

The Secrets to App Success on Google Play



v2

Edition 2.0
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What's in this guide:

We're here to help you find success and grow your app business on Google Play. In this guide, you'll discover features, best practices, and useful tips to help you build a strategy that ensures your app stands out, reaches the audience it deserves, builds your brand, and grows your revenue.

We're constantly looking for ways to improve our products and services so we expect to update this guide periodically to keep it up to date. That means that when you use some features described in this guide, they may have changed. In those cases, follow the instructions in the product or visit the product's help center.

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How to read this guide

This is the description, it's the action you'll want to take to achieve a specific result with your app.

Why it works:

An explanation of why taking this action will achieve the result you want.

How to do it:

- 1 Details on the steps you should follow to achieve the desired result.
- 2 
- 3 
- 4 

Best practices:

- Best practices you should consider when taking this action.
- 
- 
- 

Products:

A list of the Google products and services you could use.

Get started:

Follow this link to get started.

Bonus tip:

Another step or best practice you can consider to have additional impact.

Section 1

Publish your app
and master the
Google Play
Developer Console



In this section

The Google Play Developer Console gives you the power to publish your app to 1 billion active Android users. It's easy to register and publish, but the console's features go far beyond simply making your app available. With the Developer Console you can monitor your app's key statistics and get alerts when there are sudden changes, manage alpha and beta tests, receive automatic Optimization Tips, read and respond to reviews, and much more.

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01

Why distribute your app on Google Play



Google Play is the premier store for distributing Android apps. When you publish on Google Play, you put your app in front of over 1 billion active Android users, in more than 190 countries and territories around the world. Here are a few reasons why you should prioritize Android and Google Play for your app's distribution:

- Popularity — There are over 1 billion active Android users and 1.5 million devices activated daily, with devices being made by over 200 OEMs.
- Powerful — 95% of Android devices are running Android 4.0 and higher.
- New form factors — Android Wear and Android TV provide more opportunities to engage and delight users.
- Growth — Android surpassed a billion shipments of devices in 2014 and is forecast to continue growing at a double-digit pace in 2015.

- In 2014, Google Play paid out over \$7 billion to developers.
- Year over year, developer payouts grew by more than 250%.
- In the first six months of 2015, with 180 million new users, Google Play Games continues to be the fastest growing mobile game network of all-time.
- Over 50 billion apps have been downloaded on Google Play.
- 61 new ways for users to pay were added to 32 markets in 2014 and forms of payment continue to launch in new countries to help monetize apps, including PayPal, gift cards, and carrier billing.

02

How users discover apps on Google Play



These are some of the ways that users discover apps on Google Play.

Home — Featured apps and personalized recommendations.

Personalized collections — Collections of apps relevant to the user's interests based on their past activity on Google Play.

Featured apps — Apps that meet the Android design guidelines and quality criteria.

Editor's choice — Exceptional apps and games picked by the Google Play editorial team.

Search — Apps discovered by name and keyword searches. Broad search queries will return results presented in an intuitive way to help guide app discovery.

Top charts — The most popular apps and games overall and by category.

Trending – What's hot with other Android users overall and by category; existing apps that raise their quality can trend too.

Categories – Over 40 categories to browse for apps.

Collections – Regularly updated collected based on events and other interests.

Family apps & games – An easy way for parents to find suitable, trusted, high-quality, family-friendly apps and games more easily.

Developer pages – A customized homepage for each developer with a graphic, a company explanation, and a featured app.

Designed for tablets – Featured apps and games that meet the tablet app quality criteria, picked by Google Play staff.

People – Apps that your family, friends, and other users in your circles have shared or rated.

03

Sign-in to the Developer Console to start publishing your app



Use the Google Play Developer Console to manage your app and distribute it to users worldwide.

How to do it:

- 1 To get started, visit the [Developer Console](#).
- 2 Review and accept the Developer Distribution Agreement, before paying the one-time \$25 USD fee – we charge this fee to encourage higher quality products on Google Play.
Finally enter some details about your publisher identity.
- 3 You're now ready to take advantage of the features of Developer Console and publish free apps.
- 4 You can invite others in your organization to manage the same Google Play Developer Console account. This can be done from the welcome screen, or in the settings.

- 5 If you want to sell apps or in-app products, there are some additional steps. First check that you live in a country with Merchant Account support. If you do, click on set up a merchant account on the Developer Console welcome screen and then either create a Google Wallet Merchant Account or link your existing account.

Products:

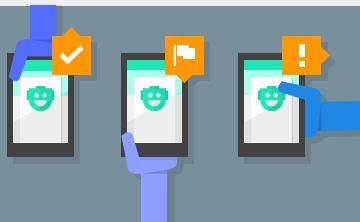
Developer Console

Bonus tip:

Consider creating a new Google account to manage your app separately from your personal account.

04

Test your app with users to get invaluable early feedback



Google Play allows you to release early versions of your app to trusted users, as alpha- and beta-testing versions.

Why it works:

Testing your app with a select group of users will give you a chance to fix any technical or user experience issues before you release it widely, so that you can be confident about releasing the best version of your app to the majority of your users. Feedback from your test users won't affect your app's public rating.

How to do it:

- 1 Decide whether you want to run alpha and beta tests, or just beta tests.
- 2 Create a Google+ community or Google Group for each type of testing you want to perform.

- 3 Invite the users you want testing your app to a Google+ community or Google Group and share the link to begin testing.
- 4 Select your app in the Developer Console.
- 5 Upload your alpha or beta version of the APK to the relevant tab and publish it on Google Play.
- 6 Choose the Google+ community or Google Group to publish the app to.
- 7 Let the communities know that they can update the app to get the latest version (or they'll receive it via automatic updates).
- 8 Review their feedback, update the app, and iterate until you're ready to release the production version of your app.

Products:

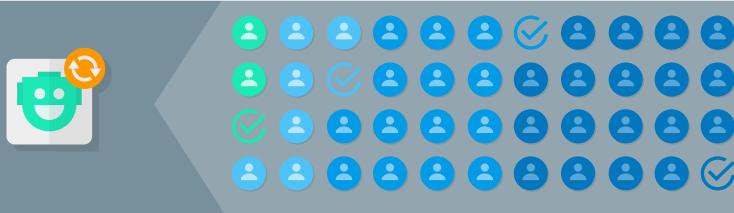
Developer Console

Bonus tip:

An alpha testing group should be small and for the least stable, experimental version of your app. Use beta testing for a larger group to test a stable version of your app that's near release.

05

Release updates progressively to ensure a positive reception



Google Play allows you to release an update to your app to subsets of all your users, then progressively to larger portions of your user base, monitoring crash reports and feedback for any issues.

Why it works:

Using staged rollouts ensures the smallest number of users are affected by any issues you may have missed in testing. You can then correct these issues before rolling out to more users, or can even roll back the update if necessary, protecting your app's reputation.

How to do it:

- 1 In the Google Play Developer Console, click on All Applications.
- 2 Select the app you'd like to release with a staged rollout and click **APK**.

- 3 In the Production tab, choose the rollout percentage of users you want to receive your app.
- 4 Save and publish your updated app.
- 5 Monitor crash reports and user feedback.
- 6 If necessary, correct any issues and publish a new version of the app.
- 7 Roll out to more of your users, until everyone has the update.

Products:

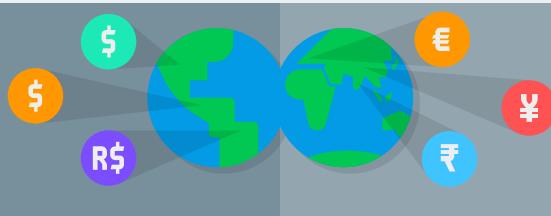
Developer Console

Bonus tip:

Start with a relatively small percentage of users, perhaps 10 to 20%, for the first rollout and give them 12 to 24 hours to use the app. If this goes well try a larger group, perhaps 20 to 40%, for 6 to 12 hours. Then try a final step of 60 to 80% for a few hours or go straight to a full release.

06

Set pricing and distribution by country to maximize local interest



Google Play allows you to control which countries your app is distributed to, as well as pricing for the app and in-app purchases in each of those countries.

Why it works:

When publishing an app in the Developer Console, its distribution will default to all countries and, for paid apps, its price in each country based on your local price. You may be able to maximize your revenues by changing your app's prices to meet user expectations in each country you distribute to. And if there are specific countries in which you don't want to make your app available – for example, if your app is not relevant in that country or you don't feel that you can provide appropriate support – you can exclude your app.

Best Practices:

- Research country economic information to understand local spending power to inform your app price.
- Optimize your pricing based on what's typical in each country (for example, countries might prefer prices ending with .95, .99, or .00).
- Use auto-conversion in the Developer Console, to get a local price based on your home currency price.

Products:

Developer Console

Bonus tip:

You aren't allowed to change a published app from free to paid. However, paid apps can be changed to free.

07

Choose the right Android platforms for distributing your app



Apps published on Google Play are made available to smartphones and tablets. You can make your app discoverable to different audiences and Android platforms by opting-in to the right options on the **Pricing & Distribution** page in the Developer Console.

How to do it:

- In your app's Pricing & Distribution page specify whether the app is free or paid and choose the countries it will be distributed to. When you publish your app, it will become available on Google Play.
- You then have some opt-in choices so that Google Play can surface your app for specific devices:

Android Wear — approved apps will receive an Android Wear badge on Google Play and be included in Android Wear collections.

Android TV – approved apps will be included on the Play Store for Android TVs. After opting-in you can also add TV specific screenshots to your Play Store listing.

Android Auto – after review for compliance with driver distraction guidelines and technical and quality criteria, approved apps appear in the Play Store.

Designed for Families – approved apps appear in Google Play's family-friendly browse and search experiences in addition to remaining available on the Google Play Store.

Google Play for Work – free apps are automatically included. Developers in the US or Canada can also make paid apps available, after opting-in and agreeing to the [Google Play for Work Addendum](#).

Google Play For Education – after an additional review by our third party network of teachers, approved apps will be made available to teachers, students, and education users.

- Your app will remain available on Google Play while it is being reviewed. The Pricing & Distribution page will show you your app's review status and notify you of any steps you need to take.

Products:

Developer Console

Bonus tip:

Your selection applies to the app, not to individual APKs.

08

Monitor your app's stats and review Alerts for unexpected changes



Google Play shows you useful information about your app; things like installs, sales, crashes, and ratings. Regularly review your app's stats to understand how it's performing. Check your Alerts to spot sudden changes and consider opting-in to receive Alerts by email.

Why it works:

Changes in your app's performance can indicate both good and bad things – the success of an ad campaign or users arriving at an app condition where crashes start to occur. By routinely assessing your app's stats and Alerts you can quickly spot changes, then correct issues before they adversely affect your users' experience or app's rating.

How to do it:

- 1** To view an app's stats open All Applications and select an app you'd like to view. Then choose Statistics to see the stats on your app's performance.
- 2** To view revenue reports you do the same as you would for stats, but click Finance after selecting your app.
- 3** To review Alerts, simply click the orange Alerts icon in your Developer Console.
- 4** To receive Alerts by email, under Settings in your email, click on Settings and then Email preferences. You can then choose the Alerts you want and how they are sent to you.

Products:

Developer Console

Bonus tip:

You aren't allowed to change published apps from free to paid apps. Paid apps can be changed to free.

09

Read and reply to user reviews to understand opinions about your app



Google Play allows users to rate your app and leave comments about it. You can reply to comments from within the Developer Console.

Why it works:

User reviews often contain valuable feedback and suggestions for improving your app, so it's worth reading them regularly. Replying to reviews engages your users and makes them feel valued, helping to build loyalty. When you respond to negative reviews, where possible, indicate how and when you'll address the feedback. Users will be more likely to leave a good rating and share your app following a positive interaction.

