



Mobile Advertising Overview

JANUARY 2009

- 1.0 Introduction..... 01
- 2.0 Mobile Web..... 02
 - 2.1 Mobile Web Advertising Overview..... 02
 - 2.2 How do I buy advertising on the Mobile Web?..... 06
 - 2.3 What results can I expect?..... 06
 - 2.4 Scope of Advertising Guidelines..... 06
- 3.0 Mobile Messaging..... 06
 - 3.1 Mobile Messaging Overview..... 06
 - 3.2 Mobile Messaging as an Advertising Medium..... 06
 - 3.3 Complete Messaging Advertising..... 10
 - 3.4 Success Drivers..... 10
 - 3.5 How to Buy Advertising in Mobile Messaging..... 10
 - 3.6 Mobile Messaging Response Capabilities..... 11
- 4.0 Mobile Applications..... 11
 - 4.1 Mobile Applications Overview..... 11
 - 4.2 Mobile Applications Categories..... 11
 - 4.3 Mobile Applications as an Advertising Opportunity..... 13
 - 4.4 Mobile Application Advertising Addresses User's Interests..... 16
 - 4.5 Mobile Application Advertising Units..... 17
 - 4.6 Mobile Application Ad Serving Considerations..... 17
 - 4.7 Mobile Application Advertising Response Capabilities..... 19
 - 4.8 How to Buy Advertising in Mobile Applications..... 20
 - 4.9 Success Drivers..... 20
 - 4.10 Outlook and Next Steps..... 20
- 5.0 Mobile Video and TV..... 20
 - 5.1 Mobile Video and TV Overview..... 20
 - 5.2 Mobile Video and TV as an Advertising Medium..... 21
 - 5.3 How to Buy Advertising in Mobile Video and TV..... 22
 - 5.4 Success Drivers..... 22
 - 5.5 Interactive Ads..... 22
 - 5.6 Mobile Ad Video Response Mechanisms and ROI..... 22
- 6.0 Who We Are..... 23
- 7.0 References..... 23
- 8.0 Contact Us..... 24
- 9.0 Glossary of Terms..... 24

The materials found in this document are owned, held, or licensed by the Mobile Marketing Association and are available for personal, non-commercial, and educational use, provided that ownership of the materials is properly cited. Any commercial use of the materials, without the written permission of the Mobile Marketing Association, is strictly prohibited.

1.0 Introduction

Mobile advertising is a rapidly growing sector providing brands, agencies and marketers the opportunity to connect with consumers beyond traditional and digital media directly on their mobile phones. This document is an overview on the mobile media channels available to advertisers today, including the benefits offered by each, and considerations to use in selecting and optimizing mobile advertising campaigns

This document is adjunct to the MMA *Mobile Advertising Guidelines*, which provide technical specifications, global formats, guidelines and best practices for each mobile channel. The *Mobile Advertising Guidelines* can be located on the MMA Website at <http://www.mmaglobal.com/mobileadvertising.pdf>.

Today, mobile phones can be utilized for much more than just making and receiving calls. Besides voice services, mobile users have access to data services such Short Message Service (SMS), also known as text messaging, picture messaging, content downloads and the Mobile Web. These media channels carry both content and advertising.

The mobile phone is an extremely personal device. One mobile phone typically has one unique user. This makes the mobile phone a precisely targeted communication channel, where users are highly engaged with content. As a result, the mobile channel delivers excellent campaign effectiveness and response levels compared to other media.

Mobile is valuable as a stand-alone medium for advertising, but it's also well suited for a vital role in fully integrated cross-media campaign plans, including TV, print, radio, outdoor, cinema, online and direct mail. These examples illustrate the ways brands and marketers use the mobile channel to engage and interact with consumers:

- Click to call (users place an outgoing call to the content provider or advertiser)
- Click to locate (users find, for example, the closest car dealer or movie theatre, enabled by location-based services)
- Click to order brochure (users receive marketing materials by supplying their postal addresses)
- Click to enter competition (users enter text or sweepstake to win prizes)
- Click to receive email (users receive an email and a link to online site by supplying their email address)
- Click to receive mobile coupon (users receive an electronic coupon on their mobile phone that can be redeemed immediately at a participating merchant)
- Click to buy (users make a purchase paid for with a credit card, added to their monthly mobile bill or using some other form of mobile payment)

- Click to download content (users download content, including logos, wallpapers or ring tones, onto their mobile phones)
- Click to enter branded Mobile Web site (users click a banner to get connected to standing or campaign-specific Mobile Web site)
- Click to forward content (users forward relevant content to friends, creating a viral campaign effect)
- Click to video (users click a banner to view an advertiser's commercial for a product or service)
- Click to vote (users reply message ballot or poll from their mobile phone and provide marketers and brands with valuable research insights)

When designing a mobile advertising campaign, there are multiple channels available to reach the consumer. Those include Mobile Web sites, mobile applications, mobile messaging and mobile video, all of which can be integrated into the interactive campaigns previously described. Each channel can link to additional mobile content or channels, as well as to complementing traditional media. Mobile provides a powerful instant and interactive response path, such as consumers sending a keyword to a short code via SMS, or registering on a Mobile Web site.

Channel	Description	Advertising Opportunities
Mobile Web	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)	Banner ads on Mobile Web sites Text ads on Mobile Web sites Branded Mobile Web sites. Good for: Driving users to a Mobile Web site Lead generation Direct sales Branding
Mobile Applications	Software or content that consumers download to or find pre-installed on their mobile phone and then resides on the phone. Examples include applications such as games, news readers and lifestyle tools. Downloads are accessible only to consumers with appropriate mobile phones and data plans.	Ad placement within applications (e.g., banners, "splash" pages) Branded applications. Good for: Branding/CRM Driving users to a Mobile Web site

<p>Mobile Messaging</p>	<p>This category includes SMS and Multimedia Messaging Service (MMS). SMS is available to virtually all mobile phone users and does not typically require a data plan or Mobile Web access, making it ideal for reaching most mobile users. While SMS is limited to contain text, MMS can contain images, audio and even video content. Most mobile phones sold over the past few years support MMS, making it an effective way to reach many mobile users. Interactive applications frequently use SMS with common short codes (CSC), which are four- to six-digit phone numbers to/from which messages can be sent/ received. For more information about the United States CSC program, download the MMA's Short Code Primer, available at: http://mmaglobal.com/shortcodeprimer.pdf.</p>	<p>Text ads (SMS, MMS) Branding/CRM (SMS, MMS) Banner ads, splash pages (MMS) Animated images (MMS)</p> <p>Good for: Driving users to a Mobile Web site Click to call Branding/CRM Interactive dialogue (e.g., voting, polling)</p>
<p>Mobile Video and TV</p>	<p>Video and TV delivered over a mobile network to the mobile phone's media player. Videos may be downloaded or streamed and are usually accessed from a Mobile Web site or contained in an MMS message. Mobile video is accessible to consumers with Mobile Web and mobile video enabled mobile phones and data plans. Mobile TV is accessible through mobile TV enabled phones.</p>	<p>Video ads in pre-roll, mid-roll or post roll. Static images, animation or video Clickable overlays Branded videos</p> <p>Good for: Branding/CRM Driving users to a Mobile Web site Click to call Click to buy</p>

However, there are some significant differences between PC-based access and phone-based access:

- The mobile phone is a highly, targeted device with typically one user. As such, powerfully accurate and relevant communication messages can be delivered where users become instantly engaged with campaigns and content resulting in increased campaign effectiveness.
- The environment in which people interact with their mobile phone does not lend itself to detailed information search and delivery. Instead, mobile users seek quick and convenient access to information and services when they are out and about. Space on the mobile phone screen is at a premium, and users have limited input mechanisms, so Mobile Web sites need to be easy to navigate using just the mobile phone keypad.
- Today's mobile phones have a broad range of different form factors, screen sizes and resolutions, all of which presents a challenge for the display and optimal viewing of content and advertising. This document's recommendations directly address this challenge.

Many operators provide a "home page" that is configured to work well with their subscribers' browsers. The operator portal (also known as the carrier's "deck" or on-deck) provides a variety of links to branded, mobile-specific external sites to make it easier for subscribers to navigate. Increasingly, mobile users browse outside their operator portal. These "off-portal" or off-deck sites are becoming important destinations for Mobile Web browsing, with sites such as Yahoo!, Facebook, BBC and Sky offering tailored mobile experiences.

2.0 Mobile Web

2.1 Mobile Web Advertising Overview

The Mobile Web is fast emerging as a mainstream information, entertainment and transaction source for people on the move and away from a PC. Browsing the Mobile Web is similar to traditional PC-based Web browsing and provides users with access to news, sports, weather, entertainment and shopping sites.

