
THE STATE
OF MOBILE MONETIZATION
February 2019

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Usage Restrictions

Introduction

To improve and ultimately perfect an app, developers need to select the right SDKs – Software Development Kits. However, in today's marketplace app developers are literally inundated with SDK choices, making it difficult to choose the best ones.

The Mobbo Power Index offers app publishers and marketers robust benchmarks of mobile app SDK components, helping them to make informed decisions about the best technology stacks. The report sheds light on the scale and performance of popular SDK components and tracks the movers and shakers in the mobile industry. This research has been conducted after studying a database of over 7 Million analyzed apps, and over 10,000 SDK components scanned across iOS and Android in all categories, which make it the most in depth study to date.

The findings provide valuable information for app publishers in their quest to pinpoint the best SDKs to integrate with, as well as for service providers in the mobile app economy who want to understand the competitive landscape in their field.

Since scale is a key factor in achieving statistical validity, larger media sources gain an advantage in this study. However, it is important to remember that smaller, niche SDK providers may also deliver good results for app publishers, so testing several technology providers - both large and small - is recommended.

Changes in the mobile ad industry and the sunset of SDK's due to M&A and Consolidation led us to not present data from some SDK vendors.

For any feedback and insights about this report, feel free to email us at info@mobbo.com.

Key Findings

1. OneAudience and Cuebiq are the most popular data monetization SDK's on Android with a 33% market share.
2. PayPal is the most popular Payment SDK on Android with 46% of apps using a Payment SDK choosing PayPal.
3. UnityAds is the most popular Rewarded Ads SDK on Android with 48% market share.
4. Firebase continues to be the most popular Analytics SDK on Android and iOS with 35% market share.
5. AppsFlyer leads the attribution SDK category with Android market share of 71% and 51% on iOS globally.
6. Game developers have increased their use of in game ads and specifically with Rewarded ads.
7. Crashlytics is the most widely used Crash Reporting SDK on both Android and iOS.
8. Android game developers are slowly moving to in game ads instead of paid games and in app purchases.

Methodology

Scope

Scope: +10,000 Technology stacks of 6 Million apps worldwide, across all categories on iTunes and Google Play. Date range: Q1 2019

Retention Rate

Retention Rate figure was calculated by one minus - the number of SDK removals (uninstalls) from January to March 2018 (inclusive) and dividing it by the total number of active SDK implementations.

Share of Voice

Share Of Voice (SOV) - is the percentage of apps utilizing a specific SDK in the monetization category taking into consideration that apps often employ several SDKs simultaneously.

Growth

Growth was calculated by:
A) Subtracting SDK removals from the number of new SDK implementations from January to March 2018 (inclusive) to get the gross implementations for that period, followed by: B) Dividing the number of gross implementations by the number of implementations at the start of the period.

Market Share

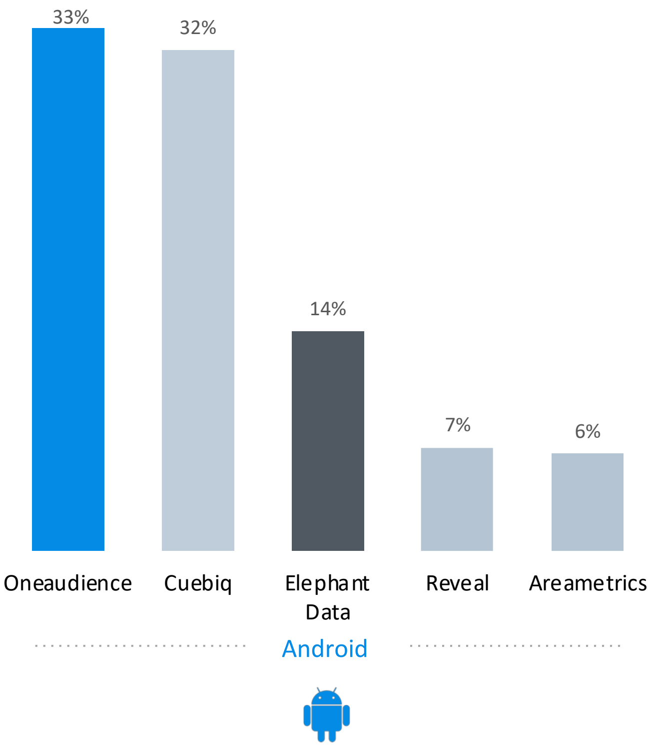
Market Share is the percentage of the market controlled by a specific SDK in the In-App Advertising vendors' category. It is calculated by dividing the number of apps that have implemented each SDK by the total number of apps that use an SDK from the same category.

