



# **MOBILE DATA USAGE & CONTROL PRIMER 1.0**

**BEST PRACTICES**

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**Table of Contents**

**Executive Summary & Objectives ..... 4**

**Mobile Data in Digital Advertising ..... 5**

**Why Mobile Data Matters ..... 5**

**Mobile Data Challenges: OBA and Data Privacy ..... 6**

**Online Behavioral Advertising: How OBA Works in Mobile ..... 7**

**How Data—and Mobile Data—Are Used ..... 7**

**OBA: Guided by data ..... 8**

**Mobile browsers vs. Apps ..... 9**

**Apps and mobile data ..... 10**

**Mobile data tools: SDKs, “Probabilistic Device Recognition,” & Others..... 11**

**Geo-data: GPS and Cell Towers ..... 12**

**Mobile Wallet Data ..... 13**

**Mobile: Versus desktop, greater Complexity ..... 14**

**B2B Mobile Data Best Practices ..... 15**

**Code of Conduct ..... 16**

**Conclusions ..... 17**

## Executive Summary

This is IAB's first Mobile Data Primer. Like its companion—the IAB Data Usage & Control Primer—the Mobile Data Primer draws on interviews with experts we consulted from branded publisher sites, ad networks, data companies, and other stakeholders in digital advertising, as part of IAB's ongoing effort to help define common language, concepts and best practices in interactive advertising.

Mobile is fast becoming the heart of online. Mobile devices—cell phones, smartphones and tablets—vastly outnumber laptops and PCs, and in fact the reach of mobile is far greater than that of any other consumer technology, including traditional broadcast or cable TV. Mobile data—data originating or resulting from the use of mobile devices—doubled in volume in 2013 over the previous year. In relative terms, mobile data is rapidly headed toward claiming the lion's share of all online data—time on mobile already far outpaces desktop, and mobile data represents 30-plus percent of the total and rising as we publish this document.

This massive flow of mobile data is of course produced by mobile users, as they engage online and use mobile devices in everyday activities. Hence, mobile data provides rich data sets about consumer interests—and helps publishers and advertisers reach out to users not only in the confines of their homes and offices, but also as they move across the “real” bricks-and-mortar world of main streets and malls, lunch spots and vacation destinations. The open secret, of course, is that the familiar cookie-based ad technology is more complicated—and on many devices, less functional—in the mobile world than it is in the desktop environment, so a wide range of effective new techniques is being developed and employed in mobile to ensure that messages are kept relevant.

Indeed, the ins and outs of mobile are different enough from other interactive modalities that the IAB Data Council determined it must develop this Mobile Data Primer as a logical companion to our general Data Usage & Control Primer. That document (<http://www.iab.net/media/file/IABDataPrimerFinal.pdf>) continues to offer a detailed guide to the breadth of data-driven advertising—including an overview of Data Management Platforms (DMPs), advertising networks, and other pieces of the wider ecosystem. In the present document, we review in abbreviated form some areas from the general Data Primer. But this Mobile Data Primer focuses primarily on the “mobile” in its title: data generated by mobile devices, how that mobile data functions in online behavioral advertising (OBA), and relevant best practices in mobile advertising. The two documents are complementary.

### **For the Mobile Data Primer, the IAB holds the following objectives:**

- Outline the emerging organizations and methods involved in digital advertising, focusing on specifically mobile data collection and mobile advertising—and discuss the roles of different players in this field.

- Briefly note key parts of the digital advertising ecosystem, for example advertisers, agencies, data aggregators, publishers and advertising networks, where appropriate, and relate them to mobile.
- Establish and clarify industry best practices for mobile data usage and control.

The IAB's overall goal in this document, then, is to sketch some of the most important features of the mobile data landscape—and to provide best practices and a summary review of the laws, regulations and self-regulatory standards that pertain. The IAB believes adoption of these best practices will enhance clarity and reduce uncertainty regarding mobile devices and data as they pertain to digital advertising.

## Mobile Data in Digital Advertising: Overview

This section summarizes today's mobile data landscape in digital advertising, and identifies some of the many possible challenges ahead for agencies, publishers, and advertisers in this field.

