

The background features a dark blue-grey color with various abstract geometric elements. These include thin white and red lines forming a 3D wireframe cube in the upper left, a vertical line with a small blue dot and a red dot, and several other lines and dots scattered across the page. The main title is in large, bold, white sans-serif font, with the subtitle in a smaller, italicized white sans-serif font, and the number '102' in a large, bold, white sans-serif font.

# MOBILE ADVERTISING

*Understand the Tech That's  
Changing How We Advertise*

# 102

# Table of Contents

1. The Five Players Who Control 74.4% of Mobile Ad Market Share
2. Ad Networks vs Ad Exchanges
3. Mobile Viewability and Big Data
4. Reach and Reach Efficiency in Digital Advertising
5. Tracking the Trackers: Third-Party Ad Serving Today
6. The Pros and Cons of Using Insertion Orders
7. Programmatic Mobile: Advertising Gone Automated
8. Tracking Mobile Ad Attribution
9. The Future of the Mobile Tracking Pixel
10. 27 Mobile Advertising Terms You Need to Know

## Introduction

Our Mobile University 102 eBook takes over where our 101 eBook left off. It's still aimed at introducing many of the various topics that live in the mobile advertising ecosystem.

However, now it starts to get a bit more complex (we even had a couple multi-talented engineers write a few chapters).

Such matters as ad exchanges, tracking pixels, and big data make their home among these pages, but don't fret. We haven't yet abandoned our easy-to-understand language.

So read on undeterred. We promise you won't regret it.

# The Five Players Who Control 74.4% of Mobile Ad Market Share

The mobile advertising market is growing at a blistering speed, expected to top [\\$100 billion globally](#) by the end of next year.

The fact that 74.4% of it is controlled by five companies? *That's incredible.*

These five behemoths are what we might call the "major players". Everything they do, from the companies they acquire to the technologies they produce, sends tidal waves of change across the industry.

Who are they? What do they do? How do they stack up? Find out in our breakdown below.

## Major Players of the Mobile Ad Market



Google is the predominant force in all mobile advertising, receiving over half of all mobile ad revenue in 2014. You might know them as the popular search engine, but Google has been acquiring mobile ad tech companies like clockwork to amass an impressive digital empire. From their in-house AdWords advertising service to subsidiaries like DoubleClick and AdMob, Google does it all.



No longer solely the internet plaything for college kids across campuses, Facebook's reach is decidedly ubiquitous. As the leading social network worldwide, Facebook reaches over 1 billion people, making it the perfect place for advertisers to build their brand and run their ads. In recent years, Facebook has doubled down on mobile with the widespread use of the mobile Facebook app and the acquisition of the video advertising company, LiveRail.



Twitter is another one of the social media behemoths to take advantage of the digital advertising space. The micro-blogging, networking service offers mobile-friendly ad exposure in the form of bite-sized, 140 character "tweets". Advertising counts for a majority of Twitter's revenue, with brands and companies purchasing the right to promote their tweets targeted to specific users across multiple devices.



Does anyone even remember what a phonebook *is*? Anyone? No? Welp, another sacrifice to the Internet Gods I suppose. Its memory lives on, however, through YP, who effectively brings the old-world functionality of the phonebook's yellow pages to mobile devices everywhere. Their popular YP app provides local marketing solutions to help businesses and brands grow their product and connect with consumers ready to buy.

# PANDORA

The internet radio service, Pandora, offers a unique opportunity for brands wanting to connect with their audiences. Pandora boasts a 100% registered user base, allowing insight into not only consumers' tastes and interests, but also their precise location. Sound is a powerful form of media that often accompanies us wherever we go. Pandora capitalizes on this with their impressive offering of targeted audio ads.

## Mobile Ad Market Share

Courtesy of [eMarketer](http://eMarketer), here's the last three years in net mobile internet ad revenue worldwide.

<b>Net Mobile Internet Ad Revenue Share Worldwide, by Company, 2012-2014</b>			
% of total	2012	2013	2014
Google	52.6%	49.3%	46.8%
Facebook	5.4%	17.5%	21.7%
Twitter	1.5%	2.4%	2.6%
Pandora	2.6%	2.1%	1.7%
YP	2.9%	2.1%	1.6%
Millennial Media	0.8%	0.8%	0.7%
Other	34.2%	25.8%	24.9%
<b>Total mobile internet ad revenues (billions)</b>	<b>\$8.76</b>	<b>\$17.96</b>	<b>\$31.45</b>
<small>Note: net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; includes display (banners and other, rich media and video) and search; ad spending on tablets is included; excludes SMS, MMS and P2P messaging-based advertising  Source: company reports, 2012 &amp; 2013; eMarketer, March 2014</small>			
170637	www.eMarketer.com		

As you can see, all the names on this list occupy the top five spots with Google taking an overwhelming majority of total ad revenue. However, it is interesting to note that Facebook has picked up considerable steam, growing into a strong contender at the number two spot.

