



# MOBILE ADVERTISING 101

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

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# Introduction

Advertising used to be so simple. You had advertisers wanting to display their ads and publishers with space to do so. That was it. No complex digital tools, no dense measuring systems, no widespread fragmentation.

*Sigh. Those were the days.*

Luckily, this fundamental advertiser-publisher-consumer relationship still lives happily at the core of the entire advertising process.

It's just a bit obscured.

With our Mobile University 101, an easy-to-use eBook of mobile ad tech curricula, we make sense of all the convoluted nonsense to help you better understand the ever-evolving ecosystem that is digital advertising.

Intelligible. Digestible. Easy to use.

# This is Advertising in its Simplest Form

It all begins with the advertiser.

The advertiser wants to sell a product or service through ads which they create. In the past, this might have been newspaper ads or radio ads. Nowadays, these ads are often digital, distributed to users on the web.

So the advertiser creates the ad.

## Now what?

The advertiser could attempt to distribute the ad themselves, trying to get what they created in front of as many people as possible.

But that would take way too much time and cost way too money.

Instead, advertisers contact publishers like newspapers or websites, who make a living by distributing massive amounts of content to consumers on a regular basis.

## It's the Perfect Partnership

The advertiser pays the publisher an agreed-upon sum of money to display their ads. In turn, the publisher distributes their content along with the advertiser's ads to their audience.

Both parties get what they want.

The publisher makes a profit, and the advertiser receives ad exposure.

The consumer, the target of both advertiser and publisher, receives the best of both worlds: distributed content by well-known publishers as well as advertisements for things they may want to buy.

That's the advertising ecosystem, as bare bones and simple as we can make it.

## Enter the Internet

The Internet has changed things. There's now an additional layer of complexity to take into consideration.

Yet at its core, the advertising ecosystem is still just advertisers and publishers negotiating the buying and selling of ads.

With the internet explosion, advertisers now have access to millions of potential publisher websites, creating an enormous supply of ad space (inventory). It's nearly impossible for advertisers to efficiently sift through all of it and find the right place to effectively display their ads.

## New Tools, Same Process

Therefore, third party digital tools have been developed to help advertisers and publishers effectively negotiate the purchase and placement of digital ads.

Ad networks, third party technology companies, arose to gather ad space supply from publishers and organize it in a way that helps advertisers connect with the various kinds of websites available.

DSPs (demand-side platforms) and SSPs (supply-side platforms), another set of digital tools, arose to help advertisers and publishers better optimize the ad buying process.

DSPs use internet data to track and purchase publisher inventory by automated software.

SSPs do the exact same for the publisher. That is, they use data to *sell* ad inventory by automated software.

Both the DSP and the SSP integrate with one another as well as ad networks, providing an automated and thus efficient exchange for advertisers and publishers to buy and sell ads.

See. It's still just advertisers and publishers trying to reach their respective audiences, only now they both use digital tools to make that process more efficient and effective.

# Why Is the Mobile Ad Tech Industry So Fragmented?

Fragmentation is innovation's Sunday morning hangover.

Saturday night is always A LOT of fun. It starts out with plentiful planning and good intentions. But the next morning? Everyone just ends up with a headache.

Historically speaking, the tech sector has enjoyed a good number of crazy Saturday nights, driving innovative new products and services for our increasingly technological society.

It seems every major company from Facebook to Google to Apple tells a story of humble beginnings, having been founded in a dorm room or garage by young entrepreneurs looking to hatch something new. Something never seen before. Something that can change the world.

And in many ways, innovation is the bedrock of American enterprise.

Independent players, young start-ups, and self-appointed entrepreneurs infuse new vision, insight, and ideas into established industries, sparking dramatic leaps forward or destiny-altering shifts in the landscape.

The ad tech industry has played out much in this way. New developments like the explosion of new publisher websites or the widespread adoption of mobile devices necessitate a response from technology companies - both established and newly founded - to offer their own solutions to a growing list of demands.

These solutions are often necessary, and indeed drive innovation. But they also come with a cost: *fragmentation*.