The following are some examples of Mobile Web ad opportunities:

Image Banners



Image Banners with Text Link



Image Banners in 6:1 Aspect Ratio



Image Banners in 4:1 Aspect Ratio

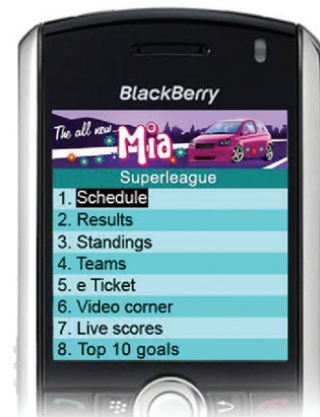
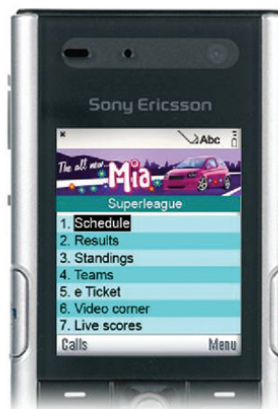


Image Banners in 6:1 Aspect Ratio

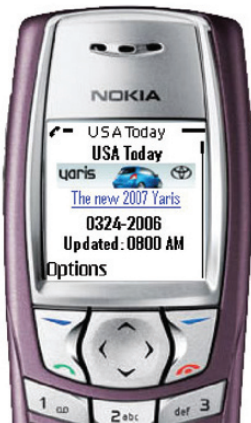
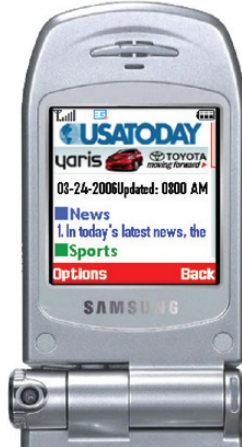


Image Banners in 4:1 Aspect Ratio



Standard Text Banner



2.2 How do I buy advertising on the Mobile Web?

Buying advertising on the Mobile Web is similar to buying display advertising on the Internet. Graphical, interactive display ads are the predominant ad unit. In most cases, Mobile Web banner ad impressions can be purchased on a cost per thousand (CPM) or a cost per click (CPC) basis. Mobile offers targeting possibilities beyond that of traditional media. As this develops further, we would expect to see a range of targeting options made available covering context, demographic and behavioral attributes. Any targeting options made available will comply with existing national level, legal and regulatory frameworks governing privacy and personal data.

Some operators and publishers that have Mobile Web sites sell mobile ads directly, while others allow their inventory to be sold by a third party, either as premium inventory or as part of a mobile ad network.

The biggest difference between buying Mobile Web display ads and Internet display ads is that Mobile Web ads are not sold by unit size. Because the sizes and resolutions of mobile phone screens vary, the way the content looks on those mobile phones will also vary. The sizes of Mobile Web banners as defined in the MMA *Mobile Advertising Guidelines* (<http://www.mmaglobal.com/mobileadvertising.pdf>) are optimized to best fit the mobile phone on which the ad is being viewed. This improves the user experience, ad readability, creative flexibility and effectiveness. This is why many publishers and ad networks may ask you to provide multiple versions of your banner creative with your Mobile Web campaign.

2.3 What results can I expect?

The success of a mobile advertising campaign can be measured in a variety of ways. The main measurements are impressions and click-through rates. Additional measurements include conversion rates, such as click-to-call rates and other forms of interactive measurement. These performance results will vary by campaign type, messaging and calls to action. However, most mobile campaigns today result in significantly higher click-through rates than PC-based Internet campaigns.

2.4 Scope of Advertising Guidelines

Today's mobile phones are becoming increasingly sophisticated, with high-resolution screens, sophisticated Mobile Web browsers, MMS support and high-speed access, all of which allow high-quality and media-rich Mobile Web ad banners. To give marketers and brands an opportunity to leverage these improvements, the MMA's *Mobile Advertising Guidelines* specify the required properties of Mobile Web ad banners.

3.0 Mobile Messaging

3.1 Mobile Messaging Overview

Mobile messaging technology enables users to communicate in an asynchronous manner, where messages are stored in the network and delivered to the recipient as soon as the recipient's mobile phone can receive it. Once delivered, the message resides on the users' mobile phone.

SMS (Short Messaging Service) allows a mobile user to send and receive a text message of up to 160 characters and across virtually any operator network. This service is also referred to as "text messaging" or "texting". All mobile phones shipped over the past few years support SMS. As a result, the large installed base of SMS phones creates a large addressable market for SMS-based mobile marketing campaigns.

MMS (Multimedia Messaging Service) is the rich media equivalent to SMS text messages. An MMS message can include graphics photos, audio and video, in addition to text. MMS is not yet universally supported by operator networks, however the market advertising opportunity is already significant and growing.

SMS and MMS services are together referred to as "mobile messaging" or "messaging". The stickiness of Mobile Messaging, the enormous reach of SMS and the rich media capabilities of MMS make this channel a highly rewarding advertising opportunity.

Newer forms of mobile client-based messaging services (e.g., mobile email, mobile instant messaging) are not addressed in these guidelines. Those messaging services are at different stages of deployment and/or evaluation internationally and have lower rates of adoption in mass markets than SMS and MMS, so are therefore not addressed in this document.

3.2 Mobile Messaging as an Advertising Medium

Mobile messaging represents an opportunity for advertising placement. Media publishers are using messaging to distribute mobile content. Businesses are providing consumer services through mobile messaging. These messages provide inventory into which advertisements can be inserted. In addition, it is now possible to purchase advertising in personal – person-to-person (P2P) – SMS and MMS messages.

There are two primary types of advertising inventory:

Application-to-Person (A2P): This type of inventory includes SMS and MMS messages sent by a business or other organization/entity via an automatic application to a consumer's mobile phone. In many cases, the consumer may interact with the application through messaging. It is possible to insert advertising on this type of inventory, provided there is sufficient space left within the message.

A2P messaging is used for a wide range of services:

- Push Content Services** – Media publishers use SMS and MMS to send requested content (e.g., news, sports, jokes, gossip) or information to their users. A user can subscribe to these services on a daily or weekly basis, or request it on an ad-hoc basis. For example, CBS News has an MMS news alert program for Verizon Wireless subscribers, and Fox25 distributes American Idol pictures and content via MMS to AT&T Mobility subscribers. USA Today provides daily weather forecasts delivered by SMS. Content service providers deliver their product via a mobile message, such as with ring tones, wallpaper, pictures, music and video. Ads can be inserted in SMS content that subscribers request and receive by using the free (non-used) space, up to the character or message size limit. Users typically receive free or subsidized content in exchange for viewing these ads.
- Business Services and CRM** – Businesses may use mobile messaging as a customer communication element of their core product offering. For example, a bank may offer text message alerts when an account drops below a certain balance, or an auto dealer may offer reminder messages when a vehicle is scheduled for routine service. Operators use messaging (today, mainly SMS) to notify subscribers of service events such as voice mail, network coverage, transaction confirmations, roaming network welcome messages or account status (e.g., prepaid balance, loyalty points). Ads can be inserted in SMS or MMS alert service content using the free (unused) space, up to the respective size limits. This may come in return for some value offered by the service provider.
- Search and Inquiry Services** – Media publishers or search service providers use SMS and MMS to send information in response to user inquiries. These include directory inquiries for store locations, or phone numbers, price search services, and a large variety of other search-via-mobile services. The inquiry is typically invoked by texting commands and/or keywords to short codes. Ads can be inserted in the free space in the message, up to the character or size limit of the message.
- Interactive Services** – Interactive services let users participate in voting, polls, contests or to become engaged with communities through chat or billboard arrangements. Often those services are integrated with other media activity, such as TV shows or print campaigns. Users are invited to vote and typically receive an automated response, which may also include advertising. Ads can also be inserted in messages received by interactive chat participants. These ads can be inserted in the free space in the message, up to the character or size limit of the message.

Additionally, A2P inventory includes messages that are part of a direct mobile marketing, advertising or promotional campaign. For example Doritos/Frito-Lay invited consumers to text unique codes found inside product packaging to the campaign's short code, in order to win prizes. The objective of this campaign was to drive product sales.

P2P: This inventory consists of personal messages sent between users. The original purpose of messaging was to enable users to communicate amongst themselves. Today, SMS is the most widely used mobile phone service after voice. In some countries, it is used by more than 80 percent of mobile subscribers.

It is possible to insert ads in the available space in personal messages, up to the message size limit. Advertising insertion in P2P messages is not commonly used today; however, some operators are rewarding subscribers that are willing to receive ads within the messages they receive from their friends with discounts on activities such as sending MMS/SMS. The potential P2P inventory is enormous.

Across many markets, there will be existing national level regulatory and legal frameworks outlining acceptable uses of this channel. In particular, the use of any personal data and/ or any use of content of P2P messages will require careful examination to ensure adherence to national privacy laws. In addition, end users concerns and expectations will always need to be carefully managed. Taking all steps necessary to ensure end customers fully understand any proposal to use their data, together with providing a clear choice to opt in or out of this type of service, is essential for its long-term success.

The following are some examples of mobile messaging ad opportunities:

Example 1: Branding Campaign

- Content in SMS: Movie Times Search Result (contextual).
- Targeted messages can enhance branding and can be contextually related to the published content where the ad is appended.
- Secondary call to action invites further interaction with the brand.