### Why Mobile Data Matters

Mobile is expanding rapidly. In the US, the number of mobile device subscribers now exceeds the population.<sup>1</sup> Mobile is also fast overtaking desktop—globally, by 2014, the number of mobile users for the first time surpassed the number of desktop users. Mobile advertising is expanding even far faster than subscriptions—online ad spending doubled internationally in 2013 over the previous year, a pace mirrored in the US mobile advertising market and expected to continue through the end of 2014.<sup>2</sup> According to the [IAB Internet Advertising Revenue Report](#) for half year 2014 mobile revenues increased 76 percent to \$5.3 billion versus the \$3.0 billion reported during the same period in 2013.

As mobile has taken off, so has mobile data. User time on mobile already exceeds desktop by approximately 60 percent, bringing the volume of mobile data on track to eclipse that of desktop

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<sup>1</sup> The Cellular Telecommunications Industry Association stated that by mid-2013 there were approximately 299.5 million wireless broadband subscribers in the US, with growth on track to exceed the nation's population in 2014. <http://www.ctia.org/resource-library/facts-and-infographics/archive/broadband-subscriptions-US-highest>. MobiThinking reported in 2013 there were 345 million total mobile subscriptions in the US—and more than 287 million of them are 3G/4G subscriptions. <http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats/a/#topmobilemarkets>.

<sup>2</sup> For the worldwide spend, see: <http://www.emarketer.com/Article/Driven-by-Facebook-Google-Mobile-Ad-Market-Soars-10537-2013/1010690>. For the US spend alone—which also doubled—from IAB/PriceWaterhouse, see: [http://www.iab.net/about\\_the\\_iab/recent\\_press\\_releases/press\\_release\\_archive/press\\_release/pr-041014](http://www.iab.net/about_the_iab/recent_press_releases/press_release_archive/press_release/pr-041014). eMarketer subsequently released a report predicting the US mobile ad spending will double again from 2013 to 2014, to a total of over \$9 billion. See also <http://www.emarketer.com/Article/US-Mobile-Ad-Dollars-Shift-Search-Apps/1010898>.

data, with mobile data already estimated at as much as 30-plus percent of total online data.<sup>3</sup> So, mobile data is increasingly the fuel for all aspects of online advertising—properly used, it guides advertisers, agencies, ad networks, data aggregators, and publishers on what to message and to whom, benefiting consumers by catering to their interests. These stakeholders collect and process mobile data—along with other online and offline data—for ad targeting, ad reporting, and ad and website optimization. Data is reported and incorporated at every step of the online advertising process, including visitor counts, ad-serving tallies, site visits and other indicators of visitor interactions. The data constantly changes and is refreshed as users use apps and visit sites—and, in an ever-improving feedback loop, it keeps interactive advertising targeted, relevant and effective.

Data from both mobile and desktop users remain the building blocks of interactive advertising, but mobile is the rising star in the online advertising ecosystem. Mobile devices—led by tablets and smartphones—have become ubiquitous, providing a central nexus in each individual’s life for communication, information, entertainment, and to act as a developing means to purchase goods and services.<sup>4</sup> Mobile has indeed followed print, radio, TV and the web to become the “next great advertising medium.”

### **Mobile Data Challenges: OBA and Data Privacy**

Online behavioral advertising across all platforms powers most online media—providing underwriting for the creation and distribution of a vast variety of online content and experiences. The best and most effective of this interactive advertising is built on accurately gauging the likes and interests of users—as we see in increasingly tailored messages, made even more effective through the intelligent use of mobile data analytics.

Mobile data is richer data, and it can greatly enhance the relevance of OBA, creating new opportunities—but also new challenges—for advertisers, publishers and consumers. As the value of collecting, aggregating and analyzing various types of data increases, individual users and commercial interests alike face new and growing data conundrums. How should different kinds of data—offline, desktop and, now, mobile—be handled under evolving best practices? Mobile data, for example, specifically permits technology companies to track, in real time, user

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<sup>3</sup> Comscore / Morgan Stanley Research 2012 and 2013 provide the numbers of mobile vs. desktop users, with the rising—if varying—percentages of mobile users presented as trend data at: <http://gs.statcounter.com/#desktop+mobile+tablet-comparison-US-monthly-201301-201401> and <http://www.walkersandsdigital.com/Walker-Sands-Mobile-Traffic-Report-Q3-2013>. Comscore notes that mobile outpaced desktop use by around 60 percent by mid-2014—with mobile apps accounting for 50 percent of all user digital media time. <http://www.comscore.com/Insights/Blog/Major-Mobile-Milestones-in-May-Apps-Now-Drive-Half-of-All-Time-Spent-on-Digital#imageview/0/>.