## Mobile Advertising Fragmentation

The industry is plagued by fragmentation. Each year, new technologies arise to harness the capabilities of mobile devices as well as the swell of people flocking to the use them. As a

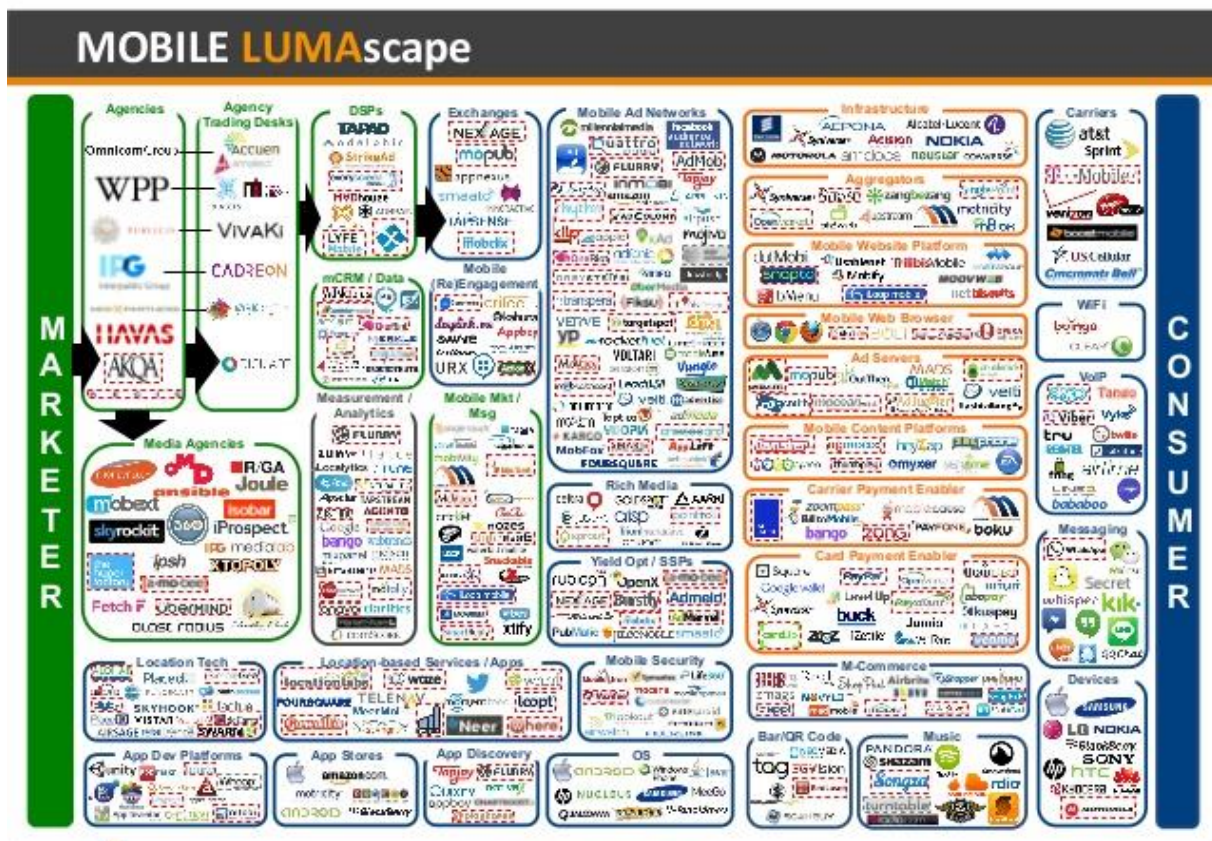
result, the mobile ecosystem grows and changes at an alarmingly fast rate – often too fast for the industry to keep up.

This causes pain points or specific problems within the industry that have historically been addressed by hyper-specialized solutions. Today, issues over ad fraud and viewability are being addressed in bulk. Tomorrow, an entirely new crop of challenges may arise and so too will a slew of new "problem solvers."

In response, hyper-specialized solutions can work. But once a tipping point has been reached, once there are so many that it does more harm than good, the entire system becomes threatened.

Unfortunately, mobile advertising is experiencing such a threat right now.

## The Current Mobile Landscape



The above monstrosity is a visualization of the mobile landscape as it exists today, put together by the good people at [Luma Partners](#). It represents hundreds of the biggest players in our space that tackle various problems caused by the opportunity this new technology presents.

As it stands, running an effective mobile campaign could require 5-15 different solutions across as many different vendors.

For example, a mobile DSP today might need to integrate with:

- [multiple ad exchanges](#),
- one to four 3rd-party data brokers,
- a [mobile DMP](#),
- a [fraud detection tool](#),
- an ad serving platform,
- a measurement platform,
- a rich media ad builder,
- and ultimately some sort of real person or programmatic solution to monitor and optimize results.

It's an incredibly complex process, one that is filled with fees and breakage along the way.

Also, consider now that mobile advertising is undergoing a dramatic shift in the way ads are bought and sold. More and more, ad buying is done programmatically through real-time bidding. That is to say, ad inventory is bought and sold by automated computers that complete the process in the time it takes to load a webpage or app.