Twitter has also gained some ground, while both Pandora and YP have begun to decline notably.

## Launch Your Campaign

If these five players control so much of the mobile advertising ecosystem, how can you access it?

The answer is through ad networks and ad exchanges. These technologies help advertisers reserve space on the top publishers' platforms.

Luckily, Gimbal integrates with both. To launch your campaign, click on the following links below and we'll guide you through the process:

[Ad Networks](#)

[Ad Exchanges](#)

# Ad Networks vs Ad Exchanges

If you were to look up the definition of an ad network and compare it to that of an ad exchange, you might think they were the same thing.

*Dammit. Two things that do the exact same stuff. Not again.*

Yep. Unfortunately, the ad tech industry has a baffling volume of companies/technologies/entities/whatever that all seem to be stepping on each other's toes and performing *suspiciously* similar roles.

Which can be really frustrating if you're trying to get a handle on all the moving parts.

However, in the case of the ad network vs. the ad exchange, there are some important differences to learn that might be able to help you out.

We'll first start with a couple of distinct-as-possible definitions for clarity, and then end with what I hope acts as a helpful metaphor for understanding.

## Ad Networks

Ad networks formed in response to the explosion of publisher inventory during the Internet revolution. In short, ad networks collect inventory from a range of publisher sites and sell it to advertisers at a price.

Advertisers generally don't have time to sort through all the available inventory out there. Ad networks will do this for them, and present advertisers with select groupings of inventory that have been curated according to specific parameters the ad network chooses (or chooses on behalf of the advertiser).

Some ad networks offer specific audience segments (i.e. demographics, interests, behavior, etc.), while others will focus on pricing or scale.



## Ad Exchanges

Ad exchanges are technology platforms that place ad inventory in an open digital marketplace for advertisers to peruse at their leisure.

Ad exchanges enable advertisers to gauge prices for ad impressions across multiple sites and purchase those that are most cost-effective.

Because ad exchanges integrate with other tools, such as a DSP, much of this ad buying is done instantaneously by automated computers. In this way, ad exchanges can provide transparency without sacrificing efficiency.

## Ad Networks vs Ad Exchanges

The most common metaphor used to compare ad networks to ad exchanges is the stock exchange, and I think it serves the purpose well.

In that scenario, ad networks are the private actors – or stock brokers – who offer select groupings of ad inventory that will satisfy a specific need.

In contrast, ad exchanges act like the stock exchange itself, facilitating the buying and selling of inventory in an automated fashion on an open market.

**In sum:**

- Ad networks offer specificity. Ad exchanges offer variety.
- Ad networks are companies. Ad exchanges are technology platforms.
- Ad networks have static pricing. Ad exchanges base pricing on auctions.
- Ad networks take time to optimize campaigns. Ad exchanges allow campaign optimization on the fly.

# Mobile Viewability and Big Data

The technology world is taken by buzzwords: cloud computing, NoSQL, platform as a service.

And of course, **big data**.

This particular buzzword usually refers to the massive amounts of data created and ingested by companies like Google or Apple and, when the interlocutor is technically-savvy, to the underlying software and infrastructure used to acquire, store, and process it.

Some understand big data as the apex of corporate surveillance. Others see it as the ultimate tool to solve many of humanity's problems. Although everyone seems to disagree in one way or another, there is one point where all voices raise in absolute harmony: big data is effective and here to stay.

## Rapid Change

Big data is in fact so effective that whole businesses have emerged over the course of the last 15 years to track, sort, store, and understand an amount of data that has never before been seen in human history.

They range from the most diverse fields like biology, pharma, security, military, financial services, logistics, communications, and social media to cite a few. In those fields, big data analysis techniques are used to discover new drugs, optimize supply chains, simulate nuclear detonations, and share feline photos to billions of people.

## The Scale of Today's Data

But how big is big data nowadays? Let's put this into perspective...

Google estimates that nearly 130 million books have been published in modern history. If the average size of a book was 500,000 characters this would translate to roughly 500 terabytes of data.

While that sounds like a whole lot of data, it pales in comparison to Walmart's customer transactions that generate roughly five times that amount – 2.5 petabytes – in a single hour.

Yahoo's Hadoop cluster capacity is rated at over 455 petabytes. Just for fun, CERN's Large Hadron Collider has the ability to generate over 500 exabytes per day – more than 200 times the combined capacity of all other sources in the world. And one million times our humble 500 terabytes of books.

*Not bad for a day's work.*

## When Size Doesn't Matter

It's definitely BIG. But is being big good enough? It depends on your definition of the word.

Let's take the online advertising space: there are likely millions of people viewing ads at any given moment. They are watching videos, clicking banners, buying products and services. This generates a respectable influx of impression data and human interaction data (ex: clicks) to base current and future campaign performance off of.

Everything seems perfect, right? *Well, not exactly.*

Traditional online advertising uses what we call 'pixels' to track impressions. Those are transparent 1×1 images that are typically displayed when an advertisement is shown. The pixels then generate server-side log entries that are examined to extract impression and click data.

