



Casual & Puzzle Games Data Benchmarks

North America, Q1 2017



Key Findings - Executive Summary



- The Casual & Puzzle category is the most popular gaming category as far as number of apps in concerned - nearly 15% of all gaming apps in total
- In the battle of retention between platforms, Android came out on top with a slightly higher rate on day 1, but then iOS opened up a gap that only increased over time (26% on day 10 and 31% on day 30)
- Non-organic users are 35% more active than organic users as far as the volume of usage is concerned, and 20% higher in its share of buying users. When it comes to actual money being spent, organic users slightly outperform non-organic users with an ARPU of \$1.48 vs. \$1.44 (in 90 days)
- Facebook and Google dominate the AppsFlyer Performance Index for Casual & Puzzle games; video advertising also proves highly effective with networks such as AdColony, AppLovin and Vungle performing well

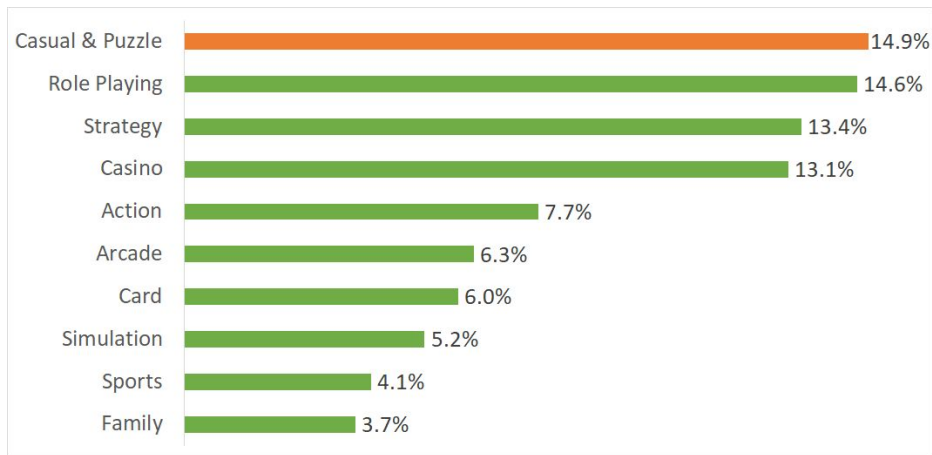
Introduction

Gaming has been and still remains the driving force of the app economy. One of the top categories in gaming is the casual & puzzle genre, as people always look for light entertainment, fun and distractions to everyday life.

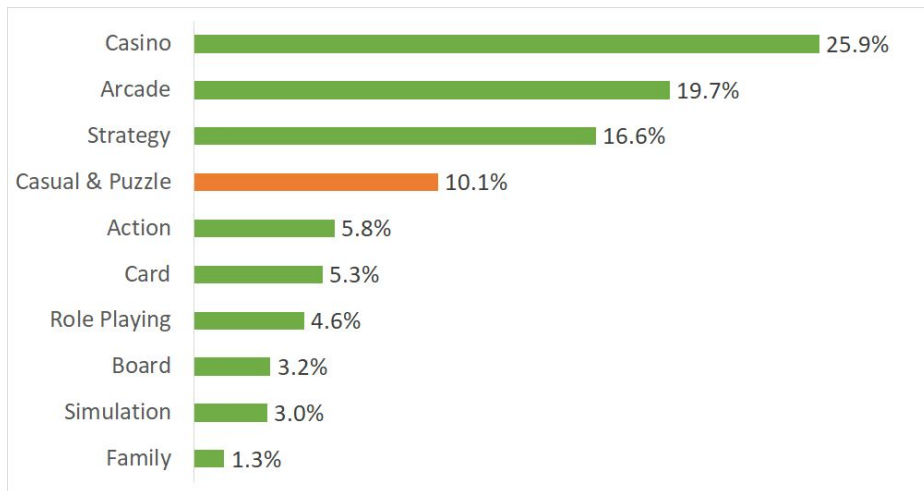
Tetris, Bubble Shooter and the king - Candy Crush Saga (by King), in addition to many others have led to the development of this market. In fact, according to our data, it is currently the most popular gaming category as far as number of apps in concerned - nearly 15% of all gaming apps in total.

When it comes to user acquisition activity, casual game businesses represent about 10% of the paid market for gaming apps - the 4th highest category.

Distribution by number of apps running UA campaigns



Distribution by number of non-organic installs



Retention

How we calculated this metric: We divided the number of users who were active on days 1, 7, and 30 out of the total number of users who first launched the app (on day 0). To determine our highly robust retention score, we looked at each day's rate separately and assigned different weights in the formula based on the logic that the longer a user is retained, the higher the weight.

