynamic Logic concluded that concise yet persuasive messaging, placed in a context that draws a highly relevant audience, can generate strong results for advertisers targeting a highly mobile segment of the population.

#### Hampton Hotels Gains Brand Lift Via Mobile Campaign With Weather.com



Source: Dynamic Logic July 2007, n=2,419 respondents.



Matching campaign goals against the variety of creative and placement options makes for complex combinations that marketers and agencies must navigate.

## Creative Types

### Mobile Creative Needs to Vary to Suit the Range of Available Devices



Mobile display creative takes a variety of different forms:

- Graphical Banners: images conveying a marketing message, can be animated or static, and interactive (clickable) or not.
- Text: the earliest mobile advertising messages were largely text-based, and even today, text remains a common creative format on both the mobile Web and in other applications like SMS.
- Video: There is little doubt that consumption of mobile video, and therefore opportunities to deliver mobile video advertising, will grow in the US in the next five years, despite slow rates of handset-based video adoption to date, and competition from specialized portable video playback devices like Toshiba's Gigabeat media players.

Creative directors should keep in mind the user experience on devices with small screens and typically limited user interfaces. Ad creative needs to be made for mobile; simply repurposing display creative from the Web (or video creative from TV) makes for a poor user experience on mobile devices. This applies not just to the creative itself, but also to landing pages or microsites (the pages reached by clicking on ads). Even designers with significant Web experience are likely to lack two kinds of expertise needed to craft successful mobile sites:

- User Interface (UI). Building landing pages requires a focus on the capabilities and usage patterns of mobile devices; and
- **Device Recognition.** Adjusting a base design and QA testing across the wide array of devices on the market poses an ever-changing challenge.

Working with mobile specialists can help minimize these potential roadblocks to a successful mobile campaign.

The range of device categories in the mobile world, and the array of different screen sizes and resolutions within those broad categories, also complicates matters. Advertisers seeking to reach a wide cross section of the mobile population must develop creative in a variety of sizes and formats, and work with mobile ad servers that can deliver the appropriate creative for a given device.





Designing creative for only one device type or class would be simpler and speed time-to-market, but would



also necessarily limit the addressable audience for the campaign.

While the market sounds highly complex and even confusing, the industry as a whole is focused on developing standards that will greatly simplify advertisers' and agencies' task. For example, the Mobile Marketing Association (MMA) recently refined its creative guidelines for mobile display advertising, requiring static banners comply to a 6:1 aspect ratio, with the 4:1 extended ratio available on an optional basis.

The IAB recognizes the need to continue to reduce the frictions marketers and agencies face when launching mobile advertising campaigns across a broad array of handsets, carriers, and mobile publishers.

Table 1: Image Banners in Default 6:1 Aspect Ratio		
Ad Size	Technical Specifications	Sample Creative (approx. size)
X-Large Image Banner	<ul style="list-style-type: none"> <li>• 300 x 50 pixels</li> <li>• .gif, .png, .jpg for still image</li> <li>• Animated gif for animation</li> </ul> <p><b>Basic</b></p> <ul style="list-style-type: none"> <li>• &lt;5KB file size</li> </ul> <p><b>Enhanced</b></p> <ul style="list-style-type: none"> <li>• &lt;7.5 KB file size</li> </ul>	
Large Image Banner	<ul style="list-style-type: none"> <li>• 216 x 36 pixels</li> <li>• .gif, .png, .jpg for still image</li> <li>• Animated gif for animation</li> </ul> <p><b>Basic</b></p> <ul style="list-style-type: none"> <li>• &lt;3KB file size</li> </ul> <p><b>Enhanced</b></p> <ul style="list-style-type: none"> <li>• &lt;4.5 KB file size</li> </ul>	
Medium Image Banner	<ul style="list-style-type: none"> <li>• 168 x 28 pixels</li> <li>• .gif, .png, .jpg for still image</li> <li>• Animated gif for animation</li> </ul> <p><b>Basic</b></p> <ul style="list-style-type: none"> <li>• &lt;2KB file size</li> </ul> <p><b>Enhanced</b></p> <ul style="list-style-type: none"> <li>• &lt;3 KB file size</li> </ul>	
Small Image Banner	<ul style="list-style-type: none"> <li>• 120 x 20 pixels</li> <li>• .gif, .png, .jpg for still image</li> <li>• Animated gif for animation</li> </ul> <p><b>Basic</b></p> <ul style="list-style-type: none"> <li>• &lt;1KB file size</li> </ul> <p><b>Enhanced</b></p> <ul style="list-style-type: none"> <li>• &lt;1.5 KB file size</li> </ul>	
Text Tagline (optional) <sup>1</sup>	<ul style="list-style-type: none"> <li>• Up to 24 characters for X-Large</li> <li>• Up to 18 characters for Large</li> <li>• Up to 12 characters for Medium</li> <li>• Up to 10 characters for Small</li> </ul>	<a href="#">View Program</a>

