

Making money from your app

What are the different ways to make money from your app? Here we explore different business models and new ways that app developers are solving the problem.

Evolving trends in monetization

The Google Play Store amassed 50 billion downloads by mid 2013, a mere five years after the first Android app was downloaded.[18] That's been driven by the wide choice of useful and entertaining apps, but also the diversity in how apps are priced. How apps earn money now versus only a year ago has changed considerably, and these trends should influence your monetization strategy.

The rise of free apps

It's telling that the top ten grossing apps across both major app stores are free. Users have embraced free apps, and Gartner reported that 89% of all apps downloaded in 2012 were free.[19] AppBrain's analysis of the Play Store indicates that 82% of apps are free out of the 860,000 apps available.[20]

Growth of in-app purchases

This type of monetization is forecast to account for 64% of app revenue by 2015.[21] AdMob surveyed game-playing smartphone users, to ask them what percentage of their recent spend on gaming apps could be attributed to in-app purchases. Respondents in the US indicated that up to 89% of their gaming spend was on in-app purchases, and the other markets surveyed were at a comparable level.

Ways to monetize

How you monetize depends on the type of content you're offering and how users engage with it. We recommend that you think about monetization as you're creating your app, not as something you plan to figure out later on. You'll want to come up with a solution that's right for you and makes sense to your users. We've outlined the different monetization options below; you don't need to settle on one, consider mixing and matching business models to meet the needs of different users of your app.

Tuyen Nguyen, Mobile Developer Advocate at Google, believes developers need to be flexible in their approach to monetization: "Developers should evaluate frequency of use and potential download volume. For example, if they build a utility app that users open once a week, then ads may not provide the highest monetization opportunity. However, if your app experiences high usage frequency, then ads can provide great revenue potential, since revenue tends to grow as impressions increase. Developers will have to weigh the opportunity cost of an upfront payment (paid downloads) against future revenue opportunity that comes with monetization models such as in-app purchase, freemium or ads. It's important to remember that monetization models can be complementary, rather than competing, if employed correctly."

Paid apps

One of the first apps available on the Apple App Store was offered for sale for \$999.99 and[22] unsurprisingly, there were not many takers. Today, even really good apps priced at \$0.99 can meet resistance from consumers; as evidenced by the rise of free apps.

AdMob surveyed mobile apps users in the US, UK, Japan, South Korea and China, asking if they would be willing to pay for an app. In all markets except China, the majority of respondents said they only download free apps.



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TUYEN NGUYEN

Mobile Developer Advocate, Google

But that's not to say paid apps are dead as a business model. In fact, downloads of paid apps are forecast to grow to 21.6BN by 2017, from 8.1BN today,[23] as more people switch to smartphones and quench their thirst for all types of apps. Users will pay for quality apps that solve a problem or provide their device with enhanced features. For example, the utility app, SwiftKey, is an easy-to-use keyboard for Android phones and has earned over a million downloads while priced at \$3.99. While it's possible to find a niche and paying users, don't bet against a competitor offering a similar app at a lower cost, or the cheapest price point possible.

Free to Paid (Freemium)

With this model you offer your app for free, then charge users for advanced features. Users will pay to upgrade their app if the extra features truly add value. For example, the free version of the TuneIn Radio app allows listeners to tune into any radio station in the world, and has garnered more than 50 million downloads. TuneIn Radio Pro is a paid version, and has all the features of the free version as you'd expect, but comes with the added ability to record any of the 70,000 radio stations. The record feature addresses the painpoint of listeners, who no longer have to miss their favorite content. Even when priced above \$6, it's proved compelling enough to earn more than one million downloads.

But a word of caution: when it comes to paying for apps, users don't like surprises. If you're offering a freemium app, make it clear in your app store listing that users who download it will have to pay to access more features or progress through the game. If you don't you'll swiftly receive bad reviews from users complaining they've been hoodwinked, even though the original app download was free.

In-App Purchases

If people don't like paying up front for apps, some don't mind paying for items within apps once they've started to use them. The rise of in-app purchases over the past two years has happened quickly, and it's set to account for more than 40% of app store revenues by 2017, versus the 17.3% it contributes today.[24]

The rise of in-app purchases has gone hand-in-hand with the popularity of gaming apps. Selling virtual currency or items like extra power-ups to enable faster progression through games has been a big hook for users. Toni Fingerroos, developer of the massively successful Hill Climb Racing game, derives a portion of his revenue from in-app purchases: gamers can unlock levels or enhance their racing vehicles either by playing the game and collecting coins, or by purchasing coins.

