TikTok | ADJUST

14.5 +

Ask App Not to Track

Allow Tracking

PLAYBOOK

iOS 14.5+ success made simple with Adjust and TikTok

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# Introduction

iOS 14: Changes and an industry shakeup

The release of iOS 14 and Apple's App Tracking Transparency (ATT) was announced in June 2020 at its Worldwide Developers Conference (WWDC), and was first released to the public on September 16, 2020. From the moment of the initial announcement until the rollout of iOS 14.5 in April 2021, the mobile marketing industry was sent into overdrive as it reassessed its long-standing concepts of user privacy, user acquisition, and mobile advertising in general. The effects of this change were felt across the entire mobile ecosystem—from users to app marketers and developers, measurement and analytics companies, and ad networks.

In this guide, we've teamed up with TikTok to provide mobile marketers, developers, and advertisers with our insights and best practices for success working on iOS 14.5+ and in the ever-evolving world of user privacy on mobile. From understanding SKAdNetwork and ATT to tips on getting the opt-in, guidance on building conversion value schemas, information on solving for predictive analytics, and creating compliant strategies that yield the best results, we make succeeding in the post-IDFA space simple.

"Privacy is a fundamental human right. At Apple, it's also one of our core values. Your devices are important to so many parts of "your life. What you share from those experiences, and who you share it with, should be up to you. We design Apple products to protect your privacy and give you control over your information. It's not always easy. But that's the kind of innovation we believe in."

Apple's privacy statement
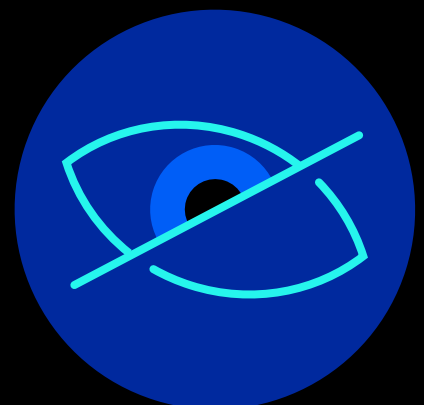
SKAdNetwork and how it works now

Adjust wholeheartedly supports Apple's privacy framework and is working together with Apple, our clients, and our industry to ensure complete user privacy and respect for peoples' decisions regarding their data. That being said, SKAdNetwork comes with significant limitations that need to be fully understood to succeed as an advertiser on iOS. Adjust, along with everyone in the mobile industry, needs to remain agile, put user privacy first, and provide clients with solutions that work.

Until the release of iOS 14.5, Apple had allowed for the Identifier for Advertisers (IDFA), a unique and resettable device-level identifier, to be accessed by all apps downloaded on that device. An option to limit ad measurement was available, but most users didn't bother. The IDFA could be used to measure clicks and compare them to installs, which mobile measurement partners (MMPs) like Adjust were then able to attribute.

This change meant that attribution, as it was understood by many apps and app marketers, was significantly impacted. The way measurement and user acquisition had previously been managed was no longer universally possible. As it currently stands, there are essentially two attribution and ad measurement approaches that can be leveraged on iOS: The ATT framework that manages access to the IDFA with user consent, and SKAdNetwork. If consent is acquired, those users can be measured and attributed in the same way as before the iOS 14.5 rollout (as their IDFA will be available to advertisers). But for measurement of users who haven't opted-in, working with SKAdNetwork is crucial, and requires a completely different mindset and approach to how we gather and process information about users.

For users who don't opt-in, Apple's SKAdNetwork is the solution that marketers can turn to for attribution of app installs and re-installs. The attribution information from SKAdNetwork is relayed from the device to Apple, and then to ad networks, developers, and mobile measurement partners (MMPs) like Adjust.

The limitations of SKAdNetwork

One post-back per install: After an install, Apple only sends one postback, meaning that advertisers and developers need to be incredibly vigilant and strategic during setup. It's vital to ensure correct set-up for full visibility of post-install events and to enable the ability to optimize campaigns.

Working with conversion values: SKAdNetwork provides space for 6-bits of downstream metrics, a number between 0 and 63 (or between 000000 and 111111 in binary), with an initial 24-hour timer. Otherwise known as a conversion value this can be assigned to any value that can be expressed in binary, and it's up to apps to decide which events they want to include.

The timer: Every time the conversion value is updated to a fresh six-bit code defined within the app, the timer gets extended by an additional 24 hours. Once this conversion value window expires, a second 24-hour window is triggered for attribution. The idea behind this is to obfuscate the time of install, making it impossible to link event triggers to individual users.

How a conversion value strategy is set up is key to success on SKAdNetwork. Each vertical and revenue model comes with its own unique requirements regarding measurement and each app has its own unique context and details. To make the most of this system, advertisers and marketers need to work thoroughly within the first 24 hours, leveraging all data possible to paint a clear picture of user behavior, from which projections and segments can be identified.

The shift in ad spend

One of the biggest questions over the past 12 months has been whether or not there has been a significant shift in ad spend from iOS to Android and, if so, how big has it been? According to Adjust data, a shift has indeed occurred but has been smaller than perhaps expected.

