

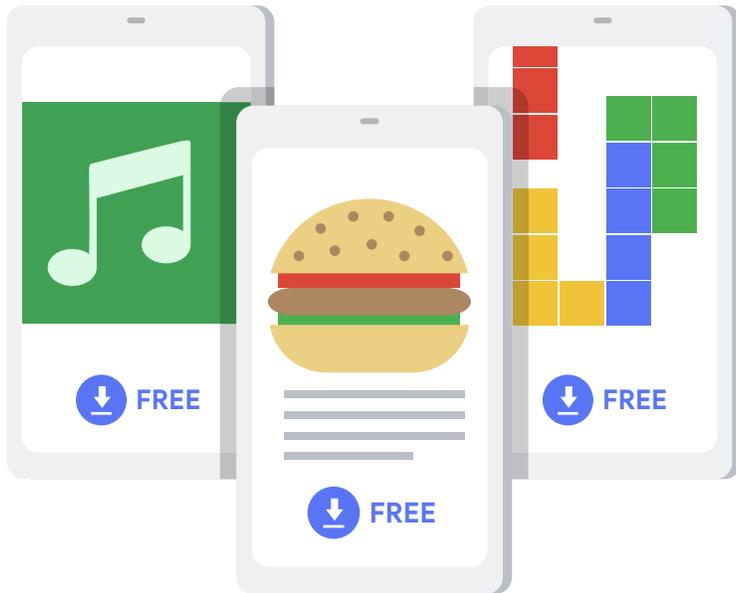
The No-Nonsense Guide to In-App Advertising

Learn how to make money from your app
with advertising and how to get started.

Contents

Introduction	3
Chapter 1 The big picture – how an app business makes money from advertising	4
Chapter 2 How pay-per-click advertising works	7
Chapter 3 What’s an ad network?	9
Chapter 4 How to choose the right ad network for your app	12
Conclusion and next steps	17
Glossary of advertising terms	20

Introduction



A clear trend is emerging in the world of smartphones – people want free apps. According to data from Statista, only about 5.8% of the apps downloaded in the Google Play Store are paid for.¹

As free app downloads grow, developers want to know the best way to sustainably fund their businesses. In our [last guide](#), we covered all of the different monetization models an app could use to make money. One model that fits with the free app trend is in-app advertising.

Making money from in-app ads has become a huge opportunity and many of the world's most popular apps rely heavily on in-app advertising to earn income. Companies like PicsArt and Trivia Crack have hundreds of millions of downloads of their free apps each and use advertising as a major revenue source. AppAnnie predicts that the in-app advertising market will reach \$201B by 2021.²

In this guide, we'll walk you through an overview of how app businesses make money from ads, cover key industry terms, and suggest the best way for you to get started.

This guide covers:

Key advertising concepts like eCPM, fill rate, demand, and inventory

How pay-per-click advertising works

A basic explanation of ad networks and how they can help you monetize your app

How to choose the right ad network for your app

Chapter 1

The big picture – how a business makes money from advertising

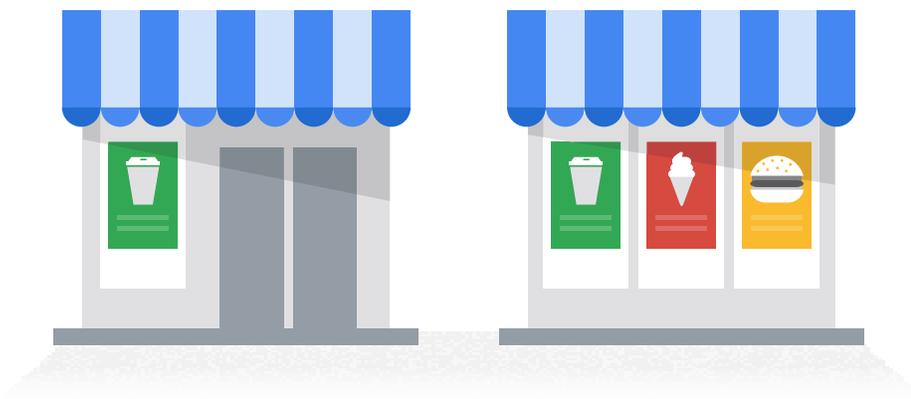
Chapter 1

The big picture – how a business makes money from advertising

The digital advertising industry shares a lot of basic principles with advertising in the physical world. Let's use an analogy to cover some fundamental concepts.

