



★ THE BEGINNER'S GUIDE TO ★

MOBILE ADVERTISING ANALYTICS



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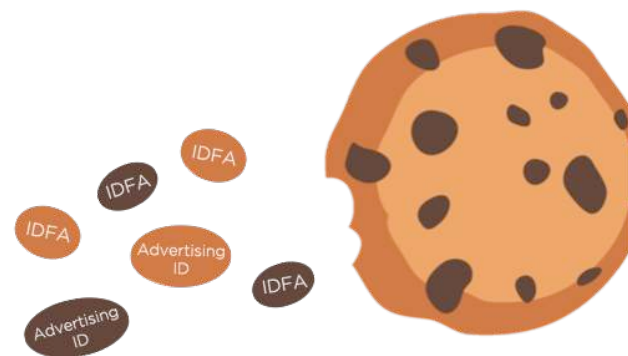


CHAPTER 1

INTRODUCTION

Before the dawn of the [mobile era](#), digital (web) marketers had it easy. They were able to accurately measure the impact of their campaigns and make smart decisions about their ad spend. Thanks to a small file stored by a browser on a user's machine - aka the cookie - advertisers were able to anonymously identify users in the browser, and that completely redefined traditional spray-and-pray and contextual online advertising.

The mobile revolution turned things upside down and the cookie began to crumble because it wasn't supported on applications or on Apple's Safari browser (by default, but very few actually change or even know how to change these settings). That left the cookie working de facto only on Android browsers - which isn't enough if you want to generate reach, especially as [apps dominate](#) the mobile web.



*Without the cookie, the mobile world
is deeply fragmented.*



There are different operating systems (iOS, Android) and different environments (in-app, mobile web). To make matters worse, there's no standardization. Instead, there are different identifiers that replace the cookie (e.g. Apple's IDFA, Google Advertising ID).

Can targeted, personalized advertising work and thrive in a post-cookie world? What about accurate measurement? Is there a reliable way to measure campaign attribution and in-app analytics that are the lifeline of data-driven app marketing?

The answers to the above questions are yes, yes, and yes. This guide will show you how.

“THE TREND HAS BEEN
MOBILE WAS WINNING.
IT’S NOW WON.”

ERIC SCHMIDT





CHAPTER 2

THE BASICS OF APP MARKETING

2.1 Mapping the Mobile Advertising Ecosystem

The mobile advertising ecosystem can be divided into players on the buy side, the sell side, and the analytics side.



Buy Side:



Brands. In the mobile advertising space, brands have an established presence on the web and/or offline. They are usually classified by vertical such as eCommerce (like Macy's or Amazon), travel (American Airlines, Hotels.com), entertainment (HBO, Netflix) and CPG (Coca Cola, Kraft).



App Developers. A company whose only business is mobile apps (like Supercell - Clash of Clan Developer, Shazam, Tinder, Clean Master).



Agencies. A company that manages ad campaigns for multiple advertisers.



Ad Exchanges. An automated marketplace that connects advertisers and publishers to buy & sell mobile ads, most of it in real time.



DSPs. A Demand Side Platform is an advanced software that is connected to multiple ad exchanges, automatically making complex media buying decisions to determine how much to pay for a single ad impression - mostly through a process called real time bidding.

Sell Side:



Publishers. A publisher is a website or app that sells ad inventory on its property.



SSPs. A Supply Side Platform helps publishers automatically and efficiently manage the selling of their inventory to multiple buyers in order to maximize their inventory yield.

Connecting the buy side to the sell side:



Ad Networks. A company that matches supply from mobile websites and apps to the demand of advertisers. A key industry player.

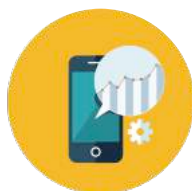
Analytics:



Independent Attribution Analytics. Unbiased providers serving as de-facto ecosystem regulators that are able to accurately attribute credit to a single campaign source, helping marketers to maximize advertising ROI. As they are not media companies, they are trusted by both networks and advertisers not only to attribute credit, but also to rule on discrepancies.

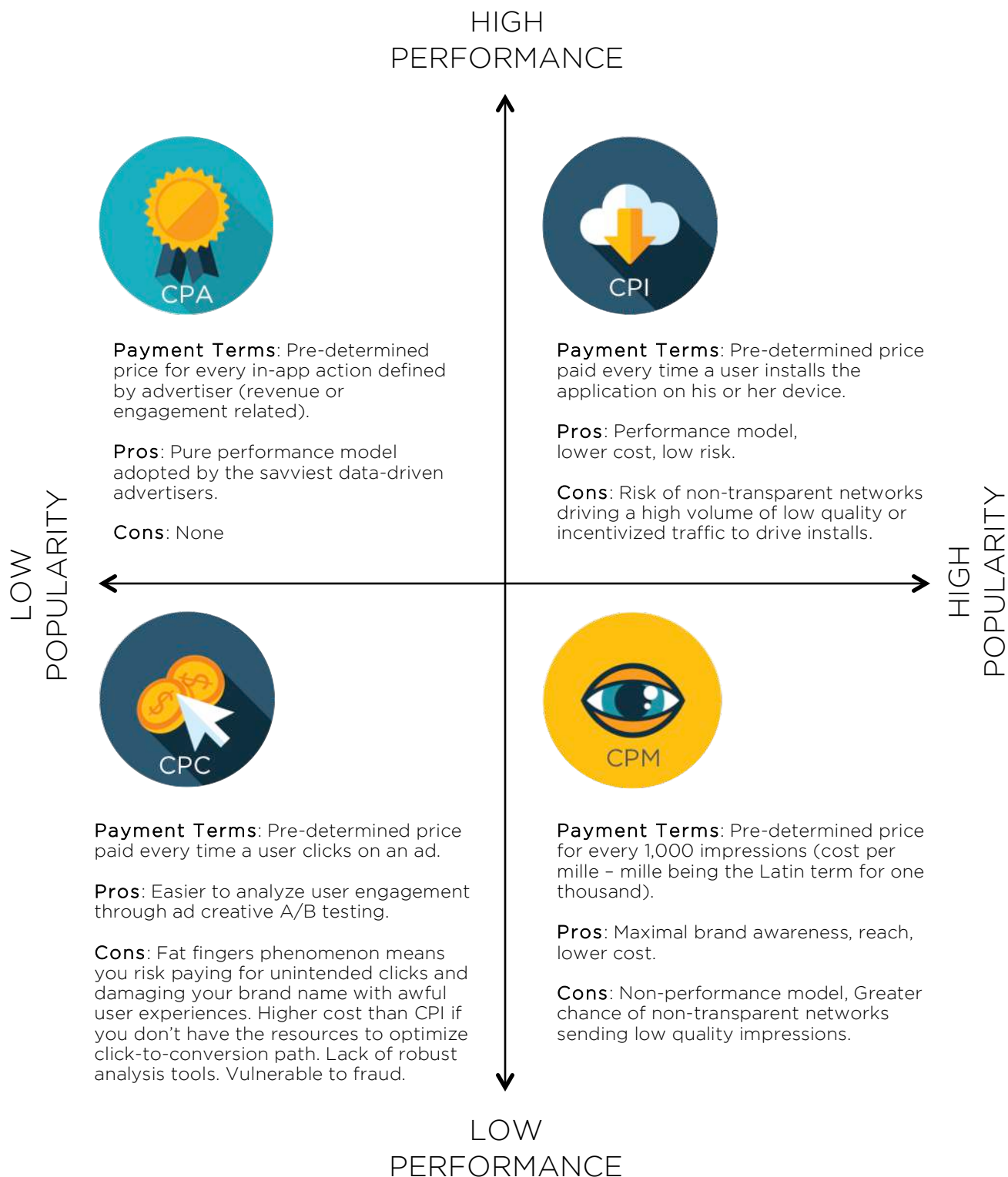


App Store Analytics. A category divided into (1) the app stores themselves that offers basic analytics on installs, and (2) specialized companies that provide more advanced analytical tools & data slicing.