Example 2: Call to Action “Reply for more info”

- Content in SMS: Stock Quote Alert (contextual).
- Brand message is part of initial call to action.
- Follow-up offers new product information and a call to action to visit the Web site.



Example 3: Call to Action “Vote” followed by coupon and lead generation

- Content in SMS: Social networking message.
- Interactive voting can solicit user information or engage in interactive marketing activities.
- Additional request for a coupon leads to option for location search.
- Provide dynamic coupons or store locations based on consumer’s Zip code entry, or upon opt-in, offer an immediate call-back feature integrated with your call center to create warm outbound call opportunities.



Example 4: Drive to WAP Site

- Content in SMS stock quote update alert (contextual).
- Drives user to mobile enabled WAP site, clickable on select mobile phones.



Example 5: Click to Call

- Content in SMS directory search result (contextual)
- Incorporates a business phone number, which is clickable by many mobile phones allowing the user to instantly dial the call.
- Connects users with your business at the very moment they are seeking information about your product or service.



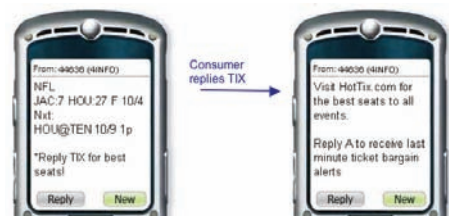
Example 6: Contests/Brand Interaction

- Content in SMS weather forecast alert.
- Provide mobile users an opportunity to test their product knowledge with trivia and other engaging contests.
- Engage user with your brand during idle time.



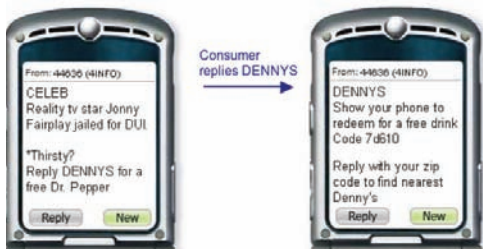
Example 7: Call to Action “Sign up for mobile alerts”

- Content in SMS sports score alert (contextual).
- Invite users to subscribe to mobile alerts from your brand on sales or promotions.
- Advertisement acts as a gateway to ongoing mobile marketing for interested users.



Example 8: Keyword Usage with additional Promotional Marketing

- Content in SMS celebrity gossip alert.
- Use brand name keywords to promote products in combination with promotions in broadcast, print, or outdoor. For example, “Text DENNYS to 44636 to get a free drink!”
- Adds an interactive component to traditional advertising channels.
- Additional reply option drives traffic to storefront.



Example 9: Call to Action “Vote” followed by coupon and lead generation

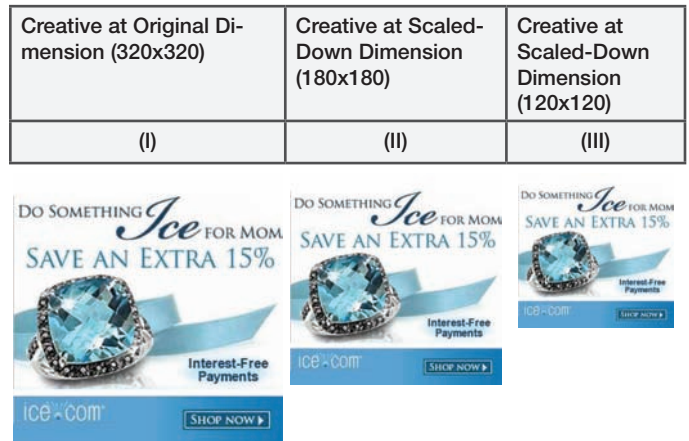
- Content in MMS: Sports news update.
- Interactive ad content follows the rich media message.
- Additional request for a coupon leads to full message ad.



Example 10: MMS Sample - Good Source Creative scales down well over range of dimensions



Example 11: MMS Creative (I) scales down well down to 180x180 (II). However, at smaller dimensions (III) text and details are lost. A use of an alternative creative (IV), based on the optional Small MMS Square AD Unit, is recommended for these dimensions.







Alternative Creative, Based on the Small MMS Square AD

(IV)



Example 12: MMS Creative (I) scales down well down to 180x180 (II). However, at smaller dimensions (III) text and details are lost. A use of an alternative creative (IV), based on the optional Small MMS Square AD Unit, is recommended for these dimensions.

Creative at Original Dimension (320x320)	Creative at Scaled-Down Dimension (180x180)	Creative at Scaled-Down Dimension (120x120)		
(I)	(II)	(III)		
				
<table border="1"> <tr> <td>Alternative Creative, Based on the Small MMS Square AD</td> </tr> <tr> <td>(IV)</td> </tr> </table>			Alternative Creative, Based on the Small MMS Square AD	(IV)
Alternative Creative, Based on the Small MMS Square AD				
(IV)				
				

3.3 Complete Messaging Advertising

MMA Guidelines are designed to address advertising that is inserted in other user-requested content, such as account notification or entertainment messages. However it is possible to also send mobile messages that contain purely advertising or marketing content. Broadcast of mobile marketing messages should follow the MMA Code of Conduct, available at: <http://mmaglobal.com/codeofconduct.pdf>.

3.4 Success Drivers

The following key characteristics drive the success of messaging as a source of mobile advertising inventory:

- **Ubiquitous SMS access** – Virtually all mobile phones can receive SMS, and the majority of users use SMS on a regular basis. Today, SMS is the most widely used mobile phone service after voice.
- **Growing MMS access** – MMS adoption levels are significantly lower than SMS, but even in developing markets, more than 70% of mobile phones can receive MMS. The MMS market continues to grow in both developed and developing markets.

- **High attention level** – Users almost never delete mobile messages without opening them and reading at least parts of the content.
- **Simplicity** – Despite the sometimes limited creative space, ads are usually easy to develop, particularly for one-step campaigns where advertisers send either coupons or codes for discounts or samples of specific products or services.
- **Engaging** – Once displayed, messaging ads can engage users directly in various ways, such as interactive message reply/forward, click-to-Mobile Web and click to call.
- **Compatibility** – Messaging usually works between different networks and between different countries. While constantly improving, MMS still faces some obstacles in this area.
- **Propagation** – The viral effect is especially strong, with response rates being boosted by recipients qualifying and forwarding messages to people with high relevance, as determined by the initial recipients.
- **Measurable results** – Messaging offers the ability to measure channel usage, unique ad exposure and obtain detailed campaign results analysis. Response collection is easier and can be achieved quickly. Brands may have access to real-time response information and may modify the campaign according to the results, long before a campaign terminates.
- **Easy to integrate into 360° communication** – The effectiveness of campaign may increase if mobile messaging is used seamlessly integrated with other media.
- **Direct and personal way of communication** – Customer has the sense of feeling that the ad addresses only him/her.

3.5 How to Buy Advertising in Mobile Messaging

3.5.1 SMS Advertising

SMS advertising is defined as ad units that appear appended to other published content. The ad unit can either be static (no action can be taken by the end user) or dynamic (user can act on the message).

Buying advertising in SMS is similar to buying text-based advertising on the Internet. In most cases, SMS ad impressions can be purchased by CPM deliveries. Typically, publishers and service providers either sell their own inventory in A2P SMS messages or work with an SMS advertising network, which places advertising in existing SMS content feeds.

3.5.2 MMS Advertising

MMS advertising is defined as ad units that appear inserted to other content. The ad unit can either be static (no action can be taken by the end user) or dynamic (user can act on the message, e.g. by clicking or responding).

MMS advertising is new, and it creates opportunities for rich media ads, including video and sound. That said, buying advertising in MMS is similar to buying banner advertising on the Internet. In most cases, MMS ad deliveries are purchased by CPM.

3.6 Mobile Messaging Response Capabilities

SMS/ MMS response capabilities are grouped into three different categories: message-based, call-based and WAP-landing-page-based.

3.6.1 Message Based Responses

The user can reply to the SMS/MMS with a message. The response number appears as part of the text on the message or as the “from” address area, where it can be replied to directly. Where the number is embedded, the mobile phone can usually extract the number from the message. The following types of reply messages can apply:

- Opt-in to receive messages
- Text in to receive more information, such as sample content
- Text in to enter a sweepstake
- Text in to participate in a customer survey
- Text in to vote
- Text in to refer to friend
- Text in to buy
- Text in to locate a nearby location
- Text in to receive the promotion

3.6.2 Call Based Responses

From an SMS/MMS message, the subscriber can click and make a phone call directly. The consumer may interact with a live operator, or the following interactive voice responses (IVR) are possible:

- Call in to vote
- Call in to buy
- Call in to get more information (e.g., about loans, new products)
- Call in to renew a plan
- Call to complete survey
- Call in to chat
- Call in to receive the promotion

3.6.3 Mobile Web Landing Page Responses

From an SMS/MMS message, the subscriber can click on a WAP link and be directed to a Mobile Web site. These responses are identical to the banner ad responses presented in the *Mobile Advertising Guidelines* available at:

<http://www.mmaglobal.com/mobileadvertising.pdf>.

