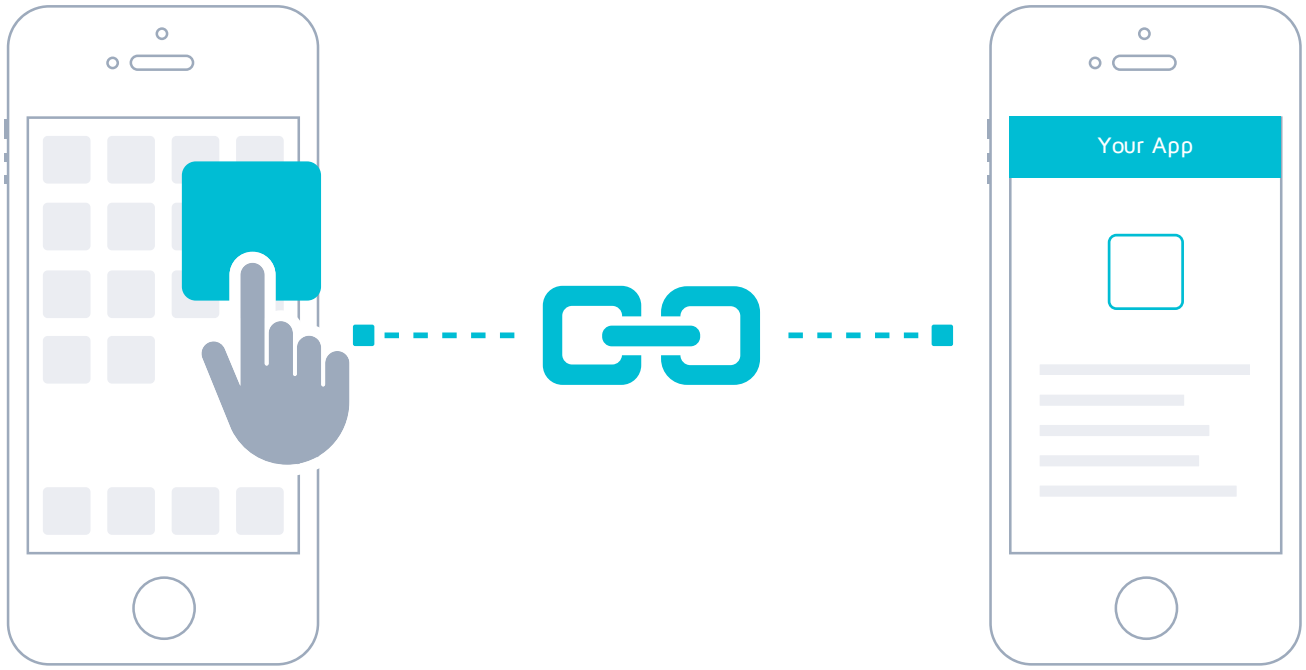


adjust's complete guide to mobile deep linking

A look into deep links: what they are,
how they help, and a little on how they work

Deep links: An introduction

It all starts with a click, and ends with an app. In an increasingly complex mobile ecosystem deep links are one of the simplest ways to direct users along a smooth journey, even while the tech underneath it all is incredibly sophisticated. For many marketers, this can seem the opposite way around. Deep links sound much, well, deeper than in fact they really are, and they might even seem more difficult to understand, and implement, than they can be. As one of adjust's core products, we want to explain what deep links are, and how they work in the real world.

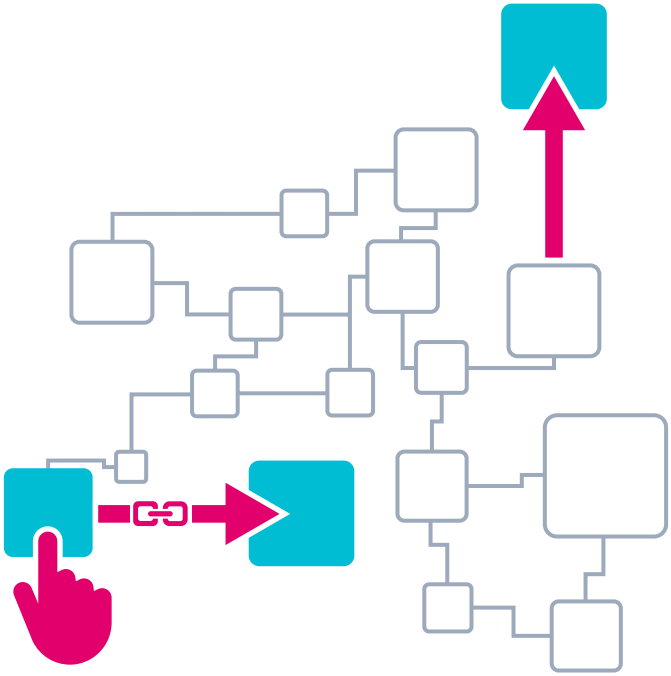
What are deep links?