Using this technique, we can get things like IPs, timestamps, cookies, device IDs, user agents, and more.

## Data in the Real World

While this is valuable information and can be used effectively to track ad impressions, it falls short in one emerging concern in the mobile advertising industry: viewability.

Viewability can be defined as the ability to tell whether one particular impression was seen by an actual human being.

In a world of rampant digital fraud, improperly integrated apps, and spiders/bots, this turns out to be quite a feat, and – since companies and marketing agencies are growing more and more interested in showing ads to potential customers – it's a feat that is required with growing importance and increasing frequency.

This is where the big data of traditional online advertising companies usually fail.

While they succeed in having more than enough data points, they do not provide the richness and context around individual impressions that is required to solve [the viewability problem](#).

## Navigating Uncharted Territory

So where should advertisers and ad tech vendors begin?

A complete analysis and understanding of the problem is a great first step. Industry trade organizations are beginning to align, not only on the definition of the problem, but on solutions that may help fix them.

One solution that has seen a rise in interest is JavaScript.

By using client-side JavaScript agents and working with industry standards from IAB and MRC, it is possible to augment this scale of data with the necessary information to do a better job at sifting the good from the bad in terms of traffic.

- We can filter the good placements from the bad ones.
- We can detect fraudulent activity and respond to it in a timely manner.
- We can help our customers deliver their ads to people that matter instead of some shady server in Eastern Europe.

Others have noticed the need for richness or to find deeper meaning in data, too. Netflix boasts (rightfully) about their big data and social-driven successes. Google's push into deep learning helps them power things like Android's Speech Recognition service and Google+ photosearch. Tim Berners-Lee, the creator of the Internet, argues that "if a computer collated data from your doctor, your credit card company, your smart home, your social networks, and so on, it could get a real overview of your life".

## More Than Just Numbers

When most people think about big data, they simply see a huge amount of data points.

But what truly matters most of the time is how those data points are related and work together. The richness of data is what gives us true insight into the hidden reality behind it, and is what teaches us how to effectively apply it to solve real world problems.

So next time somebody tells you they work with big data, ask them: "*Cool, but how rich is it?*"

# Reach and Reach Efficiency in Digital Advertising

Reach might just be the most fundamental aspect of all digital advertising.

Reach attempts to answer a very simple question: **is my message being delivered to the audience I want?**

It's the entire point of why we pay to advertise – to expose our products and services to as many applicable people as possible.

In the mobile ad space, reach is broadly measured by impressions.

Impressions count how many times consumers are exposed to an ad. It is important to note that impressions (and more largely, reach) do *not* measure whether or not a person took a desired action such as a purchase.

Instead, it's simply a matter of exposure. That's all.

## How Reach is Changing

In today's complex digital advertising landscape, reach has become a difficult thing to track. Surging demographic trends show increased use of multiple devices; most notably smartphones and tablets that offer the unique ability to accompany a consumer wherever they go.

The result is unparalleled consumer data and accessibility, but it comes at the price of added complexity.

[Recent Nielsen data](#) demonstrates that only 59 percent of ad impressions reach their intended audience, a 10 percent dip from 2013. Much of this change has to do with the way in which advertisers now target audiences.

Device complexity grants advertisers with the ability to target incredibly specific mobile audiences. Key demographic segments have largely replaced broader segments in the fight for advertiser attention.

For instance, let's say young men, age 19-24, have shown a high propensity to use the ESPN sports mobile app. This tells advertisers two things:

1. this particular demographic really likes sports.
2. the ESPN sports app is where advertisers can find them.

The campaign practically plans itself. But think about the flipside.

If advertisers pour all their time and money into targeting young men with sports ads on the ESPN app, they are inevitably going to reach other audience segments they didn't intend that fall outside the male 19-24 demographic.

## Reach Efficiency

Reach efficiency is a concept born from this need to address such rising complexity. Reach efficiency is exactly what it sounds like – it measures how efficiently an ad campaign reaches its target audience.

Reach efficiency uses what are called gross rating points (GRPs). A GRP is assigned to impressions multiplied by its frequency. Essentially, the percent of audience reached is multiplied by the number of times the ad is seen.

Ideally, advertisers want the highest percent reach for the lowest amount of frequency. An ad that's duplicated 5 times and attains 75 percent reach is much more efficient than an ad that has to be duplicated 10 times to achieve that same 75 percent rate.

That's reach efficiency in a nutshell.

Reach efficiency allows marketers to effectively analyze the performance of different campaigns with otherwise similar parameters.

## Viewability & Reach Efficiency

In a related study, Nielsen noted that the main factor in campaign performance variance came down to a website's ability to serve and optimize ads effectively.

Issues with ad fraud and viewability make the need to properly verify a site's ability to deliver actual impressions that much more critical. An ad that never makes it to its intended audience decreases the overall efficiency of the campaign.