4.0 Mobile Applications

4.1 Mobile Applications Overview

Mobile applications are a rapidly developing segment of the global mobile market. They consist of software which is running on a mobile device and which performs certain tasks and provides utility for a mobile phone user.

Mobile applications (a.k.a. downloadables) are common on most mobile phones today. They are key to providing user interfaces for basic telephony and messaging services, as well as for more advanced and entertaining experiences such as playing games, browsing and watching videos on mobile phones.

Examples:

- There’s a new mobile version of Pacman®. It is a mobile application intended to provide end-users with hours of entertaining game play.
- ContentNext recently released a mobile application that is specifically designed to enable end-users to easily download and read the MocoNews blog on mobile devices.
- Opera Mini™ is a mobile application that enables end-users to browse the Internet via their mobile devices.

Selling mobile applications commonly happens at a retail price per download through mobile operators or off-portal. But there are a number of reasons for businesses to look into today’s and future advertising opportunities that come along with mobile applications as alternative ways of monetisation:

- In-application display of banners, splash pages, links and mobile coupons.
- Sponsored (paid for by an advertiser) to promote a brand or product.

This document is focused on advertising opportunities in mobile applications and addresses the following audiences:

Table 1: Mobile Applications – Target Audience	
Target Audience	Motivations
Advertisers/ Agencies	<ul style="list-style-type: none"> - The opportunity to advertise via mobile applications - Understand the numerous types of mobile applications that are available in the market and the potential target audiences that can be reached via these mobile applications - Identify the benefits and drawbacks to advertising in mobile applications with/ without connectivity - Understand the advertising formats and features available from various “Ad-enabling” solution providers

Table 1: Continued	
Mobile Network Operators and Off-Deck Content Aggregators	<ul style="list-style-type: none"> - The opportunity to monetize mobile applications via advertising - Understand the mobile applications which they distribute and the potential of each of these mobile application types to be included into their ad-enabled/ ad-funded strategies - Understand the product features available from various "Ad-enabling" solution providers - Understand how mobile applications can further their connection with customers by providing CRM opportunities
Mobile Application Developers	<ul style="list-style-type: none"> - The opportunity to monetize mobile applications via advertising - Understand the benefits of implementing some form of connectivity into mobile applications - Understand the product features available from various "Ad-enabling" solution providers

Table 2: Mobile Application Categorization
Communications:
<ul style="list-style-type: none"> • E-mail Clients • IM Clients • Mobile Web and Internet Browsers • News/ Information Clients • On-Device Portals (Java Portals) • Social Network Clients
Games:
<ul style="list-style-type: none"> • Puzzle/ Strategy (e.g., Tetris, Sudoku, Mah-jong, Chess, Board Games) • Cards/ Casino (e.g., Solitaire, Blackjack, Roulette, Poker) • Action/ Adventure (e.g., Doom, Pirates of the Caribbean, Role-Playing Games) • Sports (e.g., Football, Soccer, Tennis, Basketball, Racing, Boxing, Skiing) • Leisure Sports (e.g., Bowling, Pool, Darts, Fishing, Air Hockey)
Information:
<ul style="list-style-type: none"> • Recipe/ Drink books • Health/ Medical guides • Electronic books • Reference Tools (e.g., Dictionaries, Thesauruses) • News/ blog readers • On-Device Company/ Product Portals
Multimedia:
<ul style="list-style-type: none"> • Graphics/ Image Viewers • Presentation Viewers • Video Players • Audio Players • Streaming Players (Audio/ Video)
Productivity:
<ul style="list-style-type: none"> • Calendars • Calculators • Diary • Notepad/ Memo/ Word Processors • Spreadsheets • Directory Services (e.g., yellow pages) • Banking/ Finance
Travel:
<ul style="list-style-type: none"> • City Guides • Currency Converters • Translators • GPS/ Maps • Itineraries/ Schedules • Weather
Utilities:
<ul style="list-style-type: none"> • Profile Manager • Idle Screen/ Screen Savers • Address Book • Task Manager • Call Manager • File Manager

4.2 Mobile Applications Categories

Many mobile applications come pre-installed on mobile phones (e.g. SMS/MMS client, browser, music player), whereas others may be provisioned and/or configured post-sales by means of maintenance/ device management (in-shop, over-the-air). The market for downloadable applications (e.g. games, business tools, instant messaging) is continuously growing and is being served by an increasing number of mobile application developers, publishers and providers.

From a technical point of view, we differentiate mobile applications by the runtime environment in which they are executed:

- Native platforms and operating systems, such as Symbian, Windows Mobile and Linux
- Mobile Web/browser runtimes, such as Webkit, Mozilla/Firefox, Opera Mini and RIM
- Other managed platforms and virtual machines, such as Java/J2ME, BREW, Flash Lite and Silverlight

To get an idea of the wealth of mobile applications residing on mobile phones, one should consider the following high-level categorization:

Mobile applications have evolved to give a user access to services that require richer, faster and not necessarily connected user experiences. In this respect, mobile applications are distinctly different from browsing the Mobile Web (albeit there are some emerging trends around JavaScript/ AJAX and mobile widgets which will cross over between both worlds).

The intent of this text is to assist in educating the market with regard to the advertising opportunities that mobile applications provide. It describes various forms of ad integration into the application logic as well as several ways of serving ads to mobile applications. An initial attempt to identify common ad units for mobile application is made before summarizing the success factors and presenting an outlook on future collective action through MMA and its partner organizations.

4.3 Mobile Applications as an Advertising Opportunity

The delivery of advertising with and within mobile applications is still at an early stage, with best practices being defined in some areas, while others have yet to be explored.

Providing ads as part of mobile application opens a new revenue stream for application publishers, distributors and service providers. These revenues may be used to partially or completely subsidize the price of a mobile application or the service(s) provided by the mobile application.

Sponsoring an entire application and offering it for free to consumers is an opportunity to raise brand/product awareness and build closer relationships with customers by offering the core target segment applications they want to use, something that has the authenticity and engaging valuable content. For a fully sponsored application the advertiser covers all costs for production, distribution and operations.

Taking advantage of the advertising opportunities available with mobile applications requires a solid understanding of the respective usage patterns (i.e., why, when and how an audience uses a particular mobile application). Depending on the user segment and the application, frequency of use can vary from once a month to 50+ times per day, reach can vary from niche to mass market, and usage context can vary from high-efficiency to time-to-kill.

Mobile applications typically make use of other mobile phone's capabilities, such as its camera, GPS and 3D graphics. These capabilities provide additional opportunities for ad campaigns if so designed. For example, if the campaign's creator knows that a significant percentage of the target market owns handsets with GPS, the ads could use location information as part of the call to action.

The following are some examples of mobile application ad opportunities:

Example 1: Mobile Game Advertising – Movistar/Betfair

This campaign was launched during the Mobile World Congress 2008 in Spain. It featured a game that users downloaded from an off-portal Mobile Web site or via a Bluetooth kiosk in the Mobile World Congress area. The game regularly cost \$3, but was free at the Mobile World Congress.

Unkasoft was the game and solution provider and the goal was to promote Movistar and its advertiser, Betfair. The campaign met all expectations in terms of the number of downloads and ads served.

Ad inventory was created at three different places in the game flow:

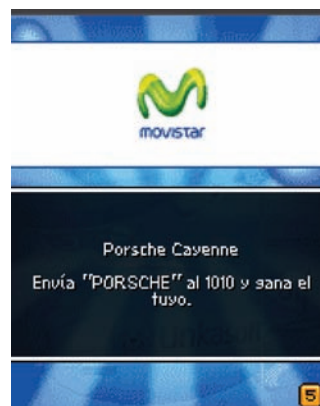
1. Pre- and post-roll full-screen graphics

A full-screen advertisement was placed at the launch and exit of the game. From this ad, players could press 5 to find out more about Movistar.



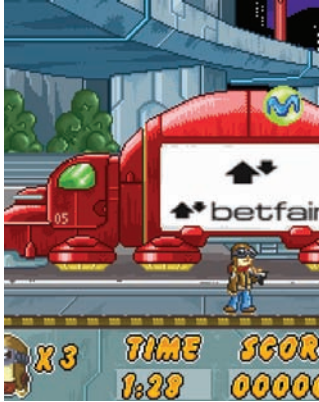
- 2 Full-page ad image between game phases

Between phases of the game, a banner and text campaign is shown.



3. In-game advertising (integration into game content)

Betfair ads were placed directly into the game and were fully integrated into the game content (e.g. displayed on truck and on the ball).