Source: Mobile Marketing Association, Mobile Advertising Guidelines, April 2008.

## Placements.

Different placements of mobile display ads have different values for marketers. The main choice marketers face here revolves around browser-based campaigns or ads on other mobile applications.

The dominant context for mobile display ads today are browser pages. The mobile browser, analogous to Web browsers on PCs, presents formatted text and graphics, with links enabling a user to move from one page or “deck” to another. The ability of handset-based browsers to display actual Web pages, as opposed to pages coded in mobile-specific markup languages like WEL (Wireless Markup Language) or XHTML-MP, varies significantly. Even if there were no stumbling blocks to full Web access on mobile devices, there will still be advantages to both viewers and advertisers that may ensure an enduring preference for pages specifically formatted for mobile.

For example, mobile consumers are likely to prefer sites with location- or time-specific content over those featuring more generic content. And content formatted for a small screen held 5 inches from the viewer’s face will always be easier to consume on a small device than a full Web page. From the advertisers’ perspective, the absence of clutter—typically only one ad is shown per page—on mobile-formatted content may also provide an incentive to think about mobile creative separately from the rest of interactive media. On the other hand, Web pages and ad creative designed for PCs present a number of problems to handset-based browsers:

- **Slow page loading.** Web pages continue to increase in file size and complexity to serve broadband-equipped PC users;
- **Poor formatting.** As monitor sizes and resolutions increase, if the server or browser lack intelligence to adjust layouts for smaller screens viewers will be forced to scroll significantly to see sprawling page designs;
- **Poor navigation.** Lacking a mouse, users are forced to laboriously navigate from link to link to reach the one they want.
- **Presence of Flash or other rich media.** Most handsets are incapable of rendering rich media today.

For all these reasons, IAB standard banners created for the PC-based Web are much less likely to achieve their advertising objectives when delivered to users on the mobile Web.

### Case Study: Facebook Evolves to Optimize User Interface on iPhones

The iPhone, famously, includes an HTML Web browser. How publishers have responded to that capability has varied, however. In the case of Facebook, when the iPhone first launched, users were directed to the Web version of the site, which is large and complex, and slow to load over a 2G data network. Facebook then experimented with redirecting iPhone-equipped visitors to its WAP site ([m.facebook.com](http://m.facebook.com)), which loaded faster but lacked capabilities and richness. Finally, Facebook developed an interface specifically for iPhones, reinforcing that even when it’s possible to view a full Web page, a specialized experience that suits a mobile user may prove the best option. Advertisers will likely proceed along a similar path to match optimal creative for a given device.

Alongside the browser, advertisers are finding display opportunities in other contexts on mobile devices

- **Games.** Some mobile games include ad inventory, either as a banner visible during gameplay or as interstitials shown in between levels or rounds. Adver-games designed for mobile phones are another possibility for non-browser mobile advertising.
- **Other user-downloadable applications.** As with games, other applications downloaded to handsets can also contain advertising opportunities.
- **Push publishing environments.** Much mobile media is consumed via the browser; however, vendors like U-Turn Mobile are enabling media properties to have their own phone-resident applications. These apps can enable publishers to “push” new content or advertisements in the background, making it instantly available to the viewer.
- **Ticketing/Couponsing.** Applications facilitating mobile ticketing or mobile coupons, for example, LiveNation can incorporate display advertising as part of the ticket.