<sup>4</sup> Indeed, the Pew Research Internet Project’s Cell Internet Use survey for 2013 showed that nearly two-thirds of US cell phone users use them to go online—doubling from 2009. Fully a third of cell phone users only access the Internet through their cellular device, not via desktop. Mobile is well on the road, arguably, to supplanting desktop for large swathes of the population. See <http://www.pewinternet.org/2013/09/16/cell-internet-use-2013/>.

location and consumer behavior—in some cases, both online and off. How can the privacy of mobile users best be protected under these circumstances? Such data privacy concerns, as we note in all of our best practices and guides, must always be carefully considered. There are legal considerations here, but also cultural and individual judgments to be made about the kinds of targeting that are helpful and acceptable, versus those considered invasive or “creepy” to users. Judgments on the acceptability of data use will change, depending on context, and such subjective considerations are as important as legal ones to consumers and industry. Such privacy issues are touched on but are not the focus of this document, which is instead aimed at clarifying terms, procedures and contractual challenges surrounding mobile data collection and usage. For a deeper exploration of consumer data privacy issues, please see our Privacy Principles and our Self-Regulatory Program for Online Behavioral Advertising (<http://www.iab.net/self-reg>).

## Online Behavioral Advertising: How OBA works in Mobile

In marketing, a top problem always has been how best to assess your customers’ preferences, in order to offer them the right product or service. So, successful companies and organizations perennially ask: What do our customers or followers want? What kinds of messages do they like to see and hear from marketers? What prompts them to buy or choose a product or service? Online behavioral advertising (OBA)—also known as “behavioral targeting” or “interest-based advertising”—is the term applied to describe using data, including mobile data—to help answer these questions.

### How Data—and Mobile Data—Are Used

Data allows advertisers, agencies and web publishers to optimize ad delivery, evaluate advertising campaign results, improve site selection and personalization of messaging. Data also improves the value of media to marketers by delivering their advertising to better-qualified prospects.

Delivering a specific ad to a specific segment makes the ad more effective, more valuable and provides a more compelling experience for the user. The following four examples cover several key ways data—generated in mobile, desktop and otherwise—is used in OBA:

1. Targeting: Web publishers and ad networks set rules that define which ads are delivered to which segments. If a segment fits the criteria, for example, of “sports enthusiasts,” the segment will be delivered a sporting goods ad. Specific data types—termed “data elements”—used to define the segment may include registration information, behavioral characteristics, geographic location, and time of use. Data elements determine which ads are served to a given user segment in a particular session.
2. Reporting: Advertisers receive reports that show how well campaigns are performing. Web publishers and ad networks gather information on site visits and user interactions

with specific ads. The data is analyzed, compiled and shared with the advertiser. User PII is not included in reports.

3. Ad Optimization: Web publishers and ad networks employ software that tracks user activity with responsiveness to a particular advertisement. Advertisers improve the effectiveness of a campaign by using the data to optimize—to find segments more likely to respond to ads for their goods or services.
4. Site Optimization: Analysis of the data is used to help publishers and advertisers better configure their sites to achieve a desired result—generally conversion rates—and to build models of the types of users who visit their sites. Site optimization is also used to provide more relevant content to users, reducing the user’s need to repetitively communicate individual preferences on each site visit. In mobile, app optimization rather than site optimization is the goal. Here, the more a mobile app gets used, the app learns and improves the user’s experience. Deeplinking is one method that takes the user from a mobile browser directly into an app, which efficiently develops a knowledge of each user’s preferences.

### **OBA: Guided by data**

To review, mobile and desktop users routinely engage in researching, shopping and other activities, generating data that reflects their interests. In OBA, that data is used to develop and deliver messages that are directly relevant to users.

OBA—whether in mobile or desktop—depends on user data, data that comes in two basic forms: “declared” and “inferred.” Declared data—often referred to as “first-party data”—is information users explicitly provide to marketers, for example by completing forms or surveys. Inferred data, on the other hand, is information that requires an “educated guess” to be actionable. In browsers, inferred data is most commonly provided by cookies—tiny, self-expiring data files on a user’s recent navigation and preferences, indicating a user’s site visits. In mobile apps, often other kinds of data are collected to signal user interests.