How to do it:

- 1** To read your app's reviews, in the Developer Console, click on All Applications and then select the application you'd like to view. Then simply choose Ratings & Reviews.
- 2** To understand your app's reviews better, you can apply filters to see them by rating, written language, app version, and/or device.
- 3** To reply to a review, click Reply to this review. The user is sent an email when you reply, including an option to update their review or contact you by email. You can edit your reply later too if, for example, the user updates their review or rating.

Products:

Developer Console

Bonus tip:

You can export your reviews in bulk to conduct your own sentiment analysis.

10

Use crash reports to help debug and improve your app



If your app crashes or stops responding (known as Application Not Responding or ANR), and the user chooses to send details, Google Play collects relevant information and makes it available to you in Developer Console. By reviewing these crash and ANR reports you can identify issues with your app, then update your app to eliminate them.

Why it works:

App crashes and ANRs will affect the user perception of your app and could lead to poor reviews and ratings. By correcting any issues quickly, you may be able to reverse negative reviews (particularly if you respond to let users know you have fixed the issue). You'll also provide a better app experience for new users, which should lead to better reviews.

How to do it:

- 1** In the Developer Console, click on All Applications.
- 2** Select the application you'd like to view and click Crashes & ANRs.
- 3** Click on a crash item to see more information and to read any comments the user added.
- 4** You can use the filters to understand if crashes are specific to versions of your app, versions of the Android operating system, or specific devices.

Products:

Developer Console

Get started:

goo.gl/AwQ7mc

Bonus tip:

You can also monitor the crashes from your app in alpha and beta testing, to quickly isolate issues you need to resolve before launch.

Improve your app based on Optimization Tips



Google Play automatically generates Optimization Tips when it detects changes that can improve your app and its performance. Optimization Tips may suggest languages to translate your app into based on where it's popular, recognize the use of certain outdated Google APIs, identify if using Google Play game services would be a benefit, or detect when your app is not optimized for tablets, amongst many others.

Why it works:

By following these tips, which include comprehensive instructions, you can improve the user experience, discoverability, quality, or performance of your app.

How to do it:

- 1 In the Developer Console, click on All Applications.
- 2 Select the application you'd like to view and click Optimization Tips.
- 3 Review the tips listed under To Do.
- 4 Follow the instructions for the tips you want to implement.

Products:

Developer Console

Get started:

g.co/play/developerconsole

Scale your operations with the Google Play Developer API



Use the Tablet App Quality guidelines to check that your tablet app is making the most of the bigger screen and the way tablets are used. If it doesn't, use the guidelines to update your app.

Why it works:

Tablets offer additional screen size and more engaged use compared to smartphones. If your app's user interface and features are designed with these in mind, you'll improve user engagement with your app. The Tablet App Quality guidelines bring together the things you need to consider when optimizing for tablets, in one convenient list.

How to do it:

To access the API:

- 1** In the Developer Console open Settings, click API access, and review and accept the Terms of Service.
- 2** Set up a new API project or connect an existing API project.
- 3** Follow the instructions to set up one or more authorized clients: either an OAuth client or service account.

Now you can update your development environment to add the features you need.

Products:

Developer Console

Google Play Developer API

Get started:

goo.gl/R9K8cV

Section 2

Focus on quality
and remember the
Google Play Store
essentials



In this section

A quality app is your foundation for success on Google Play. It allows you to maximize your marketing, user engagement, and community building efforts while minimizing support. To help you achieve quality, whether you're creating your first app or adding to your portfolio, Google Play provides practical guidance on how to ensure your app is the best it can be.

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 - 02** Bring your app to life with material design

 - 03** Create great user experiences for different devices

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 - 06** Test against the Core App Quality guidelines

 - 07** Deliver a compelling tablet experience by following the Tablet App Quality guidelines

 - 08** Deliver a big screen experience by following the TV App Quality guidelines

 - 09** Understand how wearable experiences differ and meet the Wear App Quality guidelines

 - 10** Apply the Google Play policies and guidelines to create a trusted app
-

01

Start with the Android creative vision



The Android creative vision and design principles were created to keep users' best interests in mind. Apps that work in expected ways are instantly familiar to Android users, gain their trust, and ensure they engage with your app's content, functionality, and features.

Key principles:

- Follow the overall Android navigation: navigate a hierarchy with Up and a history with Back, use deep links from homescreen widgets and notifications.
- Place your app's main navigation options in a navigation drawer. If you've three or fewer main sections in the app, show tabs just below the action bar instead or use another pattern.
- Use the Action bar to give users access to app views and important actions, and use tabs or a spinner within the action bar for navigating within the current screen.

- Make your app pure Android; use Android UI elements and icons, don't use a bottom tabs bar, don't hardcode links to other apps, don't use labeled back buttons, and don't use right-pointing carets on line items.

Products:

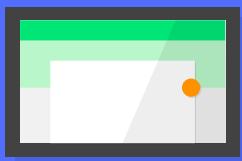
Android

Get started:

goo.gl/5MKZQY

02

Bring your app to life with material design



Incorporate the principles of material design to offer apps with visuals that both surprise and enlighten your users in equal measure.

Why it works:

Material design has been created to offer the highest level of modern visual appeal in assets across platforms and devices, including Android. As users become familiar with this visual language they will come to expect it. By following this design you can create apps that offer instant appeal while enhancing usability and improving your user engagement and retention.

Surfaces & shadows:

- Apps are not flat, nor skeuomorphic, but “tactile.” UIs consist of pieces of “paper” at varying elevations.
- Use shadows to subtly indicate surfaces, but don’t use them on foreground elements such as icons (which are “inked” on).
- Surfaces should have single-color backgrounds.

A print-like aesthetic:

- The “ink” drawn on the “paper” should follow the principles of good print design (hierarchy, space, typography, etc.).
- Promote the key action on a screen by using a circular floating action button.
- Use a standard Android action bar with color and typography for branding (not an app icon or account name).
- If the app has a navigation drawer, the top left icon in the action bar should be a hamburger icon.
- If there are tabs, they should be visually part of the action bar and shouldn’t have separators between them.
- Have a primary and accent color to call attention to specific elements, such as circular floating action buttons. The accent color should be bright and contrast very well with the primary color.
- Icons in the app follow the system icon guidelines, and standard icons use the material icon set.
- Other than avatars, images should run edge-to-edge and can even appear behind the action bar or status bar.
- Follow the 3 keylines specified in the layout principles to align text and other elements.

Meaningful and delightful motion:

- Movement should help communicate what's happening in the UI or add delight to smaller-scale transitions; don't use movement just because you can.
- Promote the key action on a screen by using a circular floating action button.
- Animations and transitions are fast, generally less than 300ms.
- Use ripple effects to indicate touch and use a "hero" transition to take a preview, like a photo, to its detail screen.
- Use animations transition between icon states or text states: a "+" sign spins into an "x" symbol.
- For slide transitions, there's a preference for quick acceleration and gentle ease-in deceleration over simple linear moves.

Adaptive design:

- All of the design elements should work together to bring a consistent experience across any screen – be it phone, tablet, desktop, TV, watch, or car.
- Uses responsive design to ensure screens lay themselves out appropriately on any screen size, in any orientation.

Get started:

goo.gl/sOC024

03

Create great user experiences for different devices



Don't create a mobile app and then force its implementation on each Android platform; take time to understand how users will live with the platform and adapt the app to each devices' use case.

Why it works:

Users interact with each Android platform in different ways and contexts. A great app designed for smartphones doesn't always give a great experience on Android Wear if it doesn't account for how people use it. Tailoring your app for each platform can give your users a richer, more engaged experience on their device.

Android platforms:

- Android smartphones and tablets are many users' primary devices. Smartphones are for personal interactions on the go; tablets are generally used for consumption. On tablets, consider using the extra screen size to add additional functionality, imagery, and more context.
- Android Wear helps provide useful information when it isn't convenient to pull out a smartphone or tablet, or at times when the user is active. For Android Wear, content should be brief with simple interactions or voice controls.
- Android TV is a leanback and often shared experience with the benefit of a big screen; emphasis should be on the content, get to it quickly with convenient browsing and search.
- Android Auto is built with safety behind the wheel in mind. Android Auto uses a standard interface to start enabled apps and services that drivers can interact with using the vehicle's controls, display, and voice.

Products:

Android

Android Wear

Android TV

Android Auto

Get started:

goo.gl/3PhQrb

04

Get ready for the next billion users



Between now and 2017, a billion new users are estimated to come online, most of them in emerging markets. However, in these markets, a majority of users face constraints not commonly seen in developed markets, such as: limited access to data connections and high cost when they are available, devices with reduced memory and smaller screen sizes, and prepaid accounts topped up as means permit. To address the needs of these users, apps will need to be aligned closely with local commerce, culture, and language; more so than might be necessary when targeting developed markets.

Why it works:

The next billion users offer a huge opportunity to grow your brand, apps, and user community, and as their economies grow they'll become a valuable part of your business.

Best practices:

- Optimize for less powerful phones; they often have smaller screens, 512MB of internal memory or less, and dual or triple SIMs.
- Ensure your app works well on slow and intermittent connections and can work offline when there is no connection.
- Minimize the size of your APK so that it can be downloaded quickly without taking up too much data.
- Optimize/minimize online data refreshes in your app. Allow data to be cached in advance over Wi-Fi when possible.
- Avoid background services where possible.
- Allow the user to control the type of data connection used, for example syncing only over Wi-Fi.
- Understand and support local economic and business ecosystems; such as currency, pricing norms, and payment systems.
- Respect socio-cultural expectations in content and UI.
- Show locally relevant content with appropriate tone and language.

Get started:

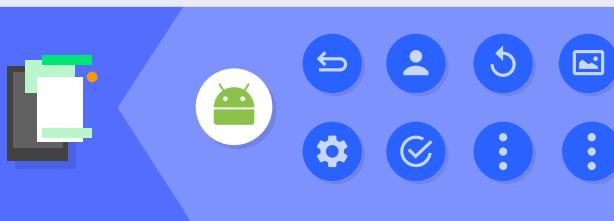
goo.gl/uWDTSw

Bonus tip:

Once you've localized and optimized your app for a country, consider running app install ads to grow a valuable audience in that market.

05

Test your app works on popular devices



One of the reasons more than a billion users love Android is that they can choose the device that's right for them. This can make it hard to test on all the device models that are popular with your users before release. Keep in mind that thoroughly tested apps are more likely to get better reviews and make more money. Google can help maximize the success of your next app launch with more comprehensive and accessible testing strategies.

Where obtaining the devices you need for testing is a challenge, consider signing up to try Cloud Test Lab in the Developer Console.

Why it works:

By ensuring that your apps or games work on the most popular devices, you reduce the risk of significant issues being discovered after release and adversely affecting your apps' ratings. It also provides you with the opportunity to identify any devices you might need to exclude from your release.

Best practices:

- Test and optimize your app on physical devices and emulators – your users are on a range of devices and it's important that you have diversity in your testing mix.
- You don't have to test on every device available – prioritize major manufacturers and ensure a diversity in screen size, processor, and device memory.
- Realistic user conditions are as important as physical devices – make sure to test your app on different networks, locations, and device orientations.
- Create a meaningful test plan – think through the critical paths in your app and ensure those are verified every time there is a new build.
- Write test scripts where possible – prioritize scripts for core functionality and parts of your app that aren't changed often.
- Integrate physical device testing into your continuous integration process, ideally stopping builds if they fail critical paths in your app.
- Review the data received from tests and look beyond app functionality alone: stability, network performance, and client side lag are also critical.

Products:

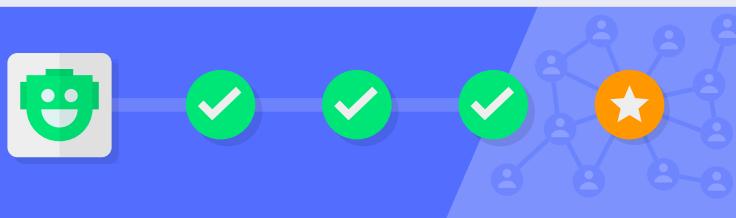
Cloud Test Lab

Get started:

goo.gl/Bqzhr9

06

Test against the Core App Quality guidelines



Use the Core App Quality guidelines to check that your app provides a good user experience and, if it doesn't, use the guidelines to update your app.