- **Passive display.** Some vendors (e.g., CellTick) are looking to incorporate advertising into the display of the phone, for example as part of screen savers.
- **P2P Messaging.** Advertising-subsidized or supported person-to-person messaging may become an important advertising venue as well. Text messages could be converted to MMS messages in the network, and delivered free to a user with an ad inserted.

### Targeting

Targeting capabilities on mobile devices are potentially better than anything on any other medium. Today, however, they remain at a relatively early stage of development. Advertisers should take advantage of today's capabilities while looking ahead to even better ones tomorrow.

Unless marketers work directly with carriers, demographic targeting is challenging right now. However, any mobile ad server can target based on handset, which can serve as a proxy for demographics in some cases. It is also possible to target by carrier, and ad servers are also starting to offer targeting by geography.

Some publishers are beginning to incorporate user profile registration, improving targeting capabilities. The value of personalization on a small device gives users a strong incentive to register; however, technical limitations (the time it takes to type in a user name and password; the lack of support for shortcuts such as cookies on most mobile devices today), may impede users' ability to register for the near term.

### Mobile Campaign Pricing Models and Costs

#### Pricing Models

Mobile display ads and sponsorships are sold using pricing models that are familiar to anyone who has bought advertising on the PC-based Web. Depending on the publisher, carrier, or ad network, advertisers can make mobile ad buys in any of the following three main ways:

- CPM (Cost per Thousand Impressions): Buying based on impressions delivered;
- CPC (Cost per Click): Buying based on the number of viewers who click on the ad; and
- CPA (Cost per Action): Buying based on some other action by the consumer beyond the click. On mobile, "cost per call" is gaining currency for some campaigns; this allows viewers of the ad to automatically initiate a call with a call center.

Today, CPC and CPM models are both common for mobile display campaigns.

#### Campaign Costs

Spending on mobile display campaigns continues to increase. According to an October, 2007, report from Third Screen Media, the average cost of a US mobile marketing campaign was \$10,000 in 2005, \$30,000 in 2006, and \$100,000 in 2007.

Pricing data for mobile banner ad campaigns is not widely available; however, based on a variety of anecdotal industry sources, CPM pricing ranges from an estimated \$10 to \$50, with most campaigns in the range of \$20 to \$35. Although this is substantially higher than typical Web banner campaigns, the perceived effectiveness of mobile banners justifies their cost.

For example, consider a direct response campaign with a mobile display ad at a \$20 CPM and a 2% click through rate. On an effective cost-per-click (CPC) basis, the mobile ad costs \$1 per click, which compares very well with similar metrics for the PC-based Web.

Production/creative costs for mobile campaigns are fairly reasonable. In general, designing a WAP banner to MMA guidelines that will work across the vast majority of mobile handsets requires no more than a few hours of a designer's time.

Somewhat more complex and costly is the development of a WAP landing page, important because many advertisers do not yet have mobile destinations. RarePlay.com and Brandweek magazine reported in January 2007 that 92% of the sites of top US brands did not have a mobile-compatible version of their Web site. Only 6% of top US brands had a mobile version at all, and just 2% had mobile versions that could automatically detect browser types to display correctly formatted content. But the top 100 US Web sites were far more aggressive. A solid 26% of the most heavily visited US sites had mobile versions, with an additional 16% having mobile versions with auto-detect.



As this report has suggested previously, Web page design expertise does not automatically translate into the ability to build successful mobile Web pages. However, advertisers can create a basic mobile landing/destination page with as little as a few thousand dollars. Industry experts say that an investment of \$10,000 will allow for a fairly elaborate mobile microsite with multiple pages and capabilities like store locators. More modest efforts can still deliver highly useful landing page functionality including:

- Click to call;
- Information collecting (forms);
- Registration;
- Contest entry;
- Additional product information.

Availability of tools and capabilities to create simple but effective mobile landing pages should increase over time.

### **Opportunities & Challenges**

Significant business opportunities await those pioneers who launch early mobile marketing endeavors. The platform is new and exciting, consumers are increasingly making use of mobile interactivity, and strong growth in adoption will continue for the next several years. At the same time, advertisers on mobile devices must be cognizant of the newness of the platform, which presents a number of both technical and market challenges. Considering both the opportunities and the challenges in advance of launching a mobile campaign will be critical to ensuring that the effort achieves its goals.

