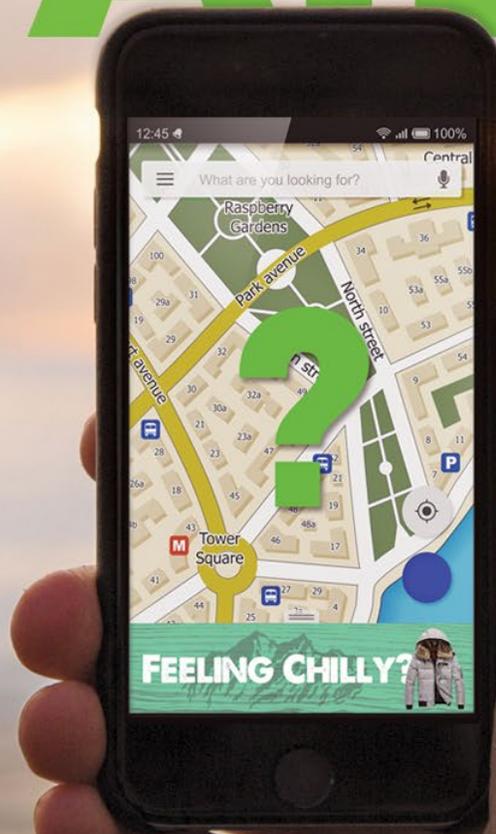


LOCATION FAILS



Five location mistakes made by mobile advertisers

Two-thirds of consumers have said they are willing to share mobile device location data. That's great news, considering how many people use their smartphones while shopping. But knowing where people go doesn't necessarily tell you who they are or what they buy. In this eye-opening report, you'll learn the most common location mistakes made by mobile advertisers and mobile ad platforms. And then you'll learn how to prevent every one of them.

LOCATION FAILS

Five Location Mistakes Made by Mobile Advertisers

Over the past year, we've talked to dozens of brands and agencies about their mobile advertising efforts, and we've identified five consistent mistakes marketers are making when it comes to using location in their mobile advertising. Here, we address the five most common mistakes marketers make when leveraging location in mobile advertising. With each of these "Location Fails," we'll also give you antidotes for each fail and put location in its proper place:

TABLE OF CONTENTS

Location Fail #1: THE LIABILITY OF LOCATION.....	2
Location Fail #2: THE TROUBLE WITH TIMING.....	6
Location Fail #3: THE CREATIVE CONUNDRUM.....	8
Location Fail #4: THE DATA DISTRACTION.....	10
Location Fail #5: THE FALLACY OF FOOT TRAFFIC.....	12

THE STATE OF LOCATION-DRIVEN MOBILE MARKETING

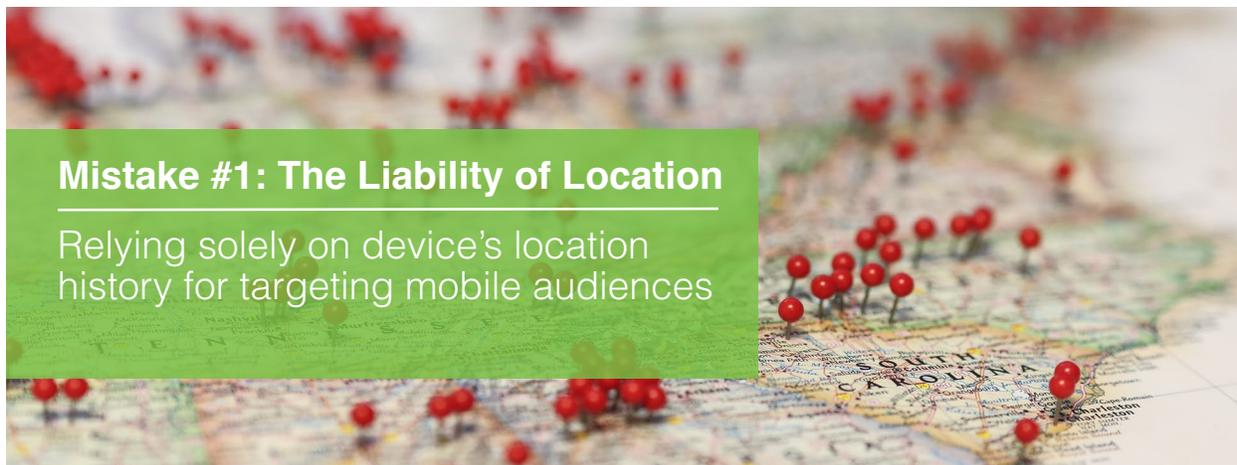
If you've been in a store lately, you know that consumers are on their smartphones while shopping. In fact, use of mobile devices before or during in-store shopping trips influenced, or helped to convert, approximately \$970 billion in sales in 2014, representing 28 percent of the total sales, according to [Deloitte data](#). This is good news for retailers. So is the fact that in-store shoppers who use their mobile phones spend 25-50 percent more than those who don't.