Why it works:

Users expect certain features and behavior from all the apps they download from Google Play. The Core App Quality Guidelines make it easy for you to check that your app meets these basic user expectations. And because the guidelines include basic test procedures, you can focus on devising and running tests for your app's unique features.

Key guidelines:

- Follow the Android design principles and conform to normal Android app navigation patterns.
- Request only those permissions your app needs.

- Preserve your app's state correctly when it goes into the background.
- Stop any music played by your app when the app goes into the background or the lock screen activates (unless these are clearly features of the app).
- Provide progress indicators for slow processes.
- Ensure your app doesn't freeze, crash, or otherwise behave unexpectedly.
- Use high quality images within your UI, make sure they don't pixelate.
- Make sure text is always readable.
- Follow the Google Play policies and give your app a suitable maturity rating.

Policy guidelines & practices:

goo.gl/BPJ0Vf

07

Deliver a compelling tablet experience by following the Tablet App Quality guidelines



Use the Tablet App Quality guidelines to check that your tablet app is making the most of the bigger screen and the way tablets are used. If it doesn't, use the guidelines to update your app.

Why it works:

Tablets offer additional screen size and more engaged use compared to smartphones. If your app's user interface and features are designed with these in mind, you'll improve user engagement with your app. The Tablet App Quality guidelines bring together the things you need to consider when optimizing for tablets, in one convenient list.

Key guidelines:

- Apply the Core App Quality guidelines first, they still hold good for tablets.
- Consider creating a multi-pane UI; for example, display a list in one pane and selected item details in another.
- Provide icons and other bitmaps in the right resolution for the user's screen.
- Ensure that fonts are adjusted and that all text is legible.
- Adjust touch targets to ensure that they can be activated easily.
- Resize homescreen widgets.
- Add additional or extended features, as users will be more engaged with their tablet.
- Include screenshots of your tablet app in Play Store.

Get started:

goo.gl/Bd7JRB

08

Deliver a big screen experience by following the TV App Quality guidelines



To distribute your app on the Google Play Store for Android TVs, it must follow the TV App Quality guidelines. If your app does not meet the TV device requirements, distribution to other device types, such as phones, tablets and other devices, is not affected.

Why it works:

User expectations for apps on their TV are different to those for a smartphone or tablet. Users sit at a distance from their TV and interact with apps through simple remote controls, game controllers, or voice actions. By applying the TV App Quality guidelines, your app will provide users with a baseline experience that is well suited to a TV, and qualify it to be distributed as an Android TV app on Google Play.

Key guidelines:

- The app should display with an icon in the Android TV Launcher, in the Games row if it's a game.
- The app should always display in a landscape orientation, filling the entire screen. Text should be correctly sized and, along with all app features, display wholly on screen.
- Navigation should be possible using 5-way D-pad controls or a gamepad controller using standard Android game controller keys. No reliance should be made on a controller having a menu button.
- The app's manifest should set the necessary intent types and hardware features.
- It should be possible to interact with ads using D-pad controls, including the ability to immediately dismiss full-screen, non-video ads. All ads should link correctly.
- Web Content should be displayed within the app, not using a web browser app.
- When playing media outside the app, a Now Playing card must be provided so the user can return to the app and at least pause playback.

Products:

Android TV

Get started:

goo.gl/G1mBXG

09

Understand how wearable experiences differ and meet the Wear App Quality guidelines



To ensure your app is identified as an Android Wear app on Google Play, it should follow the Wear App Quality guidelines. If your app doesn't meet the Wear requirements, distribution to other device types, such as phones, tablets and other devices, is not affected. The guidelines cover smartphone and tablet apps, which offer wearable-specific functionality through notifications, and apps that run directly on a Wear device.

Why it works:

Android Wear apps are unlike those for smartphones or tablets. Users interact with their Wear devices in a unique way. Great Android Wear apps offer users just the right information at just the right time. Apps should launch automatically, be glanceable, and require zero or low user interaction. By applying the Wear App Quality guidelines, your app

will provide users with a great experience and qualify to be identified as an Android Wear app on Google Play.

Key guidelines:

- Notifications with wearable-specific functionality should use the correct extender interface.
- Notifications allow replies using voice input or quick responses.
- Similar notifications are stacked.
- Notifications display the app icon and actions correctly, and use appropriate photo backgrounds.
- Wearable apps that run directly on a device should be packaged inside a primary handheld app.
- Full-screen activities use a long press for the sole purpose of prompting to quit.
- App user interfaces should work on both square and round displays and use a minimum text size of 16sp.
- App launcher string is the app name, not a command phrase.
- Apps display confirmation animations when appropriate.
- Includes at least one Wear screenshot in the app's Play Store listing.

Products:

Android Wear

Get started:

goo.gl/q3VS0A

10

Apply the Google Play policies and guidelines to create a trusted app



Ensure that you're familiar with the Google Play policies and guidelines, and apply them to your apps.

Why it works:

User trust is key to the success of Google Play: the apps users download must not behave in unexpected ways, contain offensive material, or behave 'badly' in any way. By following the Google Play app policies and guidelines, you'll create apps that users trust and contribute to the overall faith users have in Google Play.

Do:

- Respect others' intellectual property and don't encourage your users to infringe upon others' rights.
- Ensure ads comply with the content guidelines and match your app's maturity rating.
- Obtain your user's agreement to any changes to device settings.
- Keep a user's private information private.
- Accurately label your app using our ratings system: Everyone, Low maturity, Medium maturity, and High maturity.

Don't:

- Don't spam users with unwanted, deceptive, or unrelated content.
- Don't suggest your app is authorized when it isn't.
- Don't masquerade as another app or service.
- Don't attempt to impersonate the System UI.
- Don't include pornographic or sexually explicit content or anything intended to be sexually gratifying.
- Don't include spyware, malicious scripts, or password phishing scams.

Get started:

goo.gl/rhs6ng

Section 3

Improve your app's
discoverability and
find more users



In this section

You've built a great app, tested and debugged it, and refined the user experience. Now you're ready to watch the installs rack up. App installations and purchases rarely just increase on their own and you can't always rely on word of mouth. Google Play, other Google products, and many third party products and services can help maximize your app's discoverability and installations.

Contents

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- 01** Create a compelling Play Store listing so users download your app

 - 02** Optimize your Play listing with Store Listing Experiments

 - 03** Launch your app simultaneously on Android and maximize your momentum

 - 04** Increase downloads with AdWords app install ads

 - 05** Understand where your most valuable users come from

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 - 14** Offer your apps to businesses on Google Play for Work
-

01

Create a compelling Play Store listing so users download your app



Make your app's Google Play listing compelling with a unique app icon, attention grabbing images, a video of your app in action, a short and to the point description, and a well-written full description that carefully uses words users are likely to search for.

Why it works:

When users search or browse Google Play, your app's icon is a significant way to make your app stand out, so ensure it's relevant and compelling. If a user opens your app's listing, they will take only a few seconds to look for content that matches their needs. If the listing doesn't immediately grab their attention, they're likely to move onto another app. Users like using videos to assess apps — app listings with videos are more likely to result in installation than those without.

Best practices:

- Create a relevant yet unique, differentiated icon; consider working with a professional graphic designer or use the Android Asset Studio tools.
- Make sure screenshots show off the best and most important features of your app.
- Include screenshots that cover all the screen sizes your app runs on, with portrait and landscape mode shots too.
- Make sure your Featured Image sums up what is special about your app.
- Keep your app's description short and to the point; make sure the first sentence sums up your app. Cover key and unique features. Grab the user's attention, and keep it.
- Include a variety of words in your app description that represent the core features of your app, so users can find your app when searching.
- Create a video of your app in action, either using screen capture software or by filming a physical device running the app.
- If your screenshots or videos include text, be sure to upload versions for all the languages supported by your app.

Products:

Developer Console

Get started:

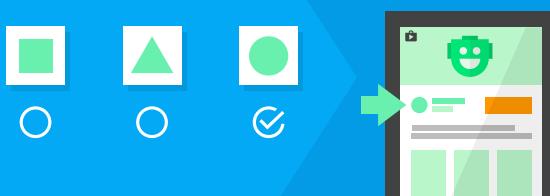
goo.gl/UBIJdR

Bonus tip:

Create a developer page to promote your brand and apps in one place on Google Play.

02

Optimize your Play listing with Store Listing Experiments



You should try to make your app's Google Play listing as compelling as possible with a unique app icon, attention grabbing images, a video of your app in action, a short and to the point description, or a well-written full description. You can then use Store Listing Experiments to help you find the best combination of these elements to maximize downloads.

Why it works:

Store Listing Experiments take the guess work out of finding the best Play Store page content for your app. Test up to three variants of your page's graphics and text – either as a global test of graphics alone or text and graphics for any localization of your store listing. You can even experiment with the order of your screenshots. The Play Store will then display your experiments to your chosen percentage of visitors. Once enough data has been collected, the results are provided in the Developer Console and you can choose to make the winning experiment's content your default store listing.

Best practices:

- Make sure that you've a question or objective in mind when designing your experiments.
- Be bold about testing different artwork, but iterate on the results to confirm and improve your findings.
- Make sure short descriptions clearly demonstrate an app or game's value to users.
- Icons matter and can have a huge impact — test early so that you can use a consistent icon once you've identified a winner.
- Experiment with screenshots and their order.
- Test one asset at a time, unless testing completely different designs for a store listing page against one another.

Products:

Developer Console

Get started:

goo.gl/vqFz7H

Bonus tip:

With Google Tag Manager and Google Analytics, you can run A/B tests on in-app elements without the need to update your app.

03

Launch your app simultaneously on Android and maximize your momentum



Create a unified marketing campaign and launch your new or updated app simultaneously across all supported platforms and devices.

Why it works:

With over 1 billion active users, Android is already the “first release” platform of choice for many developers. When you create buzz for your app on any platform, news spreads to users on other platforms and devices. By releasing your app on Android when your momentum is at its peak, you can take advantage of your marketing campaign and be sure your app is available when users search for it.

Best Practices:

- Offer your app across all Android form factors in a single release.
- Plan your app updates to cover as many versions as possible at once (smaller, regular updates are better than large, infrequent releases).
- Create a unified marketing plan that reaches users on all platforms.
- If you can't launch your app on all platforms at once, provide a clear roadmap for any "missing" platforms. Consider asking for users' contact details to let them know when your app is ready for their platform.

Get started:

goo.gl/GTcO27

04

Increase downloads with AdWords app install ads



Help users discover and install your app across the Google Search Network (now including Google Play), YouTube, in other mobile apps, and on more than two million sites across the Google Display Network.

Why it works:

AdWords app install campaigns promote your app to interested users on their phones and tablets. App install ads reach your audience when they're searching on Google.com or Google Play, when they're using other apps that are in the AdMob network, watching videos on YouTube, or browsing mobile sites in the Google Display Network. Google automatically sets up targeting to help you find your most likely users.

Key features:

- Reach people **searching on Google.com and Google Play** when they're actively looking for an app like yours, or trying to do something that your app makes easier. Showing app install ads on the Google Search Network is a great way to connect with people at the moment they're looking for and ready to download an app like yours. In fact, search is one of the biggest drivers of app installs in the Play Store*.
- Attract new app users by showing app install ads on the **Display Network**. You can reach people, based on the targeting criteria you've set, while they're using other apps or are on sites on the mobile Google Display Network (mGDN). For example, if you're promoting a fitness app, you can choose to show your ads to people on health-related sites or in nutrition-focused apps. These campaigns can increase awareness of your app among users who may not be actively searching for you. Advanced targeting options also enable you to optimize towards high lifetime value users (those users most likely to make in-app purchases).
- Engage with your target audience on YouTube by showing video ads. Videos give users a rich preview of what your app offers, how it works, and why they should try it out. Your **YouTube** video ads can also be easily used as interstitial video ads on the AdMob network.
- Take advantage of **Universal app campaigns** for Android to save time in setup, optimization, and ongoing management. From a single campaign, your ads can show across Search (including Google Play), YouTube**, and Display (in-app and across the mobile web). Universal app campaigns optimize ad creative, bids, and budget allocation behind the scenes to achieve maximum install volume at your target CPI.