Imagine you own a popular cookie shop on a busy street. Thousands of people see your storefront everyday. It's common for people to buy cookies and enjoy them on benches right in front of your store. Because your store window is seen by so many people, there might be an opportunity for you to place ads on it to make extra revenue.

Your next step is to take out your trusty measuring tape, examine your window, and see exactly where ads could go. Your window is pretty large, you could use the big space to display one huge ad or divide it up to show several smaller ads. In the advertising business, the space you have available to sell to an advertiser is called "inventory."



Inventory:
The advertising space you have available for sale

Now that you've determined what inventory you have available, it's time to sell your space to interested advertisers. You put together a flyer and start knocking on doors. Of the 20 businesses you approach, eight are interested in buying your ad space. In the advertising industry, the businesses interested in advertising on your space is referred to as "demand."

The big picture – how a business makes money from advertising



Demand:
Businesses interested in advertising on your space

As a mobile app developer, your app is similar to that busy storefront:

- ✓ You have people visiting your app every day
- ✓ Your app has available space where ads can be displayed
- ✓ There are other businesses who want to advertise to your users

But unlike the busy storefront analogy, your app is digital. Being digital brings you several big advantages. In the physical world, it's very difficult for a store owner to precisely measure how many people have looked at his or her ads. It's also hard to measure how many people have visited a store because of its ads, and real storefronts are limited in the types of creative ad formats that can be used. In the next chapter we're going to look more closely at how the digital advertising industry works and what that means for your app.

Chapter 2

How Pay-Per-Click advertising works

How Pay-Per-Click advertising works

For mobile apps, the advertising industry doesn't only offer a model where advertisers pay to display an ad. They also have a pay-per-click model (or PPC model), where advertisers only pay when someone clicks on their ad. If a user sees an ad but doesn't click on it, advertisers don't pay. It looks like this:

Pay-Per-Click (PPC):

When a digital advertiser only pays a publisher every time a user clicks on their ad.



Pay for Display Model:

In this example, you could imagine that just to put up a billboard ad along a busy road could cost the advertiser hundreds of thousands of dollars a year. Although the ad is for dog food and intends to target dog owners, it'll be shown to every person who drives by – dog owner or not. And regardless of how well the ad performs for the business, the advertiser must still pay the full price of the billboard.



Pay-Per-Click Model:

In this example, you could imagine the ad displayed in a popular app costs the advertiser \$2 per click. Just displaying the ad doesn't cost anything. The advertiser only pays when someone clicks on the ad. Because it's displayed digitally, the advertiser can reach different audience segments.

The PPC model aligns the interests of advertisers, app developers, and users. As digital advertising has matured, additional “pay for performance” advertising models have emerged like “pay per download” and “pay per acquisition”, all designed to better align interests.

But what's the best way for you to start monetizing your app with ads? Offering PPC advertising on your app would require a lot of technical work to facilitate. Also, it would require a lot of resources to market your app to advertisers.

The best and simplest way to get started with advertising is to partner with an ad network. In the next chapter, we'll explore what an ad network is and how it can help your app business.

Chapter 3

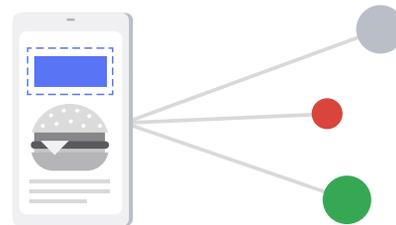
What's an ad network?

What's an ad network?

Ad networks do the hard work of bringing together the parties that participate in digital advertising, making it simpler for everyone involved to succeed. They build relationships with businesses looking to advertise and apps looking to make money by selling ads inventory. Through an ad network, advertisers can get access to lots of different inventory in apps at scale. And they also help app developers find advertisers quickly. As app owners, you can spend less time marketing your advertising space and more time focused on creating the best app for your users.