Collecting the data is the first step in developing OBA. Next, data are analyzed and used to create datasets called “segments.” Segments define groups of users who signal similar interest or consumer intent—extremely valuable information to advertisers. Equally important—and at the core of OBA—segments can be assembled free of personally identifiable information (PII), providing a reliable means to message pools of like-minded, but anonymous, users.

In OBA, once the data is gathered into segments, a display ad or other message can be served to potentially interested users. When a targeted user clicks on an ad—or, to use the industry term, “converts”—further messaging or purchase options can be presented. On the other hand, when a user fails to convert on a targeted ad, a signal can be delivered to “retarget” the same user (a cookie or pixel in a desktop browser, and in mobile, various alternative kinds of signals.) Retargeting is simply the serving of additional ads offering a similar product or service to the



same user who failed to convert initially. When done carefully, retargeting can result in additional conversions. (For more information, go to [www.iab.net/data](http://www.iab.net/data).)

Many approaches applied to OBA are similar in both desktop and mobile, and are described using the same specialized terms. For example, each piece of user data collected online—whether from a website visit, or logging on in mobile to an app—is called an “event.” A “session,” in turn, is defined as the sum total of “events” recorded over a single user’s visit or period of time. Event and session data is transmitted to databases and stored as code, and this code is referred to as “pixels,” “beacons” or “tags.”

Finally, however, there are tremendous differences in the way mobile OBA employs data versus desktop OBA. Within mobile, too, there are distinct data practices used for OBA in browser versus “app” environments. Details on these distinctions are explored in the sections below. (For a broad overview of OBA, see the general [IAB Data Usage & Control Primer](#), pp. 5-7.)

### **Mobile: Browser vs. Apps**

Mobile offers two online environments, each with differing types of data. First, there is the browser space—sometimes called “open web” or, simply, web—the same Internet ecosystem encountered in desktop devices. Though the online space is the same, the content intended for mobile browsers differs in several ways: it is formatted to be easily legible on small screens, it is optimized for a touch user interface, and it does not use Flash. Finally, while some mobile browsers, like desktop, use cookies—self-expiring data files indicating user site visits—many do not. (For example, the Safari browser on Apple iOS mobile devices blocks third-party cookies by default.)

The second mobile environment is the “app” space. This is the dominant mobile ecosystem, where browsers and cookies don’t exist, and user activity instead takes place in specific, proprietary mobile applications. Alternate, mobile-only “app data” conveys consumer preferences and guides OBA. In fact, compared with cookies, app data like mobile device ID and “geo-data” provides equivalent or better anonymized means of discerning not only a user’s interests and intentions, but also geographical movements and consumer behaviors, in real time.

Mobile users are trending toward even greater use of apps and less of browser environments. In fact, due to severe limits placed on cookies in many mobile browsers, designers are increasingly shaping mobile websites to steer users toward engagement with apps to produce rich data and maintain the same or better quality relationships with users. Meanwhile, to address privacy concerns, apps increasingly offer opt-outs regarding data-sharing, similar to those available on websites. (For more on this subject, see IAB’s “Cookies on Mobile 101,” at <http://www.iab.net/mobilecookies>, and IAB’s “Site Tagging Best Practices” document, at [www.iab.net/sitetagging](http://www.iab.net/sitetagging).)

### **Apps and mobile data**

Apps rely on making direct contact with their own or partner company servers to provide the content and functionality the user is seeking—but also to communicate data, create segments and serve OBA. For example, if a user visits a major news or retail site using an app instead of a web browser, the app exchanges alternative app data to develop or add the user to a segment. The app contacts its server, and downloads for the user the desired latest news or product promotion. Meanwhile the app uploads data about the user’s device via mobile app tags. These app tags contain a unique identity or other information, whether simple mobile device ID or a string including more data—geographical location (called “geo-data”) or sometimes additional user-declared information. This mobile data then can be combined with other data to create still richer information to create or improve segments.

### **How do trusted apps work with partners in OBA?**

IAB’s experts note at least three major trends in mobile data. First, the rise of specialized apps. Even one of the most web-dependent companies, Google, offers separate apps for Google Plus and Google Maps. The value exchange here is that each specialized Google app offers the user highly focused functionality, while the company gains data needed to create more valuable advertising—which supports the revenue stream that underwrites these apps and other services Google and others offer. Second, with the greater abundance of app users, and lesser reliance on cookies, the mobile ecosystem is further trending toward alternative means of identifying user preferences for OBA. These means combine complex combinations of statistical mobile data analysis, IP address identifiers (when available), and device IDs, to more accurately create and market mobile users as part of segments. Third, many smaller partners gain—or use—their mobile data by piggybacking on data held by larger entities. This occurs as a product of mobile users habitually logging on to apps created by social media and shopping networks, such as Facebook and Amazon, as a trusted means to also log on to content offered by smaller partner websites. Here, trusted social media or retail sites become user “portals” to the mobile web. As a trend, increasingly data used in mobile OBA is obtained by way of apps—and users’ relationships with larger, established and trusted online giants.