Deep links are a means to identify, capture and convert users on to specific content, normally within apps, connecting the mobile web seamlessly, reducing user friction.

Essentially, deep links send users to apps on their own device, as opposed to another website, or to a store such as the Google Play Store or App Store. Deep links are cleverly built into the operating system, so creating them is fairly simple. It all depends on where you want to send the click.

Deep links start with a custom phrase that specifies a target for smartphones to open. Instead of an http:// protocol, deep links can begin with your-app:// (as an example.) iOS and Android terminology slightly differs, but the effect is the same. On iOS a deep link specifies a "custom URL scheme", and on Android an "intent URL." Both will open the app if it is already installed.

In most cases, for deep linking to be successful, the app needs to be installed first, but you can create conditions where the click will divert somewhere else (such as, to the App Store) if the app is not yet on the system.



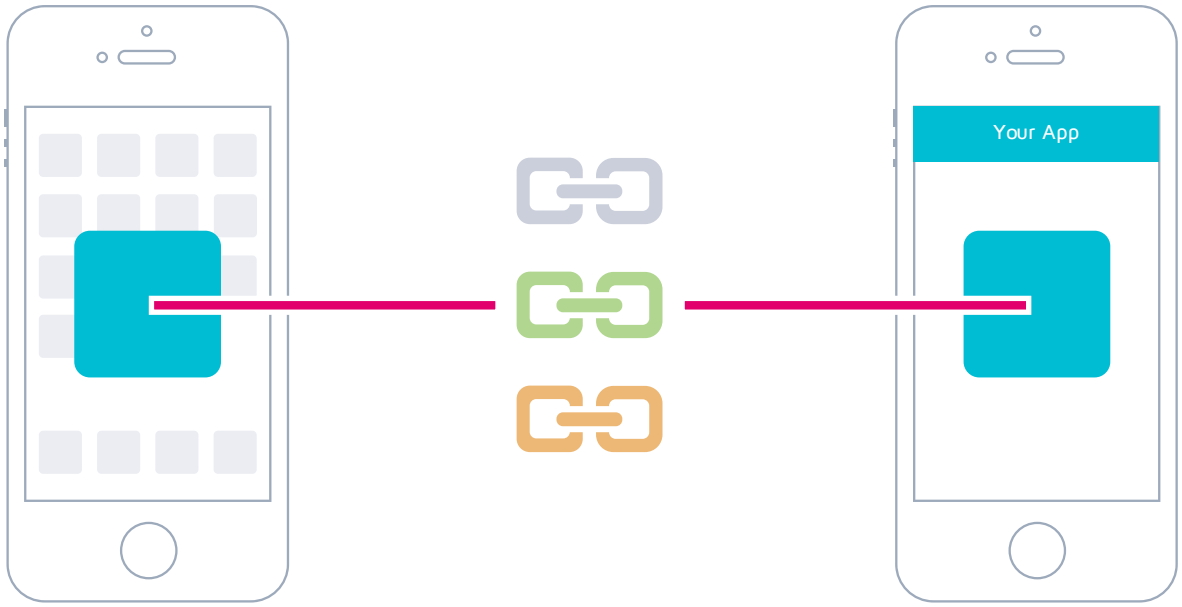
Why do deep links exist?

As said, deep linking makes moving along a purchase funnel (among other user experience criteria) that much easier for users, but it also means that advertisers have a bigger benefit when it comes to retargeting campaigns.