For this very reason, we developed our own pre-bid placement verification platform, [AdScore™](#), to help advertisers ensure value through increased viewability. Alongside our proprietary mobile DMP [AudienceArchitect™](#), advertisers now have access to an incredibly wide yet targeted reach of verified mobile users.

Reach is a vital underpinning of effective advertising strategy. It helps to get any message to any audience, and through use of advanced technological tools, brands can now do so effectively and efficiently.



# Tracking the Trackers: Third-Party Ad Serving Today

ROI-based advertising is all about one thing: **tracking**.

Tracking data. Tracking campaign metrics. Tracking consumer behavior.

The widespread availability of [big data](#) and digitized information has made analytically understanding audiences – and the campaigns we use to reach them – not only possible, but necessary.

We track to optimize. Even more so, we track to hold the tools and services we use accountable. Sometimes, however, it's better to have someone else do the tracking. *Why?*

**Trust.**

Numbers may never lie, but reporting most certainly can. For these reasons, the ad server was born.

## History of the Ad Server

An ad server's primary function is to store, manage, and serve ads on publishers' sites and apps. In doing so, ad servers provide advertisers and publishers with a way to count ad impressions and track conversions, thereby increasing understanding and optimization.

Third-party ad servers combine advanced counting and tracking services with the benefit of unified reporting. By handing over the reporting duties to an impartial third-party, advertisers and publishers are given a much-needed dose of security. There's a lower chance for miscommunication and a lower chance for false information, however unintentional.

Everyone has the same numbers. At least, that was the idea.

## Ad Servers - On the Way Out?

The rise of issues concerning [viewability](#) has placed the ad server's place in the larger digital ecosystem in doubt. Advertisers only want to pay for *viewable* impressions. Because ad servers track "served impressions" (not "viewable impressions"), the numbers they provide are becoming less and less useful.

Why count the *total* number of impressions, when the viewable impressions are the only ones that really matter?

It wasn't long ago that AdExchanger [declared the ad server dead](#). We tend to agree. As ad fraud has advanced in sophistication, so too has the technology to combat it. Data-management platforms (DMPs) and demand-side platforms (DSPs) have effectively taken the reigns from the ad server in offering a comprehensive data solution.

For instance, Gimbal's own mobile DSP [AdCast™](#) enables advertisers to not only track their data through use of real-time analytics, but also filter out fraudulent placements in order to ensure that their ads are being viewed by real people.

Real impressions = real money.

## A Holistic Approach

Unfortunately, ad servers (even mobile ad servers) fail to address the advertising industry's overarching need for holistic solutions. What they offer is merely one singular piece, whereas companies like Gimbal have managed to fit together the entire puzzle.

And what happened to trust? As it turns out, big-time publishers like Google began to develop their own ad servers anyway, recreating the need for verifiable accountability.

Independent solutions such as Gimbal offer all of these capabilities, from data and viewability tracking to independent impartiality, once again proving that ad tech is an industry best served integrated.

# The Pros and Cons of Using Insertion Orders

An insertion order (IO) is exactly what it sounds like.

It's an agreed-upon order given by an advertiser (or their agency) for an advertisement to be inserted on a publisher's site(s). IOs represent legal documentation of how an advertising campaign is to be carried out, from ad specifications to pricing and campaign timing.

In short, IOs are old school. In a digital advertising world that continues to move towards programmatic buying, IOs offer advertisers and publishers some measure of control on how advertisements are bought and sold.

However, this control does come at a price.

The following pro and con list will break it all down, allowing you to better understand what IOs offer and what they don't.

## The Pros

### The Assurance of Control

Insertion orders allow all the parameters of an ad campaign to be agreed upon in advance. The price can be set, the start and end date can be tailored to specific seasonal considerations, and even the impressions served can be determined – all before the campaign goes live.

Both the advertiser and publisher know exactly what they're getting before they get it. It's assurance. It's control.

### The Devil is in the Details

Coinciding with greater control, IOs allow an attention to the finer details of an ad campaign. Say you want to establish a dynamic pricing structure with monetized incentives? You can simply write that into the agreement. What gets signed is what gets implemented.

Every little detail can be modified to maximize the effectiveness of your campaign.

## **An Alignment of Goals**

Insertion orders provide advertisers and publishers with an opportunity to work together. Rather than leaving the buying process up to automated computers, IOs force advertisers and publishers to both come to the table, allowing for the specific discussion of terms and parameters.

By having these conversations, advertisers and publishers are more likely to effectively agree on goals, resulting in a tailored approach to meet these goals.

## **The Cons**

### **It's Slower**

Insertion orders require work... from humans. Someone has to write it. Someone has to approve it. Someone has to contact the publisher and settle on a time for negotiation. An agreement has to be made. All in all, the entire buying process can be weighed down by these necessary human interactions.

Meanwhile, automated buying systems are completing this process in mere milliseconds.