Most mobile ads require 5-15 technologies to fire in fewer than 200 milliseconds. In other words, five to fifteen disparate vendors are expected to work together flawlessly in under 200 milliseconds to serve a single mobile ad unit.



Sometimes it works. But more often than not, it doesn't. Ad attribution becomes nearly impossible to measure due to inconsistencies in reporting, plummeting campaign efficiency in the process. At times, entire campaigns crash due simply to disparity in technological platform.

As more and more vendors are added to the process, the likelihood for these problems to occur only rises.

But that doesn't mean that these innovative mobile technologies can't be integrated. Bringing everything from mobile DSPs to measurement platforms together under one roof works to eliminate nasty breakdowns in communication.

In our opinion, it's the only way to keep up with an industry moving at a blistering 300 miles per hour.

# The Viewability Problem

By now, it's no secret that the online advertising industry has a viewability problem the size of Siberia. And just like Siberia, ad viewability – as an industry issue – is an area that remains largely untamed and poorly traversed.

You've probably heard the term "viewability" a lot lately. In a nutshell, ad viewability is an issue that centers on whether or not a given ad can be seen by a person.

There are a number of factors that go into this determination. Much of it is technical minutiae, such as pixel count, ad sizing, etc. I won't lull you to sleep with the details (I am merciful).

The important takeaway is this:

**If an ad isn't able to be seen, then it can't do its job.**

It benefits both advertisers and publishers to take strides in measuring and ensuring online viewability. Advertisers would feel confident knowing that their ads are actually being seen by real consumers, and publishers would take comfort in knowing that their inventory is viewable and thus attractive to media buyers.

## Simple Concept; Complex Problem

Unfortunately, while the concept of viewability may appear straightforward, its execution isn't. It's a challenging problem with no simple solution, due to the complexity of ad engineering and an excess of moving parts.

Factor in surging adoption rates for mobile devices, all with varying screen sizes, and ensuring viewability becomes even more complicated. Many websites still aren't designed with mobile in mind, leading advertisers to consider mobile-specific campaigns only as a last minute addition *if* the budget allows.

Yet this only further exacerbates the issue, with mobile traffic looking to take a dominant hold on the market in coming years.

Addressing the viewability problem begins with the acceptance that there *is* a problem. To this end, the online advertising industry is shifting focus on measuring *viewed* impressions rather than *served* impressions.

It's a necessary step in the right direction. But as it stands, it's only serving to illuminate just how far away we are from hitting the industry standard of a 70% viewability threshold, as set by the IAB. Even Google, the biggest player in the ad industry, has reported that less than half of their ads are seen.

Much of the problem lies in a wholly fragmented ecosystem over-encumbered with disparate vendors performing niche functionalities. The journey from creation to an actual viewed ad is muddled by this complexity, driving cost up and efficiency down.

The average large scale campaign is going to use somewhere between 5 and 15 vendors, each with its own set of practices and procedures on how to best measure viewability. With so many technologies crudely bundled together, there's bound to be data loss, unleveraged assets, and silos.

More often than not, the numbers just don't match and accountability is lost. In whole, the system isn't working.

## Things to Consider

In order to solve the viewability problem, the industry needs to consider the following items:

1. **Invest in rich media.** The traditionally viewable banner ads are proving less and less effective in garnering conversions, especially on mobile. Engaging creative and additional functionality is no longer a nice-to-have for mobile device users, it's a requirement. Rich media ads can provide the user engagement that not only works to attract consumers, but also helps ensure viewability.
2. **Adopt a mobile-first perspective.** More than half of digital content is now consumed on mobile devices and it only looks to grow moving forward. Advertisers and publishers alike should focus on implementing changes that make their ads or websites not only mobile-friendly, but mobile-centric. By considering a mobile user's experience – from the context of where the ad will be displayed to the content of the ad itself (see above), viewability and engagement rates have a greater chance for survival.

3. **Use a vertically-integrated technology platform.** With the mass proliferation of niche vendors turning into a logistical nightmare, integrated vendors are the only ones with the data and accountability to hold themselves responsible for the viewability of their campaigns.

# 3 Reasons You Should Consider Buying Mobile Media

Why buy *mobile* media? It's an important question to ask, especially considering how mobile campaigns are often handled by even top level advertisers.

The fact of the matter is, mobile is habitually dealt with as a left-over. An afterthought. An add-on. That is to say, mobile campaigns have historically been implemented *only if* enough budget remains after all other media buying opportunities have been exhausted.