For example, let's say that we want to run a campaign promoting Christmas gifts to get shoppers onto your e-commerce app. In your campaign, you feature "Christmas gifts" as a category, previewing your stock, but you would like shoppers to view the items on your app, as opposed to a website (locking them into the app experience). This is where deep linking comes into play. With it, you'd have a deep link that, when clicked, opens the app and shows the product straight away.

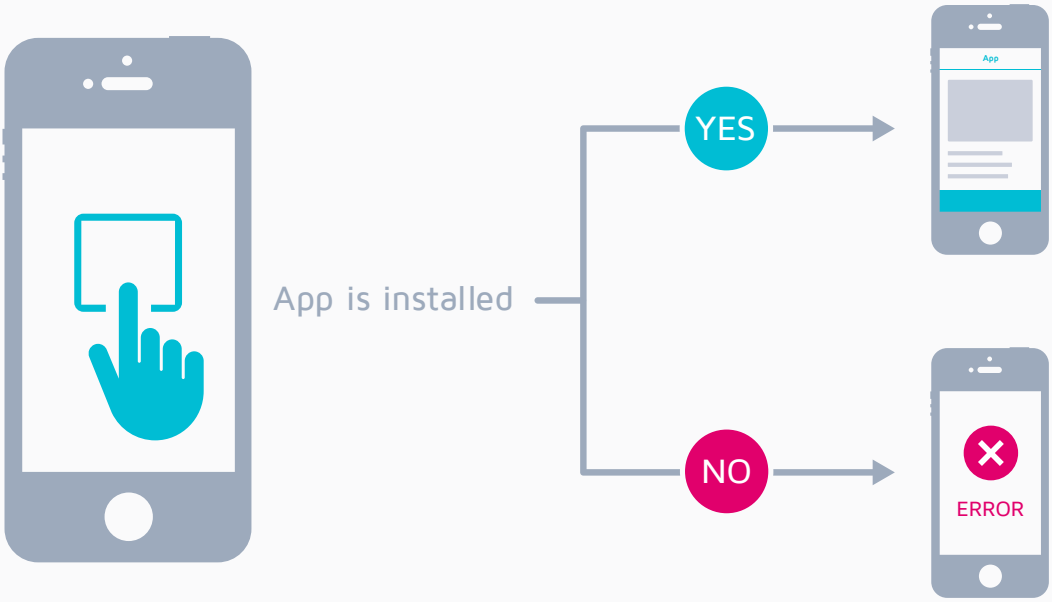
Retaining users and keeping them in one place is a key focus of deep linking. It has a number of benefits from associating brands to a great shopping experience, to keeping your target audience far away from the competition. But mainly it's all about providing users with the best experience possible, and on a smooth rather than fragmented buyer journey.

The same works for re-engaging inactive users, or directing users to specific offers through campaigns on different parts of the web. Deep linking provides a more versatile method of directing users through your mobile ecosystem, creating a seamless user experience which can increase your conversion and retention rates.



There's not just one, but three kinds of deep links

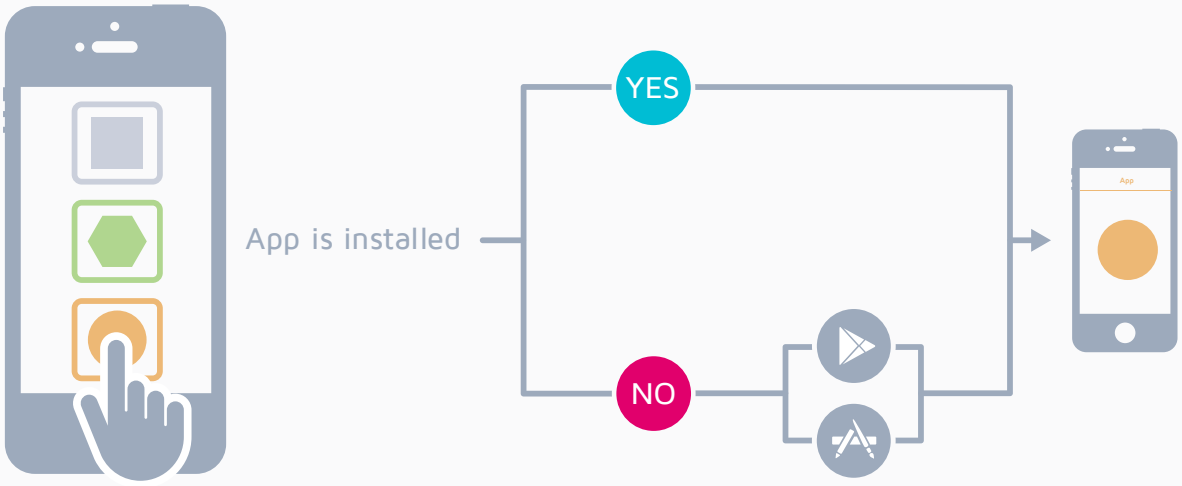
With the basic concepts behind us we can get a little more technical, but only just. It may come as a surprise, but there are three kinds of deep links, namely default, conditional and contextual. All three have their use, and some are more dynamic than others. Here's a quick rundown of the three, to give you a better grasp on the differences.