Ad spend by OS January 2020 - April 2022
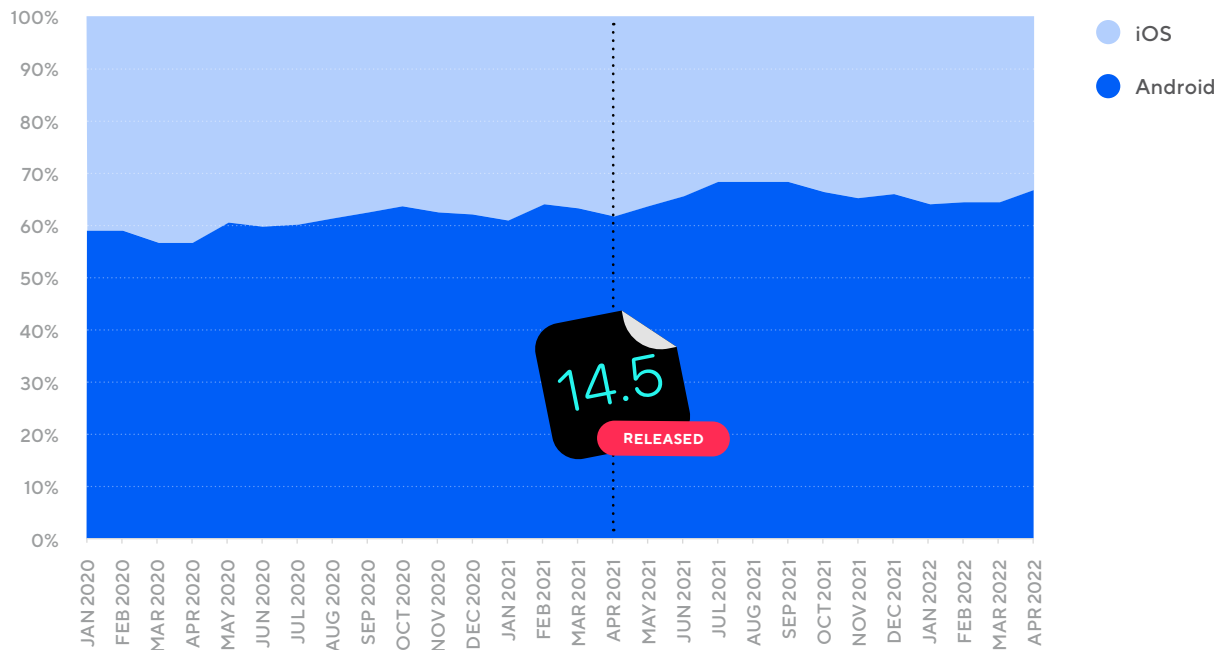
In the leadup to the release of iOS 14.5, we can see that ad spend for iOS slowly decreased from around 41% of total share in January 2020 to around 38% in April of 2021. This number continued to decrease throughout 2021, reaching a trough of just over 30% between July and October, before starting to bounce back. As of April 2022, the iOS share of ad spend is 34%.

Getting the opt-in

The most accurate data in the post-IDFA world starts with a robust opt-in strategy. Apple's ATT framework allows for ad targeting and measurement once a user has opted-in or granted consent to tracking. The more users that opt-in, the more highly-efficient data you'll have access to. Moreover, this data can be used in building out your strategic approach to your SKAdNetwork data. The higher the opt-in rate the better — but we've also found that even a low percentage of opted-in users can be crucial in determining success.

Opt-in rates by vertical

ATT opt-in rates by vertical Q2 2022
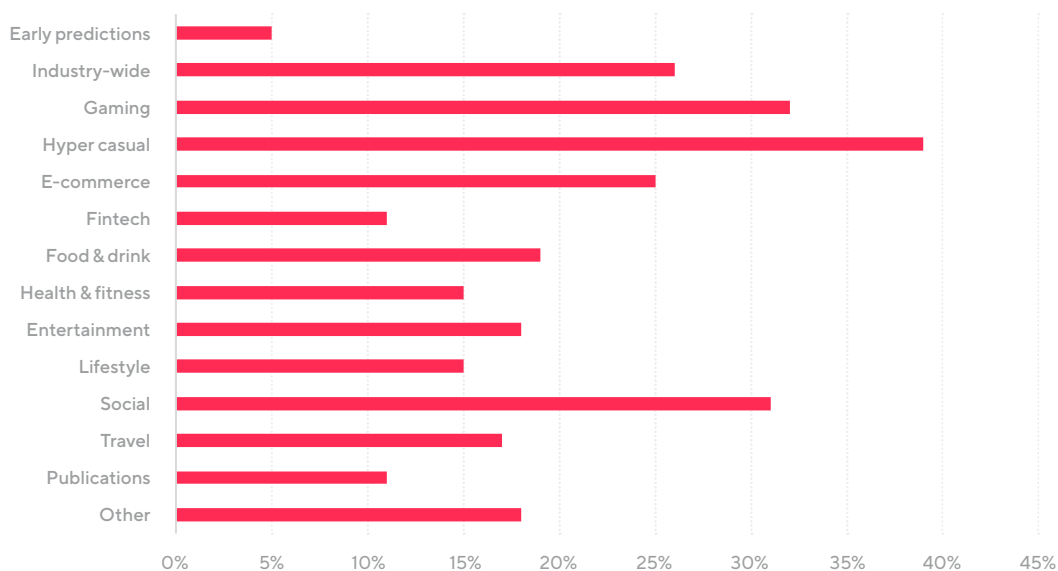
Compared to early predictions, which placed opt-in rates as low as 5%, the situation looks incredibly positive for marketers — we're seeing numbers well over 30%. Gaming, for example, posted an average of 31% in Q2 of 2022, with hyper casual reaching 39%. It's also important to note that of all verticals tracked by Adjust, opt-in rates have increased so far from 2021 to 2022, implying that a growing number of users are understanding the benefits of opt-ing in, and that brands and marketers are doing a great job of presenting these benefits to them.