#### **Opportunities**

The IAB characterizes the key opportunities around mobile advertising into three broad categories: driving response and brand relationships; delivering more personally and locationally relevant messages; and timing efforts to gain early experience in a dynamic and growing market.

##### **Drive Response and Brand Relationships**

Mobile campaigns typically see strong consumer response and click-through rates. This is sometimes attributed to the novelty effect of an interested early adopter user base, and a platform still in its early days. However, strong response rates are also driven by a relative absence of clutter on mobile screens; relatively few ads presented makes the ones that are more likely to attract attention.

##### **Deliver More Personally and Locationally Targeted Messages**

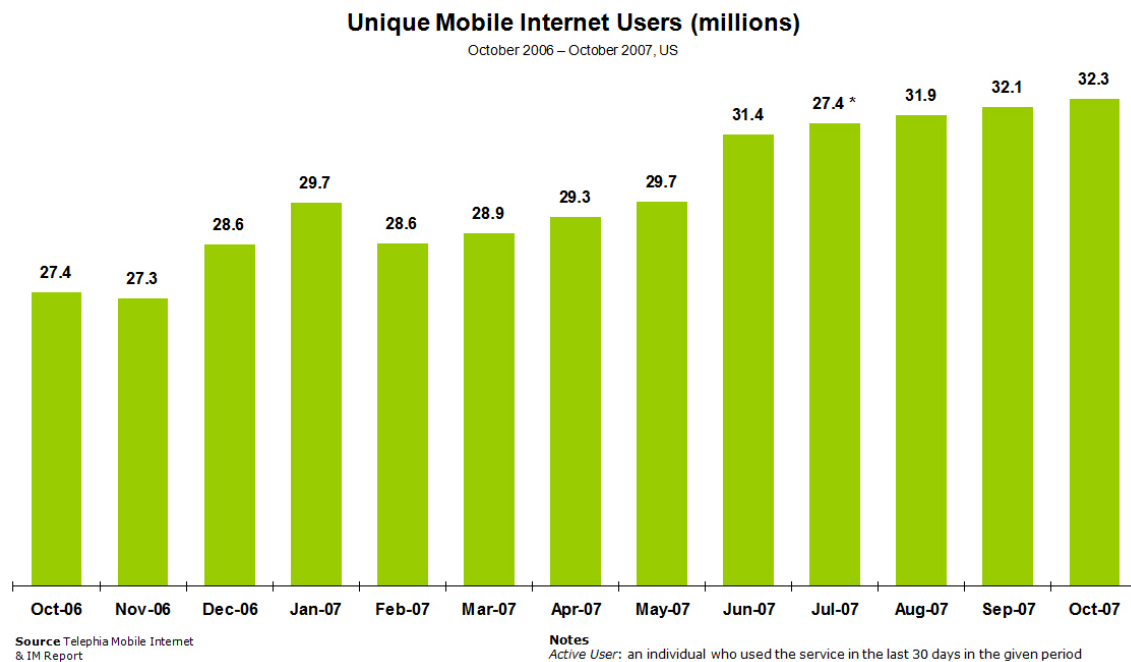
Mobile interactivity is more than simply the PC-based Internet on smaller screens. Beyond TVs or even PCs, mobile handsets are highly personal devices, and mobile media will be highly personal as well. Delivering relevant, desired, valuable information on mobile devices has the potential to move consumer relationships with brands to a new and very deep level.

Adding the location component further increases potential relevance, as mobile interactivity creates unique opportunities to reach people at home and away, enables new ties between advertising and geography, and potentially activates other marketing campaigns, whether online, on TV, or in the real world.

##### **Gain Early Experience in a Rapidly Expanding Market**

The third compelling reason to launch a mobile advertising initiative early lies in the invaluable learning and experience to be gained from the effort. Advertisers that launch early mobile campaigns build knowledge-bases that will stay relevant as adoption and opportunities grow. They stand to gain an understanding of how the mobile platform, and mobile users, compare to their counterparts on the PC-based Web. Finally, mobile campaigns today create opportunities to develop ongoing relationships with both mobile content publishers and with mobile media consumers, again positioning advertisers strategically as the market evolves.