* Google internal data, May 2015

** YouTube in Universal app campaigns is coming soon.

Get started:

goo.gl/GkCzc5

Products:

Developer Console

AdWords

Google Play

Google Search

YouTube

Google Display Network

AdMob

Bonus tip:

You can target users who've already installed your app with mobile app engagement campaigns. Engage users beyond the initial app install to keep them coming back to your app.

05

Understand where your most valuable users come from



The User Aquisition tab in the Developer Console provides detailed information on how users are finding and acquiring your app. It also reports on how users go onto buy your in-app products. All without you having to setup and create complex reporting.

Why it works:

Whether you pay to acquire users or not, you want to know where they're coming from. The snapshot provided by the User Acquisition report enables you to see where your most valuable users come from — across organic and paid traffic — and better understand where to focus your efforts.

How to do it:

- **Compare cohorts:** In this report, a cohort is a group of users who've visited your app's store listing during a selected date range. For example, if you update your app's icon on the Play Store you'll want to see how it affects installs and in-app purchases. You can do this by selecting cohorts before and after your app update, and measure how your change impacted conversion rates.
- **Examine acquisition channels:** For your defined cohort, you can explore how user behaviour and value differ between acquisition channels, such as organic Play Store traffic, AdWords campaigns, tracked channels, and searches. Drill down into specific channels to explore user behaviour in detail.
- **See users:** Get stats for all the **store listing visitors** (users who visited your app's store listing) and **installers**. This helps you understand how prospects are converting into users.
- **See buyers:** If you sell in-app products, the funnel report can also tell you about **new buyers** and **repeat buyers**. This helps you understand how quickly your in-app products and subscriptions are gaining traction with users.

Products:

Developer Console

Get started:

goo.gl/T4Chuo

Bonus tip:

If you're directing your users to your mobile app from your website, you can track conversions by adding a UTM campaign source and a campaign name tag to the [Google Play store URL](#).

06

Request a professional translation of your app to reach more countries



Use the App Translation Service in the Developer Console to get accurate, cost effective translations of your app.

Why it works:

Users respond best to apps in their own language. However, not all translators are familiar with the particular requirements of translating the text in an app. The translators included in the App Translation Service have been selected for their expertise in app translation. They can be relied upon to ensure your app's UI text will be appropriate for the languages you want to target.

How to do it:

- 1** Check your app's Optimization Tips in Developer Console to see if there are recommended translation languages. If not, check your app stats to find out where your app is popular but not translated.
- 2** Choose the languages you want to launch in.
- 3** Ensure your UI text is defined as strings in a resources file.
- 4** Go to your app's APK section in Developer Console.
- 5** Upload your app's file of string resources.
- 6** Select the languages you want to translate into, select a professional translation vendor, and place your order.

Products:

Developer Console

Get started:

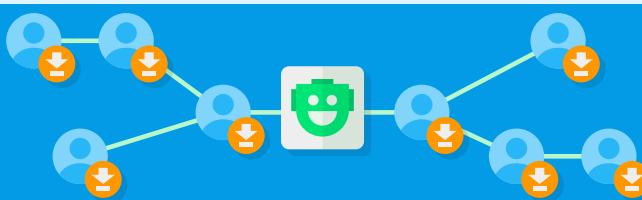
goo.gl/4sW5UX

Bonus tip:

Get your Play Store listing translated too by including its text in the strings file you send to the translator.

07

Grow via word of mouth with smarter App Invites



By combining the power of word-of-mouth with a frictionless and personalized onboarding flow, App Invites help drive installs by enabling your users to share an app with people they know. App Invites help you optimize an important means of app discovery — 52 percent of people say they discover apps through word of mouth*.

Why it works:

App Invites help drive your app's installs and increase new user engagement because users trust recommendations from their closest friends and contacts. Personalized invites are delivered through powerful distribution channels to an extensive social graph. Users who don't have your app are automatically taken through a low-friction app install flow. And when they open your app for the first time, App Invites enables you to provide a personalized onboarding flow using cross-platform deep linking.

Key features:

- Grow your audience by letting users invite their device and Google contacts.
- Multi-channel delivery over SMS or email.
- Intelligent friend recommendations that suggest a user's closest contacts and a preferred method of delivery.
- Actionable invite cards, with a prominent install button.
- Personalize onboarding flow for new users using deep-links that activate after the app installs, which can be used to include offers or incentives.
- Cross-platform support for Android and iOS.

Best practices:

- Motivate your existing users to share your app with their friends by surfacing the invite flow in the right context, at the right time.
- Create a low-friction, seamless onboarding experience for your new users using context from the invite that led them to install your app.
- Reward new users when they first open your app from an invite to increase retention.
- Customize the invite experience for sender and recipient so that it has the look and feel of your app.
- Make invites more appealing by including personalized, specific content. For example, use a photo that will make the invite more visual and informative.

* Google and Ipsos MediaCT survey, September 2014

Products

App Invites

Get started:

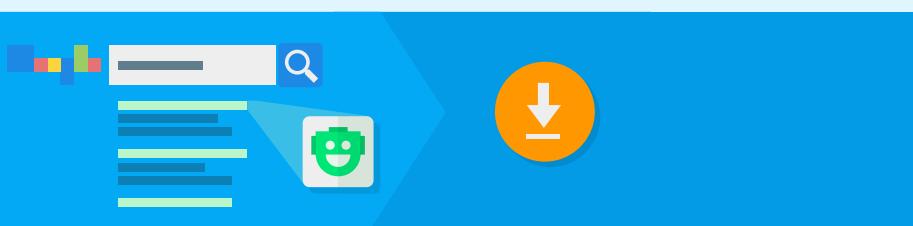
goo.gl/Ra7gN3

Bonus tip:

You can personalise the invite flow by deep-linking to app content and in-app purchases, so the user is taken straight to checkout. Use Google Sign-In and Wallet to make any order friction free.

08

Drive installs from Google Search



Google Search now helps users discover your app, with App Indexing. When users search with Google on their Android device the results will include details of relevant, indexed apps; regardless of whether the user has your app installed. The search results will include an install button that takes users to your app in the Google Play store. And when your app is installed, the user can click 'continue' to be taken straight to the right content within it.

Why it works:

Hundred of millions of people use Google Search. Having your app's content included in search results exposes your apps to a huge potential audience. And the inclusion of an install button in search results, makes it easy for users to acquire your app too.

How to do it:

- 1 In your app, add deep-linking support and define how to reach specific content.
- 2 In the Developer Console, verify your website domain.

- 3 For each web page that has a corresponding deep-link, define the deep-links either on each page of your website or in your sitemap.
- 4 Annotate your app activity using the App Indexing API.
- 5 In the Search Console, check for and fix crawl/validation errors.

Best practices:

- Defining deep-links using page-by-page markup works better than using your sitemap.
- Track your app's performance using Search Console and referrer information.
- Ensure that the app's content provides the first-click-free experience.
- Make sure that all critical resources required to run the app are not blocked by robots.txt. To test to see which resources are being blocked, please use fetch-as-google.

Products:

App Indexing

Developer Console

Search Console

Get started:

g.co/AppIndexing

Bonus tip:

App Indexing may also be used as a ranking signal in Google Search, regardless of whether a user has your app installed or not.

09

Nurture your community on social networks



Create an online presence for your app or company beyond the Play Store via a dedicated website, blog, or social media. Listen to those who join your community and respond to their feedback. Encourage users to interact with you and one another.

Why it works:

It's no accident that successful apps have vibrant, enthusiastic user communities. Your users are possibly your best advertising, as they interact with friends and pass on recommendations. They're often also the best source of ideas for improving your app.

Best practices:

- Review the different Play Store URL formats and link your users to the right place.
- Use Google Play Badges to provide links to your apps.
- Be authentic and natural. Be passionate and honest. Not trying to ‘market’ or ‘sell’ might be your best marketing strategy.
- Don’t just ‘tell’. Use photos and videos to show your app helping real people or letting them have fun.
- Post regularly, so your followers stay engaged and don’t be afraid to ask users to +1 or share when appropriate.
- Read and respond to app reviews in the Developer Console and emails that you receive from users.
- Give your fans the opportunity to alpha and beta test your app.
- Create accounts for your app on social networks, like a Google+ page and a Google+ community, so your users can connect with each other.
- Create a newsletter to engage with community members who don’t regularly interact online. You can use Google Groups to manage your mailing list.
- Create a YouTube channel and regularly upload videos.
- Run competitions or provide offers for your community.
- Use Google Forms to create surveys and solicit feedback on ideas or specific issues.

Products:

Developer Console

Google+

YouTube

Google Groups

Google Forms

Get started:

goo.gl/VN07F2

Bonus tip:

Adding Google sign-in to your app can increase conversions by reducing the burden and friction of signing-in, while helping users keep their accounts secure.

10

Offer automatic, over-the-air installs to users who use Google sign-in on your website



Implement Google sign-in on your website and link your website to your app in the Google Developers Console, in order to offer one click over-the-air installs when users sign in.

Why it works:

Users who sign-in on your website have already shown they're interested in your products or services and so they're more likely to be interested in using your app than the average visitor. Offering them a one-click install at the point of sign-in simplifies the installation process and means they don't have to find out about the app on their own. Some developers have seen app installation acceptance rates of 40%.

How to do it:

- 1** Implement Google sign-in for your website or web service.
- 2** In the Google Developers Console, register your website and app clients.
- 3** Add the app installation prompt to your website sign-in.
- 4** Use Platform Insights in the Google Developers Console to track impressions of the install prompt, installs, and success rate by day, week, and month.

Products:

Google Sign-In

Over-The-Air Installs

Google Developers Console

Platform Insights

Get started:

goo.gl/S7a3Tz

Bonus tip:

Adding Google sign-in to your app can increase conversions by reducing the burden and friction of sign-in, while helping users keep their accounts secure.

11

Cross-promote your other apps for free with AdMob house ads



If your app shows ads, you can include your own house ads in the ad inventory to promote your other apps for free.

Why it works:

Users who have already downloaded one or more of your apps know your products. This makes them a receptive audience for your other apps.

How to do it:

- 1 Sign in to AdMob and create a new house ad campaign.
- 2 Add one or more ads to the campaign, adding text and images to create your ads.
- 3 Select your targeting criteria (e.g. demographic, language etc.).

- 4 Say how long you want to run the campaign for and how to prioritize the display of these ads (by impression goal or CPM).
- 5 Start gaining downloads for your new app from your existing users.

Products:

AdMob

Get started:

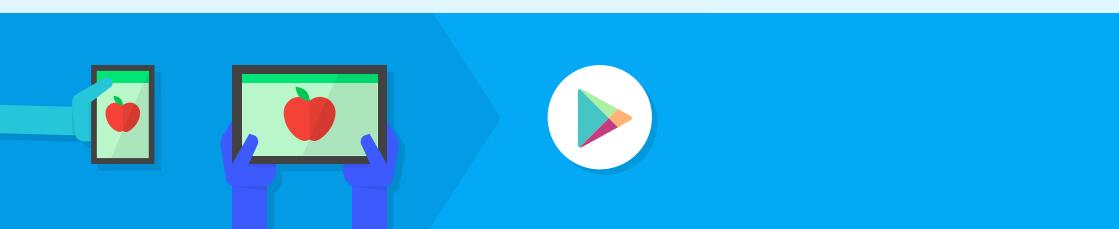
goo.gl/Ty5KI3

Bonus tip:

You can use the impression goals feature of AdMob house ads to set limits on the number of ads served. This is useful if you want to run ad campaigns from other developers in your app.