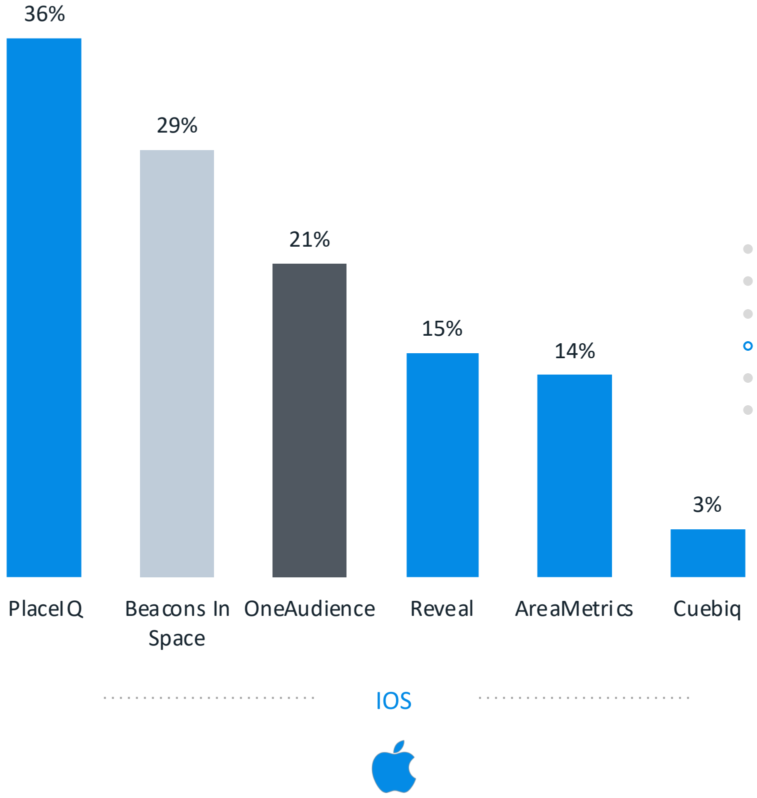
Power Index

A rank combining three factors given to each media source:

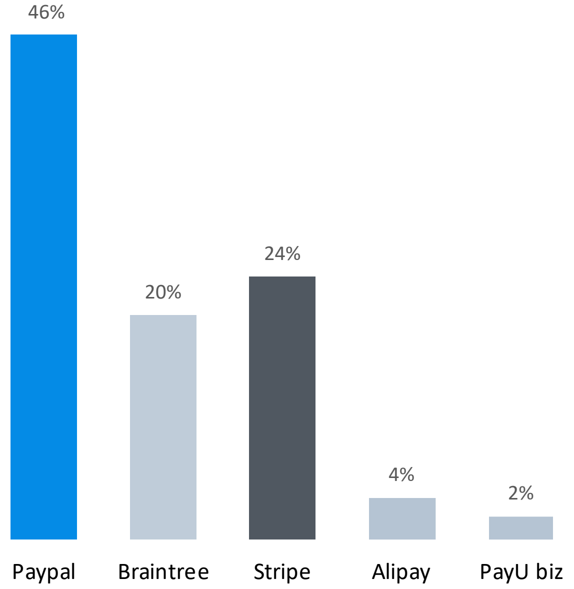
- 50% weight given to scale (- total number of active SDK implementations)
- 30% weight given to popularity among top apps (- number of SDK implementations in apps ranked in top charts)
- 20% weight given to Retention (- low uninstall rate)