Default

Default deep links keep it simple: they only redirect users to an installed app. If the app is not installed, an error message pops up, as the link can't reach the intended endpoint. Most importantly, they only open the app itself - no specific pages, and no special offers.

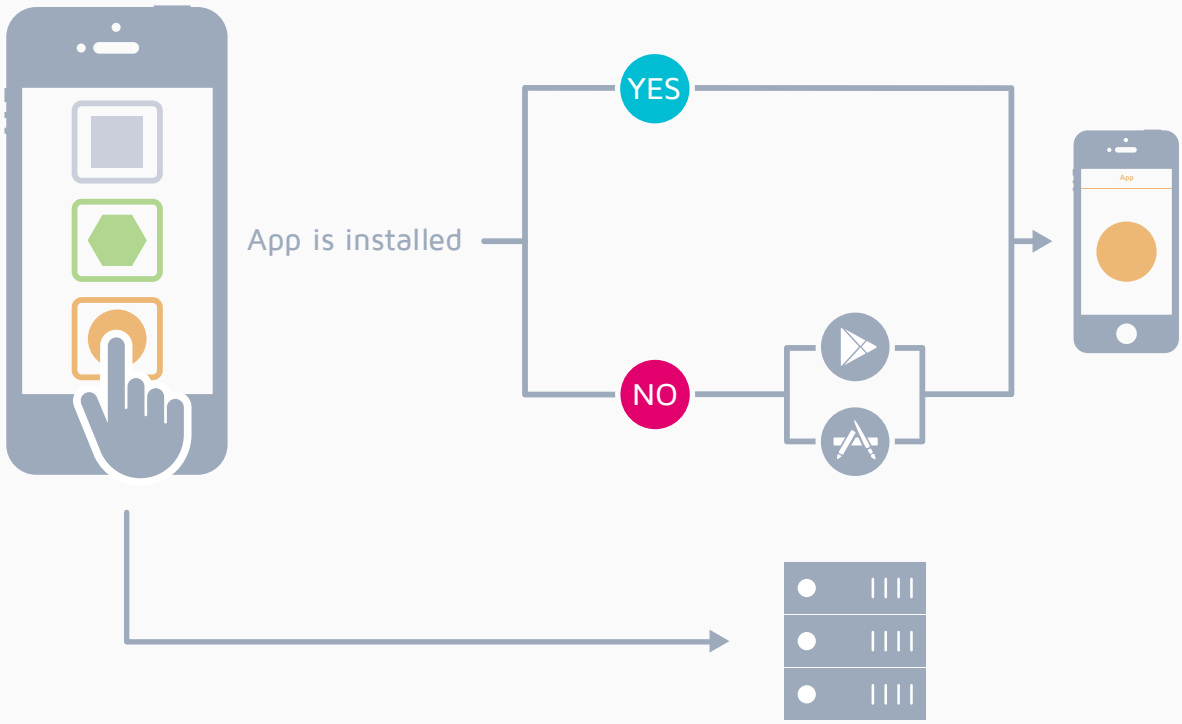
Their usage is two-fold. The first is that they're simple to create. The second is that they're very useful for specific retargeting campaigns, where you just want to find users who already have the app, and want them to return. For most other kinds of deep linking, you may want to look into making deep links more contextual or adaptive, as we'll look at in the next section.