He considered his approach to monetization carefully. "I thought about it from the very beginning. I thought about adding enhancements that users would have to purchase to advance through the game, but then I thought it'd be better if everything could be free for the user just by being good at the game. Coins for in-app purchases make sense for my users if they want to finish the game quicker."

But Toni warns that you have to strike the right balance between free features and in-app purchases:



If you have a free game and choose to limit some features, you won't get as many downloads because users might think they have to buy everything. If they can't play without buying things they will get demotivated and will no longer play with the app.

TONI FINGERROOS
Founder & CEO, Fingersoft

Other challenges include increasing the number of users of your app who are prepared to make in-app purchases. AdMob research shows that it's a minority of users who make those kinds of purchases (see the chart below), so it's likely you'll earn no revenue from most of your user base if you're dependent on this as a single monetization strategy.

Advertising

Ad revenue has been a cornerstone of the app economy for several years, and continues to be both a reliable source of income and an innovative solution for hundreds of thousands of apps. According to Marvin Paul, co-founder of shopping list app Out of Milk, ads are a tried and tested way to earn revenue: "The benefit of banner ads is that it's a mature model and it's understood by developers, advertisers and users. Newer monetization methods can be unproven and sometimes you don't want to be the guinea pig to try someone else's business model."

How you earn from ads

To place ads in your app, you sign up with an ad network, such as AdMob, install the SDK and choose where you want to place your ads. All ad networks have policies about what types of apps are allowed to show ads and where ads can be placed in order to maintain the quality of the network. You earn revenue when users click or view your ads, and developers are compensated on a cost-per-click (CPC), cost-per-thousand impressions basis (CPM) or other variations such as cost-per-install (CPI). You earn a cut of the revenue based on how much the advertiser is prepared to pay for the click, impression or install, and the ad network earns commission.

To be successful with advertising, your app should have a significant number of users and high engagement, to increase the chances of clicks on the ads.



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MARVIN PAUL
Co-Founder Capigami, Out Of Milk

Ads help maximize your revenue

A distinct advantage of advertising is that it can be used in conjunction with other business models. For example, it can be complementary to in-app purchases where only a small percentage of users actually make a purchase. You can earn money from the rest of your users by showing them ads. Many developers want to 'protect' their loyal in-app purchase users by not showing them ads. This can be achieved by segmenting users into groups of those who you want to see ads and those who you don't. Your ad network can then serve ads to the first group to help you maximize your app's revenue.

New ad formats push boundaries

Another benefit is that ad networks tend to innovate quickly, driven in part by the need to fast improve the experience of in-app advertising. The app ecosystem exploded so quickly that in the early days of app monetization ad brokers simply took ad formats available on desktop and shoehorned them into apps. Typically this meant squeezing a larger banner ad into a 320x50 ad slot and hoping for the best (chiefly that the user didn't have to squint too much to read it). When users rotated their devices, the apps would flip from horizontal to vertical or vice versa, but the ads stayed the same size. AdMob launched a new format to solve this called Smart Banners which automatically resize to fit the width of the screen no matter the size of the device or orientation.

Aside from this, it took several attempts before ad formats appeared which were better tailored to mobile apps. It's not all that different from say, the migration of print ads to television in the 1940s, as brands simply transferred ad creative from the established medium to the new one, without building a format to suit the medium.[25]

Nowadays, ad networks are creating formats which benefit each part of the ecosystem. One example is AdMob's recent introduction of skippable video ad formats on apps, known as TrueView. With this format, a developer chooses a point in their app where the user is shown a video ad. This can be at a natural break in the game, such as between levels. Users watch the first 5 seconds of the ad, then a button appears giving them the chance to skip the ad and go back to whatever they were doing in the app. The format works well: users only watch what they want; advertisers get the satisfaction that a user watched the ad because they were engaged; and, developers earn significant revenue while offering users a less obtrusive experience.

Another example is how ad networks are moving beyond the traditional small banner. Interstitial formats create full-screen, immersive experiences during breaks in the app. They provide a larger canvas for advertisers to convey their message to users, and often yield good returns. Because of that, CPMs for interstitials tend to be higher than regular banner ads. In South Korea, the founder of Raon Games, Park Young Ok, added cost-per-click interstitials from AdMob to his Bouncy Ball app.