In-App Analytics. Companies that specialize in analyzing app usage patterns to improve its user experience and ultimately its retention rate and user lifetime value.

2.2 Common CP[X] Business Models



2.3 The Organic/Non-Organic Power Combo

With over 1 million apps on both iTunes and Google Play, how do you get your app to be noticed and stand out from the crowd? For one, by generating a volume of installs from both organic and non-organic (paid) sources.

Let's explain this concept.

Organic Installs

These are app installs coming mainly from app store exploration or organic search. That means an application is discovered and installed after a keyword or brand search (e.g., after a recommendation from a friend), looking at top apps per category, or being exposed to an app through an app store's own featured recommendations.

Non-organic or paid installs

These are installs that were driven by active promotions outside the app stores, whether an advertising campaign or through an incentivized network, where users are prompted to download and install an app in exchange for virtual currency or other extra game content that is distributed in-game, through advertising, email, video etc.



The paid promotion “effect” holds for a number of days (depending on each provider) so even if a user did not immediately install the app after a click on an ad, the ad network would still be credited with a non-organic install as long as it happened within the predetermined window - usually 7 days - and was the last click before the install.

How do you make the most of each path?

Paid promotion is based on budget, and equally important on advertising analytics to drive spend efficiency and maximize ROI (much more on that further ahead).

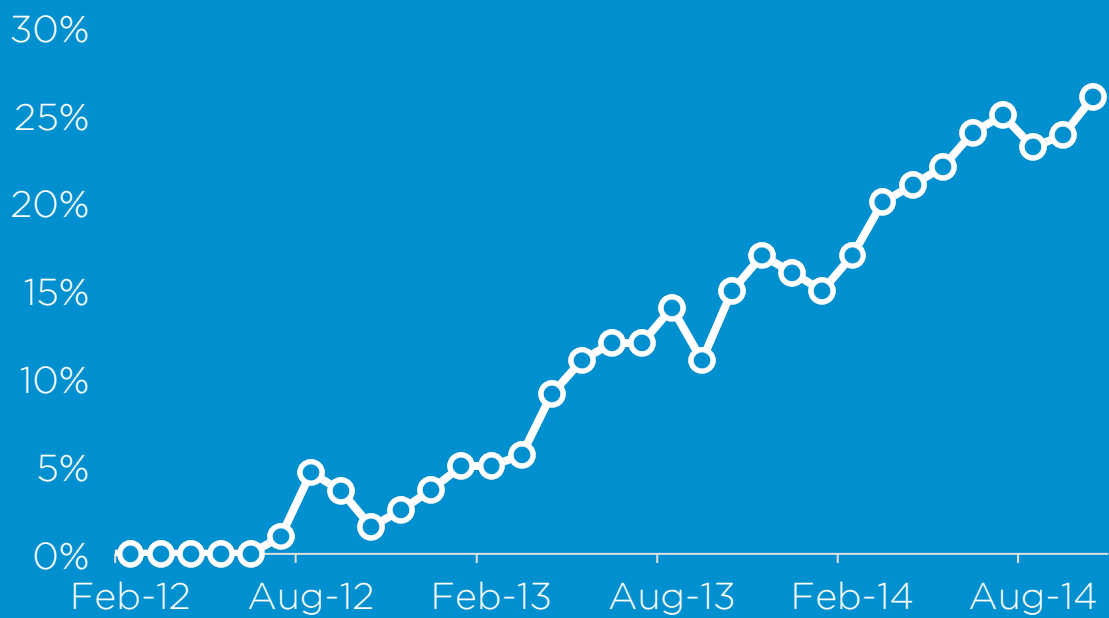
Organic, on the other hand, is based primarily on App Store Optimization (ASO) which is the app world's equivalent of Search Engine Optimization (SEO). In a nutshell, the factors that make or break ASO include title, keywords, number of downloads, ratings and reviews, screenshots and icons (more on ASO [here](#)). But since the number of installs is a major factor in ASO, an investment in non-organic installs will improve an app's ranking and that will ultimately increase the number of organic installs.



It is extremely important to get ASO right, as organic installs outnumber non-organic installs by a ratio of about 70 to 30.

Our research says that on average,
every 1 paid install drives 3 organic installs.

Graph 2.3.1: Paid and Organic Installs



Source: AppsFlyer

2.4 Breaking Down Mobile Analytics



The big data era in marketing is here.

We're surrounded by megabytes, gigabytes, terabytes, petabytes and exabytes of data.

But even all the data in the world isn't worth much, especially to marketers, if it can't be aggregated into meaningful patterns that lead to actionable insights.

Successful data-driven marketing – on web or mobile – lives or dies on the ability to gather insights and act upon them. And it all comes alive in the analytics dashboard – which has become the digital marketer's best friend.

When we zoom-in on mobile app analytics, we're actually looking at several categories. Of course, there is also attribution or advertising analytics, but it has an entire chapter of its own further ahead so we'll briefly outline the others first.

- App-store analytics
- In-app analytics
- Performance analytics
- Predictive analytics

App Store Analytics (App Stores – i.e. iTunes, Google Play)



In a Nutshell

Provides a basic understanding of an app's success, but that's about it.



KPIs

Downloads, rankings, device, geography, revenue



What It's Good For

A starting point for beginners that provides an overview of an app's success. It also delivers the highest accuracy since it's from the source itself.

App Store Analytics (Providers - i.e. App Annie, Appfigures)



In a Nutshell

Offers advanced analytics that app stores do not offer - mainly comparing your app to the competition and supporting multiple slicers and filters.



KPIs

Revenue, downloads, updates, ranks, reviews, rank per keyword



What It's Good For

This category of analytics provides items such as competitive & vertical analyses, in-depth reports (installs, rankings, geographic trends, alerts), and aggregated data per store, which is a must if you have several apps or different app versions.

In App Analytics



In a Nutshell

An extremely important source of data that measures what users are actually doing inside the app and how they are engaging (or not engaging) with it.



KPIs

Screens viewed/exited, buttons clicked, time spent per page, levels cleared, purchases made, slicing data by device type & user demographics



What It's Good For

These analytics help you optimize the user experience and improve your retention rate by knowing exactly how your users interact with your app. It can help maximize your user's lifetime value and isolate the reasons behind success or failure by mapping your most common conversion and exit paths.

Performance Analytics



In a Nutshell

Measures how well (or not) your app is performing. After all, the best app in the world that doesn't load or rapidly respond is doomed to fail. A bad experience in this respect and you risk losing your user for good.



KPIs

Load time, app responsiveness, app uptime



What It's Good For

These analytics help with increasing retention, real-time monitoring, understanding exactly which users and actions were impacted by poor performance, and pinpointing problematic patterns by slicing data (per device, operating system, region, network, etc.).

Predictive Analytics



In a Nutshell

The up-and-comer on the mobile big data block, these analytics apply big data and machine learning to predict how a single user will react to a specific offer, how much to bid for that user, and which prospect to target based on his or her resemblance to your top customers.



KPIs

Expected LTV, expected revenue, expected CTR



What It's Good For

These analytics are good for improving retention and lifetime value, conducting look alike modeling for user acquisition, increasing ROI, and driving heightened efficiency via increased bidding accuracy.



CHAPTER 3

MOBILE ATTRIBUTION ANALYTICS UNDER THE HOOD

Today's mobile environment runs on a last-click attribution model, while each advertiser runs with multiple ad networks (some of the big ones have dozens). In such a reality, there's an undeniable need to use a trusted source – by both networks and advertisers – to rule which network gets credit for reaching a goal (installs in CPI campaigns, or in-app actions in retargeting or CPA campaigns).

The only way to accurately make it stick is by having a bird's eye view of the click-to-install path across all integrated networks and informing them in real time, via what is known as a postback, that they have been credited with a conversion.

Without this view, each network could bill you for a click that led to an install, regardless of whether it was the last click or not. What this means is that different networks often try to claim credit for the same install.



Proper attribution saves you money as it prevents you from being double or triple charged.