## The Number of Unique Mobile Internet Users Continues to Increase Month Over Month



### Challenges:

Balanced against the opportunities, advertisers must also take into account key technical and market challenges that mobile advertising faces today.

#### Technical challenges

One set of technical challenges facing mobile pioneers relate to fragmentation of various sorts. The mobile audience is fragmented across multiple platforms, with multiple sellers, multiple carrier networks, multiple devices, and multiple business models, all of which hinder consistency of execution. In such a highly fragmented landscape, identification of a user, user session, browser, or device can pose a significant problem, hindering the ability to deliver the right ad to the right user at the right time. Fortunately, solutions are emerging. Mobile ad platforms that can handle the heavy lifting are becoming better established, and working with them or with publishers directly can help abstract from the complexities of the platform and reduce challenges.

A second set of key technical challenges in the mobile world revolve around measurement. For example, the state of mobile platforms makes it difficult to:

- Measure unique users against lots of polluting traffic (bots, spyders, etc.);
- Track international traffic vs. US traffic;
- Measure advertising impressions in intermittently-connected content like games or downloaded audio.

Here, too, solutions are being developed by vendors that will supply the data advertisers and agencies require to judge campaign success. Understanding available metrics from clients or potentially third parties is a key piece of homework advertisers should do when researching mobile opportunities.

#### Market challenges

The two key market challenges that early advertisers face relate to the supply side of the business and the need to proceed prudently where targeting and the use of consumer data is concerned.

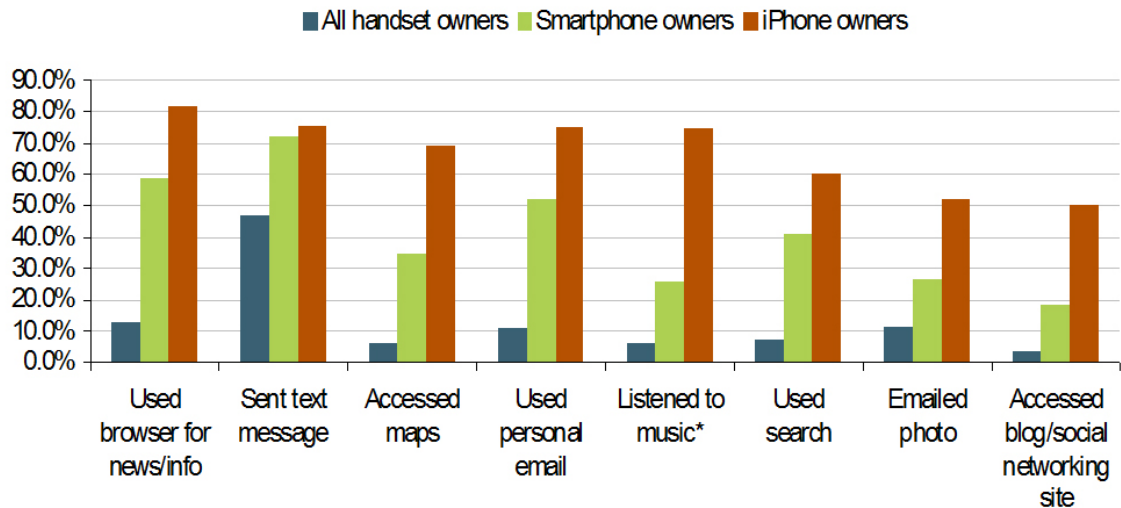
Fundamentally, supply constraints result from today's combination of a relatively finite universe of mobile media, and a still-small audience for much of that content. Time will help ameliorate both of those constraints, but it is incumbent that all players in the value chain both support and encourage carriers in their efforts to increase the popularity of mobile data. The industry can best accelerate its growth by driving new user demand for mobile content, rather than just filling existing demand from current mobile data users.

The second key market challenge relates to the need to balance the high targeting potential of mobile against consumers' comfort level with such targeting. Advertisers and publishers alike should be respectful of consumer privacy, and should continue to support industry efforts around self-regulation, such as the Interactive Advertising Bureau's guidelines on privacy, released in February of 2008. This extends beyond mobile display to other kinds of mobile advertising as well; consumers will repay marketers who respect their sense of privacy with regard to messaging on these highly personal devices.