Take a look at this simplified illustration showing how an ad network works:

1 You have a popular app with open advertising space. Instead of going out and making direct deals with potential advertisers, you opt to use an ad network. Behind the scenes, the process is automated. You've already installed the ad network's SDK and their API makes a call to their servers.



App: Hey ad network. Can you find advertisers for me? I have open inventory.

2 Based on criteria you've chosen in the ad network's interface, the ad network finds demand and serves the ads into your app. It uses the criteria -such as price, format, and content - to match the right type of ads with your app.



Ad Network: Sure! I'll make sure to find a great ad for you that fits your criteria.

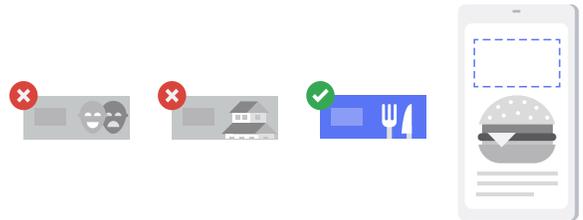
3 Several of the network's advertising partners are interested in your ad space. To determine which ad to show, the ad network typically holds an auction.



Ad Network: Hey advertising partners! There's available ad space for you on this really popular app. Anyone interested? Let's do an auction.
Advertiser 1: I'll pay \$1.34 per click.
Advertiser 2: I'll pay \$2.15 per click.
Advertiser 3: I'll pay \$8.00 per click.

What's an ad network?

4 The ad network doesn't choose the winner solely on price. They instead consider which advertiser is most relevant to your user base, type of app, and price. They serve the overall winning ad to your app. The ad being shown is considered an "impression".



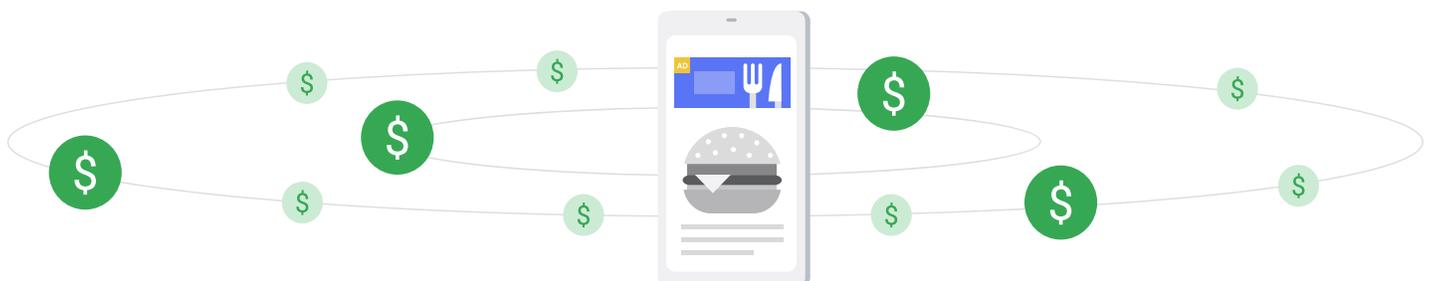
Ad Network: This ad seems like the best fit for you. Here you go!

5 The user finds the ad useful and interesting and clicks on it. Success! The user finds a cool new product. The advertiser gets a potential new customer. And you share profit with the ad network.



User: This is interesting. I'd love to check this out. *Click*

And voila - your app generated revenue from ads. All of this happens very quickly, usually in less than a second. It's important to remember that not all ad networks are the same. Some networks focus on price and getting an ad in front of as many people as possible. Others care more about the quality of their advertisers. Some include extra features to help you with other parts of your business. Others keep their SDK as lightweight and easy to implement as possible. There are a lot of options, and a lot of factors to consider. How do you choose the right ad network for your app? In the next chapter, we'll explore this question in more depth.



Chapter 4

How to choose the right ad network for your app

How to choose the right ad network for your app

As we mentioned before, there are lots of different ad networks and factors to consider. Here are a few questions to kick off your evaluation process.