3.1 SDK integration

Today, integrating with an attribution provider to set up your campaign tracking is really easy. All it takes is a couple of hours of work to add a few lines of code of a provider's SDK to your app – one for each platform (iOS, Android, Windows Phone).

There's a basic level of integration to attribute installs to ad networks and there is an advanced level if you also want the provider to track in-app events (you should!).

In any case, it's not rocket science.



3.2 Attribution Methods – How Does it Work?

The fragmentation of the mobile space poses quite a challenge when it comes to measurement.

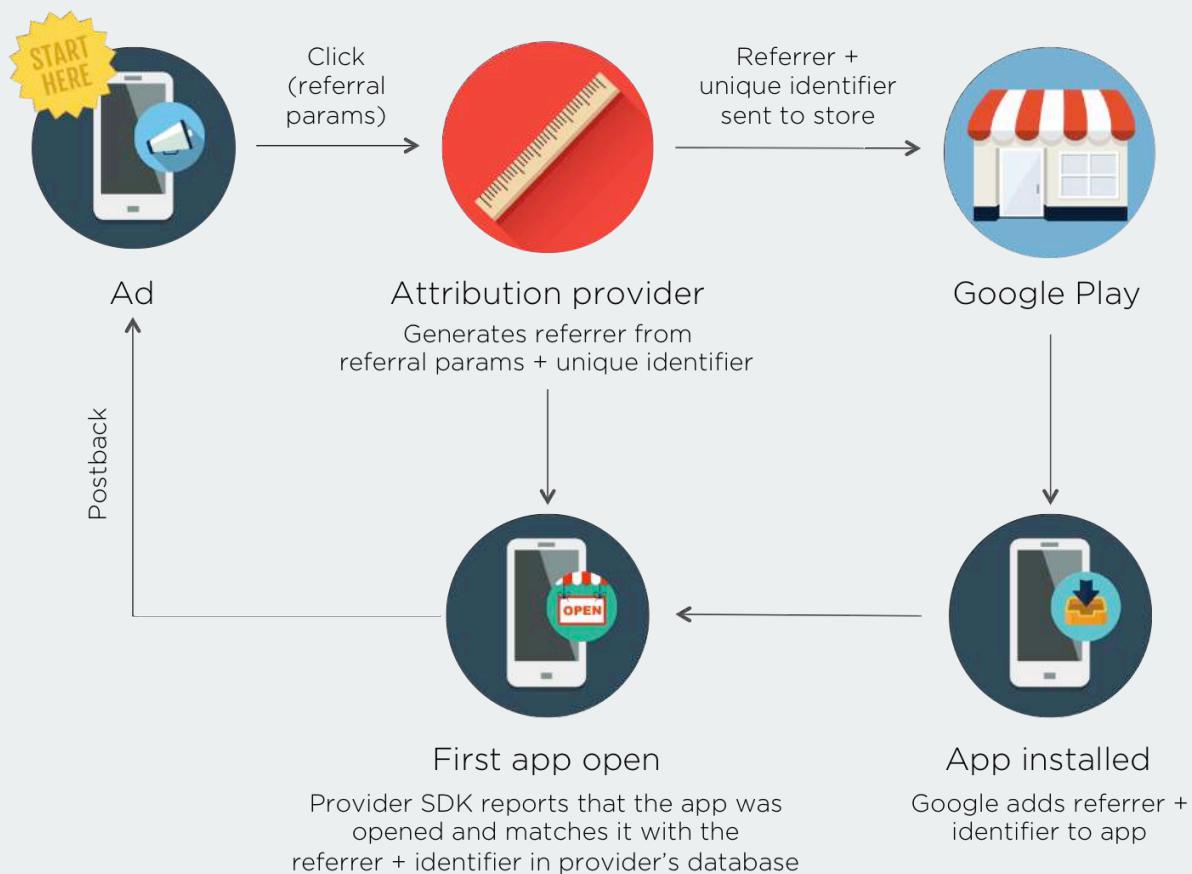
However, the good news is that robust technology can overcome this. Since it's all relatively new, there's plenty of room for innovation, which has once again proven to be the biggest catalyst of growth.



When cookies are not available, there are 3 main methods to attribute credit using different identifiers: Google Play Referrer, ID matching (Google's Advertising ID or Apple's IDFA), and Fingerprinting.

1) Google Play Referrer:

A standard and highly reliable method to attribute conversions through Google Play (but not Android out of store). It enables the attribution provider to send tracking parameters to the store, which then passes them back to the source when the app is downloaded.

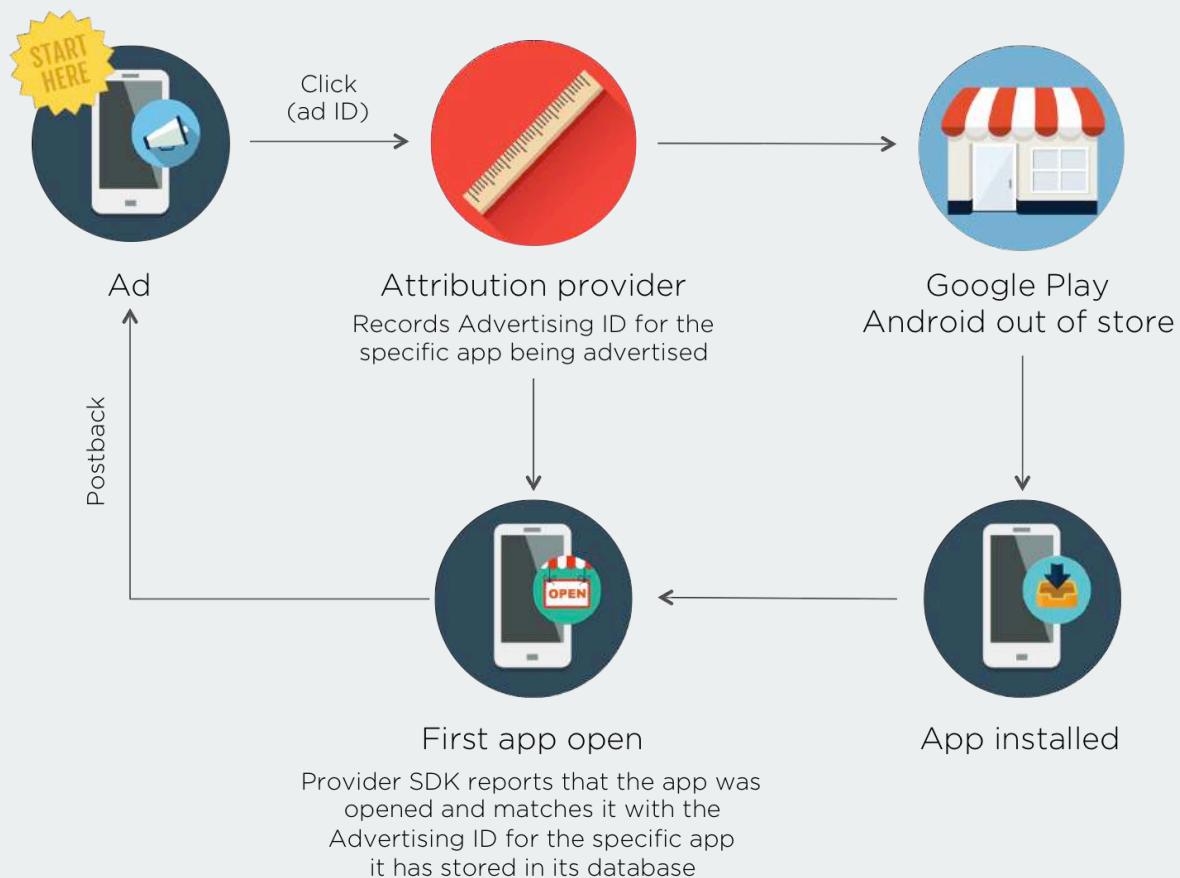


The tracking provider will most likely use the referrer method as it only depends on itself to create this match - it simply uses publicly available data from the referral source.