And even if there is enough budget left to properly power a mobile campaign, advertisers will still make the mistake of graphing standard desktop practices onto mobile execution, assuming both play by the same rules.

The thing is, they don't. Desktop and mobile are two separate beasts. Each needs its own set of practices and procedures to tame.

It's often this realization that causes some advertisers to steer clear of mobile, which is unfortunate. The habit of implementing desktop solutions first is now impeding mobile's potential. At this point, mobile media should be a significant part of any marketing campaign, if not the cornerstone.

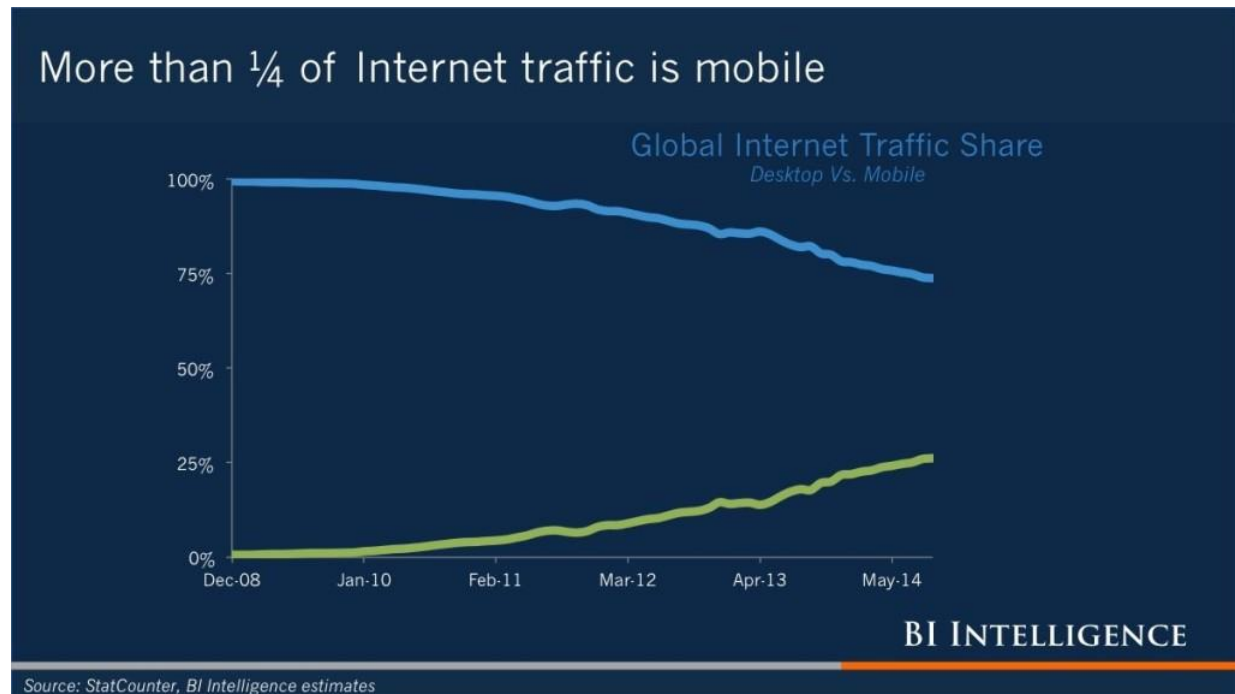
Why? The evidence really speaks for itself.

## 1.) The Mobile Market

If you're reading this post I'm going to assume you own a smartphone. Better yet, if you're *alive* I'm going to assume you own a smartphone.

Assuming might generally make an ass out of you and me, but trust me, the numbers back it up.

[According to Nielson](#), 175.1 million people in the U.S. own a smartphone as of September, 2014. That's 71% – or a *significant majority* of everyone in the country.



Alongside the smartphone explosion, mobile internet traffic is increasing exponentially. More and more people are completing traditionally desktop-first tasks such as internet browsing, video watching and shopping on mobile devices.

#### Mobile Internet Ad Spending Worldwide, 2013-2019

	2013	2014	2015	2016	2017	2018	2019
<b>Mobile internet ad spending (billions)</b>	<b>\$19.20</b>	<b>\$42.63</b>	<b>\$68.69</b>	<b>\$101.37</b>	<b>\$133.74</b>	<b>\$166.63</b>	<b>\$195.55</b>
—% change	117.9%	122.1%	61.1%	47.6%	31.9%	24.6%	17.4%
—% of digital ad spending	16.0%	29.4%	40.2%	51.1%	59.4%	65.9%	70.1%
—% of total media ad spending	3.7%	7.8%	11.9%	16.5%	20.5%	24.1%	26.8%

Note: includes display (banners, video and rich media) and search; excludes SMS, MMS and P2P messaging-based advertising; ad spending on tablets is included

Source: eMarketer, March 2015

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www.eMarketer.com

As advertisers begin to catch on, mobile ad spend rises in response. In 2014, only 29.4% of digital ad spend was mobile. In 2015, it's projected at 40.2% spend.