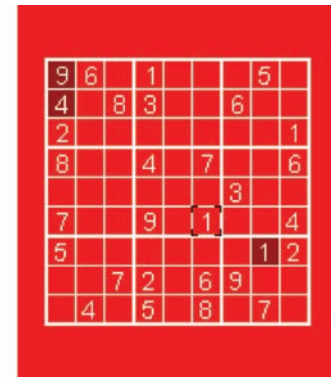
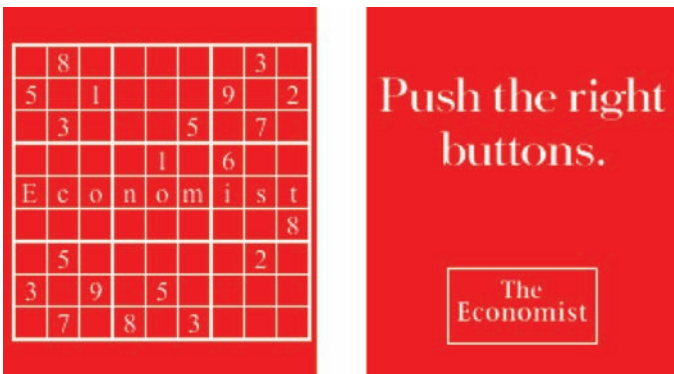


The game displays ads that are pre-defined and integrated at time of download. The lifetime of the campaign was limited to duration of the Mobile World Congress.

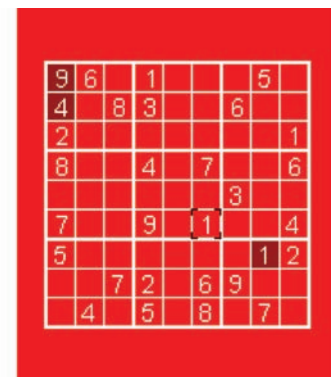
Example 2: Mobile Game Advertising – The Economist

In order to reach its client’s target audience (age 25+ demographic) in Hong Kong, Ogilvy Interactive designed a “rich-media” mobile advertising campaign that was inserted into and around a mobile application by Actionality, a Yahoo! company. The ad’s goal was to enhance and complement the mobile application and was widely regarded in Southeast Asia as a ground-breaking, well-targeted and innovative “around-game” mobile advertising campaign.

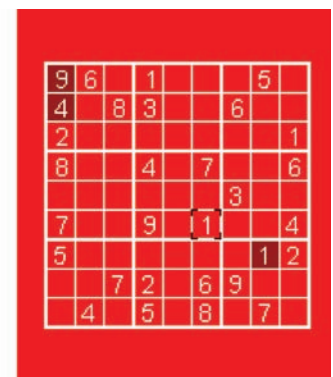
1. Pre-roll animated mobile advertisement (animation not shown)



2. Branded version of a popular mobile version of Sudoku



3. Post-roll animated mobile advertisement with click-to-call and click-to-browse (animation not shown)



Example 3: Student SMS Composer

Vodafone Czech Republic offers free SMS service – up to 300 messages per day – to student customers. It is provided through an ad-featured SMS composer, which is a Java/J2ME application installed on the mobile phone. With three ads displayed for each message sent, this provides a significant advertising opportunity.



Ad mobile inventory is being created at three different places in the application flow:

1. Banner above the main menu



2. Full-screen ad No. 1

After composing an SMS message and pressing the send button, a full-screen ad is displayed. This figure shows the main ad message.



3. Full-screen ad No. 2

After the user receives confirmation that the SMS message was sent, the second full-screen ad is displayed. This figure shows how the application offers a hot key to open a menu, where users can launch their phone's browser and be taken directly to the brand's Mobile Web site.



Continuing further in the application brings users back to step 1, where a new ad gets displayed.

The SMS composer application displays pre-cached ads to ensure that the user experience is smooth and that ads are served in offline mode, which is when the mobile phone has ended its data connection.

Example 4: Contest Entry via Click to Call utilizing Idle Screen

Providing promotional opportunities to advertisers allowed Mobile Posse to support the Cleveland MetroParks desire to “giveaway” rounds of golf in a campaign that was supporting a targeted informative campaign in the Cleveland, Ohio area during the summer of 2008. The campaign was run over multiple weeks and created a sense of urgency with users to “be the first to call in and win” while at the same time a branding campaign was being run to publicize the offerings for the MetroParks. Over 200 calls came in to the call center within the first 10 minutes after the advertisement had been delivered to the idle screen.

Mobile Posse’s Idle Screen Solution can be pre-installed on phones or downloaded from a Mobile Shop. The software allows for the delivery of scheduled/targeted content and advertisements to be delivered to the Idle Screen of a user’s Mobile Device while it is not in use. The content and advertisements can be transmitted to the phone during a “check-in” window at off-peak carrier hours allowing both fresh data to be transmitted to the phone and usage data to be collected.

1. Banner display

For the Cleveland MetroParks Golf Giveaway, a banner was delivered to the idle screen of the phones within the target area at a predetermined time.



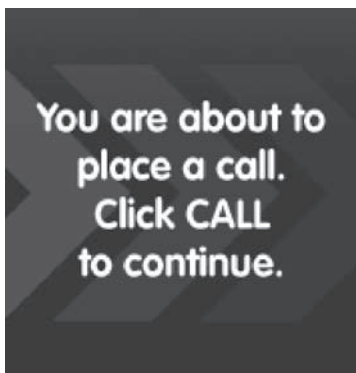
2. Full screen ad series

Users clicked on the banner to reveal the full-screen ad that encouraged users to click through to the second full-screen page of the advertisement where users would then be allowed to initiate a Click to Call to try and win the free rounds of golf.



3. Click-to-call confirmation

Before the users are able to complete the call, a final screen is presented to make sure that it is the user's intent to make the call.



4. Call completion

Once the user clicked "Call" (the right soft key of the phone) the phone number to the call center was automatically dialed and the first 10 user's calls were answered and their information was secured to be able to send them their coupons for free golf. The users after the 10th caller were then sent into a voice mail system that let them know that winners had already been selected and that they should try again the next time.

Example 5: Mobile Electronic Book with Advertising

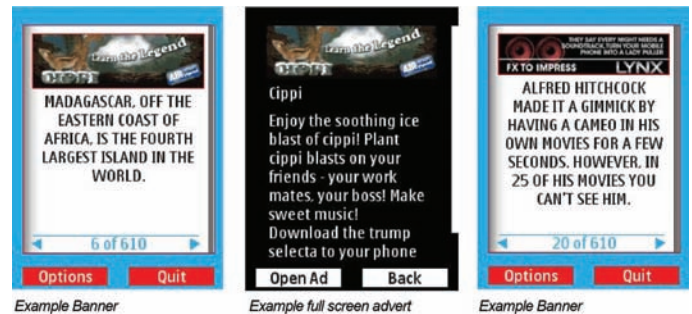
Golden Gekko approached Nicotext in February 2007 and asked if they would be interested in launching their books in mobile format to generate additional revenue. Nicotext agreed to this and selected the book "BlaBla 600 Incredibly useless facts" to try out the commercial viability and demand for the mobile version. The book has previously sold over 100,000

hard copies through the world. The mobile book is described as "A Know-It-All's-Handbook" and consists of 600 fun facts of about 50-300 characters each which makes them perfect for the mobile screen. Examples of facts are:

- A goldfish can only remember the last three seconds of its life
- Every year, more people get killed by donkeys than in plane crashes
- The odds of dying while falling out of bed is 1 in 2 million

The first book was developed and launched as a downloadable Java application in July 2007. Golden Gekko's initial proposal was to sell the books on-portal through mobile operators as well as off-portal just like mobile games. The mobile book was very well received but difficult to position on the operator portals and selling it off-portal proved even more difficult due to the lack of good mobile payment solutions.

To drive uptake and revenue it was therefore decided to launch an advertisement based version of the application with banners. Admoda was chosen as the ads partner. The banners are automatically adopted for each screen size and paid per click which means that the banners are cached in the application.



The advertisement based version was launched in January 2008 with distribution including the website, Getjar, Nokia Mosh, Mobango, Mobile9 and to a lesser extent using mobile ads. In the first two weeks the book received more than 25,000 downloads and more than a quarter million page impressions with a click-through-rate to the ads of about 1.5%. Unfortunately the revenues generated from this were below expectations. The main reasons were lack of standardization in this area, awareness from advertisers and application network connectivity issues.

4.4 Mobile Application Advertising Addresses User's Interests

Even though the willingness to pay for mobile content is much greater than the web, free applications get considerably more downloads than premium games and applications. This means that there is a great opportunity for content owners, publishers, application developers and advertisers to leverage mobile applications ranging from games and entertainment to messaging and utility applications. The range of different applications being offered also means that it's possible to reach a very

specific target audience, e.g. women 18–25 for a fashion brand. The launch of the iPhone application store has further proven that there is a consumer demand with more than 10 million downloads in the first week.

Mobile Gaming

Mobile games are ideal when consumers have time to kill or want to compete with other players when they’re out and about. When they play mobile games, consumers have their attention focused on the game and are interacting with it, improving the chances that they’ll notice an ad inserted in the game. However, it’s important to respect the gaming experience by ensuring that ads are placed in a non-intrusive, non-disruptive way. Best practices balance the need for a good user experience and a highly effective campaign.

