



# Data-driven app design

Random Logic Games uses Firebase AB testing and AdLibertas Audience Reporting to test game mechanics and increase user LTVs.

## **Background**

Random Logic Games has a knack for creating engaging apps for users, they've racked up millions of users across their portfolio of puzzles and are no strangers to using data-driven app design for demonstrating success.

Alex McArdle is in charge of refining gameplay metrics on RLG's newest app Infinite Connections, with the goal to keep users engaged and drive up user retention and profitability.



"I'm currently testing how puzzle complexity drives user engagement. Do users like small, easy puzzles that get them in and out of the game quickly, or are they more interested in larger complex puzzles? Personally I think users would get frustrated with large, complex boards and bail early."

Alex, Data Analyst, Random Logic Games

### The Problem:

Like many app developers RLG uses Firebase remote configuration and AB testing to split users into different groups, then test new game mechanics on the users. However, like many app developers it can be difficult to get definitive outcomes across their testing and performance strategies.

"When trying to see a winner from Firebase AB testing, getting a simple retention number or the probability of a user's action isn't helpful. I want to know retention, revenue earned, and user-engagement all in one.

To rely on just Firebase numbers I would need to run way more users through the test and event then it would be tough to get a clear indication of higher user-value."

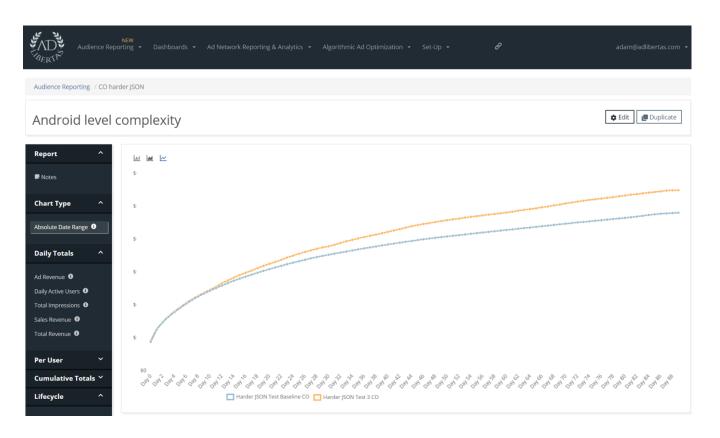


#### The Solution:

Alex wanted an easy way to determine his AB test winners so he opted to use AdLibertas Audience Reporting to measure the variant LTV performance.

"I created tests of varying level complexity – from smaller, easier games all the way up to lots of very long, involved and complex puzzles. To get fast, accurate answers on these tests, simplicity of results is critical.

So I use LTV of each test variant over time as the best measure for success."



### The Results:

"It turns out there was a very specific formula of a few small easy games interspaced by larger, more complex puzzles that were clear winners. I wouldn't have guessed this on gut alone but this formula clearly **outperformed the baseline by almost 10%** -- and for our users a 10% difference in LTV can make a significant difference in the profitability of a user."

-Alex



See how Audience Reporting can work for you

See a demo