In 2016? 51%.

As we approach 2020, mobile ad spend looks to take a strong *mobile majority* (see what I did there?). That's because mobile is where the consumers are.

The average U.S. consumer spends *one hour* a day looking at their smartphone.

Money follows eyeballs.

It's as simple as that.

## 2.) Mobile Capabilities and Rich Media

Consumers are flocking to mobile devices for a reason.

Smartphones and tablets offer unprecedented convenience of use and exclusivity of information. In other words, consumers can receive the information they want when they want and how they want it.

The advantages don't stop at the consumer. With the emergence of mobile-first technologies, advertisers can now tap into this personalized stream of mobile media.

What were once standard, lifeless ads that clung listlessly to the top or sides of desktop webpages have now become dynamic, rich media ads inserted straight into a user's mobile apps. These ads offer much higher levels of user engagement as they take proper advantage of mobile touch screen capabilities.

Take a look at our own [portfolio of rich media mobile ads](#) to get a glimpse of what's possible. We've had tremendous success launching mobile campaigns tailored around these rich media ads.

In short, they can accomplish what no other form of media can.

Rich media ads can allow tap-to-call functionality, time-based contextualized ads, coupon downloads and more, all custom-fit to a user's interests, habits, and location.

Advertisements shouldn't be merely glanced at then ignored. They should be *interacted* with. Rich media on mobile accomplishes that.

### 3.) Reaching Your Audience

If a consumer is going to look for a product or service, more often than not they are going to do so on the internet.

And now – for 71% of the U.S. population – the internet now lives in their pocket.

Therefore, putting your message in front of the right consumers at the right time is now easier than ever.

But only if you take advantage of mobile opportunities and invest in mobile media.



# How to Spot Native Ads Like a Pro

Just over fifty years ago, Justice Potter Stewart of the Supreme Court attempted to define pornography. After much research and debate, he eventually came to the simple conclusion that “[I know it when I see it.](#)”

It would become one of the most famous phrases ever uttered in U.S. judiciary history. Not merely for the controversial subject matter, but more so for its implication concerning the First Amendment of free speech.

Moving forward, what was to be deemed obscene and thus unconstitutional was largely left to the whims of whoever might be presiding at that time.

In other words, in regards to obscenity, free speech was governed by ambiguity.

In the world of digital advertising, native ads are governed by a very similar – yet just as unhelpful – version of ambiguity.

## What Is Native Advertising?

Of all the types of digital ads, native advertising just might cause the most confusion.

Not because the concept behind native advertising is overly complex. It isn't. In fact, it's rather simple. [According to the IAB](#), native ads are:

“...paid ads that are so cohesive with the page content, assimilated into the design, and consistent with the platform behavior that the viewer simply feels that they belong.”

From a theoretical perspective, that makes sense.

[Basically, native advertisements are ads that don't look like ads.](#)

Rather, they look like organic pieces of content that fit seamlessly into the user's experience.

When a user opens a webpage or loads an app, they generally aren't looking to be hit across the face with advertisements. Native advertising takes advantage of this by presenting ads in a way that isn't obstructive, annoying or (often times) even recognized as ads.

## So Why the Confusion?

If this commonly agreed upon definition makes sense, why can't the industry seem to settle on a *practical* definition, one that lays down the specific parameters needed to decide whether a certain ad unit is native or not?

The trouble lies in native advertising's ambiguity. Think about the last section of the IAB's definition: "*the viewer simply feels that they belong.*"

Could that be any more subjective?

Consider this potential experiment: gather 100 people in a room, show them a native ad, and see if they all *feel* that it belongs.

More likely than not, some of those people are going to disagree. And that's the whole point. Human beings feel subjectively.

What one advertiser might declare native, another cries obvious, and so on. It's a never-ending back and forth.

To steal a different phrase from the IAB:

["Native is in the eye of the beholder."](#)

## So How Should We Discuss Native?

Let's try to move away from Justice Potter Stewart's "I know it when I see it" into something more constructive.

To do this, it's best to look at what these advertisements can accomplish, rather than conceptual abstractions concerning what a native ad is or isn't.