Today, mobile games are primarily used for branding-type campaigns. Although interactivity currently is very limited, that will grow as games, mobile phones and networks mature.

Messaging Client

Mobile messaging clients engage audiences when they send or receive messages. Usage of messaging clients is characterized by a high frequency of short interactions. Respecting this communication environment and placing ads in a non-intrusive, non-disruptive fashion can lead to highly effective campaigns.

Today, mobile messaging clients are mainly used for branding and interactive campaigns. The call-to-action usually happens at the end of the communication activity.

4.5 Mobile Application Advertising Units

As Section 4.3 discussed, there are many ways to display ads in mobile applications. Some methods are in commercial use, while others are still in the experimental stage. The following is an overview of some ad unit types:

- **Banner Ad:** A banner ad is a static or animated image, text or combination of these that can be placed in defined areas within the application (e.g., on the application main menu page or sub-pages). Users may be able to navigate and click on the banner ad to access more information from the advertiser, a design that’s known as a dynamic banner ad.
- **Full-page Ad:** A full-page ad is a full-screen advertising experience, comprised of one or more images, text, audio and or video. It may be animated or static. The ad may be placed as a “bumper” screen for the launch (pre-roll) and/or exit (post-roll) of an application, or as a splash or jump page (formerly called interstitials) within the application. It may be used as the landing page from an earlier ad banner or may be a stand-alone full page. The user may be able to navigate and click the full-page ad to access more information from the advertiser, a design known as a dynamic full-page ad.

- **Integrated Ad:** An ad that is integrated with the application or game experience (also known as a product placement) and is formatted to be compatible with the main content type used in the application context. It can be resized, reshaped and freely positioned as part of the core application content.

- Example No. 1: Applied in games where the game publisher chooses to integrate tagged ad inventory into its core content. Examples include flags on a race track or soccer field billboards.
- Example No. 2: Applied in media player applications – such as a video player – where the player amends a video ad pre- and/or post-roll to tagged video content.
- Example No. 3: Applied in social networking applications that are re-branded for a limited period of time.

It is important to understand that not all ad units described may be applicable to all mobile applications. The MMA plans to create future guidelines for determining which ad unit applies to each mobile application type. It’s also important to note that the ad unit descriptions provided in this document are a basis for discussion rather than finite definitions. Instead, ad unit definitions will evolve as best practices develop.

4.6 Mobile Application Ad-Serving Considerations

4.6.1 Mobile Application Connectivity

Unlike browsing the Mobile Web, mobile applications are not necessarily always on-line – that is, not constantly provided with a mobile data connection. For example, some mobile games (e.g., Tetris) run completely disconnected, while others connect occasionally (e.g., to load new levels or upload high scores) and still others are constantly connected (e.g., in multi-player mode). The following is an overview of all three types:

Connected Mobile Applications: Software that requires network connectivity in order to perform the majority of its tasks. Without network connectivity, the utility of a connected mobile application is greatly diminished. Although data caching provides limited utility to users, this is not the mode in which the application was intended to be used.

Examples include Mobile Web browsers, chat clients, social networking clients, streaming multimedia applications, multi-player games and mapping applications.

Intermittently Connected Mobile Applications: Software that requires occasional network connectivity in order to perform some of its tasks. Without network connectivity, the application’s utility is somewhat diminished. Data caching provides substantial utility to users, but connectivity is occasionally required in order to keep the data fresh.

Examples include e-mail clients, banking/finance tracking applications, news readers and currency converters, idle screen applications, etc.

Non-Connected Mobile Applications: Software that does

not require network connectivity in order to perform the majority of its tasks. Without network connectivity, its utility is not diminished. Non-connected applications may have a few features that require connectivity, such as uploading a game's new high score, but these features are limited in scope.

Examples include the majority of today's mobile applications, such as most mobile games, video/audio players that play downloaded content instead of streaming it on-line, productivity applications such as word processors and spreadsheets and utility applications such as file managers and address books.

4.6.2 Ad Serving and Ad Connectivity

Serving ads in a mobile environment where constant connectivity is not guaranteed requires solutions that address this challenge. We suggest looking at ad serving in mobile applications as a three-stage approach:

1. **Ad supply:** Provide ad unit material to the application for display throughout execution.
2. **Ad display:** Display the ad unit material at the appropriate occasion in the application flow.
3. **Ad reporting:** Report ad unit exposure, measured on the mobile phone, back to the ad server in a reliable way, so that reported figures can become a trusted basis for billing & accounting between parties.

Depending on capabilities deployed, the following ad serving scenarios could be implemented:

- **Non ad refresh:** The ad is supplied to the application at the time of download, with no subsequent ad refresh. Little to no ad exposure reporting is possible. Only the number of downloads is reported.
- **Connect time ad refresh:** Ads are supplied and ad exposures are reported when the application connects.
- **Independent ad refresh:** Ads are supplied and ad exposures are reported during connections according to advertising needs and are independent from application connects (e.g., once per day).
- **Ad Engine:** This new concept foresees a central software function residing on the mobile phone that performs ad supply and ad reporting for multiple mobile applications on the same mobile phone. This "ad engine" receives and caches the available ad units and provides them locally to mobile applications in real-time upon request, usually for immediate display by the application. The advantages of the ad engine are (1) avoidance of repeated implementation of refresh functions, (2) consistent ad serving interfaces across applications and platforms and (3) serving ads to mobile applications regardless of their core connectivity design.

4.6.3 Targeting and Rendering

Delivering targeting information to the ad server to enable better ad selection based on relevant information is an evolving concern in mobile application advertising.

Different types of information may be sent to the ad server for targeting purposes:

- Device information (e.g., screen size for ad rendering, user agent to retrieve device capabilities or characteristics in a handset database)
- Carrier or country information
- Geographic location
- User data (e.g., user nickname, user demo, preferences) or application-unique ID if user data is unavailable
- Contextual info
- Demographic profile or preference information that is collected from the user of the mobile application at registration or through application based collection methods

For connected applications, targeting information can be delivered to the ad server at the time of the ad request. The principle is the same as that for browse scenarios, except that targeting information can come:

- from the application itself (context, screen size), or,
- from the server connected to the application (user information captured at the time of the application download or through user interaction with the application).

Mobile applications usually do not have access to the device user agent. Because mobile ad servers often rely on this user agent for rendering or device targeting, several options are possible:

- Use a screen size instead of the user agent (sent by the application or server to the ad server). This allows rendering, but not device-capability-based targeting.
- For applications downloaded on the Mobile Web, capture the user agent at the time of the application download and store it together with a unique application ID in a database on the application server. Retrieve the user agent each time an ad call is sent from an identified application. The same principle can be applied to any targeting info that could be accessed at the time of the application download (context of download, user id, user info).

However, all targeting capabilities must comply with existing country-specific regulatory and legal frameworks covering privacy and the use of personal data. User concerns and expectations also need to be carefully managed. Long term success depends largely on ensuring that users fully understand any proposal to use their personal data for targeting, as well as providing a clear choice to opt in or out of this type of usage.

4.7 Mobile Application Advertising Response Capabilities

Ad units can be static (non-active, non-clickable) or dynamic (active, clickable), with the latter providing a whole host of opportunities for advertisers to engage their audiences.

As outlined in the introduction of this overview, brands and marketers use the mobile channel to engage and interact with consumers thru most mobile ad channels. These types of interactive engagement are also regarded as response capabilities.

The response capabilities available for an ad unit depend heavily on the application, the runtime environment it is executed in and its way of making mobile phone features available within and outside the application context¹:

- Some mobile phone platforms require vendor-specific application integration to respective vendor-specific platforms, in which case the availability of response capabilities is subject to case-by-case verification.
- Advanced and more open mobile phone platforms and runtime environments are increasingly common and available across a variety of mobile phones from different vendors. This leads to a more predictable availability of consistent response mechanisms available to advertisers and users (e.g., click to call, click through to Mobile Web).²
- There is a trend toward Mobile Web runtime environments on mobile phones. This will enable mobile applications to enter mobile phones “on the fly” as mobile widgets that users can easily install, use and uninstall. Providing broad and secure access to mobile phone functions is at the heart of current industry efforts, with a view to provide (among other things) the full range of ad response capabilities consistently across platforms.

Providing response mechanisms on today’s mobile phones includes challenges that still must be addressed:

- Leaving the context with no return option: Click-to-mobile web, click-to-download, click-to-video are examples of response mechanisms that require invocation of other mobile phone functions and applications, (e.g. browser, download client, video streaming client. Many mobile phones would exit the application context in which the ad was clicked (e.g., exit the game) to open the new context for providing the response channel. Keep in mind that this design can annoy users. Warnings, delaying responses and avoiding responses are among the considerations for future

¹ The application context starts upon invoking the application, stays open while the application is being used and usually ends when exiting the application. Some runtime environments allow users to switch between different application contexts opened at the same time, similar to PC-type environments.