The opt-in numbers posted by multiple AppLovin-owned studios further prove this notion, as hyper casual users are by nature more aware of the value of targeted advertising to their user experience. With some numbers as high as 75%, it's clear that users will opt-in if what they're opting in for is presented optimistically, and understood.

The results for several popular games in 2021

App	Daily Active Users	Consent Rates
Wordscapes	2.7 million	30.64%
Animal Transform	276 thousand	70.36%
Blockscapes	263 thousand	26.71%
Save the Girl!	130 thousand	74.74%

Opt-in rates by country

ATT opt-in rates by country Q2 2022
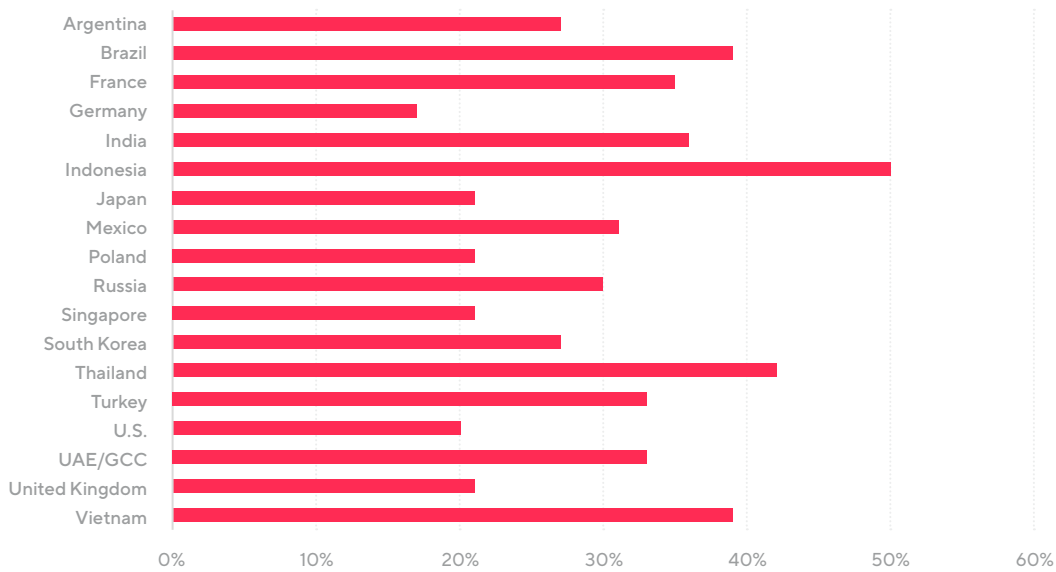
It's also interesting to note the differences by region or market, as this is an important way to inform strategy or benchmark what is or isn't working from country to country. Adjust data shows that, as of Q2 2022, Indonesia is posting the highest average opt-in rates at 50%, while Germany (an extremely security and privacy conscious market) comes in with the lowest at 17%. This demonstrates how vital communicating the value of opting-in is when working in the German market and within the EU broadly. If you were to advertise a hyper casual title in South East Asia, however, you can probably expect high consent rates.

Indonesia is posting the highest average opt-in rates at:

50%

Opt-in tips, tricks, and best practices

We've worked with a number of clients to help develop top opt-in strategies and flows, highlighting the importance of optimizing for the opt-in as part of an overall UX strategy. Throughout this process, we've identified the variables that have the biggest influence on a user's response to an ATT pop-up.

1 **Location:** Pinpoint the perfect moment in the user journey to ask for opt-in. It's usually best to display the prompt during the onboarding flow.

2 **Messaging:** Use 2-3 short sentences to emphasize the benefits of opting-in with a pre-permission prompt and customized second string.

3 **Size:** Users typically respond to pre-permission prompts that are full screen, as opposed to modals — it feels more seamless.

4 **Button placement:** Use simple text and place buttons next to each other horizontally, with the positive acceptance on the right-hand side.

"Your App" would like permission to track you across apps and websites owned by other companies.

Your data will be used to deliver personalized ads to you.

Ask App Not to Track

Allow Tracking

"SKAdNetwork has certainly presented immense challenges to the app marketing industry. At Adjust, we're committed to investing in next-generation solutions that align with the privacy-centric evolution of the market. We've remained at the forefront of any and all changes, working closely with Apple and our partners and clients to make tackling complexities as seamless as possible, and to provide guidelines and solutions that serve the needs of marketers, developers, and advertisers."