By their very nature, native advertisements act as content that a user expects to encounter.

Popular examples of this include Facebook or Twitter; a sponsored story or promoted tweet integrates with the user's experience from the standpoint of both design and placement and thus will more likely be viewed positively and, most importantly, have a higher chance of being interacted with or shared.

Native ads not only look the part, but play the part as well. A promoted tweet by, say, TripAdvisor will behave in the exact same way as any other tweet a user reads. It can be favorited, retweeted, and replied back to.

This works to give publishers more control over their editorial content while simultaneously presents advertisers with a more effective and sharable ad.

## Proof Native Ads “Work”

Overwhelmingly, the numbers back it up. Sharethrough, in partnership with IPG Media Lab, completed [a study](#) with compelling results. Of those, the most notable were:

- Consumers looked at native ads 53% more frequently than display ads.
- 25% more consumers were measured to look at in-feed native ad placements (the most common editorial native ad format) than display ad units.
- Native ads registered 18% higher lift in purchase intent and 9% lift for brand affinity responses than banner ads.
- 32% of respondents said the native ad “is an ad I would share with a friend or family member” versus just 19% for display ads.

## The Bottom Line

Native advertisements produce incredibly high levels of engagement. To get bogged down in the semantics over definition would do a disservice to native's capabilities.

Just remember, like porn: *you'll know it when you see it*. And when you see it, take note. It could very well be the future of digital advertising.

# Robot Traffickers: Ad Fraud, "Bots" and Viewability

Advertising accomplishes nothing without a human audience.

That's why so much of an advertiser's time is spent on understanding the way in which their brand interacts with their target audience. From audience behavior to conversion metrics, all of it is taken into consideration when developing the next marketing campaign.

In the modern era, advertising has moved from more tangible mediums – for example, magazine ads and billboards – to digital with the advent of the Internet.

We now have unprecedented access to a global audience. They can find their audience, track their audience, and ultimately deliver a message to their audience in ways that afford greater accuracy and personalization than ever before.

It's an entire digital ecosystem that – now with mobile – follows us wherever we go and encompasses everything we do.

So naturally, it's now being exploited by the bad guys.

## Fraudulent Mobile Activity

Ad fraud is the most persistent trend in digital criminal activity as of late and can be defined as any online activity that generates what the industry terms as "false impressions" - ads viewed by non-human actors.

These robotic actors, also known as "bots," mimic human behavior. They falsify what advertisers believe to be real human engagement while offering no potential for purchase or conversion.

Bots corrupt any performance metric advertisers attempt to use, costing advertiser money and devaluing publisher inventory.

According to recent [Google research](#), a frightening 56.1% of all impressions are not seen by human consumers. Some of these "non-impressions" were undoubtedly caused by bot activity, while others were simply served outside the window of human view.

With such dramatic numbers, the importance of fraud prevention and ad viewability is at an all-time high.

Quite simply, advertisers do not want to pay for impressions consumers never see. Properly [understanding and ensuring viewability](#) is therefore critical in determining campaign success.

## Ensuring Viewability

Ensuring viewability is no easy task. Even well-known, premium publishers are affected by significant levels of ad fraud.

White Ops, a provider for online fraud detection solutions, recently completed a [comprehensive study](#) in partnership with the Association of National Advertisers on ad fraud. They concluded that "the reputation of the publisher is no longer a reliable benchmark to predict bot traffic", recommending the use of "technology to validate all assumptions."

Such unfortunate industry developments compelled us at Gimbal to develop our own pre-bid placement verification tool, [AdScore™](#), which predicts viewability and evaluates inventory value through proper assessment of ad quality and environmental factors.

It's a way for advertisers to know where to place their ads *before* they spend their budget, maximizing value while minimizing risk.

## How to Minimize the Risk of Ad Fraud

Effective strategy for combating ad fraud begins with understanding. The following list demonstrates ways to keep nefarious criminal organizations from impacting our digital ecosystem.

1. **Educate yourself on what ad fraud is** and how it affects digital advertising. Education drives conversations between advertisers, publishers and vendors that promote the development of solutions.
2. **Use vertically-integrated solutions** like [AdSynergy™](#) that can track the entire life of an ad, or employ third-party vendors to assist in monitoring for ad fraud. Monitor publicly (as well as covertly) to both deter and detect bot traffickers.
3. **Support development** of newer browsers and fraud prevention technologies. [Recent research](#) has found that impressions coming from older browsers are significantly more fraudulent than their newer counterparts.
4. **Invest in trust.** Work with partners who you have confidence in, and who provide transparency into both their process and data.
5. **Develop company provisions** and policies on non-human traffic. By providing your company with written direction and instruction, you'll know how to handle issues of ad fraud when they arise.
6. **Measure the metrics that matter.** Focus on measuring viewable impressions, not total impressions served. Doing so will help parse those publishers that can provide viewability, and those that cannot.