Data Monetization

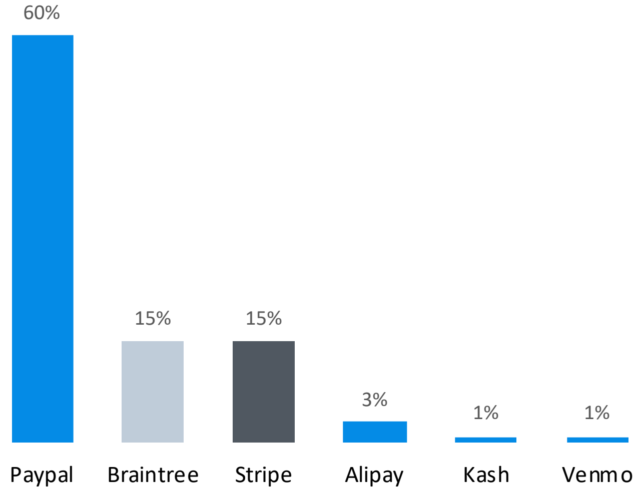




Payment SDK’s



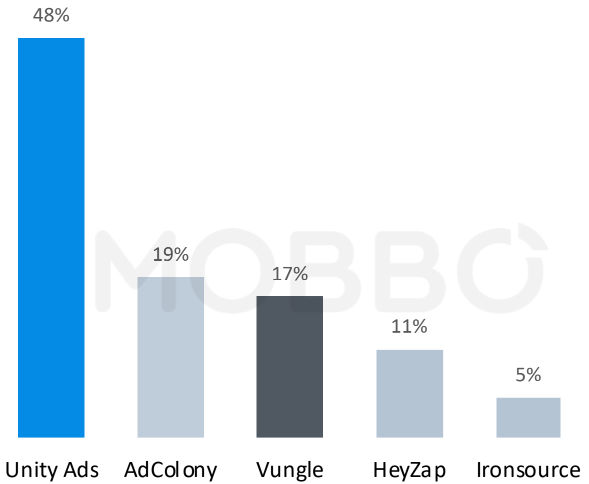
Android



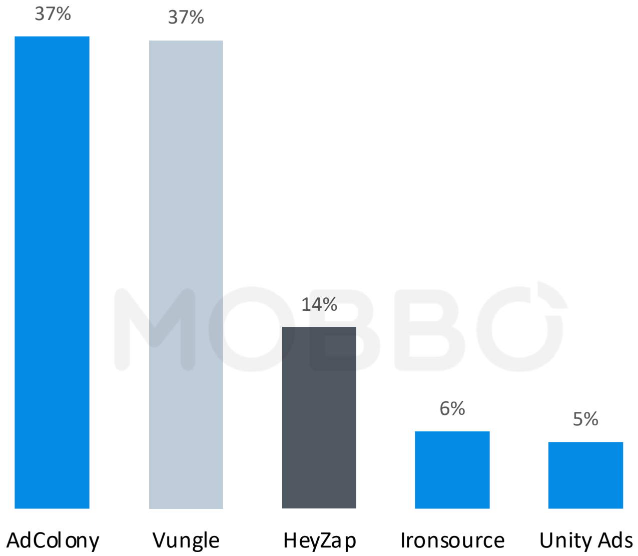
IOS

Rewarded Ads

Rewarded Ads

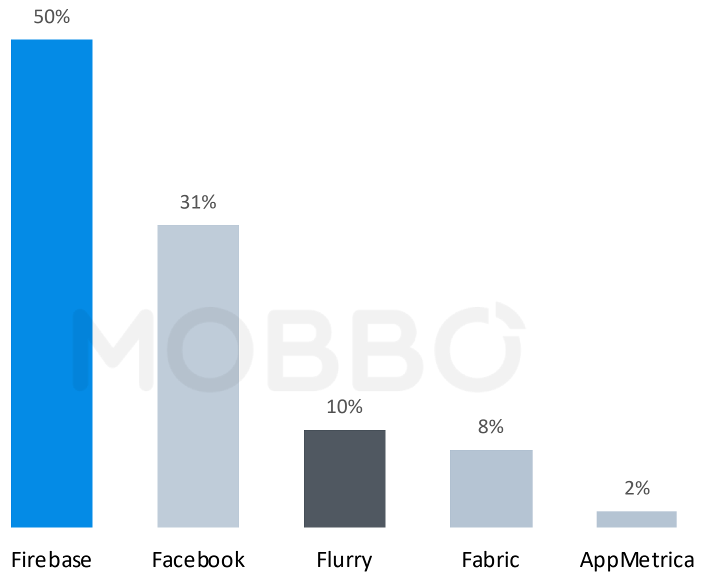


Android