Targeting faces a challenge of scaling as well: although carriers can provide demographic data, such information is not standardized across carriers, nor is it available to advertisers buying outside of carrier networks.

## The Future

### The iPhone: Smarter Phones Drive Even Greater Usage



Source: MMetrics. 3-month average ending December 2007

The greatest certainty about the world of mobile media is that new business models and technology innovations will continue to change the landscape. Some things about the evolution of the market over the next five years are virtually certain, and should encourage marketers and agencies to proceed with mobile initiatives: mobile media is not going away, and opportunities to tap into mobile devices for communicating with prospects and customers will only increase.

Evolutionary steps marketers may expect to see in the near future include:

- **Faster Data Connections.** As "3G" data networks gain ubiquity in the US, and carriers begin mulling a "4G" future, a major current hurdle to data usage will go away. Already, 3G users are bigger consumers of mobile data than consumers on slower mobile data connections.
- **Improved Devices.** Higher resolutions will compensate for conveniently small screens, and battery life will continue to improve. Faster processors will improve performance over and above network speed improvements. User interfaces will continue to become more flexible. As the chart above shows, comScore M:Metrics has found iPhone users far outpace other SmartPhone users in data consumption; as better devices proliferate, usage will increase more broadly.
- **Improved Embedded Software.** Handset makers will also begin including better software embedded in devices that will make their capabilities more user friendly and useful, helping further drive adoption.
- **More Content, More Discoverability.** In tandem with the continued increase in available content on mobile devices, expect to see enhanced discoverability, driven particularly by improvements in mobile search. This increases the availability of mobile content, and also ensures that mobile consumers can find the content they want.

- **Ad Standards.** Greater standardization of mobile ad formats and campaign measurements will reduce advertiser and agency costs.
- **Better Targeting Capabilities.** The evolution of the mobile ad market will help ensure better targeting capabilities are offered to advertisers. Publishers and ad networks will make use of things like SMS surveys to learn more about their audiences, and deliver more customized, relevant content and advertising to them.
- **Discounted or Ad-Subsidized Services.** Carriers will likely begin offering applications and perhaps even voice minutes at a reduced rate due to being ad supported. Virgin Mobile's Sugar Mama is an example of such subsidies in the US.
- **Flat-Rate Data Services.** All-you-can-eat usage plans were vital to driving the first explosion of PC-based Internet adoption; as mobile operators in the US move from per-minute or per-bit pricing to flat-rates, look for strong increases in data use per customer—and consequently greater willingness to respond to marketing messages.
- **Better Location Capabilities.** Improving access to and use of location data remains a key unfulfilled promise of mobile media. As the comfort level with location based services slowly increases, it paves the way for further enhancements in mobile media's ability to relate and be relevant to a consumer's surroundings.

Several other possible developments of the mobile landscape are somewhat less certain, but may represent lucrative opportunities for some kinds of marketers as well. The "wild card" category over the next five years includes:

- **HTML Browsers.** Widespread availability of HTML browsers on mobile devices would enable consumers to access a much wider array of Web content. It would greatly reduce the need to create separate sites specifically for mobile devices.
- **Rich Media Standards.** Adobe offers a stripped down version of Flash (called "Flash Mobile") that could potentially facilitate development of rich applications on handsets. If Flash Mobile or some other rich app environment grows more ubiquitous on handsets, it would simplify mobile content development.
- **Advanced User Interfaces.** In addition to Apple's touch screen, other advanced UIs may emerge that facilitate interactivity. Possibilities include voice interfaces; gestures (e.g., pointing the device like a Wii remote); image processing; and barcode or QR code reading via camera—offered by vendors such as Scanbuy.
- **Highly Localized Communication.** Deployment of local data networks, which would use Wi-Fi, or Bluetooth, or possibly WiMAX, create an alternate means to deliver wireless content to nearby devices.

This report has highlighted the state of the mobile display opportunity today, and discussed some of the likely changes that will improve that opportunity over the next several years. Marketers launching mobile campaigns today are entering a world of wide-open possibilities, albeit one where success metrics and creative standards remain in their infancy.

This report has drawn many parallels between mobile display advertising today and the early days of advertising on the PC-based Web. Experience with Web display advertising provides a good foundation for understanding mobile display. As with the nascent Web, marketing via mobile today offers a chance to gain invaluable experience and get a leg up on competitors as mobile media continues to flourish.