Katie Madding,
Chief Product Officer

ADJUST
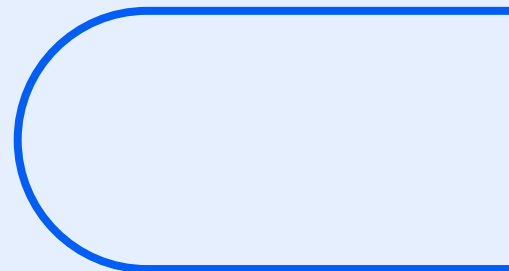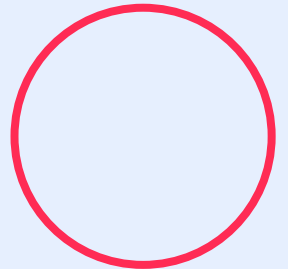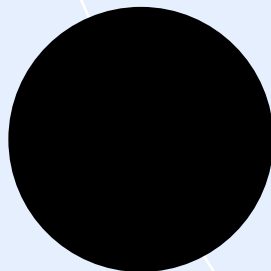
TikTok advertising account setup

Before adjusting your TikTok advertising account, review the following recommendations:

1 Review your settings
   a. Update to Adjust's SKAN-supported SDK (Adjust SDK version 4.0+) to let Adjust collect custom data points from your app and send them to TikTok For Business.
   b. Complete conversion event configuration in the Adjust dashboard.
   c. Send all unattributed events to TikTok via Adjust.

2 Expect changes in ad delivery
Be aware of the changes to the delivery strategy of your existing campaigns.

3 Operate with limited app campaigns
Determine a plan to create up to 11 campaigns per app for iOS 14.5+ traffic and develop a plan to monitor performance.
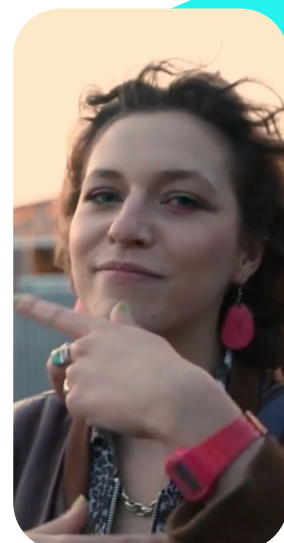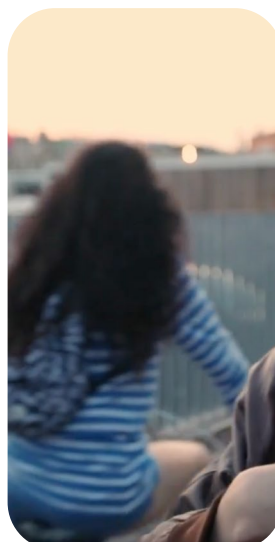
Adjust solutions: Conversion values and finding high-value users →

After extensive research into the technicalities of SKAdNetwork limitations and changes post iOS 14.5, Adjust has come up with multiple solutions to best leverage conversion values for individual business needs. Before selecting the model setup within our Conversion Value Manager, clients should first set the conversion value (CV) window. Via the CV window, you can set a defined time period after an app install, or reinstall, in which Adjust may update conversion values based on user activity. This helps you to better control when to expect the SKAdNetwork install postback. Adjust uses a default conversion value window of 24 hours.

Conversion value configuration

Use this tool to configure which engagements you want to measure in your app. Learn more.

App name

adjust Demo App

Reporting currency

USD

Conversion value window

You can change that conversion value window in the iOS 14+ Settings menu.

Window length

24

hours

From 1 through to 1536

A look at the conversion value models

Conversion value model

Choose your model based on what engagement you want to measure in your app. You can choose between measuring individual data types and creating a more advanced setup.

☐ **Guided setup**

Define what KPIs you want to measure and let Adjust map your conversion values for you. You can use all 63 conversion values

☐ **Conversion events**

Track up to 6 in-app events using conversion values. You can measure which events a user has triggered following an install. You cannot measure how many times a user has triggered a single event.

☐ **Revenue**

Measure revenue in your app using revenue events. SKAdNetwork associates the reported revenue with your configured conversion value range

☐ **Manual setup**

Map events, ad revenue, and purchase data to separate conversion value ranges. Use all 63 conversion values to gain insight into how users interact with your app.

☐ **CSV upload**

Create your conversion value configuration with your own tool and upload them as CSV

Apply

CONVERSION EVENTS

This conversion value schema links six distinct events to specific conversion values, providing full visibility into the primary post-install KPIs within your SKAdNetwork dataset. In the example below, you can see that a user signs up, executes an in-app purchase, and then completes a tutorial. The bit that corresponds to each event updates after each of these actions and returns a conversion value that tracks all of the events.

Model setup

Map up to 6 in-app events and track them using conversion bits for each install. You can measure which events a user has triggered following an install. You cannot measure how many times a user has triggered a single event.

Event name
1   Tutorial complete   ✕

Event name
2   Level up   ✕

Event name
3   Purchase   ✕

Event name
4   Search an event by name or token   ✕

Event name
5   Search an event by name or token   ✕

Event name
6   Search an event by name or token

01 — 06

Conversion Events is a straightforward and easy-to-use model that gives us the ability to count the number of users that triggered a specific event during their install/reinstall lifetime. This model provides a high level of transparency into the specific events that were triggered, regardless of how they are mapped in the setup, or in which order they occurred.

REVENUE

The focus of our revenue model is to measure the revenue your app is generating post-install. While Conversion Events utilizes bits, this model leverages all 64 conversion values available by allowing you to map your preferred revenue type condition to an individual conversion value. Within this model, there are four supported revenue types.