### **Agree to Disagree**

For an IO to be signed, there first has to be an agreement. In a perfect world agreements are always possible, but as we well know that isn't always the case. If advertisers and publishers come to the table with different expectations, lengthy negotiations could follow suit. These negotiations take time. They cost money and man-hours.

What was supposed to be a simple agreement can dissolve into vicious bureaucratic squabbling, sending all potential profits down the drain in the process.

### **Limited Publisher Base**

By relying on insertion orders to strike buying agreements with publishers, you are ultimately limiting who you can sell your ads to.

*Why?* Because automated buying exposes your ads to hundreds of potential publishers in seconds. To write an insertion order, you first have to find the publisher you want to engage with.

Unless you have thousands of hours to evaluate and contact every possible publisher, your publisher base will be decidedly smaller.

# Programmatic Mobile: Advertising Gone Automated

**Automation.** That's the word you need to know when attempting to understand programmatic mobile advertising. It's still just ad buying – only done by computers.

“Programmatic” has easily become one of the most controversial examples of industry jargon to make its home in the larger digital marketing landscape.

It's no secret why.

Programmatic technology stands to dramatically change the way in which digital media is bought and sold. It promises efficiency, it promises profit, but brings with it a host of questions and uncertainty – much of it due to a simple lack of understanding.

Don't worry. That's why we're here.

The following pro and con list will break it all down, allowing you to better understand what programmatic advertising offers and what it doesn't.

## First, what is programmatic advertising?

Before we begin, it might help to have a brief primer explain what exactly programmatic advertising is.

Programmatic ad buying is simply ad buying carried out by machines or, more specifically, pieces of software. Platforms use data gleaned from sophisticated consumer tracking systems to determine which ads to place where to (theoretically) serve the best impression to the most ideal consumer.

Simply put, all ad buying decisions are made by automated, data-fueled computers.

Now on to the pros and cons...

## The Pros

### Efficiency

Programmatic advertising makes its money (literally) by being efficient. Traditionally, ads were bought and sold by human beings. As we well know, humans can be slow, costly and prone to error, especially in comparison with their computerized counterparts.

Not so with programmatic buying.

Programmatic technology eliminates the need for humans to complete the more menial tasks required to buy and sell advertisements. No lengthy negotiations. No bureaucratic nonsense. Instead, all of it is automated, allowing us humans to do what we really want to spend our time doing anyway: **developing creative campaigns and marketing solutions.**

### Cost-Effective

More often than not, programmatic advertising is going to save you money. With so many potential publishers with available ad space, programmatic buying allows advertisers to quickly find the best-suited, optimal location to display their ads. Again, this frees up more time to concentrate on activities that more deserve our attention. As the old saying goes, time is money.

### Mobile Synchronization

Perhaps more than any other medium, programmatic buying synchs beautifully with mobile advertising. Why? Because it effectively pairs cutting edge data analytics with the ability to reach simultaneously a very wide yet targeted mobile audience. Marketing campaigns can now be optimized to contour to each individual user's identity and consumer habits.

### It's the Future

Whether you like it or not, programmatic advertising is growing exponentially. According to the [Programmatic Pulse](#) report, a joint study by Chango and Brand Innovators of the programmatic activity of 232 marketers in the US, UK and Canada, 70 percent of

respondents agreed or strongly agreed that a majority of digital media buying will be done programmatically in the future.

In short, programmatic advertising is happening and it's happening fast, with mobile being one of the chief drivers of growth. There's no way we can fully comprehend what further benefits and innovations it could generate. All the better to hop on now rather than risk getting left behind.

## The Cons

### Ad Fraud

This is a big one. Ad fraud is one of if not the greatest issue facing digital advertising as we head deeper into 2015. So much so, we dedicated one of our [own platforms](#) to help fight it.

False impressions created by nefarious bots have the potential to completely wreck any campaign-derived metrics. Due to programmatic automation, these bots have a greater chance of maneuvering within the digital ecosystem undetected.

### "Wrong-Site Whoops"

Due to automation, there is a possibility that your ad could be displayed on a site you'd rather it not. While it's possible that this occurrence could drive short-term business, a long-term hit to your brand's reputation would be a price not worth paying.

### No People

As much as we gripe and groan, the human mind is actually really useful. With fully automated programmatic buying, we lose some ability to comb over the finer details with a proper human-like finesse. It's a small price to pay, but does make perfecting marketing strategy more laborious.

Also, less people involved means less jobs, which is always something to consider.



## The Unknown

For every promising future there exists a perilous unknown. Although programmatic advertising has indeed been deemed “promising” by many industry experts, there’s always exists some doubt lying in the weeds. Troubling questions have yet to be answered.

How sophisticated will ad fraudsters become? Could the advertiser-publisher relationship become one-sided? Can we trust computers to automate *all* of our ad purchases? Will the robots rise up and enslave us?