Conditional

Conditional deep links behave slightly differently to default links, and this mainly centres around redirects. If the app you're linking to is already installed, a conditional deep link goes straight to the app. However, if the app is not installed, then the link redirects to a store for the app to be downloaded, or to a website for more information.

If (and when) the app has been downloaded, the user can be taken to specific content immediately, as a conditional deep link remembers the original link. The opening of specific content is deferred until after install.



Contextual

Contextual deep links combine functionality of default and conditional deep links while adding a little more to the mix. Essentially, contextual deep links store lots of information - not just about where a user wants to go within an app, but also where the link was clicked, who originally shared the link, or the value of a discount for a user with that link. Contextual deep links are more powerful than most web links when it comes to this feature alone. You can also build features beyond simple linking, such as personalized welcomes (where you see your friend's recommendation in the app if they share an item with you).

Default, conditional and contextual: why aren't they all just the same?

It's a valid point, because after all, wouldn't it just be better for all links to be contextual, and be done with it? Well, perhaps, but it's the implementation that's the most difficult, as well as where to store all the data that contextual deep links can retrieve. Each deep link has its place: default deep links are great for retargeting campaigns for those you know have the app already, whereas conditional links offer a mix for new advertising. Because of the sophistication of contextual deep links, they may only really be used for highly co-ordinated campaigns, not necessarily for simple banner ads and such. Also, creating the URI structures themselves can be a tricky task, as we'll see in the next section.

A note on iOS' 'Universal Links'

Just a quick mention of iOS' Universal Links, since we haven't covered them already. Universal Links are Apple's way of launching apps on their OS from a browser, where a web page can also be opened inside an app through the same link. The method uses traditional HTTP links, just like opening a website. They offer the same functionality as deep links, but are just the Apple iOS equivalent, and are implemented into the background, even if the implementation itself is similar to a standard deep link.

Constructing deep links

Deep links come in different shapes, sizes, and formats, and they can be incredibly useful for keeping users retained, and great for getting them back to your app. But how do they actually work?

Deep link structures

So, what do deep links look like? A little like this, in fact: app://page. This structure is known as a URI, and although similar, it is quite different to a traditional URL which looks like this: `https://site.com/page`.

Let's look at a few examples of URIs as used by different apps:

Ecommerce

Deep link	Purpose
`ecommercebrand://`	Opens the app
`ecommercebrand://cart`	Opens the app to the shopping cart checkout screen
`ecommercebrand://product/SK55`	Opens the app to a particular product ID

Gaming

Deep link	Purpose
`game://`	Opens the app
`game://itemoffer/33`	Opens an offer
`game://user/87653732HA`	Opens user profile