12

Offer your learning-based apps on Google Play for Education to educators and students



If your app offers learning features, then sign up and submit it for inclusion on Google Play for Education.

Why it works:

Google Play for Education provides educators, teachers, and administrators a vetted selection of apps suitable for use in K-12 classrooms or as part of a student's learning experience. Approved apps can be searched for by curriculum, grade, and standard. Once selected, apps can be pushed instantly to student devices over the air; across classrooms, schools, or even districts. This means that educators are more likely to find and consume your app, compared to listing it on Google Play only.

How to do it:

- 1** Review the [Google for Education Guidelines](#), to ensure that your app meets the requirements.
- 2** In the [Developer Console](#), review and agree to the Google Play for Education Addendum.
- 3** On the Pricing & Distribution tab for your app, opt-in to Google Play for Education.
- 4** Track your app's review and approval.

Products:

Google Play For Education

Developer Console

Get started:

goo.gl/WjC9Tj

Bonus tip:

You can also submit your Chrome apps for inclusion in the Google Play for Education store.

13

Offer your family or kid-focused apps to parents with Designed for Families



If you've built great apps designed for kids or families, the family discovery experience on Google Play is a great way to surface them to parents.

Why it works:

Parents are constantly looking for apps and games that are family friendly. By adding your apps to the Designed for Families program, and thereby surfacing them through the new Play Store Family section, parents will be able to find your apps and games more easily.

Key features:

- The new Family sections on Apps home and Games home on Google Play give you improved visibility to parents. These sections include uniquely merchandised content, new categories, and age-based browsing. Participating apps will receive this additional visibility on top of their existing categories, rankings, and reviews.
- Only apps and games opted-in to the Designed for Families program will show up in searches initiated from the Family section in Apps Home. They'll also be more visible when users search for family or kid related content from anywhere in the Play Store.
- Character pages let parents discover your apps and games based on familiar brands and beloved characters, providing a powerful way for parents to discover content and enabling you to reach a highly relevant and targeted audience.
- Apps that are part of the Designed for Families program are marked with the family star badge, which reflects the target age you select for your apps and serves as a signal of quality for parents.

How to do it:

- 1 Select your apps that have specific benefit or relevance for audiences under the age of 13. If your app is designed for both children under the age of 13 as well as teens or adults, you can select the “Mixed Audience” category.
- 2 Ensure that these apps meet the Designed for Families program requirements.
- 3 Opt-in your apps and games to Designed for Families from the **All Applications** page in the Developer Console, under **Pricing and Distribution**.

Products:

Developer Console

Get started:

goo.gl/3GJWkA

Bonus tip:

If you'd like to receive occasional emails with news relating to the Designed for Families program, sign up using the form here:
goo.gl/t7rQvf.

14

Offer your apps to businesses on Google Play for Work



For businesses: With Google Play for Work, businesses can centrally control the apps delivered to their employees' devices, as well as maintain the app settings of compatible apps through an admin console. They can deliver free or, for businesses in the US and Canada, paid Google Play apps and their own private apps to employees' phones in bulk. Paid app licenses can be transferred between users within their organization as needed. Google Play for Work is available free of charge to Android for Work customers.

For developers: Free apps are automatically available, while US and Canadian developers can allow businesses to bulk purchase their paid apps. To do so, you must opt-in and agree to the Google Play for Work Addendum. Your users will continue to be able to make in-app purchases just as they would in apps they installed personally.

Why it works:

You get new audiences in businesses, who can discover your apps through a listing on the Google Play for Work store. Then your apps, paid — if you’re a US or Canadian developer — or free, can be installed in bulk across an organization.

Best practices:

- Businesses are more conscious of data security and employee productivity, so follow best practices for security and manage user data carefully.
- Support the [App Configuration framework](#) to let an administrator remotely configure app settings.
- Request the minimum permissions that your app needs.
- Make sure communication to your backend and data in your backend is secure.
- Implement authorization policies that will minimize the number of your employees that can access user data.
- Make sure your app is compatible with [work profiles](#) and test that with the [BasicManagedProfile](#) example app.
- When you update your app’s App Configuration or App Restrictions schema, make sure it remains backward compatible. This ensures IT admin can continue to remotely configure your app, even if not all copies have been updated.

Get started:

developer.android.com/work

Bonus tip:

Consider offering enhanced support to cover extended hours or specific means of contact. Businesses are often willing to pay for this service.

Section 4

Engage and
retain users



In this section

Making your app engaging, so that users who have installed it actually use it, is crucial to your app's success. There are a number of Android and Google features you can take advantage of that help make your app a more useful and embedded part of the user's Android experience.

Contents

-
- 01** Use Android intents so your app shows up when it can help the user

 - 02** Extend your app's visibility and usefulness with rich system notifications

 - 03** Use targeted notifications to re-engage with specific segments of your users

 - 04** Drive app engagement through Google Search with App Indexing

 - 05** Re-engage users who have your app installed with targeted AdWords campaigns

 - 06** Reduce friction with quick and secure Google sign-in

 - 07** Save and retrieve login credentials with Smart Lock for Passwords

 - 08** Use Google Play game services to create a more engaging and social game experience

 - 09** Enable simple interactions between nearby devices and people

 - 10** Increase your app's usefulness by extending it to Android Wear devices

 - 11** Increase time spent with your app by adding Google Cast support and designing for Android TV
-

01

Use Android intents so your app shows up when it can help the user



If your app offers the ability to process information of a certain type or the content of a file, add an intent filter so other apps can use your functionality.

Why it works:

Android enables apps to use actions offered by other applications to complete specific tasks. If, for example, your app can share text or images, you can handle that functionality for any app that has a share button. By using intents to identify which actions your app can handle, you can surface your app at the right times in many places throughout the user's Android experience, even when the user isn't thinking of your app.

Best Practices:

- Identify and package any features your app can offer to other apps.
- Use the “view” intent to give users the option to open any links to your website within your app instead.
- Familiarize yourself with actions commonly accomplished via intents, such as sharing, so that you can focus on your app’s core functionality and outsource common actions.

Products:

Android Intents

App Indexing

Get started:

goo.gl/Y9mZs6

Bonus tip:

Get your app in Google’s index, with [App Indexing](#), so that search results for your website send the user directly to your app’s content.

02

Extend your app's visibility and usefulness with rich system notifications



Push timely, relevant, and actionable notifications to the user's device that deliver app functionality.

Why it works:

Think of Android notifications as an extension of your app's user interface. They make your app more useful, even when the user is not actively using or seeking information from it. Allowing users to control certain aspects of your app directly from the notification drawer, without opening it, simplifies tasks and saves them time. Considered use of notifications can greatly enhance engagement with your app.

Best Practices:

- Use notifications for time sensitive events, but always allow the user to choose what is notified.
- Make notifications personal, for example, in a message notification include the sender's image.
- Take users to where they can consume or act upon the item notified, when they tap the body of a notification.
- Give important notifications a high priority so they stand out, but don't overdo it.
- Stack notifications where you have several of the same type.
- Use distinct icons so users can quickly identify notifications from your app.
- Make use of the notification LED for higher priority notifications, where the device has one.

Products:

Android Notifications

Google Cloud Messaging

Get started:

goo.gl/wvncbc

Bonus tip:

You can use Google Cloud Messaging to keep notifications pushed from your server in sync across all of a user's devices with your app, so that the user only has to read and dismiss the notification once.

03

Use targeted notifications to re-engage with specific segments of your users



Use notifications as part of your engagement strategy to differentiate your app, by delivering app information that refreshes user interest. You can enhance the effectiveness of your notifications using topic messages: segment your users into appropriate persona or interests, then re-engage more effectively by sending them the most relevant notifications.

Why it works:

When your app is in the background, relevant notifications and messages provide a channel for you to re-engage with your users. With topic messaging you can send a message to users who share the same interests, in a timely and reliable way. This means you can focus your precious resources on defining the best notification messages and user experience, instead of having to build a technical solution that can reach large user audiences effectively.

How to do it:

- 1 Identify and characterize your users' by persona and interests.
- 2 Create a topic for each persona and interest you identify.
- 3 Subscribe users to relevant topic(s). Note: there's currently a one million subscription limit.
- 4 Create relevant notification messages for each persona and interest group.

Best practices:

- Analyze, and where necessary, diagnose issues with your notification or message delivery by opening Google Cloud Messaging (GCM) Diagnostics in the Developer Console. Use your registration token to lookup a list of messages to see the status of each message. Then open messages from the list, or look up with message ID, to deep dive into the history of a particular message. You can see how the state has changed and trace where the message is in its delivery path.
- Shorten your development time by integrating with the GCM server once: your server will be able to reach Android, iOS, and Chrome devices.

Products:

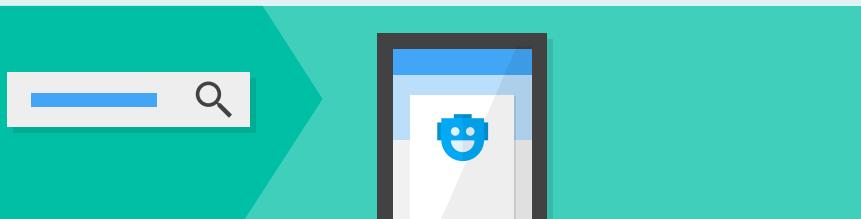
Google Cloud Messaging

Get started:

goo.gl/z0zHgJ

04

Drive app engagement through Google Search with App Indexing



Google Search can help you re-engage your users by deep-linking to your app content, right from the search results page. If you've added your app to Google's index, when users search with Google on their Android devices, they'll see deep-links to your app content, allowing them to seamlessly move into your app from Search.

Why it works:

When users turn to the Google app to find information that your app provides, you can let Google return deep-links to your app's content. This helps users re-engage with your app, even when they didn't think to open it first.

How to do it:

- 1 In your app, add deep-linking support and define how to reach specific content.
- 2 In the Developer Console, verify your website domain.
- 3 For each web page that has a corresponding deep-link, define the deep-links either on each page of your website or in your sitemap.
- 4 Annotate your app activity via the App Indexing API.
- 5 In the Search Console, check for and fix crawl/validation errors.

Best practices:

- Ensure that the app content provides a first-click-free experience.
- Make sure that all critical resources required to run the app are not blocked by robots.txt. To test to see which resources are being blocked, please use fetch-as-google.

Products:

App Indexing

Developer Console

Search Console

Get started:

g.co/AppIndexing

Bonus tip:

App Indexing will also be used as a ranking signal for all users on Android, regardless of whether they have your app installed or not.

05

Re-engage users who have your app installed with targeted AdWords campaigns



Create a “mobile app engagement” campaign in AdWords to target users who have your app installed when they’re on the Google app and in other apps with AdMob.

Why it works:

With mobile app engagement campaigns you target ads at users who have your app, encouraging them to use your app more regularly, thus increasing your active user base. Users don’t always remember to use the apps they have installed, so your campaign can remind them of key features and encourage them to try your app again, or help them complete an activity they didn’t know your app could handle.

Best Practices:

- 1** If you want to drive users to specific parts of your app, add deep-linking support to your app.
- 2** If you're running an AdMob campaign and you don't want to show the ad to all users of your app — create a remarketing list.
- 3** Create your mobile app engagement campaign in AdWords.
- 4** If applicable, add your app deep-links to your campaign.
- 5** Start your campaign.
- 6** Monitor your campaign and refine it as necessary to reach your desired audience.

Products:

AdWords

AdMob

Get started:

goo.gl/4TwpXC

Bonus tip:

Add the AdWords Conversion Tracking SDK to your app if you want to track conversion events in your app that are driven by your campaign.

06

Reduce friction with quick and secure Google sign-in



Google sign-in enables your user to sign-in to your apps using the registration system they already use and trust – their Google account. You can then offer users features, such as personalized greetings, easy access to Google services, seamless interaction across devices, and more.