(The last one isn’t really a concern. At least, *not yet...*)

Overall, it’s a complex and constantly-evolving ecosystem. Eventually, we’ll begin to find answers to these questions. Hopefully we like what we find.

# Tracking Mobile Ad Attribution

There's some measure of irony in the difficulty surrounding mobile ad attribution.

Mobile devices are specifically designed to be portable, customizable, and user-friendly, allowing users to complete all sorts of tasks on one comprehensive platform.

In sad contrast, mobile ad attribution remains fragmented and largely inaccessible, with marketers reluctant to run cross-channel campaigns due to their inability to effectively measure ROI.

In the ad attribution family, mobile continues to be the ever-aloof and disparate child, content to sit alone in his room and remain a mystery.

*(What does he do up there all day?)*

## Solving the Ad Attribution Mystery

Generally speaking, mobile ad attribution is the measurement of a user's interactions with a mobile ad on a website or app.

It's a way for marketers to understand how consumers engage with their ads in an effort to better tailor marketing campaigns to produce conversions and high ROI. If a marketer can't accurately measure what series of events led a consumer to a desirable action, there's no way to replicate that process and ensure it happens again.

Marketers obviously want the ability to determine value.

While mobile ad campaigns offer unimaginable potential to *add* value, the inability to *measure* campaign value keeps marketers downstairs without a clue.

## Why the Difficulty on Mobile?

Mobile browsers don't use cookies. [HTTP "cookies"](#) are bits of stored data communicated between a web server and an individual user's browser. It's one of the many ways marketers can track a user online to develop a consumer profile.

Unfortunately, however, the feature is desktop-exclusive.

Without this tracking capability, mobile campaigns have historically relied on rather unsophisticated methods that too often include a significant amount of guesswork. As you might assume, the word "guess" doesn't sit too highly on a marketer's list of most-cherished terms.

## Precision Targeting on Mobile

One area where mobile does have a distinct advantage is location tracking.

[In a 2013 report](#) conducted by BIA/Kelsey - a research, consulting and advisory company - the average location-based CTR (click-through-rate) was 1.21%, effectively double the average of non-location-based CTR (0.61% as reported by Verve Mobile).

It's a powerful testament to mobile's capabilities - and the technology is only getting better.

The current selection of location-based ad targeting broadly includes such methods as geo-aware ad placement, geo-fencing, and the latest trend... [audience targeting](#).

While geo-awareness and geo-fencing can be highly effective and generally produce a substantial increase in CTR as illustrated above, they also fall prey to complications with location signals and iffy location data (depending on which vendor you use).

On the other hand, advanced geo-defined audience targeting offers marketers a way to fill in the holes created by traditionally desktop-oriented, location-based targeting.

Combined with advances in big data, mobile audience targeting now has access to invaluable demographic information and social predictors, including lifestyle, personal affluence, and shopping trends.

The result is a precise consumer profile, custom-made to reach any audience a marketer desires in real-time.

## Mobile Ad Attribution in Action

The whole point of mobile ad attribution is to make sure all this location-based data is doing its job, ensuring campaigns are running optimally.

Advancements in big data leverage consumer information to properly buttress location analysis, tracking a user's spatial behavior after ad exposure. Measuring large samples of these mobile users, either through first- or third- party reports, identifies consumer patterns and thus sheds light on the entire purchasing process.

People are complex. Now, armed with smartphones, tablets, and an ever-expanding list of emerging mobile technologies, audiences are as difficult as ever to track and measure. Leveraging big data is most certainly a must.

But mobile doesn't just add cumbersome complexity. It creates *opportunity*. Attribution technologies are poised to take advantage of mobile portability and location-based data.

Marketers, publishers, and brands should take notice.

# The Future of the Mobile Tracking Pixel

Gimbal has been [shifting focus](#) over the past two years from reward based ads to creating an end-to-end, programmatic mobile advertising network focused on audience targeting.

A pixel is the smallest unit that can be used to represent an image in your monitor. If you look very closely at your monitor or mobile screen, you would see a mosaic of small points of differing colors and hues. Without such units you would not be able to watch YouTube videos, buy at Amazon, read the latest news at CNN, or enjoy this article.

The pixel is as ubiquitous as it is unnoticed.

The pixel is also the basis of the technology most digital advertisement companies use to know you better. Whenever you see an ad that appears to talk to you, that seems to know what you want at that particular moment in time in the most uncanny of ways, the tracking pixel will be there.

Once state-of-the-art, tracking pixels represent fading relevance in tracking technology. Whether you are tracking user behavior through cookies, running fancy server-side algorithms to classify and segment your audience, or just trying to separate the good traffic from the bad traffic, the tracking pixel was there.

Sadly, the tracking pixel had its day and its time in the spotlight. It can only get you – the digital marketer – so far.

Using it in today's mobile-first world is like trying to fly a fighter jet with analog instruments from the 40's: sure, you can get the job done most of the time, but you have at best a very sketchy idea of what's going on outside of your cockpit.