1. How much revenue can the ad network bring you?

To do this, you need to look at an ad network's "effective cost per mille" or eCPM for short (mille means 1,000 in Latin, referring to 1,000 impressions). In theory, the industry uses this metric as a standard measure to compare different networks' revenue potential. eCPM is calculated by dividing total earnings by total number of impressions in thousands and will give you a standard to compare different ad networks' payouts.

$$\frac{\text{Total Earnings}}{\text{Impressions}} \times 1000 = \text{eCPM}$$

For example, if an app developer used an ad network that served 1,000,000 impressions and made \$10,000, that network's eCPM is \$10.

$$\frac{\$10,000}{1,000,000} \times 1000 = \$10.00$$

While eCPM is really important in evaluating an ad network, it shouldn't be the only factor you're looking at. It's possible for an ad network with a higher eCPM to earn you less money than one with a lower eCPM. The next consideration will explain another metric that will help put eCPM into context.

eCPM:

eCPM stands for "effective cost per mille" and is calculated by dividing total earnings by total number of impressions in thousands

How to choose the right ad network for your app

2. How much demand does the ad network have available?

In addition to eCPM, it's important to evaluate an ad network's "fill rate". Fill rate is the number of times an ad network delivers an ad to an app divided by the number of times that app requested an ad.

$$\text{Fill Rate} = \frac{\text{\# of ads delivered}}{\text{\# of ads requests}}$$

For example, if an app requests an ad from a network 10 times, but the ad network was only able to find and deliver 8 ads, that network's fill rate is 80%. It's important to look at both eCPM and fill rate in context of each other. If an ad network has a really high eCPM but a low fill rate, they may make you less money overall.

	Network A:	Network B:
Impressions:	200,000	200,000
eCPM:	\$5.00	\$2.50
Fill Rate:	25%	90%
Total revenue:	\$250,000	\$450,000

Fill Rate:

The number of times an ad network delivers an ad to an app divided by the number of times that app requested an ad

Network B made much more money with a lower eCPM but higher fill rate.

How to choose the right ad network for your app

3. What experience will the ad network provide your users?

What type of ad formats does the network provide?

Ads that are unengaging and an aesthetic mismatch from your app can ruin your app's user experience. Below is a list of common ad types. Be sure to check if the ad network you're considering has the formats that fit best with your design and user flow.

Types of mobile ads:

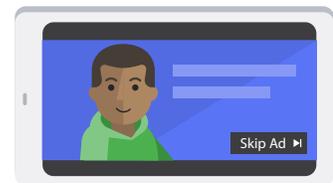
Banner ads: Banner ads appear at the top or bottom of users' screens and usually expand to full screen when tapped.



Interstitial ads: Interstitial ads, also known as full-screen ads, appear in your app at natural breaks or transitional points.



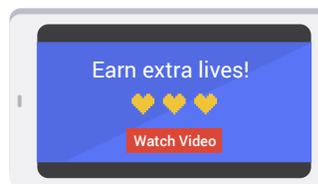
Video ads: Video ads feature engaging videos, allowing the users to expand the video when tapped. With [Google's TrueView ads](#), users can skip the video after 5 seconds.



Native ads: Native ads give you the flexibility to alter the ads to match your app's look and feel as well as its function. With this ad type, you'll receive a JSON file with the appropriate content for your own customization.



Rewarded ad: With rewarded ads, users can play games, take surveys, or watch videos to earn in-app rewards, such as coins, extra lives, or points. They're only served after a user has chosen to view a rewarded ad, putting the user in control of their in-app experience. You can specify the reward values associated with the ad units in your app and set different rewards for different ad units. Users will receive the reward for interacting with the ad without needing to install anything.



How to choose the right ad network for your app

What's the quality of the advertisers on the ad network?

Your users will have a poor app experience if the ads they see are irrelevant to them or aren't compatible with their values. This is known as "brand-safe advertising" – making sure the ads support, not damage, your brand.