### **Mobile data tools: SDKs, “probabilistic device recognition” and others**

Cookies—as we’ve seen—often have limited functionality in the mobile ecosystem. Ad-enabling Software Development Kits—or “SDKs”—offer one approach to alternative segmenting tools. Publishers, advertisers and vendors of products and services are increasingly sharing SDKs with trusted partners, enabling these partners to share space on their apps, where most mobile activity occurs.

SDKs are prepackaged pieces of code that perform specific, authorized functions in an app for partner organizations. In the case of ad-enabling SDKs, these codes permit a trusted partner organization the means to serve ads through an app. But equally important, these codes permit advertisers to gain access to additional, selected data pertaining to functions of that app. This data is in turn used for data analytics purposes, to serve OBA to a partner audience. In these two respects—supplying partners with (1) the means to serve ads in apps and (2) the use of app data to analyze and create OBA—SDKs provide crucial targeting tools in mobile analogous to cookies on the web.

SDKs are a key means for companies to partner and glean data for targeted advertising in the mobile ecosystem. But within the complex, multi-device online engagement of most mobile users, additional methods to use data in OBA are emerging. “Probabilistic device recognition” is a name applied to several related techniques. Mobile devices are extremely varied, yet within a manufacturing run of thousands of units, user and other device settings often are in slightly different—and therefore uniquely identifiable—positions. So, while trusted partner entities carefully prevent sharing of PII, they can use this anonymous but precise setting information to help create accurate segments and serve targeted messages to users.

In probabilistic device recognition, a long list of settings in mobile devices—including make and model, browser type and version, country and time zone, screen resolution and add-on selections, and language—is read remotely, making a data combination that functions as a unique identifier for a particular device. In a related method, “cross-device analytics,” the data pattern created by multiple device use is used to create a unique identifier. For instance, if a single user has adopted a smart phone, a tablet and a laptop, a pattern of finer settings—here, selected across several devices—can identify a unique user. In short, probabilistic methods—whether derived from a single devices or a suite of them—recognize unique combinations, which can be used to segment audiences and serve appropriate and anonymous OBA to mobile devices based on their users’ interests.

### **Geo-data: GPS and Cell Towers**

Android, Windows and Apple IOS-based mobile devices offer location data. This data can add greatly to advertisers’ capacity to create accurate segments for OBA, by producing far more vivid depictions of user behavior than data available in the desktop ecosystem alone. Mobile location data can provide information about a user’s intent and online behaviors—as well as bricks-and-mortar consumer behavior. Mobile devices are, like their users, mobile—and hence

when location data is thoughtfully analyzed, the result can be a very powerful tool for messaging and informing users in real time—as they live, move and make consumer decisions.

On a typical stationary web connection, a user's desktop device is assigned a single, dynamic IP address. The IP address is a key signal in OBA—but versus mobile technologies the desktop signal is hampered by two factors. First, each IP address is often shared by multiple devices, with multiple users and their differing interests, potentially clouding the OBA picture. Second, though the IP address does provide some actionable geographical data, unlike mobile location data of course it does not actually follow users' movement in three dimensions, in real time.

For all of mobile geo-data's advantages however, that data is not always accurate or reliable. Depending on the mobile device, the service provider and the user settings, geo-data used by advertisers is often generated not from GPS data, but from less dependable cell tower data. Privacy settings can further complicate the usability of location data—for example, Apple iOS devices (and some others) require users to opt in to enable geo-data sharing. In any case, mobile identifiers are an increasingly important—and potentially increasingly accurate—part of mobile OBA. Mobile geo-data, and its responsible use in OBA, is an emerging area for which the industry is evolving improved disclosure and best practices, as specified in the [DAA OBA self-regulatory principles for the mobile environment](#).