- Total revenue: IAP + Ad revenue, where IAP is the sum of all event revenue (e.g., when a client sets up more than one revenue event).
- Ad revenue: Revenue generated from engagement with ads.
- In-app purchases: The sum of all event revenue.
- Event revenue: Revenue associated with any events that have been set to track revenue.

For more control over how you track your ad revenue, you can choose which sources you want to measure. Adjust works with and supports integrations with many partners, including AppLovin, ironSource, Facebook, and more.

Model setup

Create revenue ranges to record in-app revenue. SKAdNetwork returns a conversion value corresponding to the revenue generated by the user

Revenue

Revenue type

Choose the type of revenue you want to measure using SKAdNetwork. The returned conversion value corresponds to the range of value the user generates for the chosen type.

| Total revenue | Ad revenue | In-app purchases | Event revenue |

Ad revenue sourcing   ironSource Ad Revenue

Min Including | Max Excluding

1   USD 0.00   USD 0.00

Add ranges

MANUAL SETUP

Using our Manual Setup flow, you can map events, ad revenue, and purchase data to gain greater insight into how users interact with your app post-install—and can take advantage of all 64 available conversion values by creating highly customized combinations. Each of these unique condition combinations can then be mapped to a single conversion value.

EXAMPLE

Let's say you want to distinguish between two user journeys that result in revenue being generated. In the first instance, the user generates revenue via an in-app purchase, ad revenue, or both. In the second case, they generate revenue via the same events but also perform an additional event, e.g., completing 'Level 1'. By leveraging relevant condition combinations, you're able to map the lower conversion values to revenue ranges only and then map higher conversion values to the same revenue ranges, plus the custom event of 'Level 1' being triggered.

The flexibility of this model makes it the perfect choice if revenue is an important KPI for your app, but you also need to track other key post-install events.

Journey 1
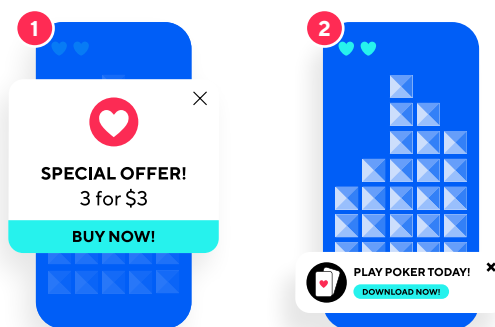
Journey 2
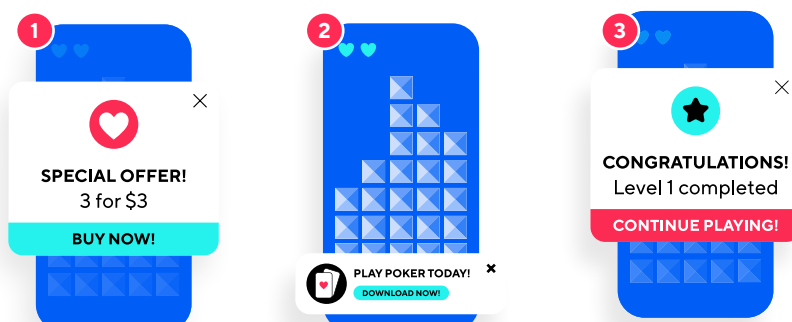
Regardless of the chosen conversion value solution on the reporting side of SKAdNetwork data, we take each SKAdNetwork postback and translate its conversion value back into meaningful, easy-to-understand metrics in the dashboard, where they're translated back into events. Clients can extract actionable insights from iOS campaigns, including key conversion value events, revenue per install, and conversion rate — no manual setup required.

You can then successfully analyze which channels are driving installs on iOS across your entire app portfolio, regardless of which conversion value measurement strategy you choose.
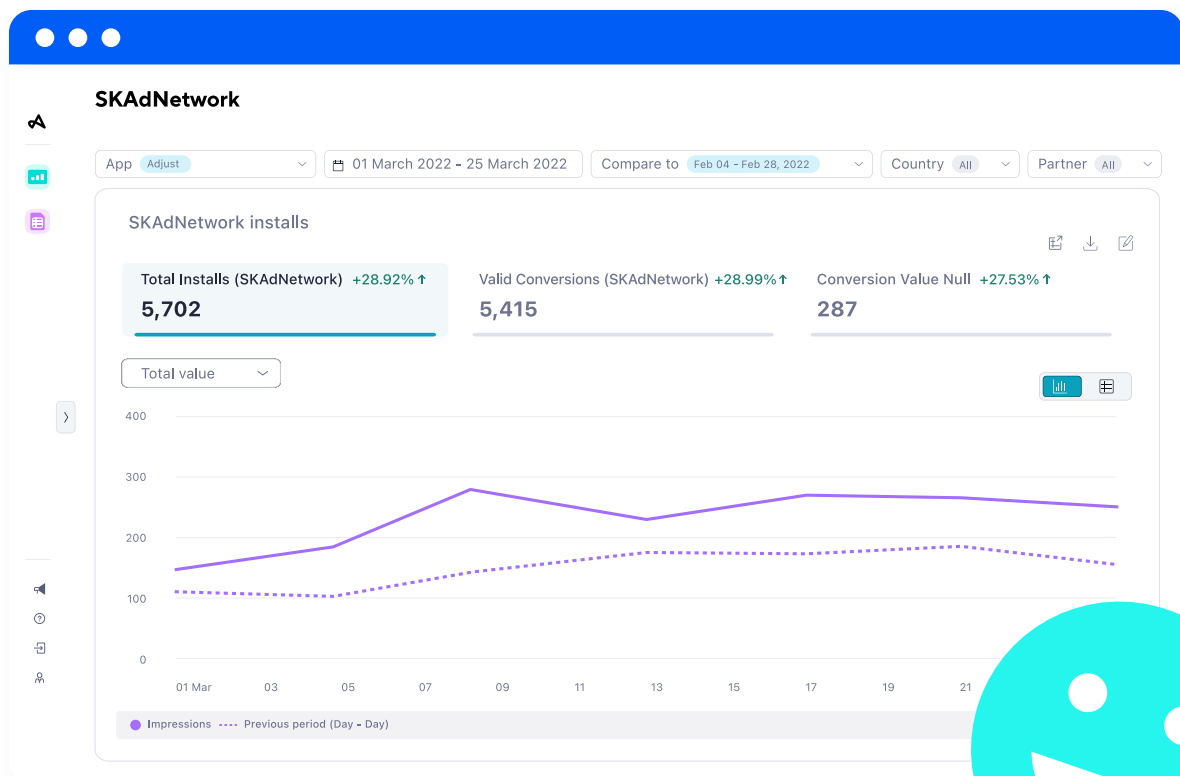
"While user acquisition has always been a central pillar in mobile marketing, the user privacy-driven shake-up has meant that old ways of doing things needed to be completely revisited, and that remaining flexible is more essential than ever. We can no longer solely rely on automation to shift the percentage points in our favor... we, and everyone in the mobile advertising industry, have to remain agile, put user privacy first and provide clients with solutions that work – just like we've done with iOS 14 and all of the changes that came before that."