Below is a list of questions you can consider asking the ad network to help you make an informed decision:

- ? What filtering options do they provide?
 - ? How sophisticated is their audience targeting?
 - ? How easy is it to cap the number of ads shown to a user at any given time?
 - ? What languages do they support?
 - ? How much demand is available to you that best fits with your app's audience?
-

How good is the ad network's technology?

Make sure the ad network you're considering has technology that you can rely on. When evaluating this, start by looking at its software development kit (SDK). Is it lightweight and well-tested? Is it easy to implement with good documentation in case issues surface? What customer service options does the network provide?

You'll also want to look at the ad network's interface and analytics dashboard. Is it easy to use and set up? Does it provide useful insights to help you grow your business?

How quickly and easily does the ad network pay you?

Every ad network has a different system and timeline for paying its inventory partners. When evaluating a network, be sure to look through what their payment process is like and if that process works well for you.

Conclusion and next steps

How Google AdMob can help you earn more:

If you're ready to get started with in-app advertising, Google AdMob provides a comprehensive and robust ad platform that can help you earn more, improve your user experience, and scale quickly.

AdMob is used by more app developers than any other ad platform worldwide. We have 650,000 apps using our network to monetize each month, requesting over 300 billion ads, and paid out over \$1BN to developers. Check out how our platform can help build your app business:



Maximize lasting app revenue

- Reach millions of advertisers worldwide
- Easily earn lasting revenue with powerful technology like **mediation** and **Open Bidding**



Get the answers you need to grow your business

- Gain unique insights directly in your dashboard to find your most valuable players and optimize their lifetime value, powered by Google's advanced machine learning capabilities
- Preserve user experience and show relevant ads to the right users with special features such as **AdMob smart segmentation**



Keep users happy and engaged

- Engage your users with a variety of innovative **ad formats** like video ads, interstitials, rewarded ads, and native advertising that seamlessly integrate with your app



Get more done faster

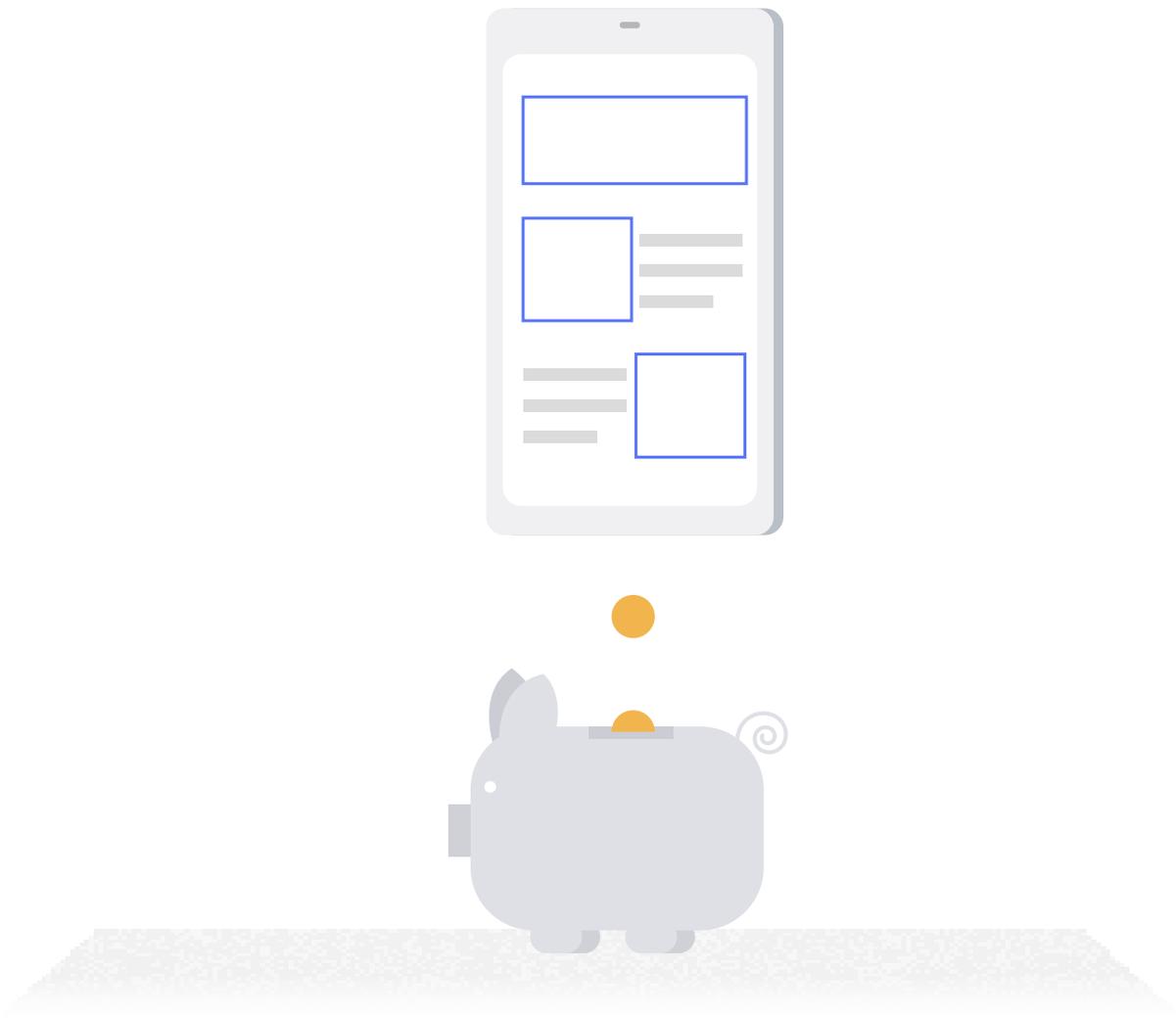
- Create a brand-safe advertising environment with strong advertising policies and publisher controls
- Efficiently test your app to display ads so you don't miss out on revenue with our Admob Mediation Test Suite

