

# Ad Format Adoption Testing with Firebase

## Solution Overview



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## Products & features covered

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Google  
AdMob



Firebase  
A/B Testing



Google  
Analytics



Firebase  
Remote Config

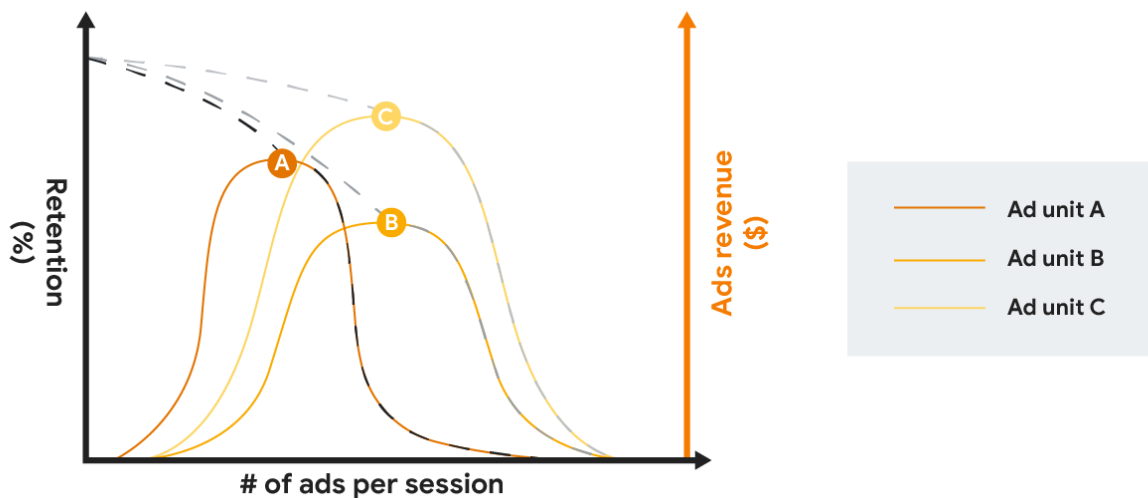


# Solution overview

## What is ad format adoption testing?

Whether you are a hybrid-revenue or ads-revenue driven publisher, the adoption of different ad formats can be complicated.

Not all ad formats will suit every app, some ad formats might perform better depending on app properties. You might be concerned that using a new ad format for your app could have a negative impact on user experience or retention, but you might also be curious to see if it could lead to an increase in revenue and engagement when instrumented properly.



**Optimal ad format maximises revenue with minimal impact to churn**

To help you with these unknowns, Firebase offers tools that help you make data-driven decisions about adopting new ad formats. Using Firebase, you can A/B test the performance of a new ad format with a small subset of users. You can observe the results of the test and review recommendations from Firebase to see if the new ad format is performing better than the existing ad format in your app. Once you are confident that the changes will likely have a positive impact, you can then roll out the changes to the majority of your user base with a click of a button.



## Business case & the value

On the average, developers and publishers using Google AdMob and Firebase tools for adding a new ad format enjoy major revenue uplifts (up to 10X\*) while keeping the retention rate stable.

[Pomelo Games](#) uses Firebase to increase revenue by up to 35% without losing players.  
Qtonz uses Firebase to achieve 4x increase in Ads Revenue and 190% increase in ARPPDAU

\*Revenue uplift based on results from 8 large publishers in 2020.

## Products & features used

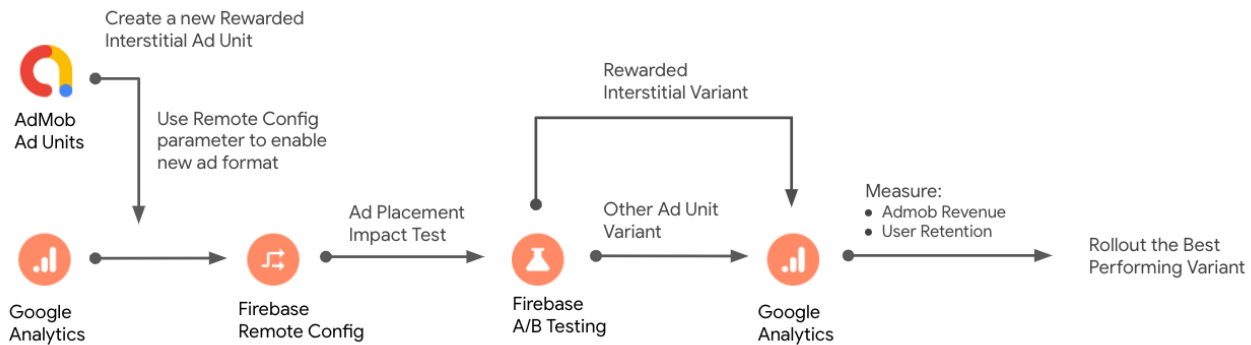
The following products are used to set up an Ad Format Adoption testing strategy. Check out the Implementation Overview below for more details about how you'll use these products.