Simon Dussart,
CEO

ADJUST
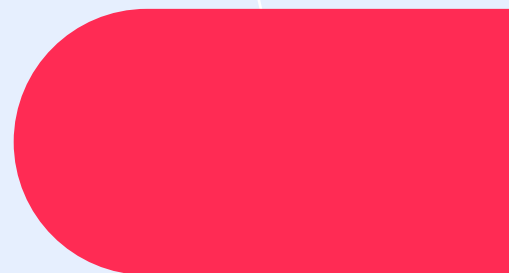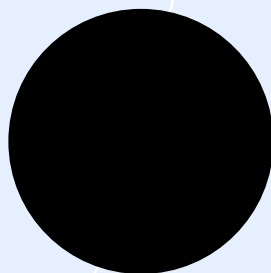
Adjust solutions: LTV and predictive analytics

Predictive analytics on iOS come with increased complexity when working with SKAdNetwork data. Given that the data received is anonymized and based on activity from the first 24 hours of a campaign, the information is, by nature, limited. This makes maximizing insights via conversion value schemas, as outlined above, an essential first step in this process.

Predicting Lifetime Value (LTV) is complicated because:

- We only receive SKAdNetwork postbacks, using a schema that must be defined by the mobile app, and which cannot be tied to a specific user.
- We can't measure revenue or proxy metrics directly, and must work with SKadNetwork values 0-63.
- We don't receive the information in real-time.

The solution for this at Adjust uses artificial intelligence, or machine learning, to analyze layers of trends that help predict a user's future behavior. This way, a user's historical data, and patterns learned from other similar users, can help predict the value of that user on, say, day 30, from data supplied on day 1. By working with large data sets (collected by our SDK) fed into machine learning algorithms, we can extrapolate and correlate to paint a picture of long-term outcomes for non opted-in users.

Adjust's predictive models are custom built for each specific app, meaning that they learn and are trained from the real (SDK) data of each specific app. By pairing predictive modeling with cohort analysis and aggregated SKAdNetwork data, marketers are able to extract the most meaningful insights and make informed decisions. They're also empowered to understand the future value of a campaign early into its runtime (bypassing the SKAdNetwork waiting period), and surface data relationships that might have otherwise been missed.

Adjust recommendations: Conversion value mapping

When setting up conversion value mapping for an app, the first question a marketer should ask is whether their users are likely to start generating revenue in the first 24 hours or not.

1. **For users that do generate in-app purchases or ad revenue within this period,** a straightforward mapping setup with revenue ranges assigned to the 64 available conversion values (or a subset of them) would make sense. The distribution of these revenue ranges depends on each app's specific IAP pricing structure, and the possible ranges of ad revenue that can be generated within that first 24-hour window. These ranges should correspond to the different user groups being targeted. With this type of mapping, it's possible to evaluate the success of a campaign by the distribution of conversion values in the resulting SKAdNetwork postbacks. A good example of a vertical where this kind of model makes sense is hyper casual gaming.

   Using this approach, marketers will receive a day zero (d0) revenue from each user from SKAdNetwork, which can then be used to estimate a ratio of the dX/d0 revenue per user with the ATT framework. With this, you can multiply the d0 revenue with the ratio and thereby estimate the LTV of the SKAdNetwork campaign by summing up all of the contributions from the SKAdNetwork postbacks.