What's next

We hope that you've enjoyed reading this guide on ad monetization. Now it's time to get to work. To get started, check out the [AdMob Mobile Garage video series](#) with all you need to know about setting up your account.

Please feel free to share your progress with us on [Twitter](#). For more information on app monetization best practices, tips, and success stories, check out our [YouTube](#) channel and [blog](#).

Best of luck!



Glossary of advertising terms

Inventory: the advertising space you have available for sale.

Demand: the businesses interested in advertising on your space.

Pay-Per-Click (PPC): when a digital advertiser pays an app developer every time a user clicks on their ad.

Impression: whenever an ad is fetched and shown in an app. An ad being shown is considered an impression regardless of whether the user clicks on it or not.

eCPM: stands for “effective cost per mille” and is calculated by dividing total earnings by total number of impressions in thousands.

Fill Rate: the number of times an ad network delivers an ad to an app divided by the number of times that app requested an ad.

Banner ads: A basic ad format that appears at the top & bottom of the device screen.

Interstitial ads: Full-page ads that appear at natural breaks & transitions, such as level completion. These ad formats support video content.

Rewarded ads: these ads reward users for watching short videos and interacting with playable ads and surveys. Good for monetizing free-to-play users, and they support video content.

Native ads: This customizable ad format matches the look & feel of your app. Ads appear inline with app content. They also support video content.

Brand safety: Google works hard to maintain a brand-safe environment for advertisers and publishers to buy and sell ad space. Google display ads provide a safe marketplace across audiences and locales, so you can rest easy knowing your brand is in good hands from the get-go.

ABOUT GOOGLE ADMOB:

Google AdMob is a leading mobile advertising platform, trusted by more than 650,000 apps worldwide. Since 2006, AdMob has helped developers grow successful app businesses with rich ad formats, ad mediation and industry-leading fill rates. With Google Analytics built into AdMob directly, developers can measure app performance and segment users to monetize intelligently.

Sources:

1 <https://www.statista.com/statistics/266211/distribution-of-free-and-paid-android-apps/>

2 <https://www.appannie.com/en/insights/market-data/app-advertising-spend-2021/>

© 2019 Google LLC. All rights reserved. Google and the Google logo are trademarks of Google LLC. All other company and product names may be trademarks of the respective companies with which they are associated.