2) Google's Advertising ID:

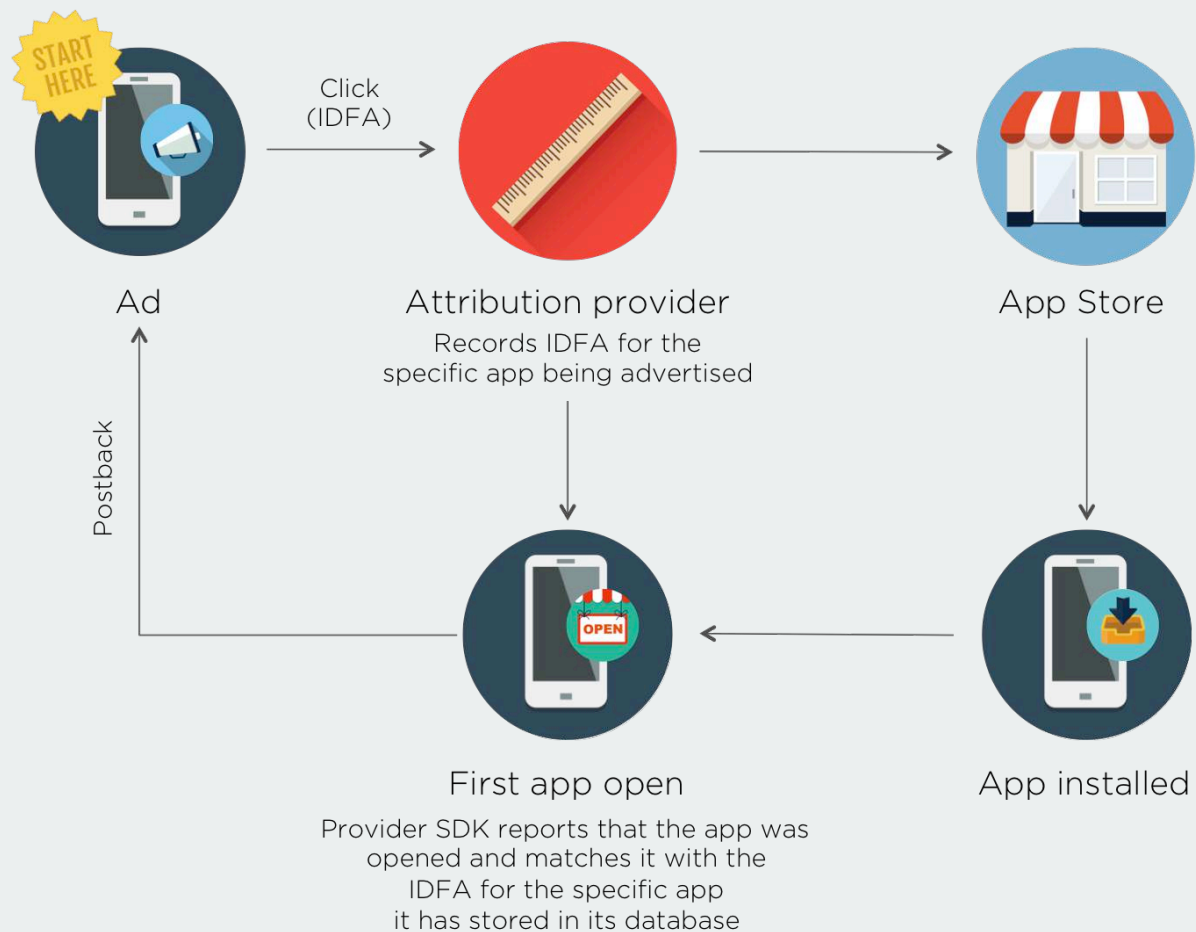
Another rock solid identifier in terms of accuracy. This is used to measure Android installs (for Google Play and out of store).

The problem is that there are no advertising IDs in the mobile web and even in the app space it is sometimes not available (requires a user's consent and the ad network to support and pass it – which is why the referrer method is vital).



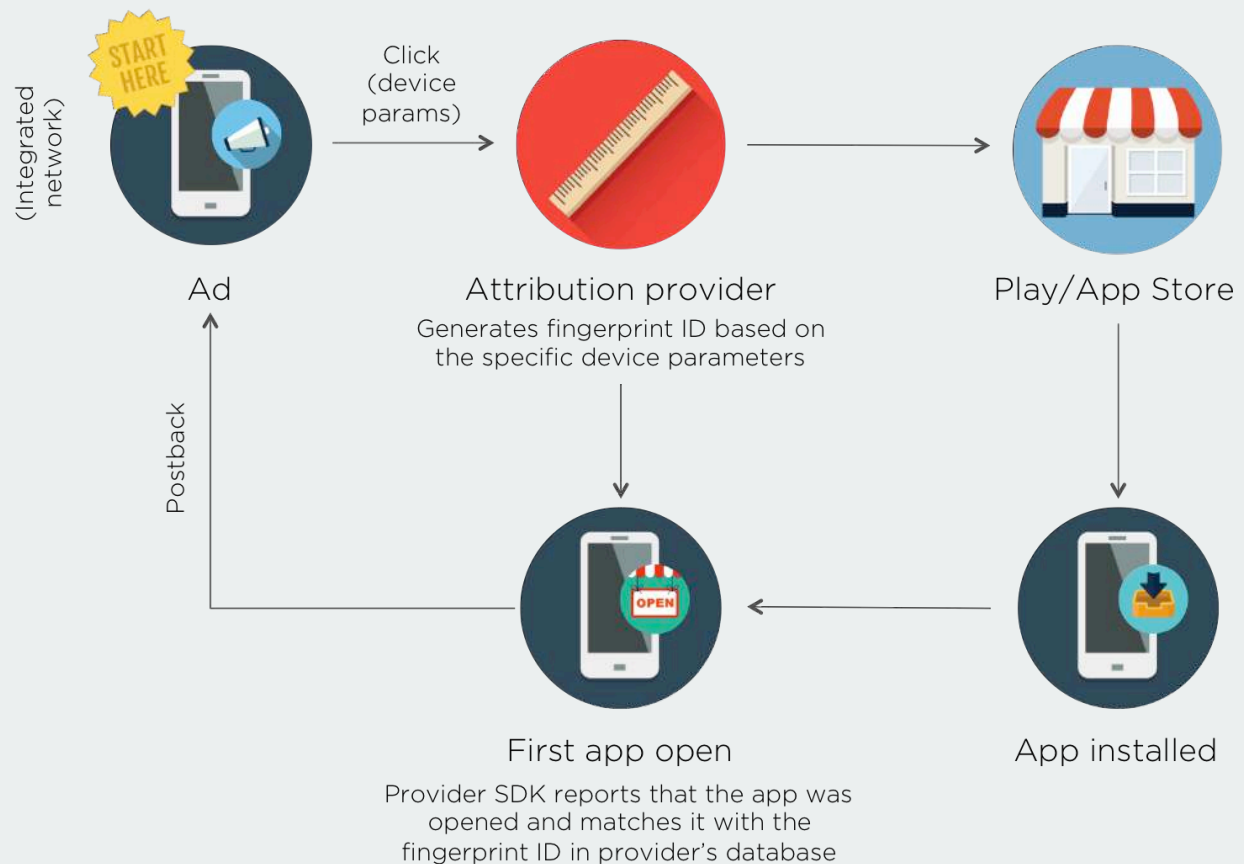
3) IDFA (iOS):

Apple's highly accurate and privacy-sensitive device identifier that replaced UDID. The attribution method works the same way as with Advertising ID.



4) Fingerprinting:

The fallback method for attribution if for any reason there are no deterministic identifiers like the IDFA, Advertising ID or Referrer. This is done by using publicly available parameters like device name, device type, OS version, IP address, carrier, to name just a few, and forming a digital fingerprint ID that matches specific device attributes.

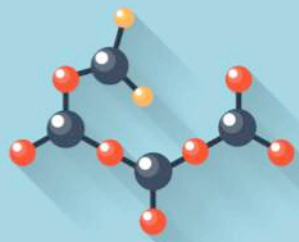


If any of these attributes is changed (for instance, if a user upgrades his OS version or even uses a different IP) a new fingerprint is formed and the old one is no longer usable.