2

2. **For verticals like e-commerce, food delivery, and health and fitness, where generating revenue in the first 24 hours is less likely,** or where the revenue generated is not indicative of long-term in-app behavior, it's essential to look at other KPIs. Events like 'view listing' and 'added contact details' can help marketers to paint a picture of how a user will perform or behave later in their journey. Here, it's more valuable to gain transparency into exactly which combination of events were performed, regardless of the order in which they happened and is beneficial to map the events to individual bits rather than conversion values. The 6 available bits can be leveraged in most scenarios to cover the key events, indicative of long-term user behavior, that can occur in the first 24 hours. With this approach, it's not necessary to think about the order in which to map these events like you would with conversion values (which can only increase, and not decrease) because we're using the bits as binary flags for each of the events. It's not even required to know the details of a typical user journey, as any combination of bit mapping will provide the same transparency.

   When working with this approach, the same principle of using ATT data can be leveraged to find a correlation between user LTV and events performed in-app on the first day. This can be an extremely successful approach and can certainly be effective for basic campaign optimization.

3

3. **For a more sophisticated way of predicting SKAdNetwork campaign LTV,** or the estimation of the likelihood of certain events being performed outside of the SKAdNetwork postback window, or determining day X retention, there is a third option that suits all app verticals and monetization models. This approach employs machine learning to achieve a tailor-made LTV prediction for each individual app. In short, it works as follows:

   - Measure d0 user behavior as per the ATT framework.
   - Train a tailor made machine-learning algorithm to predict the dX LTV or dX user retention, or events performed by user on dX, per the ATT Framework.
   - A mapping of the predicted LTVs for the set of users and the corresponding 64 conversion values will then be produced.
   - This mapping is then used in SKAdNetwork campaigns and conversion values are updated according to the learnings of the algorithm.
   - The SKAdNetwork postbacks for the campaign provide a conversion value distribution that serves as an indication of the campaign LTV that can be expected.

TikTok best practices and recommendations

The optimal account set-up for iOS 14.5 +

PRODUCT	Advertiser account
IMPACT	Marketers should create dedicated iOS 14.5+ campaigns when using the App Install and/or Catalog Sales objective for app prospecting: • There is no requirement to create a separate, dedicated ad account for iOS 14.5+ app campaigns. • There is no limit on the number of ad accounts that can be used for dedicated iOS 14.5+ app campaigns.
RECOMMENDATION	• Use your existing TikTok Ads Manager account: Learnings from your account will help iOS 14.5+ campaign performance. • Use the same account for your iOS and Android campaigns: Learnings from Android campaigns will help with iOS 14.5+ campaign performance. • Streamline account management: it is highly recommended to use a single (or max 2-3) ad account for your 11 iOS 14.5+ campaigns. • Share the limit on number of campaigns per app with your agencies or resellers. Determine how many campaigns you want to allocate for agency usage vs. retaining for in-house management.

*Note: Impacts and solutions are subject to Apple's policy and implementation. Therefore, the comprehensive recommendation is to be determined and not fully disclosed here. Please consult your regional representative for updated information.

Best practices for campaign objectives

- Group countries, and consolidate lookalike and interest group audiences where you have similar bids or performances when measured by ARPU.
- Test and optimize creatives by using ad level SKAN reporting and leveraging TikTok's Automated Creative Optimization (ACO) to formulate the best combination.
- Delete or pause under-performing campaigns to free up iOS 14.5+ campaign slots.

The best approach for ad groups

PRODUCT	IMPACT	RECOMMENDATION
Multi-ad group of Dedicated Campaign	• Tiktok Ads Manager offers two ad group settings per dedicated campaign • Modeled reporting at the ad group level for both install and in-app SKAN events for multi-ad group campaigns	Adopt Lowest Cost bid strategy when running multi-ad group campaigns
App Install Ads optimizing for Clicks or Installs App Prospecting, optimizing for clicks or installs (DSA)	• iOS 14.5+.5 traffic cannot be reached from existing iOS app install campaigns that optimize for clicks or installs. • Deferred deep link will not be available for dedicated iOS 14.5+ campaigns. • New toggle button in Ads Manager will indicate your intent to create an app install campaign for iOS 14.5+ traffic. • Expect fluctuations in performance and cost.	Create dedicated iOS 14.5+ campaigns to reach iOS 14.5+.5 traffic. iOS 14.5+ campaigns will have new limits of 11 campaigns, with two ad groups per app (i.e. 11 campaign limitation spans across apps with multiple accounts).
App Install Ads optimizing for App Events	• iOS 14.5+.5 traffic cannot be reached from new and existing iOS app campaigns. • App Event Optimization (AEO) now supports iOS 14 dedicated campaign with optimization against events like Purchase, Registration, Add to Cart, Subscription and Achieve Level.	

App Event Optimization solutions

PRODUCT		BID STRATEGY AVAILABILITY	SUPPORTED EVENTS	AVAILABILITY
AEO for Dedicated Campaign	Install with in-app event	Cost cap	• Purchase • Registration • Add to Cart • Subscription • Achieve Level	The AEO feature will be made available automatically once the threshold is reached: • At least 1 unattributed or attributed event postback over the last 7 Days at the App ID level
	In-app event	Lowest cost	• Purchase • Registration • Add to Cart • Subscription • Achieve Level • View content • Checkout • Start Trial • Search • Login • Loan Application • Join Group • Complete Tutorial • Add Payment Info	

TIKTOK RECOMMENDATIONS

- Familiarize yourself with the dedicated campaigns AEO's functionality and threshold before activating it.
- Allocate the 11 dedicated campaigns between MAI and AEO wisely to prevent an insufficient quota of campaigns when AEO is needed.
- Due to the impact of ATT, the postback data delay under the dedicated campaigns can be substantial. Be patient after launching the campaigns, but please reach out to your representative if you have not received any event conversions after three days of the launch.
- Ensure your campaign is getting more than 90 installs per day to meet the privacy threshold in order to get postback for in-app events for all installs. Use the SKAN privacy withheld metric for your AEO campaigns to monitor the percentage of installs posted with null conversion values.
- To optimize bid setting, use the data from MAI for dedicated campaigns as a reference when starting AEO for dedicated campaigns.