The key takeaway is that people are using their smartphones while they are shopping in brick-and-mortar stores, which reinforces the importance of location when it comes to mobile advertising. And it's clear they don't mind that brands know where they are, since two-thirds of consumers have said they are willing to share device location, as reported in a survey conducted by Sentient Decision Science for Microsoft. The data clearly shows that consumers are using their devices in-store and are willingly sharing location with brands.

What then can advertisers conclude when they put two and two together from all of this? That 2 + 2 must equal M (Mobile) and mobile equals Location. Location has become to brand marketers and agencies what candy is to kids; they can't resist it. The evidence:

- In a survey of Brand Marketers and Agencies by Hanapin Marketing, mobile location was ranked more important as a tactic than data management or programmatic.
- BIA/Kelsey [forecasts](#) that 38 percent of all mobile ad spending will use location targeting in 2016.

The problem: knowing where people are or where they go doesn't necessarily tell you who they are and what they buy. The significance of this oversight is at the heart of the following five location fails.



Mistake #1: The Liability of Location

Relying solely on device's location history for targeting mobile audiences

Location Fail #1: THE LIABILITY OF LOCATION

...and how to minimize your risk of targeting the wrong prospects

Relying solely on a device's location history for segmenting and targeting mobile audiences is a common problem. Location targeting has become THE hottest targeting method for mobile, and so, no doubt, you're familiar with the companies that pioneered location targeting, such as [Place IQ](#) and [xAd](#), and those that have jumped into the game over the past couple of years, including [Verve](#), [NinthDecimal](#), [ThinkNear](#) and Factual, to name just a few.

But what exactly is location-based targeting, and how does it differ from proximity targeting?

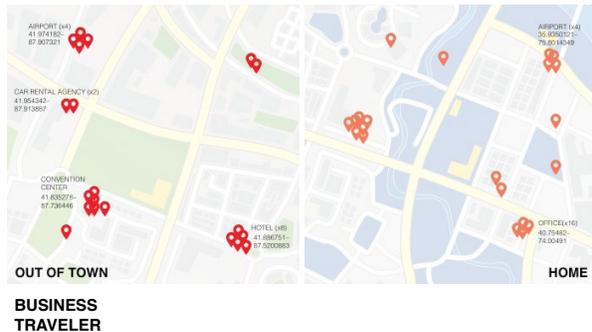
Location targeting vs. proximity targeting

Location targeting looks at a history of a device's location over time to create audiences for targeting. It achieves this by seeing ad requests generated when a person is using an ad-supported app. A good example from [Mobile Marketing Association's](#) 2015 location targeting report: If there's a person identified via their mobile data as often being in markets other than their home market (at airports, hotels, etc.), then the person is identified as a traveler. And if their travel pattern shows multiple trips over several months, a marketer can conclude that they are a frequent traveler and most likely a business traveler – hypotheses that are then used by location targeters to find large groups of people whose devices fit a similar travel pattern, create an audience segment, and then they target ads.

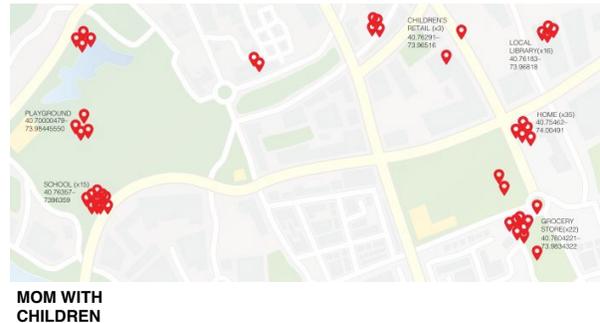
By comparison, proximity targeting, also known as geofencing, delivers ads based on the proximity of a mobile device at the time an ad is served – where consumers are at the moment the ad is being delivered. A couple examples:

- To target an ad to a person when they are outside of a Walmart, or reach someone attending a major league baseball game, you can employ such proximity targeting techniques.
- You identify a mobile device as being used at a park, at a school or at store that sells children’s clothing. For ad targeting, you assume that devices with that travel pattern belong to women with children – a statistical likelihood. And if you see a few million devices with similar travel patterns, you perform mobile ad targeting to this assumed audience of women with children.