Period



Q1 2017

Region



North America

Number of installs



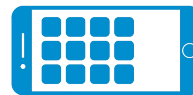
47 million

App opens



25 million

Number of casual/puzzle apps

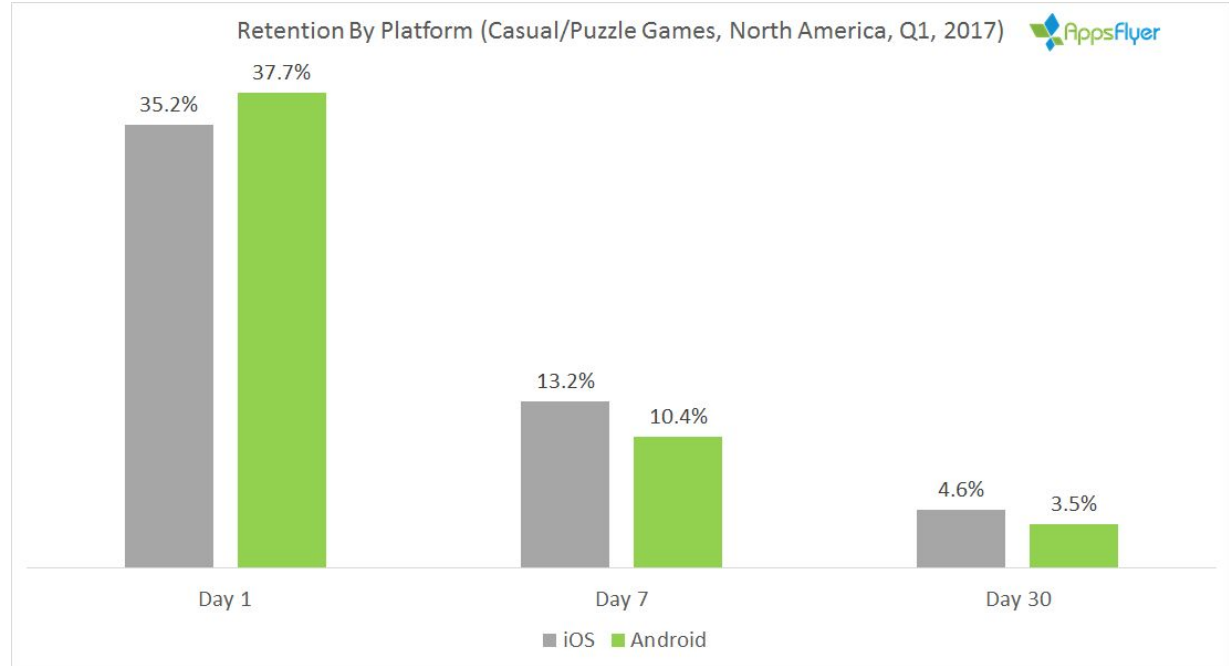


550
min 2K installs

Retention By OS

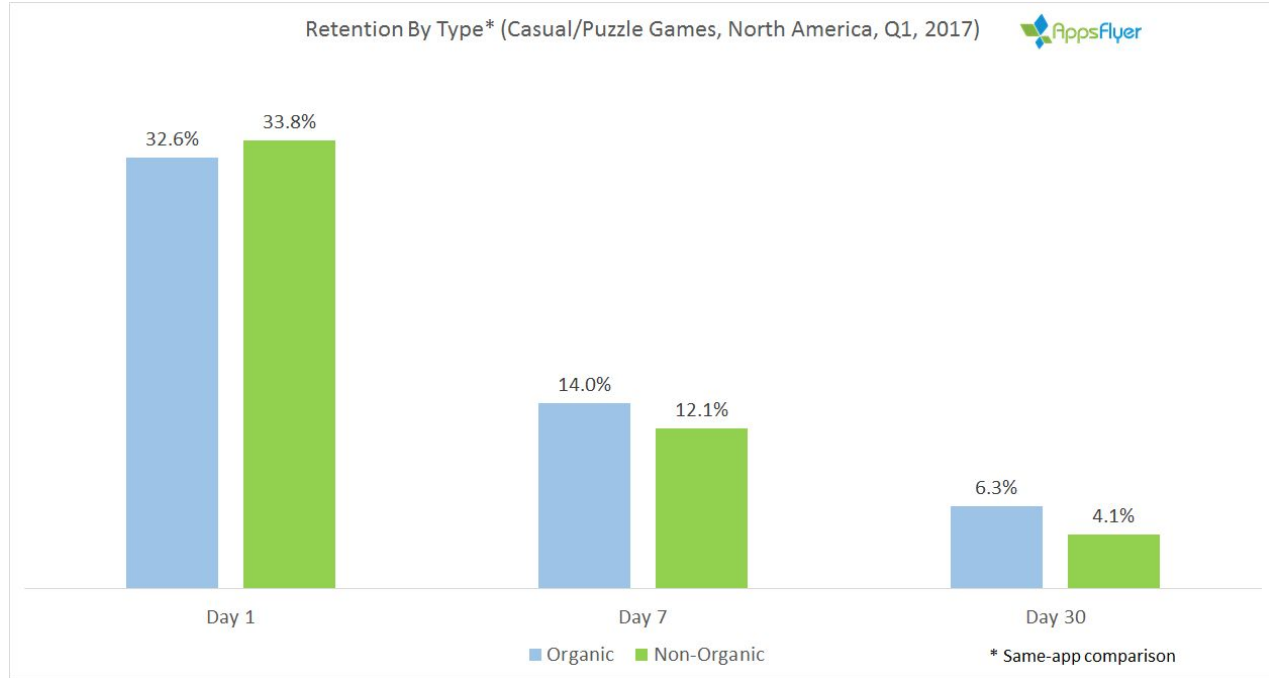
Retention is one of the biggest challenges for marketers, and casual games is no exception with less than 5% of players opening a gaming app 30 days after they have installed it.