Why it works:

Because users trust their Google account, you get people into your apps quickly and securely. By offering the additional features facilitated by Google sign-in, you're able to offer a more engaging experience across form factors and between apps and the web.

Key Features:

- Secure authentication that makes sign-in easy for your users using their Google account, which they already use with Gmail, Play, Google+, and other Google services.
- Offer a seamless app experience across devices and into your website, securely from a one-time consent. This will help keep your users engaged, no matter what device they pick up or sit down at.
- Connect users securely with Google services; share with Google contacts, save files to Drive, add events to Calendar, and more.
- Provide users with the ability to pay for in-app purchases with their Google Wallet.

Products:

Google Sign-in

Get started:

goo.gl/J9TpLu

07

Save and retrieve login credentials with Smart Lock for Passwords



With Smart Lock for Passwords, you get frictionless sign-in and sign-up into apps on Android and sites in Chrome with any account. Users get automatically signed-in across devices. In turn, you reduce the risk of forgotten user passwords resulting in missed conversion opportunities when users get frustrated trying to sign in and move on to another activity. Once your user saves a password to Smart Lock, they can skip entering their credentials on all of their Chrome and Android devices.

Why it works:

By integrating Smart Lock for Passwords into your Android app, you can automatically sign users into your app using the credentials they've saved. Users can save both username-password credentials and federated identity provider credentials.

Key Features:

- Similar to the capabilities of Google Sign-In, Smart Lock extends an automatic sign-in experience to any type of account, across devices.
- Smart Lock “assists” your site and apps existing login system – it doesn’t replace it. It simply passes usernames and passwords onto the developer, which means you don’t have to change any of your existing backend identity management and user identification.

Products:

Smart Lock for Passwords

Get started:

goo.gl/rACR9z

08

Use Google Play game services to create a more engaging and social game experience



Add features such as achievements, save to cloud, leaderboards, and more to your games with Google Play game services.

Why it works:

Users will respond to a game better when they have real players to compete with or compare themselves to. Google Play game services allow players to challenge themselves and be challenged, measure themselves against others, and receive rewards. Users who take advantage of Google Play game services features are more likely to engage and make purchases from your game.

Best Practices:

- Add leaderboards, so users can compare their performance with players worldwide.
- Save data to the cloud and enable players to move seamlessly between different devices.
- Use achievements to challenge players to explore your games.
- Create quests to issue time-bound challenges, without needing to update your game.
- Add multiplayer functionality to your real-time or turn-by-turn games to introduce an extra challenge.
- Let players send and request in-game gifts with Game Gifts.
- Add seamless interaction between your Android, iOS, C++, and web games.

Products:

Google Play game services

Get started:

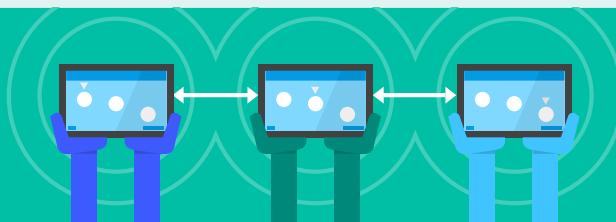
goo.gl/BRbwgg

Bonus tip:

Get your app in Google's index, with App Indexing, so that search results for your website send the user directly to your app's content.

09

Enable simple interactions between nearby devices and people



The Nearby APIs expose simple publish and subscribe methods that rely on proximity (up to about 100 feet). Your app publishes a payload – formatted however you like – that can be received by nearby Android or Apple devices. Under the hood, Nearby uses Bluetooth 2.0, Bluetooth 4.0, Wi-Fi, and an ultrasonic modem. With Nearby, you can let your users work or play better together when they're close: easily set-up multiplayer games, ad-hoc groups, sharing, or collaborative sessions.

Why it works:

The unique ranging and cross-platform capabilities of Nearby make it easy to build experiences that seem magical when users are close by. This increases engagement among users who use your Nearby-powered features and encourages users to share your app.

Best practices:

- The Nearby APIs make extensive use of radio and sensor features, consuming battery up to 3.5 times faster than normal. So, to preserve battery life, use Nearby features sparingly and only when they're needed.
- Use an explicit action to invoke Nearby: A button, switch, or special screen. Provide the user with a visual indicator, for example an animation, to show Nearby is actively sending or receiving content. Use the Nearby logo found at developers.google.com/nearby.
- Make sure the user understands what data will be visible to nearby users of your app before they start Nearby features.
- When the app leaves the flow that requires Nearby or is exited, stop any publish or subscribe activity. Do this by calling `unpublish` and `unsubscribe` in your Activity's `onStop` method.
- Where you want to limit the range of Nearby features, use the ultrasonic modem only by specifying `Strategy.setDistanceType(DISTANCE_TYPE_EARSHOT)`. This restricts the range to about 5 feet and ensures only devices in the same room can "see" the initiator.
- If one side is publishing only and the other side is subscribing only, use `Strategy.setDiscoveryMode(DISCOVERY_MODE_BROADCAST)` on the publishing side and `DISCOVERY_MODE_SCAN` on the subscribing side to speed up the exchange of data. Publish and subscribe are orthogonal to discovery mode (the publisher could scan and subscriber broadcast or vice-versa).

Products

Google Play services

Get started:

goo.gl/5ICNza

Bonus tip:

Use the Nearby API to enable your app to detect and receive messages from beacons using Eddystone, the open beacon standard from Google. Using this technology, your apps can deliver users a magical proximity-aware experience: receiving location specific information and improving other location-based tools.

10

Increase your app's usefulness by extending it to Android Wear devices



Look for app features you can extend to Android Wear, such as actionable notifications, to make your app useful to your users at the right time.

Why it works:

Android Wear surfaces information and features at useful times, so that users don't have to constantly check their mobile devices. Notifications work straight away on Wear — but by adding actions and enhancements you can make your app more useful and increase engagement and retention.

Best Practices:

- Notifications on smartphones can automatically sync to wearables, so design them with both devices in mind.
- Enable your app to handle voice actions, like “Ok Google, take a note”, for a hands-free experience via an Android Wear device.
- Create a custom experience as a wearable app, which makes full use of Android Wear features.
- Share data and actions between the Android Wear device and your app.

Products:

Android Wear

Get started:

goo.gl/IFKdjF

Increase time spent with your app by adding Google Cast support and designing for Android TV



Make it possible to cast your app's content to the big screen on devices like Android TV or Chromecast with the Google Cast API or make a native version of your app for Android TV.

Why it works:

Users still spend the most time with a device per session viewing their TV. To get higher rates of content consumption, make content from your app castable with the Google Cast API or design your app for Android TV.

Best Practices:

- Optimize your app for big screens with content activities at the center.
- Keep the user interface minimal, with as much content as possible on each screen, and easy searching and browsing.
- Use visual imagery, movement, and sound to inform and delight your users.
- Minimize the number of navigation steps required to perform actions, in particular the steps between app entry and content immersion.
- Use voice interfaces when you require text input but, whenever possible, avoid asking users to enter text.

Products:

Google Cast

Android TV

Get started:

goo.gl/ls4wSi

Bonus tip:

Use the “Google Cast Ready” badge on your website, app store listing, marketing materials, and promotional materials so prospective users know about the additional functionality that comes with your app.

Section 5

Monetize and grow
your revenue



In this section

By carefully mixing monetization options and matching them to the expectations and spending power of your local audiences, you can quickly find effective ways to generate revenue.

Contents

-
- 01** Maximize your app's revenue by choosing the right monetization model

 - 02** Sell digital products as one-time purchases with Google Play In-App Billing

 - 03** Sell subscriptions with Google Play In-App Billing to create an ongoing revenue stream

 - 04** Get paid to show relevant ads from over a million advertisers with AdMob

 - 05** Target traffic that will lead to conversions with AdWords re-engagement campaigns

 - 06** Save costs and scale with Google Cloud Platform
-

01

Maximize your app's revenue by choosing the right monetization model



By learning about the different monetization options available for Google Play apps, you can build a monetization strategy that matches your audience's expectations.

Why it works:

To maximize your revenue, consider multiple monetization models for your app. Each app's audience can have different preferences for paid apps, subscriptions, ads, in-app purchases, and e-commerce. You can use the monetization options available on Google Play to create a strategy that works best for your audience.

Best Practices:

- Research other apps in your category and learn how users expect to pay for content.
- “Casual use” apps (like puzzle games or weather apps) often monetize best with advertising or in-app purchases.

- If your free app has ads, consider offering an in-app purchase that removes ads.
- If your app can be extended or expanded, like adding levels in a game, consider making the core app available for free and offering extended features through in-app purchases or subscriptions.
- For apps with significant recurring content costs, consider using subscriptions with a free trial period.
- Premium (paid) apps are more appropriate in selected categories. For example, users are more likely to pay for an ad-free, kid-friendly app than a casual app.
- Use Google Analytics to understand how users interact with your app to help you make monetization decisions.

Products:

Developer Console

In-App Billing

AdMob

Google Wallet Instant Buy

Google Analytics

Get started:

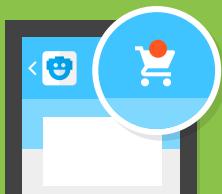
goo.gl/NZn0fj

Bonus tip:

To gain a greater understanding of your user's purchasing patterns, including statistics on average revenue per paying user and new vs. returning buyers, go to your app's revenue statistics in the Developer Console.

02

Sell digital products as one-time purchases with Google Play In-App Billing



Monetize your app by distributing it for free, then selling in-app products or additional features using Google Play In-App Billing.

Why it works:

There's a lower barrier to users downloading and trying free apps compared to paid ones. And users who have experienced your app and liked it, are usually more amenable to paying for additional features and functions. By offering "consumables" in your app, users will continue to purchase items, creating you a long-term revenue stream.

How to do it:

- 1 Determine what content or features you want to sell as digital goods.
- 2 Set-up a Google Wallet Merchant Account in the Developer Console.

- 3 Define your in-app products in the Developer Console, choosing between durables (once purchased, always available to the user) and consumables (items used a limited number of times or for a set period of time).
- 4 Integrate the In-App Billing API into your app.
- 5 Add mechanisms to unlock features or deliver content to your app.

Best Practices:

- Offer a free download with limited features or full features for a limited time. Then use an in-app purchase to unlock the full, unlimited app.
- Offer additional features or content items through in-app purchases, such as new levels, special playing pieces, or other features in games.
- Offer subscriptions where your app offers regularly updated or time-based content.

Products:

Developer Console

In-App Billing

Get started:

goo.gl/uD8f3J

Bonus tip:

Any item offered as an in-app purchase can also be offered as a subscription.

03

Sell subscriptions with Google Play In-App Billing to create an ongoing revenue stream



As an alternative to selling digital goods in your apps, particularly where you have recurring content costs, sell additional content and features using the subscription feature of Google Play In-App Billing.

Why it works:

Subscriptions can provide a lower 'entry cost' compared to a high one-off purchase. Subscriptions also provide you with a recurring revenue stream, which can be very useful when you have a recurring cost associated with acquiring or creating content.

How to do it:

- 1 Determine what content or features you want to sell as subscriptions.
- 2 Set-up or link a Google Wallet Merchant Account in the Developer Console.

- 3 Define your subscriptions in the Developer Console.
- 4 Integrate the In-App Billing API into your app.
- 5 Add the mechanisms to unlock features or deliver content to your app.

Best Practices:

- Demonstrate the value of the subscription before asking the user to pay, for example by offering a free trial.
- If possible, ask users to sign-in before you ask them to subscribe, to move them further down the funnel and reduce the barriers to payment.
- To avoid the limits that some carriers have on direct billing, consider using monthly subscriptions rather than annual ones.

Products:

Developer Console

In-App Billing

Get started:

goo.gl/0FjurJ

Bonus tip:

You can use the Google Play Developer API to provide subscription purchasers with extended access to content (for example, while they're on your website or another service). You can also integrate with an existing subscriber base in your app.