30-Day Window



30-Day Window



Proximity targeting techniques take advantage of the fact that mobile devices often generate location signals when the user is on an ad-supported app. Considering how many concurrent mobile users there are today, that can add up to an large amount of location data. To give you some perspective, 4INFO connects to a dozen of the largest ad exchanges, and our servers process more than 10 BILLION ad requests every day — a quarter of a trillion ad requests a month, many of which include device location data. And all this big data is getting bigger.

So why is this a problem?

There are two inherent risks with location targeting: the inevitable guesswork and intentional location inaccuracies.

The guesswork problem:

Location targeting invariably includes a certain level of guesswork because, in the end, you still don't know precisely who the device belongs to. In our business traveler example, while you might know a device appears to belong to a business traveler based on its location history, you don't know if that device belongs to Joe or Frank. Both are business travelers, but you can different brands and messages are going to appeal to these two, depending on age, hobbies, gender, spending habits and so forth.

Or, in our second example of women with children, you don't know if the device belongs to Mary or Ellen. And if Mary is a younger mom, she buys different items and shops different brands than Ellen if she is a grandmother. Or is she even a she? "She" might actually be Robert, a stay-at-home dad.

The location inaccuracy problem:

To augment the device user's location history, these proximity targeting platforms often overlay demographic or purchase data onto the audience because they don't otherwise know who owns the device. So, location targeting involves guesswork and assumptions, and doesn't tie a specific mobile device to a specific individual.

The antidote to Fail #1

Use trusted data instead of personas to reduce risks from relying heavily on location for targeting:

1. Make sure the platform you work with knows who the device belongs to.
2. Tie to that data to the right person – your specific target audience.
3. Use that to deliver the most accurate and precise targeting possible.

Here are some real-world targeting examples made possible by linking a mobile device to a physical address, and then linking as well to past purchase history.

- For a hummus brand, 4INFO targeted current buyers of the product, focusing the ad and creative on people formerly bought the product and who historically are heavy gameday buyers.

- For a national drug store chain, 4INFO used household credit card data from the last 12 months to find competitors' heavy buyers, and then delivered them ads to persuade them to switch.
- For an insurance company, 4INFO used propensity segments from Acxiom to identify people who have a high likelihood of driving a motorcycle or attending automotive or motorcycle spectator sports, and then targeted them with ads for motorcycle insurance.

The biggest advantage of purchase-based data targeting like this is precision: eliminating wasted impressions.

Getting access to purchase data can seem to be a big hurdle, but there are numerous companies that aggregate purchase data for ad targeting. Those providers are already partnered with ad platforms, so it won't require any work for the brand or the agency to use their purchase data.

To use CRM or other first-party data takes more work, but doesn't require that a brand give their agency or a mobile ad platform access to their sensitive sales data. Rather, most brands work with a data management company, who houses the brand's sales data on their servers, and using methods that never exposes customer sales data to the ad platform. The result: targeting while maintaining privacy.

So are we suggesting that you ignore a device's location data altogether? Absolutely not. We agree that location is important, but don't use location for targeting; use it for relevance and context – to make sure you're reaching the right person. And then use the device location to determine how to serve up the most relevant ad within the context of what the mobile user is doing. For example:

- If you reach the buyer and know they are at home in chillaxing mode on their tablet, it's a great time to serve up product information and interactive content to involve the user.
- When you reach them in a store, it's a great time to serve up a coupon or special offer.
- If you reach them near a store, take the user to a locator to find a store selling your product.

These are effective ways to use location in mobile ads without relying on it for targeting the person.



Mistake #2: The Trouble with Timing

Targeting consumers too late in the purchase process

Location Fail #2: THE TROUBLE WITH TIMING

...and how misinterpreting location signals can cause you to miss buyers at key stages in the purchase process

There's a risk of putting too much emphasis on location that could result in you targeting consumers too late in the purchase process. You've likely read the studies and campaign write-ups espousing geofencing to reach people right when they are in the purchase process. For example:

- Many campaigns over the past couple of years used Proximity Targeting (geofencing) to serve an ad while a prospect is on the car dealer lot test-driving cars. Seems like an ideal time to reach a car buyer, right?
- Some restaurant chains geofence competitors' locations to serve up an ad with a special offer or new menu item to entice the diner to swap out their dinner plans.
- Advertisers target sporting events or concert goers with an offer for post-event activity.