Sketchy ideas are better than no ideas and are a good place to begin, but eventually you'll want to know more. You need to know more if you wish to compete in the current digital marketing arena.

## Moving the Mobile Tracking Pixel Forward

How can you do so? How can you get ahead of your competition?

There are many possible answers to those questions, but a good place to start is by knowing more about your audience. After all, those are real people who may buy your product, sign up for your service, or simply become aware of how awesome your brand is.

When designing and deploying [rich-media mobile ad](#) units, you can learn much, much more about your audience than a simple static tracking pixel can tell you.

You can track where the user clicked, how much of a video he watched, what her score was on a mini-game, and how long he took to decide to fill out that contact form.

Using a mix of readily-available, battle tested Web 2.0 technologies such as JavaScript and HTML5, and open source frameworks such as [AdKit™](#), you can easily tap into a plethora of information so rich that you can probably know the real people accessing your content better than they know themselves.

- You can know that Josh likes to browse car parts after work and that he's just waiting for the next fun, energetic ad to convince him to get that new sound system.
- You can know that Sara is on the market for a good personal finance tool because of that college loan and, if you can convince her your app is safe, trustworthy and hassle-free, you've got yourself a deal.

Such is the power of insight and knowledge.

Most importantly, by collecting those types of data each time a rich-media ad is run, you are able to build a massive library of [data points](#) full of tracking information. From it, you can draw trends from behaviors, interactions, and locations across cohorts that enable the creation of targeted audiences in the future in real-time.

The future is here, and the frontier is clearly laid out. We are in a time of transition from traditional media sources to interactive, exciting new channels of consumer engagement; from boring, static “tell-me-what-to-do” ads to dynamic live content and experiences.

Best of all, the technology to tap into all that power is available now and up for grabs. Should you want to truly excel at getting your consumers to see and engage your message, all you have to do is [get in touch](#).

# 27 Mobile Advertising Terms You Need to Know

It's no secret: the mobile advertising industry has more acronyms and jargon than we can shake a stick at. Our glossary of mobile advertising terms is out to change that. In this guide, we'll break down what the trendiest phrases in ad tech mean in clear, concise, easy-to-understand terms.

So take out your pencil and paper and get ready to take lots of notes, or print a copy of this post and keep these mobile advertising terms by your desk.

## Ad Exchange

An ad exchange is a technology platform that functions primarily as a digital marketplace. It allows advertisers and publishers to buy and sell online ad space from various ad networks through real-time auctions. The payoff is efficiency and transparency. Ad exchanges enable advertisers to gauge prices for ad impressions across multiple sites and purchase those that are most cost-effective. All of this is done simultaneously, eliminating any lengthy ad-buying negotiations.

## Ad Network

Ad networks are companies that gather ad space supply from publishers and sell it to advertisers, typically at a marked up price. In short, they act as middlemen who connect companies that create ads with websites with the space to display those ads.

## Ad Server

An ad server is a web server that publishers use to store, manage, and deliver their ads to website visitors. Ad servers often employ advanced analytical tools, allowing publishers to use data to better understand and optimize their advertising model. For example, ad



servers can count and track users, generating data-fueled reports for advertisers on the number of impressions their ads receive.

## **Ad Tag**

An ad tag is code publishers place on websites in order to sell ad space. It consists of two parts: 1) a URL and 2) a piece of HTML or JavaScript code. Working together, these two parts first request content (ads or other ad tags) from the URL and then instruct the browser how to display the content.

## **API**

An application programming interface (API) is a language format, written in code, which allows programs and applications to communicate with each other and their respective operating systems. The language creates a standard of rules and protocols which programmers use to develop software that doesn't conflict. In the mobile ad tech sector, API-powered mobile devices offer greater visibility into a user's lifestyle, delivering data that can create marketing opportunities and inform strategic decisions.

## **Attribution**

Attribution is the process by which user interactions are identified and measured. It's a way in which marketers garner a better understanding of how certain events lead users to a desired outcome, referred to as a conversion. Attribution quantifies an ad's ability to influence a consumer's purchasing decisions, providing marketers with a way to compare the effectiveness of various marketing campaigns.

## **Creative**

Creative, specifically ad creative, is a file that houses the digitally formatted design and artwork for an advertisement. This file is rendered as a display ad on the publisher's medium and can take the following formats: Image (GIF, PNG, JPEG), Flash File (SWF), HTML or JavaScript.