### Who is the IAB Mobile Advertising Committee?

The IAB Mobile Advertising Committee is comprised of IAB member companies who are committed to making mobile a more effective and efficient advertising platform for marketers and agencies through the development and endorsement of measurement guidelines, creative guidelines and best practices.

Additionally the committee undertakes projects to prove and promote the effectiveness of mobile advertising to advertisers, agencies, marketers and the press, and to help grow revenues for the mobile advertising marketplace.

Co-Chairpersons: Gary Schwartz, Impact Mobile; Sharon Knitter, Cars.com

Committee members span the range of players in the mobile advertising and/or media ecosystem.

Member Companies	
1105 Media, Inc.	CPX Interactive
24/7 Real Media, Inc.	Crisp Wireless
4INFO	DoubleClick, Inc.
AccuWeather.com	Dynamic Logic
Ad Infuse	Emmis Interactive
AdMob	Enliven
ADObjects	Ernst & Young LLP
Adtegrity	ExtendMedia Corp.
Advanstar Communications, Inc.	Eyeblaster
Agency.com	Forbes.com
Allrecipes.com	FOX Interactive Media
AOL	FOX News Channel
Aptimus, Inc.	Geary Interactive
Associated Press	Gemstar - TV Guide International, Inc.
AT&T Wireless	Google, Inc.
Atlas	Greystripe
Aurix LTD	Hachette Filipacchi Media
Azoogles Ads, Inc.	Hearst Magazines Digital Media
BIA Information Network, Inc.	Hearst-Argyle Television
Burst Media Corporation	HowStuffWorks
CBS Interactive	iCrossing
Clip Syndicate	Idearc Media Corp.'s SuperPages.com
CNET Networks, Inc.	IDG
CNN.com	ImServices Group
Cognizant Technology Solutions	InsightExpress
Compete, Inc.	Interpolls
comScore M:Metrics	Interpret LLC
CondéNet	JumpTap
ContextWeb, Inc.	Leapfrog Online
Cox Newspapers, Inc.	Lifetime Entertainment Services
	Marchex

Member Companies, continued	
Media Two Interactive	Sony Pictures Television
MediaFLO USA, Inc.	Tatto Media
Microsoft Digital Advertising Solutions (MSN)	The Sales Athlete
Millennial Media	The Wall Street Journal Digital Network
MIVA Media	Theorem, Inc.
NBC Universal Digital Media	Thomson-Reuters
New York Times Digital	Time Inc.
Nokia / Enpocket	Traffic.com, a NAVTEQ Company
Nurun	Transpera
Organic Inc.	True North, Inc.
Origin Digital	Turn, Inc.
PerfSpot.com	Univision Online
PointRoll	USATODAY.com
Polar Mobile Group	Van Wagner
PricewaterhouseCoopers LLP	Verve Wireless
Q Interactive	Vizi
Range Online Media, Inc.	Walt Disney Internet Group
RealNetworks, Inc.	Weather Channel Interactive (Weather.com)
Rentrak	WeatherBug
Ripe Digital Entertainment	Whitepages.com
Sapient Corporation	World Wrestling Entertainment, Inc.
Scanbuy	Yahoo!, Inc.
ShoZu	Zango

## Appendix A: Definitions & Nomenclature

Definitions from: Mobile Marketing Association, Mobile Marketing Industry Glossary, Version 068, 2007. <http://www.mmaglobal.com/glossary.pdf>.

**3G** — The third generation wireless service promises to provide high data speeds, always-on data access and greater voice capacity. The high data speeds enable full motion video, high-speed internet access and video-conferencing, and are measured in Mbps. 3G technology standards include UMTS, based on WCDMA technology (quite often the two terms are used interchangeably) and CDMA2000, which is the evolution of the earlier CDMA 2G technology. UMTS standard is generally preferred by countries that use GSM network. The data transmission rates range from 144 kbps to more than 2 mbps.

**Click to Call** — A service that enables a mobile subscriber to initiate a voice call to a specified phone number by clicking on a link on a mobile web site. Typically used to enhance and provide a direct response mechanism in an advertisement.