There are dozens of geotargeting stories in the trade pubs like these. While these sound good in concept, there are significant logic gaps when you work through the campaign strategy and results.

Take the car buying example. Today, most of us start our search not at the dealer lot but at car review websites or car buying service sites/apps, and maybe manufacturer sites. You likely spent weeks researching before you set foot on a dealer lot, winnowing your intentions to exactly which cars you'd test drive. By the time you get to the dealer, you already defined your considerations. If an ad now pops up on your phone for a car brand you hadn't considered, it's unlikely you'll alter your plans.

Or in the case of the diner; if you're at a restaurant, already waited for a table, been seated and then happen to open an app, what are the odds that you'll ditch now if a nearby restaurant's mobile ad appears with a great offer?

For the sports fan at the stadium, an event-timed sports bar ad may work if he has no postgame plans, but most make postgame meetup plans before the game, lowering the odds that they'll change plans during the game.

These popular geotargeting strategies they look brilliant on the white board, and take advantage of the fact that smartphone travels with us at all times, but they overlook the actual purchase decision process and ignore key points in the customer's journey where they are making purchase decisions.

The antidote to Fail #2

The solution is to target the buyers at EVERY STAGE in the Customer Journey; not just when they are on the auto dealer lot, but while they are, for instance, researching cars on their tablet at home, weeks before they ever set foot on the dealer lot. That's the time to persuade them to add your car to their research, because the traditional purchase funnel has been replaced by the customer journey. Throughout the Journey, enable them to continually interact with your brand.

And yes, the smartphone and tablet are there throughout but, because so much information is at consumer's fingertips, no two journeys will be the same for the same product purchase. Consumers enter the pathway at any stage and they are in control of when and how they move through that purchase journey. Reach them at every point in their journey: while researching options; while in the store, shopping; even before they begin the shopping process and realize they have a need.

An example of pre-purchase strategy is to target those who leased a car three years ago, and promote your car with the hope of getting them to consider replacing their lease car with your model.

Mobile advertising can be key component at every point in the journey, not just at the point of purchase.



Mistake #3: Creative Conundrum

Showing the right creative at the wrong time

Location Fail #3: THE CREATIVE CONUNDRUM

...and why prospects often receive the right message at the wrong time

Mistake #3 is about reaching the buyer with the right creative, but at the wrong time. This happens when you aren't paying attention to the location of the customer at the time the ad is served.

Let's go back to the auto buying example. In a survey conducted for Facebook by Ipsos Media, they looked at what actions car buyers took on their desktops and laptops versus their mobile devices. They found that more time-intensive activities and upfront research are mostly done on a laptop or desktop, and more communication tasks done on mobile devices.

Other research shows that tablets, as an alternative to a laptop are commonly used to multi-screen during the car buying process. For example, while sitting on the couch watching TV, they may use their tablet to visit auto sites and begin researching an upcoming car purchase.

If you're the auto maker targeting your ad to a buyer while they're on the dealer lot, what happens if your creative is a mismatch to the device's location at the time the ad is served? For example, try to show them a video ad while they are test driving cars, they won't pull over to watch your video. The research show they'll more likely watch videos earlier in the research. Conversely, reaching the car buyer while they are at home researching and offering up a dealer locator will fail: likely too early for them to care.

The antidote to Fail #3

The same antidote for the problem of using only location for targeting applies here; target using data, and then personalize using location. By targeting the right person and then looking at where they are at the time the ad is being served, you can serve up the right ad at the right time. For example:

- Reach a car buyer who's on or near a dealer lot with a locator ad to schedule a visit. Or give them financing offers that prompts them to ask the salesperson and engenders a quicker close.
- When you see the car buyer at home, serve up a video ad and direct them to comparison charts and configurators – especially if you see they are on a tablet and home, because there's a good chance they are in research mode.

That's using location effectively—making ads relevant to the consumer's activities when they see the ad.



Mistake #4: The Data Distraction

Assuming location data is accurate

Location Fail #4: THE DATA DISTRACTION

...and how to avoid bad data that misleads your efforts

Data Distraction, is what happens when you assume that the location data you are getting is accurate. It's a well-publicized fact that a lot of the location data from ad requests isn't. Thinknear, a company focused on Location Accuracy, publishes a regularly updated Location Score Index, reports that nearly two thirds of ad requests don't contain location data accurate enough to target a user well.