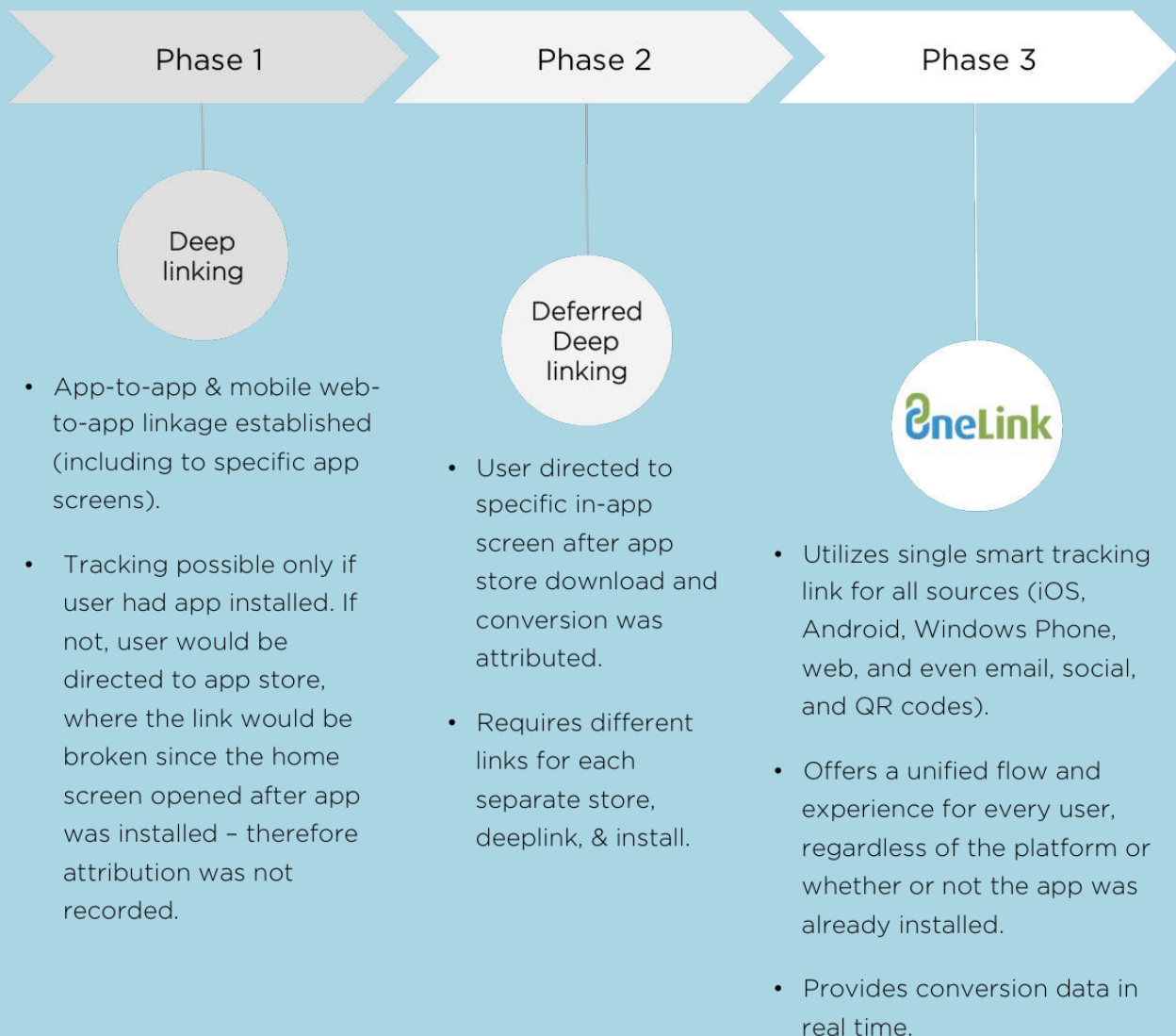
Because fingerprinting is based on a statistical model, it is unable to deliver 100% accuracy. Generally speaking, it's most accurate in the short term (around 24 hours), after which its accuracy level drops as users often change things around in their device.

That's usually enough though, as the vast majority of users click and then install the app within hours at most.

3.3 The Evolution of Mobile Deeplinking



In the beginning, the app world was a world of its own. A walled garden. Links and data did not pass through apps or between the mobile web and apps. Which made ad tracking and optimization all but impossible. And that's how deeplinking was born. Since then innovation kicked in, although gradually, as follows:



Below is a graphic showing OneLink in action.



3.4 The Value-Volume Combination of Integrated Partners

When exploring attribution providers, you'll probably run into each one flexing its muscle by boasting a large number of integrated partners. What is this and why is it important? There are three main reasons:

Reason #1: One SDK. If the advertiser wants to work with an ad network the attribution provider is integrated with, he doesn't have to add its SDK. It all goes through the tracking company's SDK and from there to a central dashboard.

This solves a major headache for marketers (and their developers) who have a hard time involving their IT to integrate every single network they want to work with; not to mention the impact on app performance when running with a single SDK.



The more integrations an attribution provider has, the easier it becomes and the more options you have to choose from. If a network you want to work with is not on the list, you can always ask the attribution provider to run the integration – which would only inflate its own list for future use.

Reason #2: Optimization. Integration enables two companies to pass data in both directions. Attribution companies can often work with any media source from which they'd get the data that they can later use to attribute a conversion through the click.

But reporting the conversion back to the network if indeed it happened, won't be supported.

There's no postback.

Without it, the ad network won't be able to properly optimize the specific campaign not to mention general learnings that can be applied for overall optimization – which certainly won't contribute to making the mobile ecosystem smarter.



Reason #3: Stamp of Approval. Running campaigns with integrated partners has become a standard.

Advertisers will often refuse to run on networks that are not integrated with a tracking system simply because they place their trust in the latter as the regulator or impartial “judge” who makes the rulings.

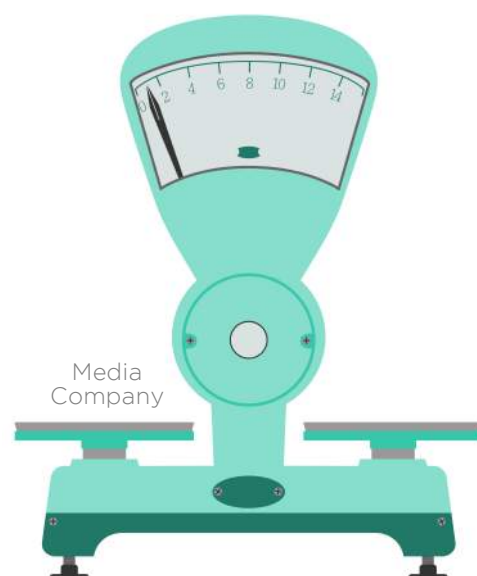
3.5 Unbiased vs. Biased Attribution Providers

What we're seeing in the mobile attribution analytics ecosystem are two types of attribution players:

- **End-to-end solutions.** These companies do it all: buy the media, measure and optimize the campaigns. They are therefore biased attribution providers. As media companies, their core business is buying and selling media. The attribution plays a minor role in their offering so they're unlikely to invest much in updating and improving the product.
- **Pure players.** Providers whose only business is attribution and play the role of ecosystem regulators, raising the flag of neutrality, transparency and reliability. As such, they are unbiased.

Biased solutions indeed bring value as they reduce overhead and simplify workflows. Busy as they are, this appeals to many digital marketers. However, what they'll probably find less appealing are the inherent conflicts of interest such a marriage may bring.

Let's explore some of the major ones you should be aware about.



Little or no support.

Advertisers seeking support from a biased attribution provider may find that if they are not a major source of revenue, support of their account would suffer. It simply wouldn't be economically viable to invest in such accounts if another part of the business generates more revenue.



Data-sharing.