Although Android retention was slightly higher on day 1, iOS opened up a gap that only increased over time (26% on day 10 and 31% on day 30).



Retention By Type

When comparing the organic and non-organic retention rates of casual games we can see a clear trend: Non-organic users were stronger out the gate, but then Organic users took over, ending up with a nearly 55% higher retention rate come day 30.



Install to Lifetime Engagement

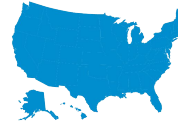
How we calculated this metric: We summed up the total number of in-app events and divided it by the total number of installs of these apps. As for purchase events, we totaled these events among apps that implemented our suggested integration, and divided it by the total number of installs of these apps.

Period



Q1 2017

Region



North America

Number of users



1.4 million
Who downloaded apps
between January 1-14

Number of Purchase events



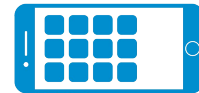
550,000

Number of Events measured



32 million

Number of casual/puzzle apps



110

Install to Lifetime Engagement

Although organic users are more engaged over time (retention), non-organic users were 35% more active as far as the volume of usage is concerned (defined as the number of in-app events recorded by a user).

How can we explain this finding? Casual game marketers are advanced data-driven pros who know how to squeeze the value from their paid users. In addition, casual organic users have a casual mindset when they visit the app store to find a new game. That means they won't put much thought into it: they'd download a game, try it out and stop using it just as fast if they don't like it.

A platform comparison shows that iOS users were 40% more active than Android players.

1
Install =

22.8
Total Events



21.4

Organic: **14.1**



30.1

Non-Organic: **19.2**

17.4
Level Achieved Events

Organic: **16.7**

Non-Organic: **18.5**

0.57
Purchase Events

Organic: **0.55**

Non-Organic: **0.59**

Share of Buying Users

How we calculated this metric: We isolated a cohort of users who installed during Jan. 1-14 and then went on to see how many of those users made at least 1 purchase event in 90 days (dividing that number by the total number of users). Purchase events were only recorded from apps that implemented our suggested integration.

Period



Q1 2017

Region



North America

Number of users



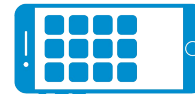
1.4 million
Who downloaded apps
between January 1-14

Number of buying users



150,000

Number of casual/puzzle apps

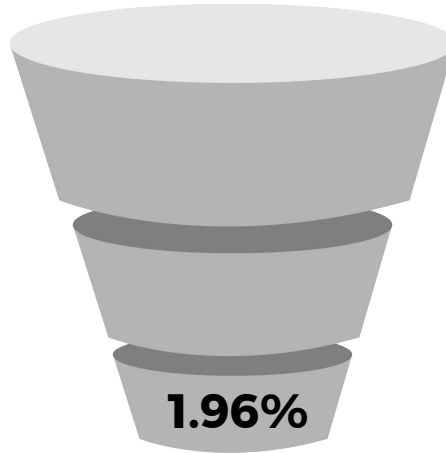


80

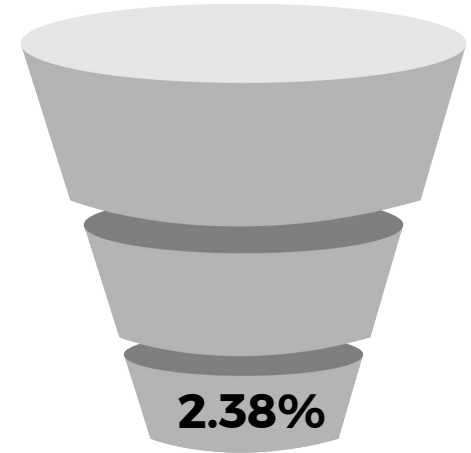
Share of Buying Users

Similar to engagement, there was a higher share of non-organic casual gamers who made purchases than organic ones. See slide 7 for an explanation on why the non-organic casual gamer is in practice even more valuable than the organic one - as long as marketers use all the data they can to maximize their value.