04

Get paid to show relevant ads from millions of advertisers with AdMob



Ads are an effective and easy way to earn revenue from your apps. AdMob is a smart monetization platform for apps that helps you to maximize revenue from ads and in-app purchases. More than 650,000 apps already use AdMob to generate a reliable revenue stream, with more than \$1 billion paid to developers in the last three years. All you need to do is sign up for [AdMob](#), and then use the Google Mobile Ads SDK to place ads in your app with just a few lines of code. You get paid quickly in local currencies (where available), with no wire fees charged by AdMob. AdMob's integration with Google Play services pushes automatic performance improvements to Android apps without additional SDK changes.

Why it works:

Well-placed, well-targeted adverts in apps, particularly free apps, can achieve good clickthrough rates while preserving the app's user experience. It's easy to add the code to deliver ads and AdMob takes care of the rest - finding and delivering relevant ads to your app from any of Google's advertiser demand across AdMob, AdWords, and the DoubleClick Ad Exchange. This range of advertising sources coupled with free, industry-leading mediation achieves high CPMs and excellent fill rates, automatically helping to improve your earnings.

Best practices:

- Place ads thoughtfully and adhere to the [AdMob policies](#). Ads shouldn't be too intrusive, but still need to be clearly visible to attract clickthroughs.
- AdMob has a wide variety of ad formats including interstitials, video, native ads, and banners to choose from depending on your app's content.
- Make use of targeting features to match ads with your users and your app.
- Remember that ads form part of your app and must match its age rating.
- Exercise control options sensibly. Don't get carried away limiting the volume of ads that AdMob shows at the expense of revenue.
- Consider running house ads to promote other apps in your portfolio, or your friends' apps. When you launch a new app, this kind of promotion is a free and easy way to attract new users quickly.

- Analyze your app's performance from within AdMob with Google Analytics. Discover where people are downloading your app, the features they use the most, how they navigate through your app with graphical flow reports, and more.

Products

AdMob

Google Analytics

Get started:

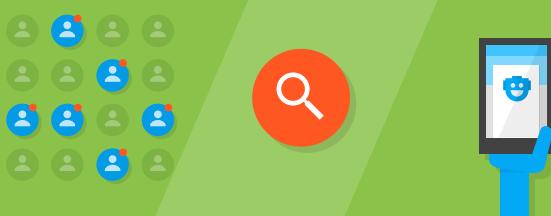
goo.gl/ZNEQK8

Bonus tip:

You can help increase your ad revenue further with AdMob Mediation. AdMob's mediation solution works with 40 ad networks to serve the highest-paying ad into your app.

05

Target traffic that will lead to conversions with AdWords re-engagement campaigns



With targeted AdWords re-engagement campaigns, send users to your app instead of your website when they're ready to convert.

Why it works:

With AdWords re-engagement campaigns, you can target a user who has your app installed while they're on Google Search and in other apps with AdMob. Search campaigns let you target users at the exact moment they're searching for something that your app provides; AdMob lets you reach a wide audience while they're using related apps. Your ad can deep-link the user to relevant content in your app instead of your site and so provide them the best possible mobile experience. By having them re-engage with your app, you're giving them another chance to turn into an active user, which is useful if you see higher lifetime values for your app users compared to your website users.

How to do it:

- 1** Add deep-linking to your app.
- 2** Add the AdWords Conversion Tracking SDK to your app or setup your own tracking solution.
- 3** If you're running an AdMob campaign and you don't want to show the ad to all users of your app — create a remarketing list.
- 4** Create a mobile app engagement campaign in AdWords.
- 5** Add your app deep-links to your campaign.
- 6** Start your campaign.
- 7** Monitor your conversions and refine your campaign over time.

Products:

AdWords

AdMob

App Indexing

Get started:

goo.gl/Lck7nz

Bonus tip:

Check the Policy for advertising based on interest and location to find out which sensitive categories of sites or apps can't use remarketing, and what you need to add to your site's or app's privacy policy.

06

Save costs and scale with Google Cloud Platform



Build and host the backend for your mobile app on Google Cloud Platform.

Why it works:

Google Cloud Platform lets you build, test, and deploy applications on Google's highly-scalable and reliable infrastructure. Cloud Platform offers computing, storage, and application services for your web, mobile, and backend solutions. With Google Cloud Platform you tap into a worldwide network of managed services dedicated to offering high levels of uptime and optimized local network performance. You only pay for the services you use, and as your user base grows, Google Cloud Platform manages that growth for you. By reducing your hosting and management costs, you can concentrate on what you do best: delivering great app experiences.

Key features:

Run on Google's infrastructure — Build on the same infrastructure that allows Google to return billions of search results in milliseconds, serve 6 billion hours of YouTube video per month, and provide storage for 425 million Gmail users.

Focus on your product — Rapidly develop, deploy and iterate your app without worrying about system administration. Google manages your app, database, and storage servers so you don't have to.

Mix and match services — Virtual machines. Managed platform. Blob storage. Block storage. NoSQL datastore. MySQL database. Big Data analytics. Google Cloud Platform has all the services your app architecture needs.

Scale to millions of users — Apps hosted on Cloud Platform can automatically scale up to handle the most demanding Internet-scale workloads and scale down when traffic subsides. You pay only for what you use.

Performance you can count on — Every millisecond of latency matters. Google's compute infrastructure gives you consistent CPU, memory and disk performance. Our network and edge cache serve responses rapidly to your users across the world.

Get the support you need — With our worldwide community of users, partner ecosystem and premium support packages, Google provides a full range of resources to help you get started and grow.

Products:

Google Cloud Platform

Get started:

goo.gl/AYj7FJ

Section 6

Measure what
matters and make
the right decisions
with Google Analytics



In this section

To improve your app and the revenue it earns, it's important to understand how users discover your app, how effective your marketing campaigns are in driving discovery, and how users interact with your app once they have it. Sophisticated developers have learned that simple in-app measurement with Google Analytics is the key to building effective, engaging, and well-monetized apps. Implementing Google Analytics from day-one will help you frame business objectives and start out on the right foot.

Contents

01 Add one line of code to unlock Google Analytics

02 Use data to build better apps

03 Understand the value of your users

04 Get the most of your marketing spend

05 Improve conversion rates using analytics

06 Create Audience Lists to re-engage your users

01

Add one line of code to unlock Google Analytics



By adding one additional line of code to the Google Play Services SDK, which you'll probably be using already, you can start to gain insights about your apps and users the moment you launch.

Why it works:

The standard Developer Console reporting – download counts, reviews, and revenue statistics – provide a limited view of user acquisition and app usage. By implementing Google Analytics you can start to get a clearer picture of user interaction with your app. Google Analytics easy-to-use reporting puts hundreds of Metrics and Dimensions at your fingertips, automatically. Once implemented you'll unlock over three hundred metrics like users, sessions, session duration, events, and crashes. You can view that data on different dimensions like operating systems, device models, and geography.

How to do it:

- 1** Sign up for a Google Analytics account.
- 2** Implement and initialize tracking for your app with our detailed how to guide.
- 3** Consider customizing your implementation using our Implementation Guide.
- 4** Republish your app to start collecting analytics data.
- 5** Go to Google Analytics to analyze the data collected.

Products:

Google Analytics

Get started:

goo.gl/hpTuJZ

Bonus tip:

If you're an AdMob user, link to your Google Analytics account in order to monetize, promote, and analyze all of your data within AdMob.

02

Use data to build better apps



Extend the use of Google Analytics in your app to measure user activity such as screen views, events, in-app purchases, conversions, and more. You can even understand cross-device behavior by sending your own unique CRM ID along with Google Analytics data.

Why it works:

Even with detailed user reviews and good community interaction, it can be hard to understand clearly how users interact with your app — like knowing which features are popular and which are rarely used. By extending the use of Google Analytics beyond its basic features, you can get a precise picture of how users interact with your app. Using this information you can optimize your app to deliver the best user experience — for example, by improving or removing rarely used features or enhancing the features and functions that are used the most.

How to do it:

- 1 Review the Google Analytics' Implementation guide.
- 2 Gather insights on your users with the demographic data.
- 3 Use screens tracking to understand how users interact with your app content.
- 4 Measure significant user actions with event reporting.
- 5 Get In-App purchase detailed data with transaction reporting.
- 6 Understand user behavior across different devices using User ID.
- 7 Find bugs and exceptions quickly with crash data.
- 8 Capture time-based events with User timings.

Best Practices:

- Develop a measurement plan before you release your first version of the app, so that you're prepared to analyze your app and adjust it immediately.
- Only track things that may be useful long term – tracking the “jump” button in a game, for example, may create data that doesn't help you make decisions.
- By combining engagement data (like events) with monetization data (like transactions) you can get the most holistic view of how users engage with your app.

Products:

Google Analytics

Get started:

goo.gl/SHPUIT

03

Understand the value of your users



Use Google Analytics to gain insight into the factors that keep users coming back to your app.

Why it works:

The most successful apps are those that keep their users coming back day-after-day, month-after-month, and year-after-year. Google Analytics offers a number of sophisticated reports that will help you understand your users, their behavior, and their retention so that you can optimize your app experience to focus on what's working.

Key reports:

Active Users Reports display the trailing 1, 7, 14, and 30 day active users and use it to understand how often your users are coming back.

Demographics & Interest Reports highlight information about your users. See the Gender & Age breakdown to discover the demographic characteristics most common among your users, or take a look at the Interest reports to see what interest categories entice your users.

Segmentation allows you to isolate and analyze subsets of your data based on specific attributes and is the best way to slice and dice your data to understand key trends in your users' behavior. For example, you might segment your data by marketing channel so that you can see which one is responsible for an increase in purchases. Combine all this data to determine which aspects of your app are pulling users back.

Products:

Google Analytics

Get started:

goo.gl/DkE3RP

Bonus tip:

Segmentation is one of the most powerful tools that Google analytics offers. Hundreds of thousands of combinations are possible with the hundreds of metrics and dimensions at your disposal. Start by segmenting simple things (Device Model or Operating System Version) to see if you can identify any important trends.

04

Get the most of your marketing spend



Combine the power of Google Analytics with other data sources to understand the performance of each of your marketing channels.

Why it works:

Google Analytics Acquisition Reports help you understand how many users find your app on Google Play and then go on to install and open the app; using this you can understand which marketing channels are the most effective at driving downloads. The Google Play Sources and Referral Flow reports can help you understand how users discover your app. You can use this information to optimize your marketing strategy to maximize purchases or installations.

How to do it:

- 1 Link your Google Play account in the Google Analytics Admin settings, to start seeing data from Google Play.
- 2 Visualize the user journey in your app with the Referral Flow report to spot bottlenecks and recurrent paths.

Best Practices:

- Use the New Users report to get an overview of first launches by Operating System, App Version, and Country/Territory.
- Use the App Marketplace report to discover which marketplaces — Google Play and third-party platforms — users visit to download your app.
- Use the Google Play reports to discover how users find your app. See what drives traffic to your page in the marketplace and how it contributes to installations.
- Link your AdWords and Google Analytics accounts and enable auto-tagging, then use the AdWords reports to understand how this advertising is driving purchases and installations.
- Use the URL builder to track all traffic sources for your Play Store campaigns.

Products:

Google Analytics

AdWords

Developer Console

Get started:

goo.gl/R4hR2p

Bonus tip:

You can also use Google Analytics to understand how users who are re-engaged by specific campaigns are using your app. This can be done by instrumenting your app to collect campaign source details and appending them to any analytics data recorded.

05

Improve conversion rates using analytics



Use the Behavior Flow, Ecommerce reporting, and other goal conversion metrics to determine how to drive higher rates of conversion within your app.

Why it works:

Whether your goal is driving users to in-app purchases or signing up for a newsletter, getting users to complete key actions — or conversions — will be your main success metric. Being able to identify if users are encountering roadblocks before converting, or if certain app areas have high exit rates, will enable you to identify opportunities to improve your app experience and increase conversion rates.