Attribution analytics providers are big data companies. They collect petabytes upon petabytes of data about ad campaigns, installs and in-app events. If a media company owns an attribution solution, it has a trove of data at its disposal that it could use to optimize and monetize its campaigns across the board.

An unbiased provider would never ever use your data or sell it to third-party companies.



[Lack of] Network Integrations.

A biased attribution provider may try to sway the advertiser towards other networks on its list, whether owned or preferred. Integrating with the network requested by the advertiser would either drive traffic to a competitor – if the company actually owns a network, or may lead to a drop in revenues – if it runs with a new partner with whom it has less favorable terms.



Discrepancies.

When you ask an unbiased provider to investigate discrepancy in attribution data, it may decide not to invest in such a probe but rather “rule” in a way that would best serve its interests (for example, if it owns a network it would make a hefty sum if attributing most of the credit to its own network).



3.6 Common Business Models

There are three common models:

- Charge per non-organic installs
- Charge per click & non-organic install
- Charge per attribution event being tracked
(e.g. campaign clicks, non-organic installs, install & post-install in-app events)

Although payment per non-organic install is more expensive, the total cost of the charge per event model is actually much heavier. The below example illustrates how these three models stack up against each other (using standard rates):

Charge per non-organic installs	Charge per click & non-organic installs*	Charge per attribution event being tracked*
	$\$0.003 \times 20 = \0.06 $\$0.003 \times 200 = \0.60	Clicks cost per install: $\$0.002 \times 20 = \0.04 $\$0.002 \times 200 = \0.40 In-app events per install: $\$0.002 \times 50 = \0.10
Cost per install: \$0.02	Cost per click & non-org install: \$0.06 - \$0.60	Cost per install: \$0.14 - \$0.50
TOTAL COST: $100,000 \times \$0.02 =$ <u>\$2,000</u>	TOTAL COST: $100,000 \times \$0.06 \text{ (or } \$0.60) =$ <u>\$6,000-\$60,000</u>	TOTAL COST: $100,000 \times \$0.14 \text{ (or } \$0.50) =$ <u>\$14,000-\$50,000</u>

* Based on a 0.5%-5% average conversion rate for ad-networks/discovery-platforms and 20-200 clicks per install (likely the result of fat fingers). In-app events per install average at around 50. Click [here](#) to view research.



CHAPTER 4

ADVERTISING OPTIMIZATION ACROSS THE USER LIFECYCLE

4.1 The Holy Grail of App Marketing

Now that we understand the ins and outs of how attribution works, we've made it to the focal point of our guide – the business value of attribution, best practices and pitfalls to watch out for.

The key thing to get here is that in app marketing, success hinges on both user acquisition and retention. It's all about being present across the user lifecycle to maximize commercial success by targeting the best prospects that are most likely to become the best customers with the highest lifetime value.



4.2 From Acquisition to Smart Acquisition

App marketing is an evolution in progress but the direction is crystal clear: **performance**. What started with CPM and CPC is currently dominated by CPI but gradually moving to CPA (see page 9 for more details).

There may be an ad network that's delivering tons of new users, but when you take a closer look, you realize that they're low quality. Your user base may have grown, but many of these users may not have had any active app sessions nor completed any in-app actions.

“A properly attributed campaign that's tied to in-app events allows marketers to better optimize and even quit using a specific network altogether.”



A volume of installs is obviously very important as it pushes an app up the ranking in the app stores. But it also serves as the baseline from which you'll find the best users. If it's a matter of percentage, the greater the baseline, the greater the number of loyal users you'll win who will engage and spend. It's simple math.

The key lies in your ability to significantly shoot up the percentage of loyal users. How so? For one, by effectively managing your ad spend – investing more in media sources and channels that have shown they can deliver not only an install but also a loyal user who meets your goals – whether engagement or revenue-related.

So you want to use an attribution provider that not only tells you where a install came from, but also more importantly – tells you where the best install came from. This is done by continuing to follow a user's post-install activity and measuring his in-app events, and then tying these events back to the acquiring network.

Not sure which KPIs to focus on? Take a look at some examples on the next page.

Let's take a look at some examples of in-app KPIs from AppsFlyer's own dashboard.

Table 4.2.1 Sorted by ARPU (Average Revenue Per User)

Aggregated Performance Report ⓘ

Export Table

Media Source	Clicks	Installs	Conversion Rate (avg. 1.29%)	Sessions	Loyal Users ⓘ	Loyal users/Installs (avg. 30.83%)	Revenue	ARPU ⓘ (avg. \$0.64)
Network 4	125,433	25,279	20.12%	N/A	N/A	0.00%	\$33,372.62	\$0.95
Network 6	114,721	8,290	7.23%	37,117	2,536	30.59%	\$7,721.42	\$0.93
Network 1	8,795	1,358	15.44%	3,943	215	15.83%	\$787.81	\$0.68
Network 3	N/A	12,025	N/A	56,570	3,940	32.77%	\$6,539.47	\$0.54
Network 5	4,841	72	1.49%	316	28	38.89%	\$23.94	\$0.33
Network 2	270,827	9,126	3.37%	42,027	2,874	31.49%	\$2,702.76	\$0.30



If ARPU is what you're after, focus on Networks 4 and 6. If you're interested in increasing the number of loyal users, invest in Network 3.

Table 4.2.2 Sorted by Loyal Users/Installs

Aggregated Performance Report ⓘ

Export Table

Media Source	Clicks	Installs	Conversion Rate (avg. 2.51%)	Sessions	Loyal Users ⓘ	Loyal users/Installs (avg. 46.43%)	Revenue	ARPU ⓘ (avg. \$1.69)
Network 7	3,857	503	13.04%	9,601	368	73.16%	\$510.00	\$1.01
Network 3	N/A	8,629	N/A	204,784	5,937	68.80%	\$13,425.00	\$1.56
Network 1	263,781	7,120	2.70%	192,101	4,601	64.62%	\$26,037.00	\$3.66
Network 14	1,161,435	363	0.03%	6,456	225	61.98%	\$171.00	\$0.47
Network 4	2,418	55	2.27%	1,587	34	61.82%	\$79.00	\$1.44
Network 2	1,280,776	14,308	1.12%	257,027	8,601	60.11%	\$23,877.00	\$1.67
Network 5	965,334	3,588	0.37%	59,418	2,131	59.39%	\$4,406.00	\$1.23
Network 16	155,851	43,613	27.98%	687,577	25,577	58.65%	\$31,943.00	\$0.73
Network 8	9,595	579	6.03%	12,519	339	58.55%	\$581.00	\$1.00
Network 6	116,370	330	0.28%	5,451	178	53.94%	\$346.00	\$1.05



Invest in Networks 7, 3, and 1 to acquire users with the highest loyal users-to-installs ratio.

Table 4.2.3 Ad Type Within Network, Sorted by Conversion Rate

Aggregated Performance Report ⓘ

Export Table

Campaign	Clicks	Installs	Conversion Rate (avg. 3.37%)	Sessions	Loyal Users ⓘ	Loyal users/Installs (avg. 26.64%)	Revenue	ARPU ⓘ (avg. \$0.12)
Ad2	37,097	1,855	5.00%	0	495	26.68%	\$246.76	\$0.13
Ad4	35,317	1,200	3.40%	0	321	26.75%	\$129.35	\$0.11
Ad1	36,945	1,237	3.35%	0	329	26.60%	\$149.25	\$0.12
Ad5	35,493	1,158	3.26%	0	309	26.68%	\$111.44	\$0.10
Ad3	37,312	1,187	3.18%	0	315	26.54%	\$143.28	\$0.12

4.3 Retention – Keep Users Coming Back for More

The user has downloaded your app. That's an important step. But don't rest on your laurels yet. Most of the work is still ahead. Now you have to make sure he opens the app, uses it regularly and actually drives real value to your business.

So how do you get a user to open your app and not the dozens installed (on average) on his device? Not to mention the thousands of potentially relevant apps for that user in the app stores just waiting for their chance to take your place.

User retention is a massive topic in app marketing. It involves many areas that we won't go into in this guide. You can read more about it [here](#) and [here](#). Our focus is on the attribution analytics angle and how it can improve your retention rate and maximize lifetime value.