Organic



Non-Organic



ARPU & ARPPU

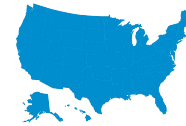
How we calculated this metric: We summed up the total revenue of apps that had implemented our suggested purchase event implementation and divided it by the total number of users that installed these apps, or the total number of buying users. Both metrics only included revenue from in-app purchases.

Period



Q1 2017

Region



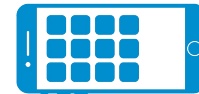
North America

Number
of users



1.7 million
Who downloaded apps
between January 1-14

Number of
casual/puzzle apps



90 apps
Min 1K installs

ARPU & ARPPU (90 days)

Organic users that make purchases in casual games are slightly more valuable than their non-organic counterparts when it comes to actual money being spent.

There was a significant gap between the average revenue of all users and the average revenue of PAYING users. Once again, this shows the value of the paying users in gaming - where only a fraction of gamers generate a lion's share of revenue.

ARPU

\$1.48
Organic

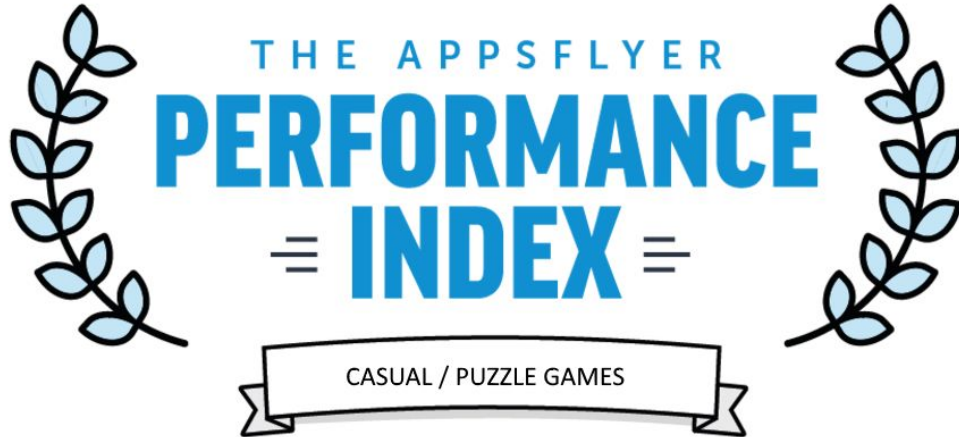
\$1.44
Non-organic

ARPPU

\$36.06
Organic

\$32.55
Non-organic

Ranking the Best Media Sources in Mobile Advertising



Period



H2 2016

Region



North America

Number of
non-organic installs



9 million

Number of
strategy apps



120
Min 1K installs



Methodology

VOLUME RANKING

A ranking of media sources based on the total number of app installs they generated throughout the study's time frame.

RETENTION SCORE RANKING

STEP 1

We calculated the non-organic retention rate of each app per media source. We did this separately for each day of a 30-day period, dividing the number of users who were active on the day in question by the total number of users who first launched the app in the selected timeframe.

STEP 2

We calculated the organic retention rate of each app on a country level, separately for each day throughout 30 days.

STEP 3

We then compared the non-organic and organic retention rates for each of the 30 days. Using organic retention as a benchmark significantly reduces the impact of a given app's quality, and therefore offers a far stronger indication of a media source's performance.

STEP 4

We calculated a weighted average using a retention-based logic; the longer a user is retained, the higher the assigned weight. As such, the day 1 non-organic to organic ratio had the least weight, and day 30 the most weight. This weighted 30-day average serves as our retention score.

STEP 5

We removed statistical outliers - apps that had a significantly higher or lower retention score in specific countries.

RETENTION & POWER RANKING

After removing media sources that did not meet our threshold (based primarily on client adoption), we ranked each source's retention score to derive their retention rank. To calculate the final Power Ranking, we normalized both the number of installs generated by each media source and its retention score, and then combined the two factors.

GENERAL

The traffic analyzed in the index includes both incentivized and non-incentivized ad formats.

VOLUME RANKING



RETENTION SCORE RANKING



POWER RANKING





Thanks!