# What is a Mobile DMP?

In our ever-evolving digital ecosystem, information is everywhere. It's wholly ubiquitous and pervasive, coming in all forms and sizes, traveling across every imaginable medium.

For these reasons, it can sometimes be tough to get a proper grip on.

That's where programmers, data scientists and tech experts come in to provide us with state-of-the-art tools to better collect, manage and make sense of all that pesky (albeit incredibly useful) information.

One such tool, used by advertisers and publishers alike, is a **data management platform** – or DMP.

## So What is a Mobile DMP?

A data management platform (DMP) acts as a centralized hub for all things data. It finds, stores and analyzes every form of information from any source, enabling marketing professionals to develop accurate consumer insights quickly and effectively.

**Mobile DMPs** are specifically designed with mobile data in mind. From user IDs to location data, all of it is housed and analyzed to match marketers to the audiences they seek.

In short, DMPs offer a 360-degree view of the consumer, from what they buy and how they buy it, to where they go and what they do.

## Integrated Power

DMPs have the potential to be incredibly powerful. As a [Winterberry Group](#) white paper, in partnership with the Interactive Advertising Bureau, declared back in 2012, “the DMP is the embodiment of a ‘Big Data’ solution for multichannel advertising, marketing, media and audience activation.”



In recent years, the rise of programmatic advertising and real-time bidding only furthers the need for this solution, as advertisers require the ability to sift through audience segments in milliseconds.

Today, the capabilities of the DMP continue to grow. The transition to mobile is only going to expedite that process.

## Enter the Mobile DMP

Mobile advertising is the next frontier of ad tech yet unfortunately remains fragmented and underserved. Mobile's ability to target and reach audiences with an astonishing level of accuracy is perfectly tailored to coordinate with what DMPs have to offer.

DMPs collect specific data points on a given audience's behaviors, interests and actions that go towards informing strategic decisions. Now with mobile, those data points are increasing exponentially. It's a potential treasure trove of data-fueled, actionable insight and understanding.

Fittingly, it's our job to acquire it and yours to use it accordingly.

At Gimbal, we've built our own [mobile data management platform](#) to create and leverage millions of data profiles from mobile users across the country. Moreover, our DMP synergizes completely with our entire suite of mobile ad tech products, including our very own [mobile demand-side platform \(DSP\)](#).

## Making Sense of It All

No one wants to drown in an untamed tidal wave of mobile information. [Research shows](#) that marketers overwhelmingly believe that first-and-third party data integration is a core competency of the DMP. It's a remarkable solution for a still-lingering list of problems that regrettably includes industry fragmentation and silos.

**Attack the silos. Integrate. DMPs provide a way.**

# What is a Mobile DSP?

Bear with me. It's *another* acronym – *I know*. But this one is important.

It is DSP or demand-side platform.

Sound scary? Let me walk you through it. All these ad tech acronyms are just like monsters in a haunted house. Remove the mask, and a normal (or at least functional) human being is revealed underneath.

Grab my hand, and let's brave this haunted house of ad tech together.

## So What is a DSP?

A demand-side platform (DSP) is software that facilitates the buying and selling of online advertising. It's a digital tool used by advertisers and agencies to efficiently find the very best publisher inventory sorted according to specific parameters.

These parameters can be anything the advertisers (or the agencies that represent them) want. An advertiser can sort publisher inventory by audience segment (i.e. demographics, interests, locations, etc.) or by kind of inventory (i.e. video, display, mobile, etc.).

The point is, with a DSP, all of this searching and sorting – which in the past was done by human beings and took *forever* – is now being done by automated computers.

It's faster. It's more efficient. And it costs less.

Win. Win. And win.

## What about Mobile?

Mobile DSPs are designed to address many of the specific challenges that the mobile media revolution has caused. Some of these challenges include:

1. Ad creative. Mobile devices require ads that can run properly and look good doing it on different screen sizes.

2. Location. Mobile users take their phones with them everywhere. Tracking them to deliver timely location-based advertising requires mobile-specific technology. When done properly, it provides a great opportunity for personalized engagement.
3. Mobile apps. Most users not only consume media on their mobile phone, [but do so in mobile apps](#). Just like varying screen sizes, mobile apps play by an entirely different set of rules which must be taken into consideration.