² Java/J2ME with Mobile Information Device Profile 2.0 (MIDP 2.0) and BREW1 2.x and above are examples of widespread application execution environments.

guidelines in this area. Placing call to action into the post-roll message is preferable in this respect. In addition, costs may be incurred as a result of the action, and it is best practice in such cases to alert users in cases where additional charges apply.

- Leaving the context with return option: Some recent application runtime environments allow applications to remain open when entering the ad response channel. While this increases response options, it still requires attention to the user experience. Future guidelines will address notification for returning to the original application and possible automatic return to the original application.
- Embedded response mechanisms: Mobile applications may provide a set of response features as part of their core functionality. This paves the way for simpler and more immediate ways to capture responses. It would require a mimic of configurable basic request/response patterns (e.g., tick boxes, drop-down lists, data entry fields) to be defined that – customized for individual ad campaigns – cover the needs of the majority of interactive ad campaigns.
- Ad engine response mechanisms: Further developing the concept of embedded response mechanisms, the central ad engine (see Section 4.6) could take the role of providing basic request/response templates to mobile applications. This is for further study.

4.8 How to Buy Advertising in Mobile Applications

Designing successful mobile advertising campaigns that use mobile applications require insights into how the target audience uses those applications. The catch is that access to that information is currently limited to individual games publishers, games distributors and/or the application service providers. All parties involved will need to cooperate in order to provide transparency for planners and buyers and to promote the ad opportunity in mobile applications.

Buying advertising in mobile applications is similar to buying advertising on PC applications (e.g., MSN or Yahoo Messenger). For non-refresh ad serving, where the ad is delivered at time of download, ads can be purchased on a cost-per-download basis. For refresh ad serving, as well as for future ad engine ad serving scenarios, ad impressions can be purchased by CPM, as long as robust and trusted reporting capabilities are in place.

Dynamic ads in mobile applications can also be purchased on a cost-per-click (CPC), cost-per-acquisition (CPA) or cost-per-unique-download (CPD) basis; the latter is ad sales based on the number of unique users reached by the advertisement.

The following is some initial guidance for buying ads in mobile applications:

- Connected mobile applications often use independent refresh ad serving capabilities. This environment provides the most flexibility when it comes to targeting, rotation and reporting of ads.
- Connected and intermittently connected mobile applications that have connect time ad refresh capabilities provide advertisers with a new opportunity to reach mobile users. However, ad refresh and upload of reports are deferred to connect times, which can mean hours, days, weeks or even months of delay.
- Non-connected mobile applications with advertisements are likely to run in non ad refresh mode, which may be viable for advertisers that want to conduct simple brand campaigns, but the lack of reportable ad performance statistics in this case points to the need for CPD buying.

4.9 Success Drivers

When it comes to advertising through mobile applications, it is crucial to support an environment of increased application purchase, usage and advertising acceptance. The following are some tips for success:

- Ad displays should be integrated in ways that don't compromise the nature, intent, performance and user experience of the original mobile application.
- Displaying ads and inviting users to engage with brands and advertised content should provide a compelling user experience in itself, taking the application usage context into account, such as by being brief and efficient, or exciting and playful or practical and need-specific.
- When calls to action trigger departure from the application context (with or without return option), we recommend paying close attention the user experience. This area will require additional guidelines.
- During design and execution, mobile applications featuring ads and response mechanisms should recognize their impact on the mobile phone's processing power and memory consumption in order to avoid crashes.
- The industry needs to agree on guidelines based on proven successful case studies to inform mobile application designs. Such guidelines should also specify recommendations around creative material (e.g., aspect ratios, dimensions, formats) similar to the MMA's guidelines around Mobile Web, mobile messaging and mobile video and TV. Recommended duration of ad exposure for the different ad units is also subject for future guidelines.
- Mobile application developers play an important role in simplifying advertisers' workload when creating and exe-

cuting campaigns. The mobile application itself shields lot of the differences and complexities of underlying mobile phone implementations, platforms and runtime environments.

- When placing adverts in applications and especially in the case of fully sponsored applications the advertiser and their suppliers should ensure that the applications have been tested and certified for the target mobile phones. A badly displayed ad or being associated with an application that doesn't work on the consumers mobile phone can give the customer a bad experience in a similar way to a Website not working in a specific web browser.
- There is a role for mobile operators to consider charging implications when it comes to supplying ads over the air to mobile applications.

4.10 Outlook and Next Steps

Besides further elaboration of the findings in this document, there is a continued role for industry collaboration along the following areas of activity:

- Collect best practice for ad featured applications from ALL application categories.
- Extract learning from best practice and compare best practice examples for their commonalities to inform work on guidelines.
- Start spelling out and publishing guidelines for ad featured mobile applications in those areas where we observe consistent best practice. Keep an eye on possible commonalities of ad practices between application types that may allow reusing creative material.

5.0 Mobile Video and TV

5.1 Mobile Video and TV Overview

Mobile video and TV is an important advertising medium that gives brand advertisers the potential of reaching audiences in a targeted and personal manner. It provides advertisers the opportunities to create high impact, emotive, informative and personal advertising while leveraging the targeting that mobile inherently provides.

The demand for video and TV services is forecasted to grow over the next five years:

Table 7.22: Number of Mobile Broadcast TV Subscribers (m). Regional Forecast 2007-2012

	2007	2008	2009	2010	2011	2012
North America	0.2	0.7	2.1	5.6	9.5	18.0
South America	0.0	0.0	0.0	0.0	0.1	0.6
Western Europe	1.1	3.4	7.1	12.3	20.7	31.6
Eastern Europe	0.0	0.0	0.1	0.4	1.1	3.1
Far East & China	10.1	16.6	22.8	29.1	36.5	46.0
Indian Sub Continent	0.0	0.0	0.0	0.3	1.2	3.8
Rest of Asia Pacific	0.1	0.4	1.4	3.6	6.9	13.4
Middle East & Africa	0.0	0.0	0.1	0.5	1.3	2.8
Total	11.5	21.1	33.6	51.8	77.4	119.2

Source: Juniper Research

Table 7.1: % 2.5G/3G Mobile Users Who Subscribe to Mobile Streamed TV Services. Regional Forecasts 2007-2012

	2007	2008	2009	2010	2011	2012
North America	2.0%	2.6%	2.4%	2.2%	1.9%	1.5%
South America	0.2%	0.5%	1.2%	2.3%	3.4%	4.9%
West Europe	1.6%	2.4%	2.4%	2.2%	1.8%	1.3%
East Europe	0.5%	1.0%	2.1%	4.1%	5.0%	5.8%
Far East & China	0.7%	1.4%	2.4%	3.6%	5.7%	6.6%
Indian Sub Continent	0.7%	1.2%	2.1%	4.4%	6.4%	7.3%
Rest of Asia Pac	0.9%	1.5%	2.4%	3.2%	4.0%	4.5%
Middle East & Africa	0.4%	1.0%	2.1%	3.8%	5.6%	7.0%

Source: Juniper Research

5.2 Mobile Video and TV as an Advertising Medium

Typically, mobile video and TV content is delivered over a mobile network and is played via the mobile phone's media player. There are many companies supplying these mobile media players directly to handset manufacturers, who install them before shipping.

There are four main principle methods of delivering the mobile video and TV content over a mobile network to a media player on a person's mobile phone. Some of these methods and their different characteristics are discussed in the following paragraphs:

Streaming Video or TV: A mobile video is "streamed" to a person's mobile phone and starts playing on the mobile phone when the first bits of the video stream are received. Due to the nature of the underlying technologies used, the quality of the received video differs, based on varying network conditions. But the technologies used allow ad servers to track the actual viewing of a video ad placed at the beginning, middle or end of a mobile video. Common video ad servers would be able to provide advertisers with detailed statistics about how many sections or what percentage of a particular video ad has been viewed by the audience.

Download Video: A video file is downloaded to and stored on the mobile phone completely before the mobile phone starts playing the video. Due to the nature of the underlying technologies used, the quality of the received video files is only dependent on the quality of the source file on the video servers. Mobile phones are developing towards increased memory availability to store downloaded videos; as a result, video advertising increases in relevance as a compelling media to convey ad messages. Because the video is played when fully received on the mobile phone, an ad server cannot detect whether the video content and ads are watched in part or at all. In response to this challenge, it should be noted that technology development and standardization is underway.

Progressive Video Download: The video file is downloaded to and stored on the mobile phone and starts playing the video when a certain percentage of the video file has been received. This technology combines the benefits of streaming video

(rapid playback) and download video (high quality). Although most progressive video download technology are still proprietary, standardization bodies are making efforts to include progressive downloads as a new standard.

Broadcast TV: TV channels are broadcast continuously over a mobile network, and the users can select which channel to watch on the mobile phone. Similar to "traditional" TV, advertising opportunities exist within commercial breaks as well as with ticker, banner or overlay type of effects. Currently, there is no global broadcast technology standard, however the following technologies are gaining acceptance in the different regions of the world: Digital Video Broadcasting – Handheld (DVB-H), MediaFLO (US), ATSC M-H (US), DMB, ISDB and SDMB (Asia).