### **Mobile Wallet Data**

Mobile devices are increasingly being used not just for voice call and online data needs, but to transact purchases in the bricks-and-mortar environment, doubling as a credit card or cash. As a “mobile wallet,” the mobile device goes beyond being a tool for communicating, researching and indicating intent. It replaces traditional cash and plastic cards, becoming a standalone method of payment, credit or debit, and an identification card enabling users to make transactions—for everything from buying coffee, meals, and entertainment tickets to keeping receipts. In fact, the phone can replace everything that traditionally was kept in a regular wallet. OPTIONAL: Some recent companies offering mobile wallet services include Square and Venmo—and more recently large-scale launches by Google Wallet and Apple Pay. Companies are meanwhile launching ever more innovative devices which offer mobile wallet functionality, for example the upcoming Apple Watch.

The mobile wallet also creates a powerful, portable dataset on consumer and other user activities. The transaction data itself is very sensitive, sometimes including not only financial but also other—for example, medical—information. To secure this data, it is generally carried over regulated bank networks such as Visa or Mastercard, and other secured networks. However, nontraditional players are entering this field, at least experimentally—executing sales and potentially collecting the data. Some nontraditional partnerships include phone carriers themselves—for example, “Softcard,” a mobile data consortium held by AT&T, T-Mobile and Verizon. Worldwide, numerous other mobile wallet partnerships are in operation. Mobile wallet use, and data volume, of course remain limited compared with their enormous potential. But

looking ahead, mobile wallet point of sale consumer data is already some of the most sensitive data there is—and this is an area where industry needs to develop especially strong safeguards and best practices. [Visa](#), [Mastercard](#), and others have published best practices and security procedures regarding their mobile wallet activities, as do other providers. IAB [OBA self-regulatory principles](#) for advertising and advertising data should also be abided by industry entering the mobile wallet arena.

### **Mobile: Versus desktop, greater complexity**

On desktop, for the most part there are four browsers and a single configuration for screen size ratios. Mobile is far more complex in many ways. Internet explorer usually comes pre-loaded on PCs, Safari comes loaded on Apple—and Google Chrome or Firefox are often subsequently downloaded. These four relatively simple browser environments are active on just two major operating systems—Windows and Apple. On mobile, there are at least four additional layers of complexity, each of which has data management, security and software implications for OBA:

--Browser system complexity: On mobile, there are more variants of each major brand of browser—for example, Chrome on Android devices, or Apple Safari for apps. In the greatest contrast with desktop browsers, many mobile browsers—such as Safari for mobile—are often “cookie-restrictive”; they block third-party cookies by default. Others—notably Android—generally enable most cookies by default, so data can be exchanged as it is on desktop.

--Screen size complexity: Numerous different screen sizes and aspect ratios are available in mobile. Measured diagonally, smart phone screens are often 4 inches, mini-tablets are 7 inches, and then full-size tablets are 11 inches. There is a trend among manufacturers toward offering smart phones with larger screens, for example the Samsung Galaxy Note 4 at 5.7 inches and iPhone 6 Plus, which has a 5.5-inch screen.

--Operating system complexity: Multiple operating systems have been developed for mobile—notably Microsoft Windows for Mobile, Apple iOS, Google Android, Amazon Fire, Blackberry.

--Activity complexity: On desktop, there is generally one way users interact online: via a browser. On mobile, by contrast, there are two ways to interact online, (1) through the web and (2) through apps. In the mobile ecosystem, only 20 percent of activity goes through mobile browsers and the “open web”—while fully 80 percent of browser activity doesn’t happen on browsers—it happens on apps.

Wide variations in browser systems, screen size, operating system and online activity add up to mobile’s far greater data complexity.

## B2B Data Usage and Control Best Practices

Establishing business-to-business best practices regarding data usage and control is necessary to build trust throughout the ecosystem. The IAB and the Data Council believe clarifying industry best practices, as well as proposing a potential enforceable set of guidelines, will greatly reduce the uncertainty and help create a sense of faith and transparency throughout the marketplace. In this regard, the IAB plans to use the Quality Assurance Guidelines program as a framework to institutionalize best practices.

The following list summarizes the set of best practices that the IAB has developed regarding B2B best practices for data usage and control. The overarching principle is that data collection, subsequent use, and appropriate compensation should be transparent and agreed to by all business parties. It is the IAB's goal to have all parties (publishers, advertisers, advertising agencies, advertising networks and data aggregators) adhere to these basic best practices, not only for the benefit of the industry, but also for consumers.