If you are not validating the location accuracy, or working with a platform that does, you are making assumptions that will result in bad targeting and inaccurate contextual messaging. You might be wondering: why is location data in ad requests often wrong? Many reasons!

- **If the user doesn't have GPS turned on**, the only source the app can use to determine location is IP Address – notoriously inaccurate. In 4INFO testing, we found that more than 25 percent weren't able to match against their database. Worse, we seeded the file with 15 employee IP addresses so we had a true set to test against their data. Only two of the 15 were correct!
- **Some apps don't obtain device location**, instead deriving it from data supplied by the user when they registered the app, not their actual location.
- To mitigate battery use, **some apps only report the last location ping the phone generated**, caching the result. As soon as the device moves, the actual location data is false. Many apps just don't need to have real-time location data for their core purpose, but real-time location does matter for ad serving, since you can enter or leave a store or drive a mile in a minute and that might change what ad you would want to serve.

- **Some apps intentionally obscure location accuracy** for privacy reasons, smudging lat/long accuracy so you can only read the general area the phone is in.
- **Some apps obscure lat/long data to sell it** through their own sales force.
- **The phone itself may be inaccurate**, such as when you are indoors and a roof obscures the GPS signal, altering how you interpret what store they are in at the time of the ad request.

So, why does location accuracy really matter to you as a marketer? Three reasons:

- First, it could result in false assumptions if you're developing location-based audiences. If the location is wrong, you are assigning false info to the device, altering the interpretation of the individual. Are they at a coffee shop, gym or donut shop? You can't know which.
- Second, you could be geofencing the wrong person and miss the right one when you want to reach them. Geofencing is often done when someone is in or near a store. If the device location data is off, you're wasting costly impressions with bad targeting.
- Third, if you are using store visits to measure campaign effectiveness, you may be assigning store visits when the visit didn't actually happen or be missing store visits that actually occurred.

Bottom line: if you rely on location for mobile ads, it'd better be accurate location data.

The antidote to Fail #4

Make sure the platform you are working with has measures in place to identify and filter out bad location data. Many do, including 4INFO. Key steps include:

- Eliminate sources that use centroids – most platforms can do this, but verify!
- Eliminate or restrict locations derived from IP Addresses (and how you interpret it)
- Eliminate supersonic travel – erroneous location blips that sometimes devices give off. Few can do this, but it helps with location accuracy if they can. Ask them.

In short, make sure the platform you're employing has a rock-solid way of filtering out the bad location info.



Mistake #5: The Fallacy of Foot Traffic

Measuring campaign conversions by tracking store visits/foot traffic

Location Fail #5: THE FALLACY OF FOOT TRAFFIC

...what location signals really tell you, and what they don't

The Fallacy of Foot Traffic refers to measuring campaign conversions using the method of tracking store visits using ad requests. It's being embraced by many brands and agencies to make sure they can prove a definite impact.

Recently, Foursquare jumped into the measurement game, using store visits from their panel of 1.3 million people opting in for non-stop device location sharing. They join Placed in using a panel approach. And numerous other companies are using ad requests to measure foot traffic, including Place IQ, xAd, NinthDecimal and Verve.

The most popular and easiest way of obtaining store visit data is to use the **billions of daily ad requests**, taking the device location and then mapping it to store and other points of interest to identify when a consumer is seen in a store.

The other way is using a **panel of people with an app loaded** on their phones who have opted in to send location data constantly from their device. This is harder and more expensive, since the provider must get tens of thousands to participate, and may have to incentivize them in exchange. But the upside is that they see thousands of pings daily from each device, versus the platforms using ad requests, since some devices may generate no or just a few ad requests each day depending on each users app usage. Unfortunately, both methods have flaws.

- First, did the user actually make a purchase or just visit the store? It's easy to measure store visits, but both methods are ineffective at proving Return on Ad Spend (ROAS). You only know that the device was in the store, not whether they did or didn't make a purchase.
- Second, if they made a purchase, you don't know what they bought and how much they spent with either method. At a Walmart, for instance, did they buy a pack of gum or a big screen hi-def TV? You have no way of knowing by collecting store visits.
- Third, when platforms use ad requests to log foot traffic, the user must actually be on an ad-supported app while in the store. While consumers may carry their mobile devices into a grocery store, there is no guarantee that they will even take it out and use it while shopping in-store. Think about it; do you engage with a mobile app during most store visits? If you're focused on buying, you likely have no reason to engage with an ad-supported app.
- Fourth, as we pointed out earlier, the location data could be wrong. Even if it's wrong by just 30 feet, you could attribute a store visit to the wrong store and skew your results. Not good when a study by Placed found that less than one percent of store visits are accurately captured!