How to do it:

- 1 Implement Enhanced Ecommerce to capture in-app purchases.
- 2 Use Goals to identify other important conversion types.
- 3 Test different approaches using Content Experiments.

Best Practices:

- Use Ecommerce reports to understand which products are best-sellers and which ones aren't being purchased. Pair this with segmentation to see if certain in-app items help users better engage with your game or app.
- Use the Behavior Flow reports to understand where users go after your home screen. See if there are screens where users disengage.
- Use Content Experiments in Google Tag Manager to test alternative approaches to your conversion calls-to-action, without having to redeploy your app.

Products:

Google Analytics

Get started:

goo.gl/R4hR2p

06

Create Audience Lists to re-engage your users



Use Google Analytics to identify specific groups within your user population and create remarketing campaigns to re-engage them.

Why it works:

Using Google Analytics, specify the criteria you care about to segment your data in tens-of-thousands of different ways. Using these segments create Audience Lists of app users to target with remarketing. When you find something particularly interesting, you can even create lists directly from your reports.

How to do it:

- 1 Collect Ad-ID to enable the creation of Audience Lists.
- 2 Identify interesting groups of users with Segments.
- 3 Use these segments to build Audience Lists.

- 4 Use your Audience Lists in AdWords to target remarketing campaigns or for house ads in AdMob.
- 5 Review and refine: use what you learn to improve segmentation, Audience Lists, and re-engagement.

Best Practices:

- Look for users who are unlikely to purchase and continue to serve them traditional ads. Consider using Audience Lists to serve in-app purchase ads and experiences to users likely to purchase.
- For users who haven't visited your app in a while, create an audience, and reach out to them using remarketing campaigns in AdWords.

Products:

Google Analytics

AdWords

AdMob

Get started:

goo.gl/pYI9Vt

Bonus tip:

Google Analytics is available inside AdMob; with this integration you can slice and dice your data in the same place that you create campaigns.

Section 7

Go global by
being local



In this section

When localizing your app or game, you need to think beyond translation. Users around the world are more likely to download and engage with apps and games that are relevant to them. The closer you can align your app, your store listing, your prices, and marketing to local expectations and the local culture the more successful you will be.

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01

Understand your users in the countries you're trying to target



When launching outside your home market, research thoroughly to understand the local audience and take their preferences and expectations into account.

Why it works:

Not all apps and games have the same appeal globally, local markets can show strong preferences to particular features and designs. By picking the right markets in which to localize and taking local considerations into account, you'll maximize your chances of success and reach many more users.

How to do it:

- Research, research, and research the countries you plan to target
 - Google and many free (and paid) third-party tools can help.
- Reach out to your community and sound out anyone living in your target market.
- Check the Optimization Tips for your app in the Developer Console, to see if there are countries where your app is already gaining popularity.
- Understand the consumer price index and local purchasing power for each market to inform your prices.
- If possible, ensure your app works when there is no data connection, which is particularly important in countries with limited data coverage or speed.
- Smaller install sizes are better no matter where in the world you are, but it's especially important in markets where data can be relatively expensive.
- Think about the different user behaviors in each market — where and how users are accomplishing their goals and tasks with their devices — and how your app fits in. For example, Korean users commonly use their devices while commuting on public transport (where they have a strong data connection) but the US lacks a similar commuter culture.
- Research the likely effectiveness of different user acquisition channels in different markets — users in different markets vary in how responsive they are to different approaches.
- For games, check characters and levels for anything that might be culturally insensitive in your target market.

- For sports related games, understand the local biases: cricket in India, ice hockey in Finland, and baseball in the US.
- Korea and Japan show a particular interest in casual games, especially those with cute characters. There is also good uptake of in-app purchasing.
- For the USA simple-to-learn games that are easy to play can attract a large user base.
- In Germany and Russia there is a strong bias among game players for the strategy, simulation, and war game genres.

Products:

Developer Console

Get started:

goo.gl/4MmznU

02

Tips for games that appeal to US and European users



These are some simple generalizations about mobile games and local gamers' expectations in countries such as the US, the UK, Germany, and Russia. These aren't rules that need to be followed — this list highlights areas you should be thinking about when designing and launching a game in these countries. Always gather your own insights by researching popular games and gaming culture in any target country.

Icons — Keep your icon simple and focus on one or two features. Focusing on characters in your icon is a good way to connect with the user. Having a square background isn't necessary. Using a border can help your icon stand out from the background but isn't required either. For casual games, consider using a more colorful or cute style that appeals to all ages and demographics. Finally, avoid words in your icon unless they're connected to your game's branding or gameplay.

Video — Add high quality video trailer that shows gameplay to your store listing.

Screenshots — Effective screenshots tend to represent actual gameplay with key features called out on top.

User interface — Consider the different contexts and situations that users play games in. Traditionally, Western users played games on TVs and PCs with large screens and input controllers. This has influenced many games to be played in landscape. Whichever way you orient your game, since phone and tablet screens are small and users are unlikely to have an input controller, having a simple interface is important. Focus on fewer menu items and action buttons so players can easily navigate your game.

Gameplay — Successful games usually balance an accessible onboarding process for new players and intuitive gameplay, with a deep metagame to keep more engaged players coming back. Your onboarding process should have a gradual learning curve that introduces new features and game modes to the player.

Pricing — When you price your games, keep in mind what method players will use for payment. If players use direct carrier billing, they often have a monthly allowance. Research payment methods in each market, so you can allow players to spend appropriately. Additionally, prices in the US and Europe often end in .99.

Get started:

goo.gl/WVvFWo

03

Tips for games that appeal to Asian users in countries like Japan and Korea



These are some simple generalizations about mobile games and local gamers' expectations in countries such as Japan and Korea. These aren't rules that need to be followed — this list highlights areas you should think about when designing and launching a game in these countries. Always gather your own insights by researching popular games and gaming culture in any target country.

Name — Make sure your name fits the local market. Names of imported games in Asia are often transliterated with the original English name in parentheses. When the transliterated title is too long, it's best to shorten it or use a different name.

Artwork — Asian artwork in games tends to be anime or manga. Notable characteristics include lots of color and characters with exaggerated eyes.

Icons — Asian art styles tend to focus on cute and colorful characters reminiscent of popular culture (like in anime and manga). Icons vary widely so take a look at different examples in each market you want to target.

Video — Add a high quality video trailer that shows gameplay to your store listing.

Screenshots — Screenshots tend to be packed with game world content and use lots of color. They can be concept art highlighting characters and beautiful environments.

User interface — There is a strong culture of using mobile devices while commuting in Japan and Korea. Thus, users tend to like games in portrait orientation in which they can navigate menus and take actions with one finger. Despite the simple navigation, interfaces tend to be packed with information.

Gameplay — Casual games can have a fairly steep learning curve. In-game currency doesn't always need to guarantee premium items, just the ability to access them.

Fonts and strings — Asian languages are denser and take up less space. Make sure the characters and font style you use fit within the user interface and menu buttons.

Line breaks — Pay special attention to accurate placing of line breaks in Japanese and Korean.

Pricing — Prices in Japan and Korea tend to end in 0.

Special offers — In Japan, carrier billing caps refresh on the first day of the month so it's a good day to target for updates and promotions.

Get started:

goo.gl/WVvFWo

04

Design your app with translation in mind to simplify localization



Make sure that your app is designed to accommodate the variations in things like language, sentence structure, characters, and number presentation you'll encounter when localizing.

Why it works:

From the outset, design your app with the nuances of localization in mind. This will save you time and money when you come to expanding your addressed markets. It will also ensure a positive, mistake-free experience for your users.

Best practices:

- Design a single set of flexible layouts. For example, build in 30% extra space in UI elements to accommodate other languages.
- Use alternative layouts for localizations with caution, as they tend to increase maintenance effort – even though Android makes it easy to declare sets of layouts and other resources for specific languages, locales, screen sizes, and more.
- Support Right to Left layouts and text using full native support for features such as layout mirroring in Android 4.2 and later.
- Use system-provided formats for dates, times, numbers, and currencies so your app automatically matches the user's selection.
- Include a full set of default resources, those resources not marked with any language or locale qualifiers, so your app won't crash.
- Whatever the default language used in your app, make sure that you store the associated layouts, drawables, and strings in default resource directories, without language or locale qualifiers.

Get started:

goo.gl/xk6Yf9

05

Translate your app with the Google Play App Translation Service



For apps with limited use of text, use the Google Play App Translation Service to obtain a skilled, professional translation of your app at a reasonable cost. For complex apps with lots of text, consider using a specialized translation service and making use of your fans for quality assessment.

Why it works:

We've selected a number of translation services that all have a track record in app translation and made them available through the Developer Console. This takes the guesswork out of selecting a translator, but also simplifies preparation of your content as you can deliver your text for translation using the standard strings.xml file.

How to do it:

- 1** Ensure all your strings are defined in strings.xml, remove any redundant strings, and add additional information to help with translation.
- 2** In the Developer Console, select the app you want to translate.
- 3** Find the app translation service at the bottom of the APK section.
- 4** Select your translator and target languages.
- 5** Pay for the service.
- 6** Manage the translation directly with your chosen translator.

Products:

Developer Console

Get started:

goo.gl/gVGukz

06

Test your app in each language to ensure a successful launch



Test all localizations thoroughly, with the same rigor you tested your initial native language version.

Why it works:

Even the best translator can miss language nuances that will quickly be identified by users once your app has been released. By testing your localizations, you'll avoid language or content slip-ups that could be detrimental to your app's reception.

Best practices:

- Where possible, always use native-language speakers to test your localization.
- Look out for clipped text, overlapping text, and poor line wrapping.
- Check for incorrect word breaks or punctuation.
- Validate alphabetical sorting to ensure the order is as expected.
- Make sure all layouts and text directions are correct.
- Watch for untranslated text; check for the resources directory being marked with an incorrect language qualifier.
- Test for default resources.

Products:

Developer Console

Get started:

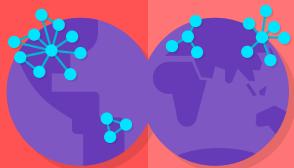
goo.gl/tJc20a

Bonus tip:

Don't be afraid to ask your community and users to give feedback on translations. Better yet, incentivize them to do a better translation and credit users with the best translations. Often, users are willing to contribute, and fan translations are high quality.

07

Market your app and support users locally for a positive reception



Don't stop at localizing your app. Reach out to your international users with marketing and support that is relevant to them in their language.

Why it works:

Localizing your app won't always guarantee a significant audience in any particular country. By implementing a localized marketing campaign and then offering appropriate support, you're far more likely to succeed.

Best practices:

- Localize your Google Play Store listing by adding its text to the content you send for translation through the App Translation Service in the Developer Console.
- Use the Google Play Badge Generator to create localized badges for use in web pages and blogs.

- Make sure all text in screenshots is localized, and if the screens include local content, make sure it's relevant to the target country or language.
- Involve your international users in alpha and beta tests.
- Understand your app's performance internationally and check its stats.
- For games, understand player behaviors and progression so that you can keep your top players engaged while easily onboarding new players.
- Read and respond to reviews from international users, in their own language where possible.
- Provide language specific support links and user groups.
- Reply to all customer service emails in a timely manner.

Products:

Developer Console

Google Play Badge

Generator

Device Art Generator

Get started:

goo.gl/b76BJM

Section 8

Useful resources



Additional resources:

-  Find success on Google Play
developers.android.com/distribute
-  Get news and tips in your inbox
g.co/play/developernews
-  Android Developers Blog
android-developers.blogspot.com
-  +AndroidDevelopers on Google+
google.com/+androiddevelopers
-  Android Developers on YouTube
youtube.com/androiddevelopers
-  @AndroidDev on Twitter
twitter.com/androiddev
-  Google Play Developer Help Center
g.co/play/developerhelpcenter

Please give us your feedback!

We're continually working to improve our products and services to help you grow your app business on Google Play. Please give us your feedback on this guide and let us know what you want to see in future editions:

goo.gl/TZZj4G