### Publisher/Ad Network/Ad Exchange

#### Disclosure

- Publishers and their agents should disclose to buyers what brand-identifiable<sup>1</sup> advertiser data is being collected by them or their agents, what other organizations have access to the data, and how the data will be used. If changes occur (or are proposed), they should be disclosed in the same manner and with the same transparency as when first disclosures were made.

#### Use

- Publishers and their agents should not use brand-identifiable advertiser data to retarget advertisements without permission from the advertiser.
- Publishers and their agents should not disclose externally any brand-identifiable advertiser data collected during the delivery of an advertising campaign for analytical purposes without permission from the advertiser.
- Publishers and their agents should aggregate brand-identifiable information across multiple campaigns and multiple advertisers to ensure that brands cannot, directly or indirectly, be identified.

There are additional data disclosure requirements for ad networks and ad exchanges that certify against the IAB Networks & Exchanges Quality Assurance Guidelines, which can be found at [www.iab.net/ne\\_guidelines](http://www.iab.net/ne_guidelines).

### Advertiser/Advertising Agency



Although representatives of advertisers and advertising agencies were not directly involved with the creation of this document, the following section reflects the best practices created jointly by the IAB and the 4A's and released in the 4A's/IAB Standard Terms and Conditions for Interactive Advertising. It is highly recommended that publishers and ad networks urge data practices similar to those below on the part of any advertiser or agency partners.

#### Disclosure

- Advertisers and their agents should disclose to publishers what brand-identifiable publisher data is being collected by them or their agents, what other organizations have access to the data, and how the data will be used.

#### Use

- Advertisers should not allow their agents to disclose to other parties (not included in the ad serving chain) any brand-identifiable publisher data collected from their media placement for analytical purposes without permission from the publisher.
- Advertisers and their agents should not use brand-identifiable publisher data to retarget advertisements without permission from the publisher.
- Advertisers and their agents should not use publisher provided data (i.e. out-of-session data such as registration or BT) to retarget customers in a subsequent campaign, without a separate compensation agreement.
- Advertisers and their agents should ensure that all parties collecting data from technology placed within their own media placements adhere to the same usage and control restrictions to which they are held.

The revised 4A's/IAB Standard Terms and Conditions for Interactive Advertising Version 3.0 can be found at <http://www.iab.net/tscs3>.

#### Code of Conduct

The IAB Data Council has concluded that the most recent Quality Assurance Guidelines will provide an adequate framework to support an independent organization that will act as a clearinghouse for reported problems with interactive advertising and will monitor industry members' adherence to an agreed code of conduct. This organization would investigate claims of reported infringements and violations from industry participants. If a claim is valid, it is the intention to have mechanisms in place to alert the interactive advertising community and take measures to correct and remediate the issue. To create this body it will be critical to have the support of buyers, sellers and aggregators because the proposed organization's credibility and effectiveness will depend upon widespread support and meaningful governmental recognition. The traditional advertising industry already has a significant record of achievement in this regard and emulating such a model could achieve similar results.



## Conclusions

Mobile is the fastest-growing sector of online advertising. The IAB Data Council prepared this document as part of its mission to develop definitions, and educate government leaders, industry players and consumers on how to create and manage mobile advertising and the data that powers it—and to develop relevant best practices.

In the desktop ecosystem, the central elements of most interactive advertising and content delivery are bounded by IP address, cookie and web page. But on mobile devices, there is far more complexity to developing effective OBA, often necessitating more, and increasingly varied, sources of data—as well as a need to develop advertising for multiple types of mobile browsers and app environments.

There are significant advantages for both advertiser and user offered by mobile advertising methods. New SDKs and probabilistic device recognition complement and—on many mobile devices and networks—improve upon cookies in guiding advertisers to serve users with relevant ads. Integrating accurate, real-time geo-data with user intentions offers yet another set of mobile techniques that promise to bring greater efficiency and accuracy to OBA. Electronic payment using mobile devices and secure mobile data—the mobile wallet—is convenient for users, and gaining traction to replace credit cards, boarding passes and even proof of identity or other tasks formerly transacted by opening a leather billfold. These are some of the most common and effective techniques for using mobile data in OBA.

We believe that this document will help advance the technical development of mobile OBA, and that it will serve as a launching point for addressing the wider concerns and needs of industry leaders and consumers in the field of mobile interactive advertising.