With all these accuracy problems, why have store visits caught on in the advertising world like wildfire? One reason: too much effort to link mobile impressions to actual sales tractions. Think about the most common methods of measuring mobile ad campaigns. Easiest are the traditional KPI's, like clicks, taps and page views. In the desktop world, those are highly regarded because it's easy to tie a click to an online purchase using them. But with mobile devices, and in brick and mortar stores (where more than 90 percent of all purchases still occur), there's no correlation between clicks and sales. Numerous studies have proven this.

So along comes store visits, thanks to mobile device location. Why it's much more useful than clicks:

- It's a more logical connection between seeing an ad and seeing someone in a store.
- The platforms do all of the work in collecting the datapoints via ad requests or panels, so it's easy for an advertiser or agency to obtain it.

All the store visits in the world won't deliver a successful campaign if customers don't buy.

In the end, store visits alone provide useful insight and an early read of campaign performance, but they are a poor measure of conversions.

The antidote to Fail #5

Overcoming the Fallacy of Foot Traffic begins when you put measurement in its proper place. By all means, look at foot traffic from store visits. It's still a useful metric, but the only way to get the full picture of a campaign's performance is to trace ad impressions all the way through to the transaction. The good news is that, today, it is possible to link in-store and other off-line transaction data to mobile advertising impressions. There are platforms doing it every day, including 4INFO.

Many marketers don't realize you can trace a mobile ad all the way to an offline transaction in a store. You can, and should. It's the only way to take the debate off the table about whether mobile ads get people to buy. And it's not as hard as it's often perceived. As we noted before, there are many data companies today offering aggregated data across an industry, including NCS, Kantar Shopcom and Crossix. And since many mobile ad platforms have partnerships with these companies, it takes no effort for advertisers to measure mobile ad campaigns based on actual in-store sales data.

The value to you, the advertiser, is far more meaningful than measuring store visits. You can calculate a precise ROAS using real sales data. Here's how it's done:

1. A platform serves up an ad campaign to a group of people targeted for a campaign. Sometimes the targeting also comes from sales data, as we noted earlier.
2. At the end of the campaign, you end up with some portion of the target audience who were exposed to the mobile ads and some who were not.
3. The measurement partner creates a control group from the unexposed audience that looks identical to the exposed group in every way, using hundreds of variables (demographic, purchase history, coupon usage, etc.).
4. By finding people with similar media consumption, you end up with people who look identical except for one thing: the control group didn't see the mobile ads, and the test group did.
5. The measurement partner then compares sales activity during the campaign vs. a period following the campaign, and compare the two. The campaign gets credit for only the incremental sales lift within the control group.

When you compare store visits side-by-side with actual resulting sales lift, you see the advantages of measuring sales lift. With store visits, you don't know if the person purchases or what they purchased. But with sales lift measurement, you calculate ROAS using actual sales transactions: no guesswork.

4INFO recently published benchmarks for the industry via many measurement studies based actual in-store sales lift, showing an average ROAS of \$2.72. Which means for every dollar of media invested by the advertiser, the campaign generated \$2.72 in incremental sales lift – a healthy return!

To reduce risk, insist on measuring actual sales lift to get a meaningful analysis of conversions for your mobile ad campaigns. For most marketers, crushing it at the cash register is what really matters.

To learn more, request a copy of the recent eBook [5 Steps to Discovering the Consumer Behind Your Mobile Data for Effective Advertising](#), which we did in partnership with Direct Marketing magazine. It outlines five steps marketing professionals can take to create a customer experience that will engage and delight their consumers.

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About 4INFO

[4INFO](#) has built a mobile-first advertising technology (ad tech) platform that uses a unique, patented method of tying mobile devices to people very accurately. By using home addresses as our match key, instead of email address or cookies, we can tie off-line to in-store purchase and other data to precisely target mobile ads to 95 percent+ of all smartphone users in 100 million+ households.

Then we measure campaign effectiveness based on actual sales lift—not just seeing them in a store, but knowing what they purchased and how much they spent when they were in the store.

We work with more than 200 national brands, including 8 of the top 10 CPG companies, 7 of the top financial services companies, 6 of the top 10 retailers and all five of the largest auto manufacturers, and are one of Inc Magazine's fastest growing companies.