In addition to the mobile video delivery methods described, it should be noted that mobile video can also be contained in MMS messages.

The following are some examples of Mobile Video ad opportunities:

Example 1: Pre & Post Roll Campaigns



Example 2: Ad Funded vs. Ad Sponsored Video Services

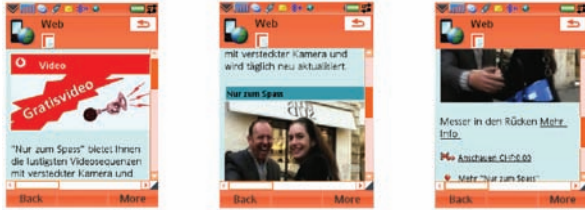
The project objectives were to achieve the following:

- Measure brand awareness via mobile video channels
- Measure customer acceptance of mobile video ads
- Test "best practices" for mobile video ads
- Identify audience profiles and measure advertiser reach
- Investigate viability of commercial business model for ad funded and ad sponsored video services.

The solution was to launch Ad Infuse's AdInMotion platform, deployed to insert mobile pre- and post-roll video advertisements real time in active streaming video sessions as well as deliver targeted WAP banners on the video publishing pages. Since there are three resident languages in Switzerland, the platform was also used to target advertisements based on the customer's language preference.

Detailed advertisement impression statistics, as "ratio of ad seen", "unique users" and "delivered vs. undelivered impressions" were collected real time. And customer acceptance and brand awareness were measured during the trial period via telephony interviews.

Program/ Promotion Overview: The ad funded (free of charge) video channel “Nur Zum Spass” involved comedy videos. The clips were between 60 and 180 seconds in length. A new clip was published daily.



The ad sponsored (reduced charge) video channel “50Rp music videos” involved reduced price premium music video clips from known international artists like Emimem, Fergie and Jay-Z provided by Universal. A catalog of 20 selected music video clips were published to Vodafone Live! visitors. The music video clips were offered at 10% of the price of normal premium music video clips.



5.3 How to Buy Advertising in Mobile Video and TV

Digital media buying departments are initially buying advertising in mobile video services similar to online video advertising, however at this nascent stage, mobile TV and video may be purchased from a variety of agency departments. As with traditional broadcast TV, the longer the length of the ad in seconds the higher the price. The method of charging by time length has not yet been adopted widely online or on mobile but may be introduced in time. It is recommended that mobile TV and video be sold and evaluated on a CPM basis similar to online. This will allow for a greater understanding and acceptance within the advertising community.

Consumer Business Models

As with traditional TV and online media there are two business models for mobile advertising:

- Ad funded: Content that’s available free of charge to the consumer and completely funded by advertisers.

- Ad sponsored: Paid content, that’s typically available at a reduced fee (compared to similar premium content channels) and partly sponsored by advertisers.

In addition to the price of the content, the price to the consumer to download or stream deserves consideration. Where possible, advertising should be avoided in cases where this would lead to a consumer incurring additional data costs to view an ad. This generally occurs when consumers are roaming abroad or have data plans with volume or time-based charging.

5.4 Success Drivers

Because mobile video/TV is at an “early” stage within its development, gauging success will vary. It is strongly recommended that at this time, mobile video/TV should not be the sole focus of the advertising expenditure. Instead, advertisers and agencies should look to mobile video/TV to provide additional lift in awareness or “buzz”.

5.5 Interactive Ads

Still young in its overall deployment, interactive features have the promise of further engagement within the already targeted space of mobile advertising. Some features currently being explored:

- Dynamic interactive and target ads inserted into either broadcasted or unicast video
- Interactive response components such as click to Mobile Web call-to-actions or click to receive a message
- Combining targeted pre-roll and overlay ads together within video content

Interactivity has the potential to be a “game changer” within mobile advertising. More details surrounding this will unfold as technology and scale of audience develop.

5.6 Mobile Ad Video Response Mechanisms and ROI

Since interactive mechanisms are still being developed, it may be prudent to combine video ads as a complement to advanced interactive formats such as clickable mobile web banners or SMS/MMS.

For example: one might place Mobile Web banners related to the video advertisement in the downloaded content on the content download page. When a mobile media player has finished playing the content, if the consumer wants to interact with the message in the video they now have the opportunity to engage with the brand by clicking on the Mobile Web banners.

6.0 Who We Are

About the Mobile Marketing Association

The Mobile Marketing Association (MMA) is the premier global non-profit trade association established to lead the growth of mobile marketing and its associated technologies. The MMA is an action-oriented organization designed to clear obstacles to market development, establish mobile media guidelines and best practices for sustainable growth, and evangelize the use of the mobile channel. The more than 700 member companies, representing over forty countries around the globe, include all members of the mobile media ecosystem. The Mobile Marketing Association's global headquarters are located in the United States and it has regional chapters including North America (NA), Europe (EUR), Latin America (LATAM), Middle East & Africa (MEA) and Asia Pacific (APAC) branches. For more information, please visit www.mmaglobal.com

About the MMA Mobile Advertising Committee

The MMA Mobile Advertising Committee, with active committees in North America, Asia Pacific and Europe, Middle East and Africa, has been established to create a library of format and policy guidelines for advertising within content on mobile phones. By creating mobile advertising guidelines, the MMA ensures that the industry is taking a proactive approach to keep user experience, content integrity and deployment simplicity as the driving forces behind all mobile advertising programs world-wide.

The MMA Mobile Advertising Committees, chaired by Ad Infuse, Inc., Madhouse, Inc., ScreenTonic, Verizon Wireless, and Vodafone Group Services, Ltd developed these guidelines in collaboration with the following MMA member companies:

MMA Global Mobile Advertising Committee		
4INFO, Inc.	Millennial Media, Inc.	Sharpcards
Acuity Mobile, Inc.	Mobile Posse	SkyFire Labs, Inc.
Ad Infuse, Inc.	Mobikell Networks (Europe) Ltd	Smaato Inc.
AT&T Mobility	MobITX, Inc.	Smarter Agent
Buzzd	MS&L	Sports.comm Ltd
Cox Net	Neustar, Inc.	Tapioca Mobile
Golden Gekko Ltd	Nokia Corporation	Turkcell Iletisim Hizmetleri A.S.
Google, Inc.	OpenMarket	Unkasoft Advergaming
Greystripe Incorporated	Orange NSM	Verizon Wireless
GroupM	Out There Media GmbH	Vibes Media
JumpTap	Qualcomm	Vodafone Group Services Ltd.
Madhouse Inc.	Rhythm NewMedia	Yahoo!
MediaFLO USA, Inc.	ScreenTonic	
Microsoft (MSN and Windows Live)	Sensi, Inc.	

7.0 References

The following links provide additional sources of information and reference:

- MMA Code of Conduct (<http://www.mmaglobal.com/codeofconduct.pdf>)
- MMA Consumer Best Practices Guidelines (<http://www.mmaglobal.com/bestpractices.pdf>)
- Mobile Marketing Association Website (<http://www.mmaglobal.com>)
- MMA Mobile Advertising Guidelines (<http://www.mmaglobal.com/mobileadvertising.pdf>)
- Mobile Applications (<http://www.mmaglobal.com/mobileapplications.pdf>)
- Mobile Measurement Ad Currency Definitions (<http://www.mmaglobal.com/adcurrency.pdf>)
- Understanding Mobile Marketing: Technology & Reach (<http://www.mmaglobal.com/uploads/MMAMobileMarketing102.pdf>)
- Off Portal – An Introduction to the Market Opportunity (<http://www.mmaglobal.com/offportal.pdf>)
- Mobile Marketing Sweepstakes & Promotions Guide (<http://www.mmaglobal.com/mobilepromotions.pdf>)
- Mobile Search Use Cases (<http://www.mmaglobal.com/mobilesearchusecases.pdf>)
- Introduction to Mobile Coupons (<http://www.mmaglobal.com/mobilecoupons.pdf>)
- Introduction to Mobile Search (<http://www.mmaglobal.com/mobilesearchintro.pdf>)
- Short Code Primer (<http://www.mmaglobal.com/shortcodeprimer.pdf>)
- W3C Mobile Web Best Practices (<http://www.w3.org/TR/mobile-bp/>)
- W3C mobileOK Basic 1.0 Guidelines (<http://www.w3.org/TR/mobileOK-basic10-tests/>)
- W3C mobileOK Checker (<http://validator.w3.org/mobile>)

8.0 Contact Us

For more information, please contact:

Mobile Marketing Association

Email: mma@mmaglobal.com

www.mmaglobal.com

9.0 Glossary of Terms

The MMA maintains a nomenclature glossary of all terms within MMA guidelines, education documents and research.

The glossary is available at:

<http://www.mmaglobal.com/glossary.pdf>.



The Mobile Marketing Association is the premier global organization that strives to stimulate the growth of mobile marketing and its associated technologies. The MMA is a global organization with over 700 members representing over forty countries. MMA members include agencies, brands, content providers, hand held device manufacturers, operators, technology enablers, market research firms, as well as any company focused on the potential of marketing via mobile devices.