The retention is calculated as the unique number of users acquired by a specific network who were active on a specific day/week out of the total number of unique users who first launched the app in the selected timeframe.

The following chart from the AppsFlyer dashboard clearly shows that network 5 (15.0% at Day 10) has the best retention, while network 3 (10.1% at Day 3) has the worst.

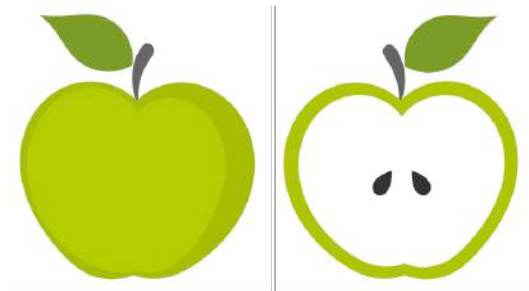
Chart 4.3.1 Retention Table

Media Source	install day	1	2	3	4	5	6	7	8	9	10
Network 1	100% 5,530	35.8% 1,978	25.4% 1,404	20.5% 1,134	18.0% 997	17.6% 973	16.4% 905	16.3% 900	15.7% 867	13.3% 734	14.0% 774
Network 2	100% 2,076	32.6% 677	23.0% 477	19.4% 402	17.6% 365	16.5% 342	15.2% 315	14.8% 308	12.8% 266	11.8% 246	12.7% 264
Network 3	100% 1,408	16.3% 231	12.3% 175	10.1% 143	8.9% 126	8.3% 118	7.7% 109	7.6% 108	6.3% 90	6.6% 93	7.1% 100
Network 4	100% 1,388	35.6% 494	23.8% 331	19.0% 264	17.2% 239	15.7% 218	15.7% 218	14.0% 194	13.7% 189	13.8% 192	11.5% 160
Network 5	100% 40	32.5% 13	32.5% 13	27.5% 11	22.5% 9	17.5% 7	30.0% 12	12.5% 5	17.5% 7	10.0% 4	15.0% 6
Network 6	100% 15	33.3% 5	20.0% 3	13.3% 2	13.3% 2	13.3% 2	20.0% 3	13.3% 2	6.7% 1	6.7% 1	0.0% 0

4.4 Cohort Analysis for Advertising Analytics

A cohort report enables you to group users with common characteristics and measure specific KPIs over different timeframes.

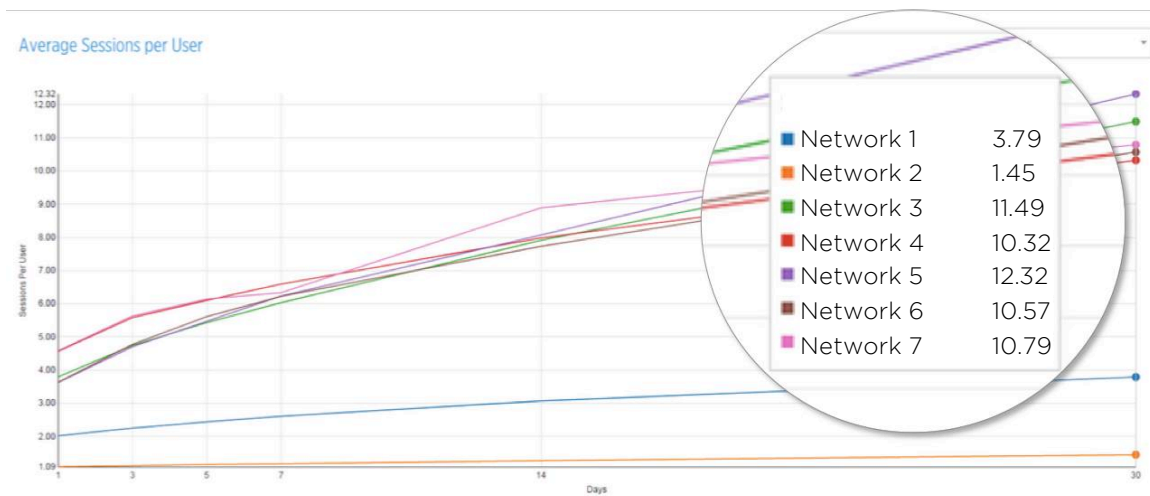
For example, one cohort can be users who first launched an app any time during the month of January while another cohort are those who launched it during February and live in the US. This form of grouping enables an “apples to apples” comparison and therefore a really good indication of change over time. It tells us about the quality of the average customer and whether it's increasing or decreasing over time.



Let's explore the following example on the next page from AppsFlyer's cohort report. This cohort includes users from Great Britain who installed the app between January 1 and January 31.

They are then grouped by the media source that acquired them, which allows us to analyze which network delivered users with the highest average sessions per user over time.

Chart 4.4.1 Cohort Report



Unlike retention, the metric is calculated per different timeframes, which represent the first X activity days per user, and then accumulated among all users (that's why the graph points up).

What can we learn from the graph?

- Networks 1 and 2 under perform and can be cut
- Network 5 growth (purple) is most impressive and constant over time – budget increase can make a lot of sense here
- Network 7 (pink) line loses its curve from day 14 – meaning engagement is dropping. Perhaps a retargeting campaign before day 14 can help keep the curve before day 14

4.5 Retargeting – Personalizing the User Experience with Ads



The practice of re-engaging with existing users via personalized retargeting campaigns is all but mainstream on the web.

Nearly 90% of marketers are using it, according to Marin Software. Retargeting on mobile is also picking up steam as tracking technologies solidify and usage is exploding worldwide. A recent survey by AdRoll put the percentage of marketers currently running on mobile at 56%, and many more are expected to jump on the bandwagon this year.

Retargeting is a very effective method to target users who have already installed your mobile app. It works well if you want to maximize the LTV of existing users and reactivate dormant ones. It's also a great way to convert mobile web visitors to app users by retargeting them on the mobile web using a cookie and then with deeplinking, getting them to download the app.

Retargeting has a big part in delivering what marketers are after – a personalized user experience across multiple touchpoints. This can be on the app or outside the app whether another device, web and even offline (more on this topic further ahead).

Advances in deep-linking technology certainly helped push retargeting forward on mobile because it directs a user to a specific page that's personalized to fit his interests – a pair of Adidas soccer shoes, or an incentive to pass a specific level of a gaming app that a user abandoned. After all, knowing a user was interested in something specific and then directing him to the home screen would be a complete waste.

Retargeting Attribution

Just as any ad campaign, measuring your retargeting activity is critical for effective budget management and maximum advertising ROI.

The attribution mechanism is no different than an install. It simply means an advertiser would define a desired in-app event (e.g. app open for a dormant user, in-app purchase for an existing user) for which the attribution provider would credit a media source that delivered the last click that led to the desired action.



4.6 Social Network Attribution

Mobile advertising is relatively new. But it has been around long enough to show that social ad networks reign supreme. Specifically, we're mainly talking about Facebook and Twitter. These companies have built an amazing advertising solution. With so much data in their hands, they're able to deliver the best, most accurate targeting granularity – and that means the highest engagement and performance.

But, and this is a big but, Facebook and Twitter do not let just anyone track campaigns running on their platforms – only those they've selected following an extensive process.

There are only a handful of attribution providers that have Facebook and Twitter's official stamp of approval as measurement partners – which is a major thing to consider if you want to run a social campaign and be able to measure it.

Click [here](#) to see Facebook's list and [here](#) for Twitter's.



4.7 Measuring True LTV in a Multi-Touchpoint Market

Being smart about attributing credit to a network based on in-app events is great. But as we all know, brands also live on the web and even on the street below your office. Not to mention on other devices.

What if, after downloading your app on his iPhone, a user buys something you offer on his iPad, your website or even offline – which is where most users actually buy stuff ([eMarketer estimates](#) that in 2014, mobile commerce sales will total \$57.8 billion in the US – about one-fifth of all retail ecommerce sales and only 1.2% of total retail sales). Such an action that contributes to the app owner's ROI would be critical for the app marketer to know about.