## CPA

Cost-per-Action (sometimes known as Pay per Action or PPA; also Cost per Conversion) is an online and mobile advertising pricing model, where the advertiser pays for each specified action. For example, an action after an initial impression and click, like an install, form submit (e.g., contact request, newsletter sign up, registration etc.), double opt-in or in-app sale. *Formula:  $CPA = Cost / Number\ of\ Actions$*

## CPC

Cost-per-Click (CPC) is the price the advertiser pays a publisher every time a consumer clicks on the ad. The price is set by the advertiser. *Formula:  $CPC = Cost / Number\ of\ Clicks$*

## CPI

Specific to mobile applications, Cost-per-Install (CPI) is the price an advertiser pays whenever the consumer installs the advertised application. *Formula:  $CPI = Cost / Number\ of\ Installs$*

## CPM

Cost-per-Mille (CPM) is a pay structure designed to generate brand awareness. The advertiser pays the publisher for every 1000 times the advertisement is displayed to a consumer. *Formula:  $CPM = Cost \times 1000 / Impressions$*

## CTR

Click-through rate (CTR) is the ratio of clicks to ad impressions. This is the most commonly used metric to determine the success of an ad campaign. *Formula:  $CTR = Number\ of\ Clicks / Impressions$*

## DMP

A Data Management Platform (DMP) is a centralized digital warehouse where marketers, publishers, and other businesses can effectively store, manage and analyze large quantities of data. DMPs are incredibly useful in marketing campaigns, enabling optimization through more effective ad targeting. AudienceArchitect™ is, of course, our [mobile DMP](#) of choice.

## DNT

Do Not Track (DNT) is specifically a HTTP header field that sends a signal to other websites, namely analytics companies, ad networks and social platforms, requesting them to disable any tracking of individual users. Despite the request, many sites still do not honor the DNT signal. There currently exists no standardized protocol for its enforcement.

## DSP

A Demand Side Platform (DSP) is a centralized technology platform that enables automated ad buying from a range of publisher sites while simultaneously connecting with consumers through vertical and lateral targeting. It's an all-in-one tool for advertisers, efficiently integrating the buying, delivering and tracking of ads through proper utilization of data. The result is campaign optimization. Marketers can manage and tailor both their bids and their data to more effectively reach their targeted audiences. There are a handful of good [mobile DSPs](#) out there. Ours is AdCast™.

## eCPM

Effective Cost-per-Mille (eCPM) is a way to measure the value of a publisher's inventory on a Cost-per-Mille (CPM) basis. eCPM is calculated by multiplying the number of clicks (CTR) by the CPC rate to determine total revenue. That total is then divided by the number of blocks of 1,000 impressions delivered, giving the eCPM value. *Formula: eCPM = (Total Spent/Impressions Delivered) X 1000*

## Fill Rate

The fill rate is the rate at which a publisher successfully displays an ad in relation to the number of times the ad was requested. Essentially, this rate evaluates the amount of wasted inventory space a publisher has.

## GRP

Gross Rating Point (GRP) is a standard measure for the impact or exposure of an ad campaign. GRPs calculate reach multiplied by exposure frequency. For example, if an ad is exposed to 32% of a targeted audience and that exposure occurs a total of three times at the same 32% rate, then you have a GRP of 96. Because the GRP measures *gross*, it is therefore possible to have a number over 100.

## Impression

An ad impression is the calculated instance of an ad being displayed to a human consumer. Impressions give marketers a broad understanding of how many people their brand is reaching.

## Inventory

Ad inventory is the total amount of space a publisher has on their respective platform to display advertisements from advertisers. Ad inventory is sold to an advertiser at a price, often determined through an online bidding system. Specifically mobile ad inventory is often measured in impressions.

## Mediation

Mobile ad mediation is a technology that allows publishers to maximize the revenue gained from selling impressions. The ad mediation platform ranks ad networks according to publisher priorities, enabling the publisher to quickly find and choose ad networks that provide the highest potential revenue for their inventory.

## **Programmatic Buying**

Programmatic buying is automated ad buying. It allows advertisers and publishers to quickly buy and sell advertisements through computerized systems and without the need for human intervention.

## **RTB**

Real-time bidding (RTB) is the process by which ad inventory is bought and sold instantaneously through programmatic means. The auctions, which take place every time a web browser opens a website, sell ad space provided by publishers to the advertiser willing to pay the highest price. The entire process is facilitated by ad exchanges.

## **Rich Media**

Rich media constitutes a kind of ad that will typically contain some form of video or user interaction engagement. Rich media allows advertisers to connect with and involve consumers on a deeper level, providing dynamic content and effects.

## **SDK**

A software development kit (SDK) is a set of programming tools for developers and programmers to use for the creation of a wide range of applications for various software packages. In mobile tech, these tools are often made available to customers, offering an intuitive, easy-to-use programming kit to develop their own mobile apps. Once created, apps created from publishers and consumers alike can be published and sold over the popular app marketplaces.

## **SSP**

A supply side platform (SSP) is a technology that allows publishers to maximize the revenue gained from selling their ad inventory. It's an automated system that connects publishers to multiple ad networks and exchanges to facilitate the purchase of inventory.

Publishers then can receive the best possible price as their inventory is exposed to the highest number of potential bidders possible.

## **Viewability**

Was your ad seen by a human? If so, for how long? These are the tough questions that mobile viewability seeks to answer for advertisers and publishers alike. For a comprehensive explanation on [mobile viewability, check out our dedicated resource.](#)