Music

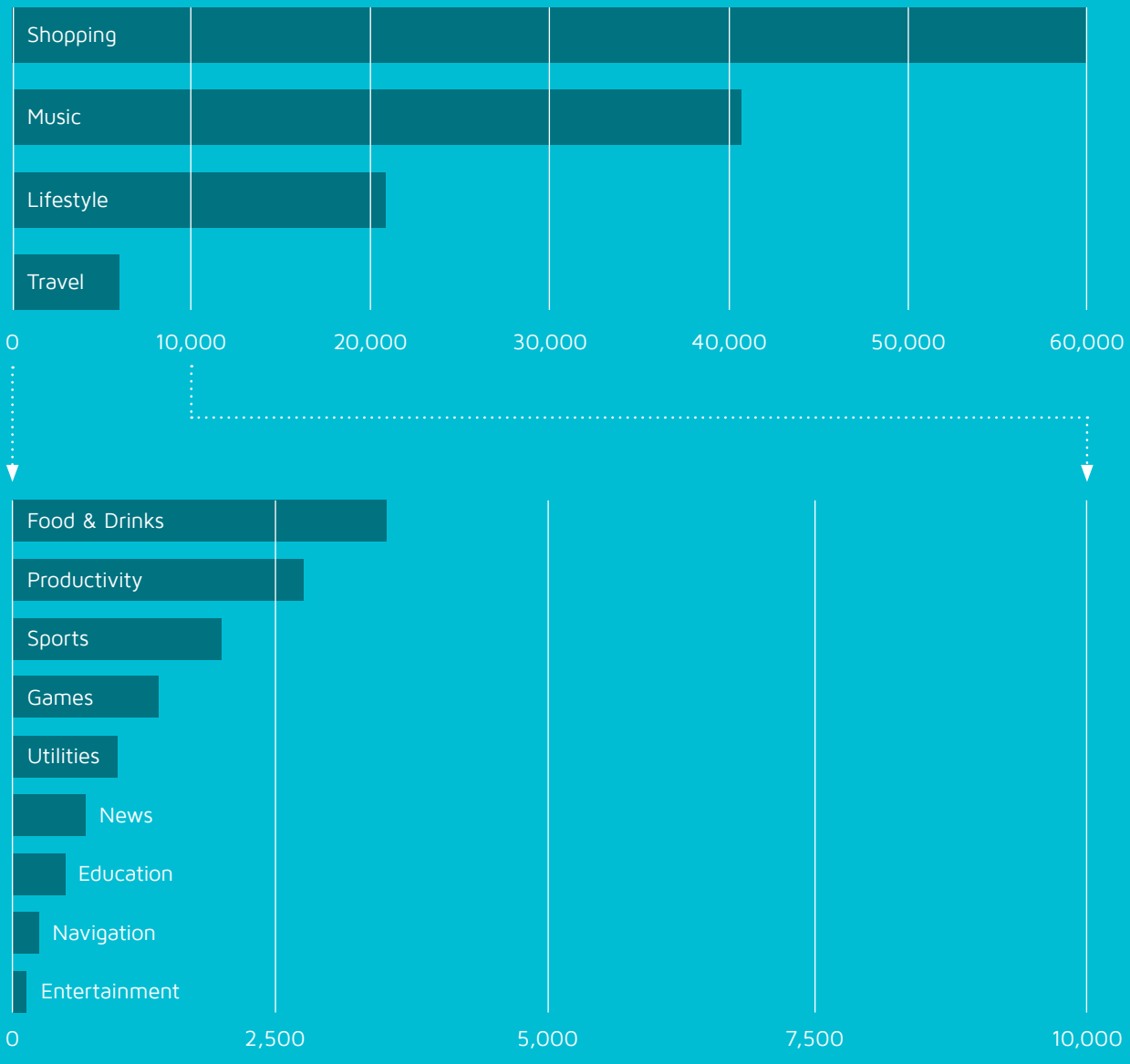
Deep link	Purpose
`music://`	Opens the app
`music://playlist/30345`	Opens a playlist
`music://radio`	Opens radio in-app

How do apps get the most out of deep links?

There are several kinds of verticals that have the potential to use deep links in all sorts of creative ways, from clever organic search listings to big paid campaigns. For instance, say you want to promote a new song via Spotify - a paid listing on a search engine could direct mobile users straight to the song within the app, as opposed to a web player. Or, if you want to boost Instagram interaction as an ecommerce app, link to pictures of your clothing on Instagram from the product page, and vice versa.

The breakdown behind the links

Not every vertical is as locked-in to the use of deep links as others, and though popularity is rising, it's worth considering where you are within the market before pressing forward with using deep links. We do have that data for you, which shows the split of deep linking popularity between categories:



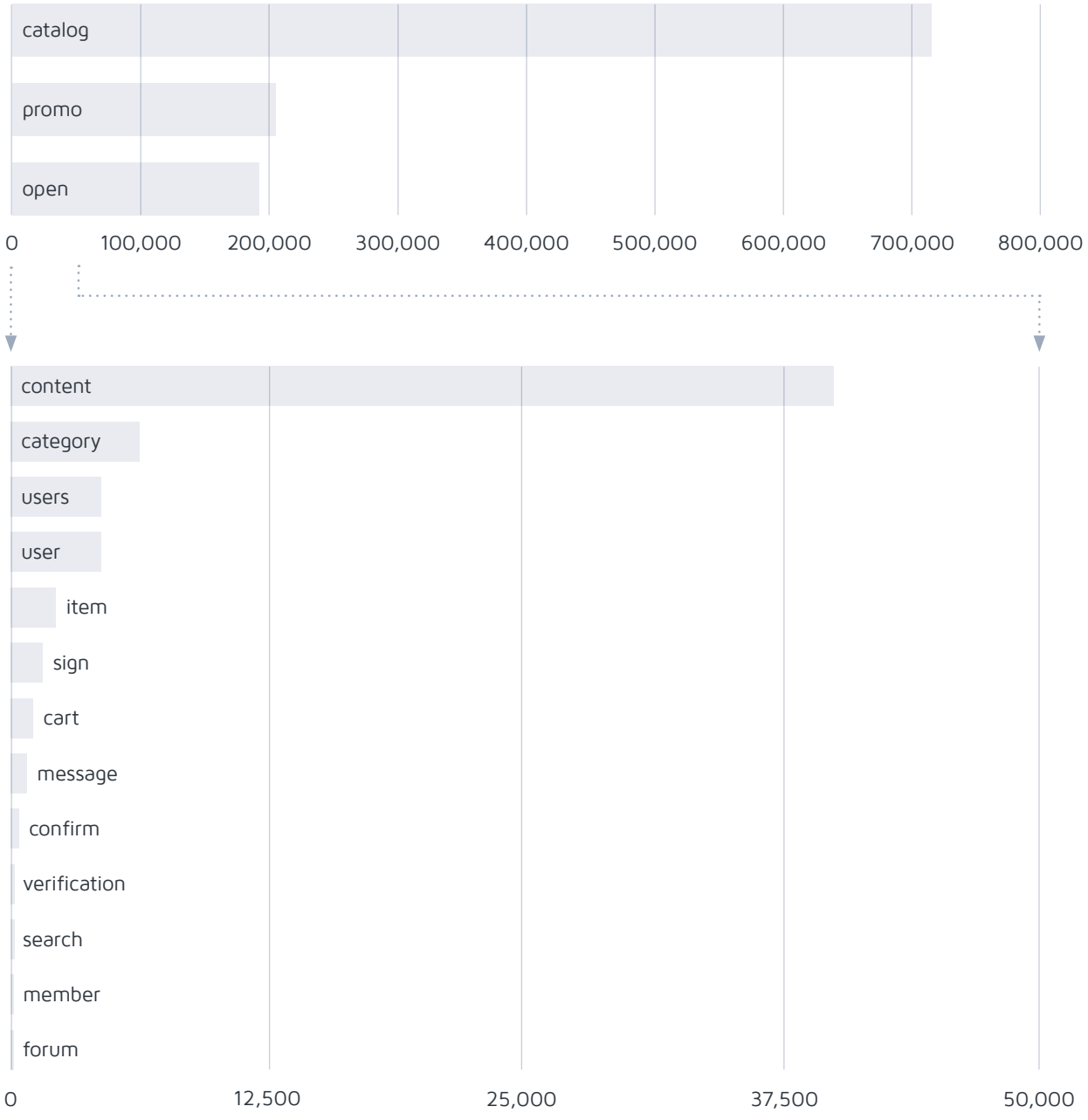
Clicks over a 24-hour period

As you can see, our data displays three dominant categories within the app store: shopping, music and lifestyle. Travel apps are a distant fourth compared to these three, with other sectors trailing off dramatically.

It's perhaps surprising that shopping apps dominate, but then again, within organic search the ease by which a purchase can be completed through the use of deep linking highlights the importance of the function. With music, promoting new artists is made much easier through a link to Spotify, Google Play, or Apple Music.

But that's not all the story: after all, what kinds of content do deep links point to? Across categories, the most obvious might be pure promotional material, but most popular are in fact links to catalogs (combined with the popularity and perhaps ecommerce apps' mastery of deep linking, this should come as no surprise.) However, pure app opens are still a popular use of deep linking, perhaps indicating the lack of familiarity with deep linking for many app marketers. For a full breakdown, the next chart shows how deep links are used across 16 different use-cases.