**Common Shortcode** — Short numeric numbers (typically 4-6 digits) to which text messages can be sent from a mobile phone. Wireless subscribers send text messages to common short codes with relevant keywords to access a wide variety of mobile content.

**Deck (Portal)** — A browseable portal of links to content, pre-configured usually by the network operator, and set as the default home page to the phone's browser.

**Landing Page (Jump Page)** — A secondary page to which a user is directed when they click on an ad, where they are provided additional information and/or a mechanism to make a purchase. The user is often driven to a landing page via an ad banner, link or other offer related communication.

**Mobile Marketing** — The use of wireless media as an integrated content delivery and direct response vehicle within a cross-media or stand-alone marketing communications program.

**Mobile Originated Message (MO, MOM)** — The mobile subscriber's initial opt-in message, sent from his/her handset.

**Multimedia Messaging Service (MMS)** — Standard for telephony messaging systems that enable the sending of messages that include multimedia objects (images, audio, video, rich text). May or may not include normal text.

**Off Portal (Off Deck)** — Point of sale/access on the mobile network, but outside of the carrier's "walled garden"/portal/deck, where consumers can access/purchase information and mobile products/content/utilities.

**On Portal (On Deck)** — Point of sale/ access within the carrier's "walled garden"/ portal/ deck where mobile customers can access/purchase information and mobile products/content/utilities.

**Over-the-air (OTA)** — A method of distributing new software updates to cell phones or provisioning handsets with the necessary settings with which to access services such as WAP or MMS.

**Pull Messaging (Wireless Pull Advertising, Content Pull Advertising)** — Any content sent to the wireless subscriber upon request, shortly thereafter, on a one time basis. For example, when a customer requests the local weather from a WAP-capable browser, the content of the response, including any related advertising, is Pull Messaging.

**Push Messaging (Wireless Push Advertising, Content Push Advertising)** — Any content sent by or on behalf of advertisers and marketers to a wireless mobile device at a time other than when the subscriber requests it. Push Messaging includes audio, short message service (SMS) messages, e-mail, multimedia messaging, cell broadcast, picture messages, surveys, or any other pushed advertising or content.

**Short Message Service (SMS)** — A standard for telephony messaging systems that allow sending messages between mobile devices that consist of short messages, normally with text only content.

**Site Tagging** — The process of inserting advertisement tags into a Mobile Web (WAP) site that allows a mobile campaign management platform to deliver advertisements to the site.

**Smartphone** — A handheld device that integrates mobile phone capabilities with the more common features of a handheld computer or PDA. Smartphones allow users to store information, email, install programs, along with using a mobile phone in one device.

**SMS Message** — A message sent via a Short Message Service. 160 characters in length and most commonly referred to as a text (or txt).

**Text Ad** — A static prepended or appended text attached to an advertisement.

**Text Link** — Creative use for mobile advertisements—represented by highlighted and clickable text(s) with a link embedded within the highlighted text. Usually limited to 16-24 characters.

**Walled Garden** — The service provider—for example, the mobile carrier—provides a restricted list of services to the consumer (deck/portal), but disables the ability of the consumer to access services outside of that list.

**WAP Landing Page** — A secondary WAP page a consumer is taken to once they click on an MMS link in order to give or receive additional information.

**WAP Pull** — Where the user directly requests a mobile WAP site by entering a URL, or by entering the phone number on a content provider web page.

**WAP Push** — A specially encoded message which includes a link to a WAP address that allows WAP content

**Wireless Application Protocol (WAP)** — An open international standard for applications that use wireless communication. Its principal application is to enable access to the internet from a mobile phone or PDA. Can be used to deliver content to mobile devices.

**Wireless Markup Language (WML)** — A markup language developed specifically for wireless applications to enable optimum usage of the limited display capabilities of a handset. Based on XML, it is used for tailoring WAP content.

**Wireless Web (Wireless Internet/Mobile Web/Mobile Internet)** — The Mobile Web is a channel for delivery of web content, which offers and formats content to users in awareness of the mobile context. The mobile context is characterized by the nature of personal user information needs (e.g. updating your blog, accessing travel information, receiving news update), constraints of mobile phones (i.e. screen size, keypad input) and special capabilities (i.e. location, connection type such as 3G or WLAN).