After some consideration, I implemented cost-per-click full screen ads, which has significantly increased my revenue. To protect the user experience, the full screen ads only display after a user has cleared 10 stages of the game. Despite the limited implementation, revenue increased around 30%, which has allowed me to continue to update the app and develop new content.

PARK YOUNG

Founder of Raon Games, Bouncy Ball

How to choose an ad network

When evaluating ad networks, consider the value they provide beyond eCPM; an equally important key metric to focus on is fill rate. An essential metric to use when comparing ad networks is to multiply eCPM by the fill rate, to give you the actual revenue earned per thousand ad requests. For example, let's say you are comparing two ad networks, A and B.

	eCPM	Fill rate	Revenue per thousand ad request
Network A	\$1.00	90%	$\$1.00 \times 90\% = \0.90
Network B	\$3.00	25%	$\$3.00 \times 25\% = \0.75

Notice that eCPMs of Network B are three times higher than Network A. However, because Network A has a higher fill rate, you would actually earn more revenue from this network despite it having a lower eCPM.

Ad mediation

Mediation is a technology which helps an app developer to maximize the number of ads showing in their app, and thereby earn more revenue. One of the most important metrics an app developer should track in their app is fill rate, which is the percentage of ad requests that are filled with ads. In an ideal world, an app developer's fill rate is 100%, meaning that an ad is displayed to a user every time they generate an impression. The more ads users see the more likely they are to click and earn you money.

So how does this relate to ad mediation? Simply put, there aren't many ad networks capable of providing app developers with a 100% fill rate. That's because they don't have enough supply to meet the demand. In other words they may not have enough advertisers running ad campaigns (or spending in large enough amounts) to show an ad for each impression your app serves. Enter ad mediation which enables you to show ads from multiple ad networks in your app, to immediately increase supply. There are several ad mediation services available, including AdMob's which is free, and plugs into many networks. To make it work you set up ad mediation for your app, add the relevant ad network SDKs, then sort them by order of priority to serve ads to your app. You'd start perhaps with the network offering the highest CPM, then the next highest and so on.

RECOMMENDATION

Aiming to sell your ad space directly to advertisers? If you want to sell your ad inventory directly to advertisers, an ad server, such as DFP Small Business, can help. An ad server will allow you to sell, schedule, deliver, and measure all of your advertising from a single dashboard. You can manage multiple ad networks using DFP too.

An ad server will also be able to forecast how many ad impressions you can sell based on the projected traffic to your application so you can accurately project and reserve your sales.

Choose an ad mediation tool that offers yield management

The most useful ad mediation tools provide yield management, which is a way to show the highest paying ad for each impression you get in your app.

AdMob's Ad Network Optimization evaluates the CPM of each network in your mediation stack, and dynam-

ically reorders them so the network with the highest CPM serves an ad to your app. Once set up, AdMob continually obtains the freshest possible CPM value from each ad network and compares them. In addition, you can enable the AdMob network to bid alongside other networks on a per-impression basis.

Subscriptions

Subscriptions are another form of app revenue that can be appealing to developers, but again this model is highly dependent on the type of app you have and the value users see in it. Users subscribe to pay a regular amount (usually monthly) for new features, content, or just to keep using the app. There tend to be three different types of subscription-based apps:

Apps offering truly original content that can't be found anywhere else (think comedy, art).

Apps with a unique voice that users identify with - such as a magazine or newspaper - that fosters a great affinity with the brand.

Apps that provide an ongoing service that represents good value and becomes integral to the user's lifestyle (think music streaming apps).

Either way, it's common for subscription-based apps to offer a free trial, or at minimum a reduced introductory rate. People need to fall in love with your app in order to make an ongoing commitment! As soon as users feel they can find similar content elsewhere at a lower cost, or they lose reason to engage with the app on a regular basis, then the subscription model can fail. AdMob research shows that 41% of smartphone users in China and South Korea stopped using an app because they found a better one.[26]

Reward-based advertising

Reward-based monetization has emerged recently as an attractive option for app developers, because it creates benefits for all stakeholders in the app ecosystem. The basics of this model entails a developer setting goals within their app for a user to complete (for example, reach level 10 of a game or amass 1000 points). When the goal is achieved the user can earn some form of reward provided by a sponsor, for example \$1 off coupon for a grocery item.