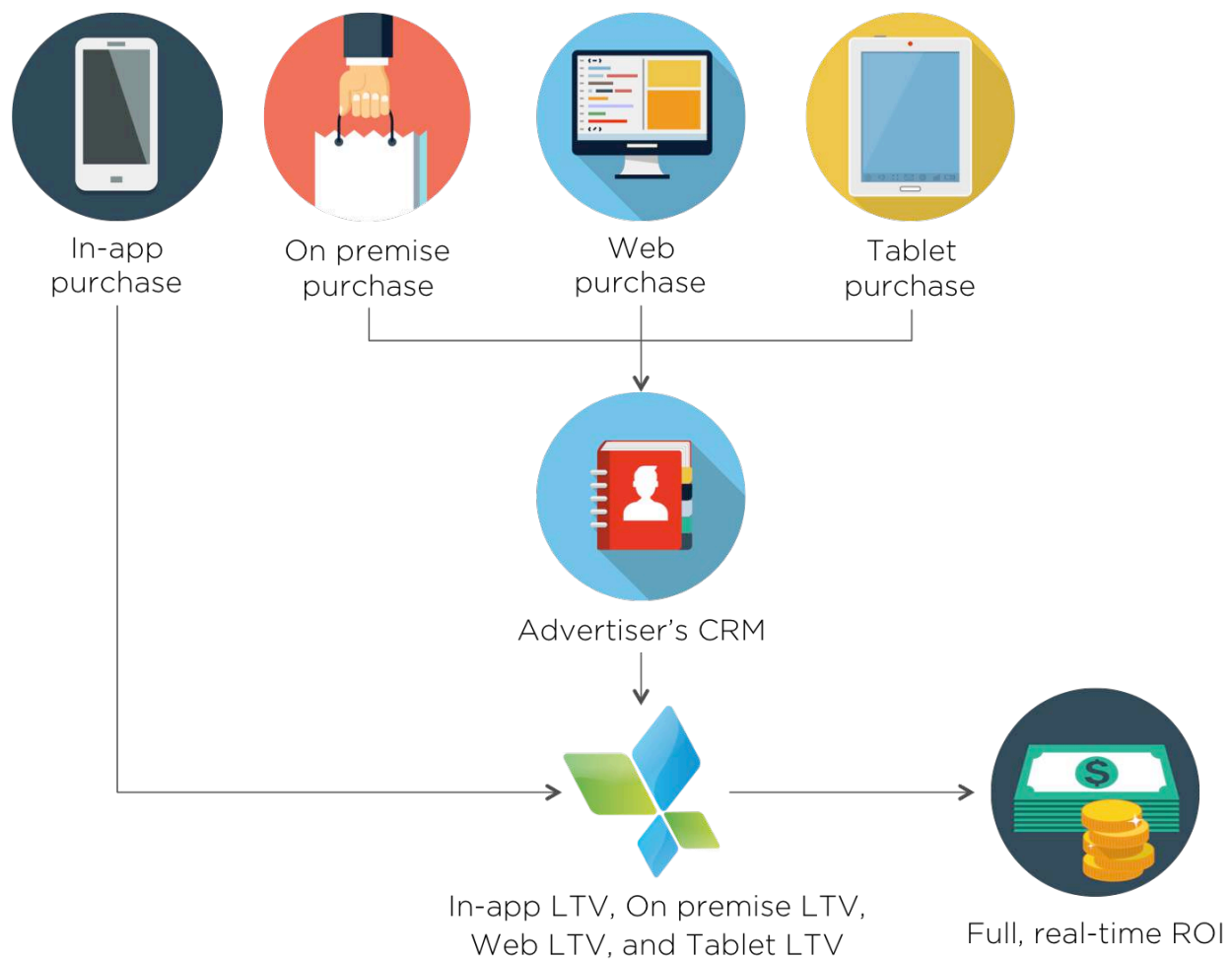
Now imagine being able to connect the dots between an app download and a web, in-store or different device purchase.

The value of the app install could be much higher than previously imagined.

It can really change things when it comes to measuring your advertising ROI and deciding which channels and which networks to use in your acquisition or retargeting campaigns.

How is the connection made? Good question. Basically with a unique identifier you use in your CRM. This could be a log-in, or a customer loyalty card number or any other unique value that allows you to identify a user and his activity across your brand's touchpoints. Just make sure you're able to push this data to your tracking provider (server-to-server integration is the most efficient way to do this).

The following chart sums it up:



TV Attribution

TV campaign budgets for apps (not to mention standard brand advertising) are on the rise. In fact, both [Clash of Clans](#) and [Game of War: Fire Age](#) paid a cool \$4.5 million to win national attention in the US during Super Bowl 2015.

The newest form of install attribution is used to measure organic installs by examining the impact of TV ads on immediate actions in the app stores. Basically this is done by matching data on the airing time of each ad with an app install that occurs within a time frame (in minutes) determined by the advertiser. Post install analytics such as retention, LTV and Cohort reports are then calculated to measure effect.



4.8 One Formula to Rule Them All

If we had to sum up a single formula of success in mobile advertising, this would be it:



$$LTV > CPI$$

The bottom line is that if a user generates greater value over time (spend or engagement) than what you invested to acquire him, you're doing something right!

This formula factors in a lot of what we've discussed: acquiring the best users in the first place and then maximizing the value of the existing ones.

4.9 Reporting – Dashboard, Pull, and Push APIs

With so much good data to use, where and how can you actually view the data and analyze its patterns? Overall, there are 3 formats:

- **Analytics Dashboard.** View aggregated data or export to Excel performance, aggregated, and user level data.
- **Pull API.** The advertiser pulls a bulk of data (hourly or daily).
- **Push API.** The provider pushes the data to the advertiser in real time with information to a specific event.

Let's explore the following marketer personas to better understand when to use each method:



I use the
DASHBOARD

I'm a small/medium sized app, with no internal BI system and no need for user level data. I want daily monitoring that provides a quick overview of media source performance.



I use the
PULL API

I'm a medium/large sized app with a high volume of data. I don't have an internal BI system and I don't need organic data.



I use the
EXPORT FROM
THE DASHBOARD

I'm a small/medium sized app, with no internal BI system. I'm an Excel wizard who likes to go deep by slicing & dicing.



I use the
PUSH API

I'm a large sized app with massive volumes of data. I have an advanced BI system and I need organic & non-organic user level data.



CHAPTER 5

THE 10 COMMANDMENTS OF MOBILE ADVERTISING ANALYTICS

1

Run with an unbiased attribution provider that you can trust

2

Tie user acquisition attribution to post-install events that are closely related to your business goals

3

Increase ROI by tracking Facebook and Twitter campaigns

4

Measure the success of your retargeting campaigns

5

Improve user loyalty with cohort analysis

6

Use a single attribution deeplink to measure all your campaigns across all platform

7

Measure a campaign's impact on web, cross-device and offline purchases and engagements

8

Run campaigns on your attribution provider's integrated networks to achieve the best optimization

9

Integrate in-app events you care about in the SDK from day 1

10

Remember that $LTV > CPI$ is the new formula for app success



CHAPTER 6

CONCLUSION

The mobile revolution is in full swing. That means the app stores are jam packed with numerous competitors of your own app – sometimes even in the hundreds. Making it in this ultra, shark-infested competitive landscape, beyond having a superior app experience, requires investment in paid campaigns – whether acquisition or retargeting.

Relying on app store discoverability to drive organic installs will not do the trick. What is required is a mix of organic and non-organic installs to drive not only a volume of new users but more importantly a volume of new loyal users who will actually engage with your app, in addition to retargeting campaigns to better communicate with existing users and keep them happy and engaged.

An advanced attribution analytics platform can help you reach these goals by overcoming a fragmented space and properly identifying users, while tying attribution to post-install events to achieve the highest possible ROI on your advertising campaigns.



www.appsflyer.com

US: +1-800-660-2818 | IL: +972-9-768-1949

CN: +86-10-5357-3139 | UK: +44-20-3318-8649