To find mobile inventory, mobile DSPs will integrate with digital marketplaces called ad exchanges. It's where publishers make their inventory available. Our own mobile DSP, [AdCast™](#), integrates with some of the [top mobile ad exchanges](#) out there.

## The Process

Once integrated with an ad exchange, a DSP will have access to millions of ad impressions from all over the Internet. At that time, the actual process of finding and buying the ads takes mere milliseconds to complete.

How?

It's all done via real-time auctions, known in the ad tech world as real-time bidding.

In that process, the DSP will decide which inventory it makes the most sense to buy based on the advertisers parameters, and will then bid for that inventory to determine the final price.

## Implications

DSPs, especially mobile DSPs, stand to alter how digital media is bought and sold. DSPs make it faster, more efficient, and better optimized by utilizing the wealth of data points that are now readily available.

This does mean however that human beings will no longer be negotiating prices (at least, not very many of them).

But that's not necessarily a bad thing.

DSPs allow ad buyers to instead be ad *planners* who strategize and optimize ad campaigns, rather than getting bogged down by those pesky transactions.

And that's way more fun anyway, isn't it.

# Extending Mobile Advertising Through Real-Time Bidding

Milliseconds.

That's all it takes for **real-time bidding**, or **RTB**, to complete its process. In the time it takes to load a webpage or app, ad inventory is efficiently bought and sold by automated computer systems.

So it's no wonder that the technology is being proclaimed as the future of mobile ad buying.

RTB is a complex process with a reasonably simple explanation. It works like this.

## The Process

Real-time bidding requires three things to be completed:

- a publisher
- an ad exchange
- a DSP

The publisher initiates the process by offering up ad space to be bought by an advertiser. That ad space, called inventory, is then distributed and auctioned off by an ad exchange, which acts as a kind of middleman. Finally, a mobile [demand-side platform](#), or DSP, negotiates the buying of the ad inventory on behalf of the advertiser.

Multiple advertisers will bid in real-time and the ad is sold to the highest seller.

## The Result

Think of it as an auction that takes place before you can blink your eyes. The process is carried out nearly instantaneously while the browser is loading your webpage. Many of the ads you see on a webpage or inside an app are a direct result of this process.

But the highest bid isn't the only determining factor of what ads you see. Ads that ultimately appear are determined by a variety of factors, including your past online behavior and current location.

Mobile devices like smartphones now enable advertisers to target incredibly specific consumer segments. RTB ensures that these targeted segments receive only the most relevant ads quickly and efficiently.

## Mobile Implications

A while ago, Business Intelligence published a [report](#) entitled *The Pulse of Digital*. It offers data-fueled detail on the ways in which RTB stands to make a major difference in mobile advertising.

- **Better Monetized Inventory** - The glut of ad inventory as global audiences rush into mobile has dragged down mobile display ad CPMs (CPMs refers to the cost per thousand impressions). That means publishers can't monetize their mobile audiences effectively via ads. Advocates of programmatic — or automated buying and selling — say it can deliver the scale and efficiency needed to effectively match buyers and sellers and boost CPMs.
- **Leveraging Location Data via RTB** - RTB is a style of [programmatic buying](#) in which digital advertising opportunities are auctioned off in real-time. The auctions take place in milliseconds as advertisers bid on the right to show you an ad immediately after you open an app or click to a new web page, with granular control over demographics, context, location, etc. On mobile, RTB could be extremely powerful because consumers take their devices everywhere — to the mall, the car dealership, Starbucks, etc.
- **Controls & Efficiencies** - Believers in RTB and programmatic for mobile say they are making giant strides in perfecting their technologies, so they'll have the ability to leverage consumer data on mobile and track users as they do on PCs (while still being sensitive to privacy concerns). That will include location, contextual, and demographic data layered atop real-time ad requests.

- **Higher CPMs** - Some publishers already achieve higher CPMs with RTB than they do with blind buying of impressions on traditional ad networks. As a result, RTB is seeing wider adoption across the mobile ad ecosystem, and positive momentum on both sides of the equation. The sell-side is providing more premium inventory, and larger publishers. And the buy-side is seeing more demand for RTB from advertisers and agencies. Of course, RTB and programmatic are contributing to hyper-efficient markets where ad prices tend to be low. The key is for RTB to bring scale to premium mobile ad marketplaces, bring in scale-focused brands, and lift all boats that way.

RTB may indeed be the future. The expected surge in mobile advertising is only going to expedite this eventuality.

# 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 a lot of notes.

## 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 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.](#)