Popularity of deep link types by click

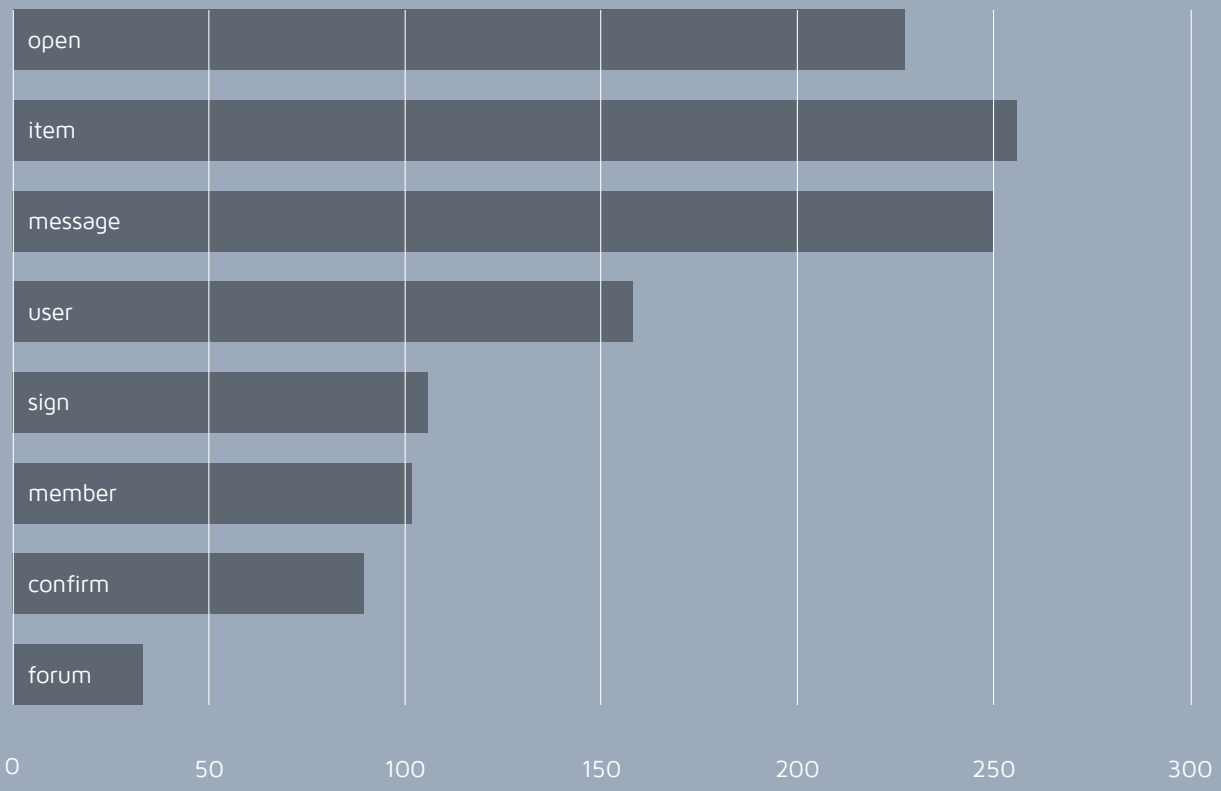


Clicks over a 24-hour period

A nod to games

Although gaming users click deep links less than other verticals, "Games" has a hugely diverse range of actions that extend beyond opens, catalogs and sign-ups. From messaging, to items (and item offers), games have extensive deep linking potential, and tied with a prominent PPC or SEO strategy deep links could reap huge rewards for both app makers and gamers.

Gaming deep links



Clicks over a 24-hour period

As you can see, the most popular links reward users with items. Incentivizing users has always been a means to boost re-engagement, and is heavily used by the gaming industry in all kinds of creative ways.

adjust and deep linking

With all that being said, we haven't even touched on how easy it is to set up deep links within the adjust platform. We are, in fact, able to set deep links up for you. Our typical structures are conditional deep links: when users click a link, the adjust SDK checks if a user has the app installed on their mobile device. If they don't, adjust's links can defer users to wherever you would like, not just the App or Play Store. Once a user has installed your app, we'll further direct them to a specified location within it. This makes setting up deep links, and monitoring them, super easy to do compared to doing it all yourself.

If you want to know exactly how to implement them, we have some resources for you, both in the docs and on the blog.

For an entire overview of adjust deep link implementation, click here.

For a further deep dive, click here.