App Profile Page

| PRODUCT	ABOUT	BENEFIT
App profile page for installs	App Profile Page is a native instant page that gathers promoted app information like app name, icon, ranking, promotion images, and description from 3rd party app analytics platforms automatically. It also allows you to edit some specific components to add more context to display their app information on this page. App Profile Page is designed to offer users an enriching experience with relevant app info, and helps you drive more conversions for iOS 14.5+ app campaigns.	App Profile Page is relevant for optimizing for installs and available with Lowest Cost and Cost Cap bidding bid strategy. App Profile Page can help you improve your delivery performance for iOS 14.5+ dedicated campaigns since it leverages onsite signals.

SKAN privacy threshold

- For campaigns optimizing for installs: This impacts reporting on in-app events as apps will not be able to track in-app events for all the users acquired from the campaign. There is no impact to performance of install optimization and measurement of SKAN installs.
- For campaigns optimizing for in-app events: This impacts both optimization and reporting for in-app events as our system gets limited data for the purpose of optimizing the performance of an AEO campaign. The impact is higher for apps that are further away from the preferred target of 90 installs per day.

TIKTOK RECOMMENDATIONS

Set a daily target of 90+ installs per iOS 14.5+ campaign. To see if your campaign is not meeting the privacy threshold, leverage the new null conversion metric, "App Install (SKAN Privacy Withhelds)". This shows if your campaign is seeing limited event postbacks due to campaign performance or because of the privacy threshold.

Even though SKAN VTA (view through attribution) is enabled by default, it's recommended to take these conversions into your measurement methodology since users often watch an ad and later convert without actually clicking.
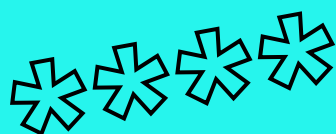
iOS 16 and beyond: Adjust's vision
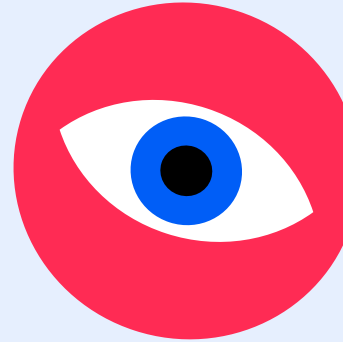
The changes brought about by Apple's privacy updates and rollout of iOS 14.5+ have been the cause of great upheaval for the mobile marketing industry but have not been as dire for user acquisition or attribution as many people expected. As a proud leader in this industry, we understand that iOS and Apple, along with all of our clients and partners, are constantly changing and evolving, and that the industry will continue to become more privacy-centric. We embrace these measures and work hard to remain at the forefront of developments to guarantee we're always offering the best products, solutions, and guidance to all those who work with us.

At WWDC in June, Apple announced a series of updates due to roll out with SKAdNetwork 4.0, which are aimed at improving app and web ad performance while maintaining user privacy. From changes to postback windows to hierarchical source identifiers and conversion values, we're excited to explore the opportunities these updates will bring and continue to provide next-generation measurement solutions.

From the announcement of iOS 14 until now, our approach has always been to ensure that we meet our clients' needs and empower marketers to make data-driven decisions with confidence. The definition of 'measurement' might evolve, but so does the value we deliver. While doing this, we also stand wholeheartedly by Apple in upholding the principles of user privacy and transparency. This philosophy focuses on embracing the new era of privacy-centric mobile marketing and creating industry-leading solutions that benefit all aspects of the app ecosystem—which has continued to thrive.

The proof is in the data. Overall opt-in rates are consistently climbing and marketers have managed to make the most of SKAdNetwork data to inform strategies that yield solid results. As the market continues to mature, not only will we see more consolidation, but a desire for a more fully integrated tech stack that allows for more automated and efficient mobile growth. Adjust offers solutions to our clients that encourage intelligent use of the data that is available to them, working with Apple, and always putting data-privacy first.

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ABOUT ADJUST

Adjust is the mobile marketing analytics platform trusted by growth-driven marketers around the world, with solutions for measuring and optimizing campaigns and protecting user data. Adjust powers thousands of apps with built-in intelligence and automation, backed by responsive global customer support.

Adjust is a subsidiary of AppLovin (Nasdaq: APP), a leading marketing software platform providing developers with a powerful, integrated set of solutions to solve their mission-critical functions like user acquisition, monetization and measurement. Learn more about Adjust at

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ABOUT TIKTOK FOR BUSINESS

TikTok for Business aims to create a home for brands and marketers to be creative storytellers and meaningfully engage with the TikTok community. Our growing suite of advertising solutions delivers across every marketing touchpoint, enabling advertisers of any size to unlock real-world opportunities and drive business results.

www.tiktok.com/business