- [Google AdMob](#): AdMob enables you to create ad unit variants that will be served within your app. When you link AdMob with Firebase, AdMob sends ad revenue information to Firebase to improve ad strategy optimization.
- [Google Analytics](#): Google Analytics gives you insight into user engagement, retention, and monetization metrics like total revenue, AdMob revenue, purchase revenue, and much more. It also allows you to create user audiences and segments.
- [Firebase Remote Config](#): Firebase Remote Config enables you to dynamically change and customize the behavior and appearance of your app for desired user segments - *all without publishing a new version of your app*. In this guide, you'll use Remote Config parameters to control whether a new ad unit is shown to your users.
- [Firebase A/B Testing](#): Firebase A/B Testing provides the interface and infrastructure to run product and marketing experiments in your app. It takes care of distributing experiment variants to users, and then performs statistical analysis to determine if an experiment variant is outperforming the control group based on your selected key metric, such as revenue or user retention.



## Implementation overview

### Ad Format Adoption Test & Rollout



The [Implementation Guide](#) goes through implementing and testing a new ad format for your app, and it's using a [rewarded interstitial ad](#) as the example test case. Keep in mind, though, you can extrapolate and use these same steps to test out [other ad formats](#), too.

This guide assumes that you already use AdMob in your app and that you'd like to test whether adding *another* ad unit (with a new ad format) will have an impact on your app's revenue or other metrics. But if you don't already use AdMob in your app, that's ok! The steps in this guide can also help you understand if simply adding an ad unit to your app has an impact on your app's metrics.

**Tip:** If there's a term that you're not familiar with, check out the glossary at the end of the [Implementation Guide](#).



### Step 1:

- **Use AdMob to create a new ad unit variant for testing**
  - a. Create a new rewarded interstitial ad unit in AdMob.
  - b. Implement the ad unit placement within your app's code.

### Step 2

- **Set up an A/B test in the Firebase console**
  - a. Initiate a new A/B test in the Firebase console.
  - b. Define testing basics, targeting, and the goals that the test will run against.
  - c. Define test variants and set up the Remote Config parameter that will control whether to show the new Rewarded Interstitial ad to users in the test.

### Step 3:

- **Handle Remote Config parameter values in your app's code**
  - a. Use the Remote Config parameter in your app and implement the logic for displaying the ad unit based on the parameter's value.

### Step 4:

- **Start the A/B test & review the test results in the Firebase console**
  - a. After starting the test and allowing it to run for a period of time (a few days or weeks), navigate to the A/B test in the Firebase console.
  - b. Observe if Firebase has determined if there is a winning variant based on the primary goal of the A/B test.
  - c. Review the impact on secondary metrics for each variant. Although Firebase determines if a variant is a winner based on the primary goal, you'll also want to inspect the data from the secondary metrics to ensure the variants didn't cause unintended negative impacts.

### Step 5:

- **Decide whether to roll out the new ad format**
  - a. If A/B Testing determines that the variant showing the new ad format is the winner, you can start showing the ad format to all users targeted in the experiment for your app – just click the button in the A/B Testing page.
  - b. Alternatively, if a winner is determined, you can end the experiment, then set the Remote Config parameter value to the winning variant's value. You can make this be the setting for all your users or even just a subset of your users.
  - c. If a clear winner isn't yet determined, you can either continue running the experiment to gather more data, or end the experiment if it's already been running for a long period with inconclusive results



## Implement this solution in your app

You can implement Ad Format Adoption Testing in your app by following the [Implementation Guide](#).

# Thank you!