It compliments the ecosystem because developers can integrate a form of advertising which encourages the user to progress through the game to earn more rewards; advertisers provide something of value to the user and the offers can be tracked when redeemed; and finally users earn rewards for doing something they enjoy. Companies such as Lootsie and Kiip are proponents of reward-based advertising in apps.

CASE STUDY

Samurai Defender

How app developer Link Kit combined in-app purchases and ad delivery in their Samurai Defender game.

An important decision for any app developer is 'Which monetization method should I use?'. There are several methods, including paid apps, in-app purchases and ads, but they don't need to be mutually exclusive. We spoke with Keiji Takeuchi, representative director of Link Kit in Japan, about their Samurai Defender app which contains both in-app payments and ad delivery in a single app.

Worldwide distribution

Keiji Takeuchi, Link Kit

"I founded Link Kit in February 2011. We mainly develop software for smartphones. Samurai Defender is a genre game in the style of Tower Defence, where you defend a tower against an enemy attack using bows and arrows. The

iOS version was released in March 2013, with the Android version following in May. As of September 2013 we've reached a total of 600,000 downloads."

Tatsuo Sakamoto, AdMob

"Although it's a samurai theme, is Samurai Defender being distributed outside of Japan?"

Takeuchi

"Yes, worldwide distribution started in June 2013. The highest downloads outside Japan are in Vietnam and Taiwan, and we're currently focusing on China. Although there's a high Android platform share in China, there's no Google Play, so instead there are hundreds of local app stores, which makes it difficult to penetrate."

Sakamoto

"Hundreds, really? That's a challenge."

Takeuchi

"In practice, if we could cover 10 app stores that would get us access to over 70% of users. But it changes rapidly so it's difficult to keep up. Naturally there's a risk associated with doing business without knowing the local situation. That's why we have local partners, who we rely on primarily to provide user support. We don't actually meet with these local partners; everything is done via email. We'll get to this later, but we initially managed to meet up at the recent Tokyo Game Show."



Casual game developers who monetize using ads might be anxious about billing development. You have to incorporate a system into the game which makes users want to make a purchase, and that can seem challenging.

KEIJI TAKEUCHI
Founder, Link kit

Sakamoto

"So you're working with partners you haven't met! It must take some courage to work with partners from another country just using email and without meeting. What do you look for in a partner other than the size of the organization?"

Takeuchi

"We don't work with large organizations but with those that are still small. We like to find partners who have the same enthusiasm as we do. We work to instill high motivation in our partners by setting up a scheme where success benefits both sides. App Monetization"

Sakamoto

"Samurai Defender uses both in-app purchases and ads as monetization methods. Do you feel that in-app purchases are something of an obstacle for many casual game developers?"

Takeuchi

"They can be. In-app purchases can provide great returns if implemented well, but if the game isn't designed correctly nobody will be buying."

Sakamoto

"What proportion of Samurai Defender users make in-app purchases?"

Takeuchi

"Almost 10% of users make in-app purchases in Japan, and almost 5% overseas. But in terms of income, ads bring in much more than in-app purchases; in-app purchases are only around 15% to 30% of income. If we had to choose between in-app purchases or ads, we'd have a pretty big lost opportunity."

Sakamoto

"If combining in-app purchases and ads becomes the norm, it looks like that would help app developers to improve monetization. But of course many developers feel they have to choose between in-app purchases or ads. What do you think is the biggest hurdle?"

Takeuchi

"Casual game developers who monetize using ads might be anxious about billing development. You have to incorporate a system into the game which makes users want to make a purchase, and that can seem challenging."

Sakamoto

"To what extent do you think users are annoyed by ads? Do ads have a negative effect on income from in-app purchases, for example, by reducing the number of users willing to make an in-app purchase?"

Takeuchi

"I honestly don't think there is any negative effect. We show ads to all users and see no negative impact on in-app purchase revenue. Firstly, we don't display banner ads while a game is in play. Also, click-through rates (CTR) are not that high, so I don't think we're experiencing many accidental clicks. In the end, we have to ensure that the game is the main element and the ads are secondary, and ensure the user experience isn't affected. As a company we work for genuine positive income. As well as banner ads, we incorporate offer wall ads. Of course these add to our income stream, but they also widen the options available to users. They provide a way for those users who won't pay under any circumstances to get access to items. We're always looking for new ways such as this to monetize without being reliant on users making lots of payments."*

Best practice

AdMob research shows the majority of mobile app users prefer banner ads to be placed at the top of the screen, or between activities.