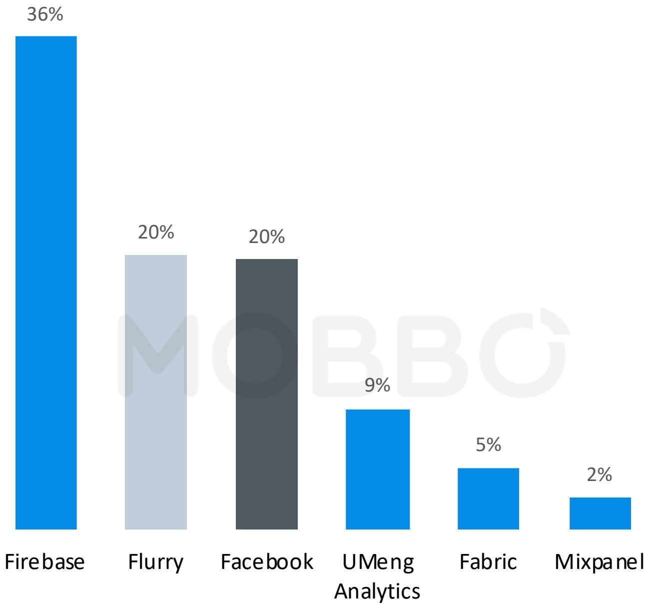


IOS

Analytics

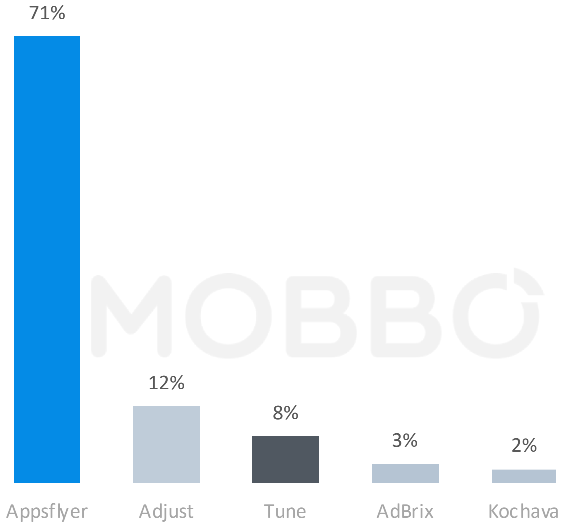


Android

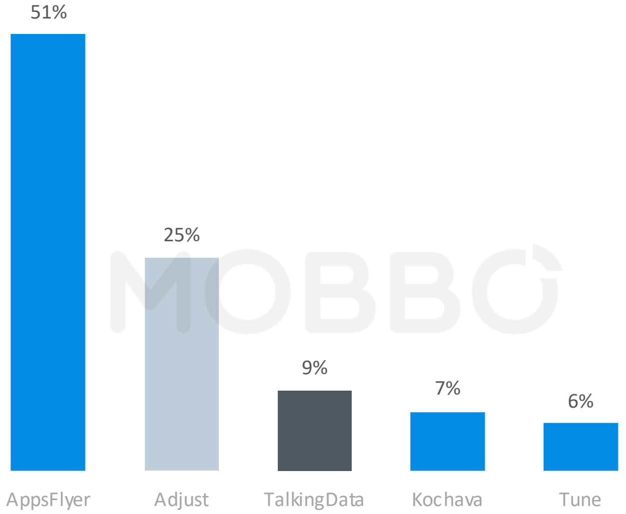


IOS

Attribution

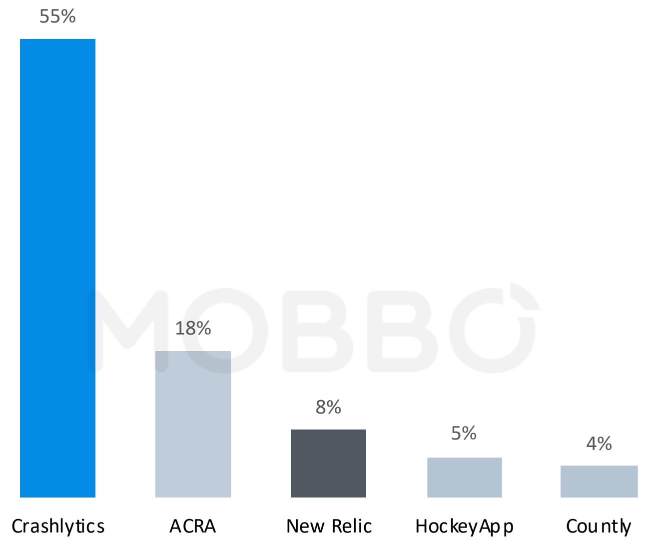


Android

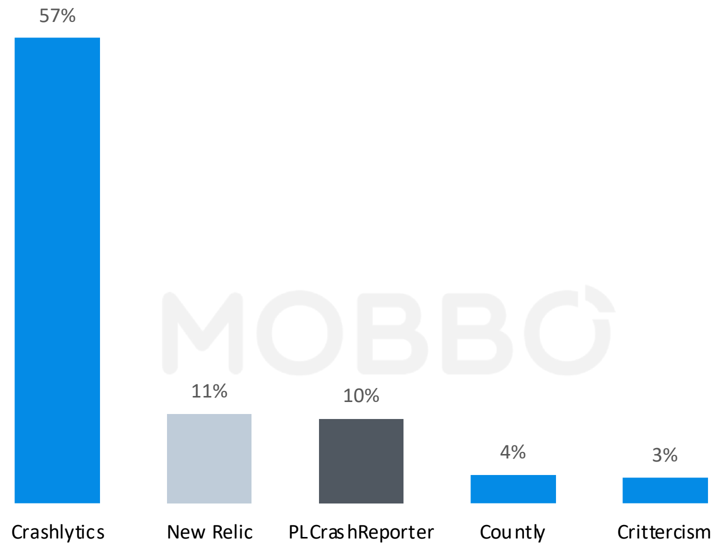


IOS

Crash Reporting

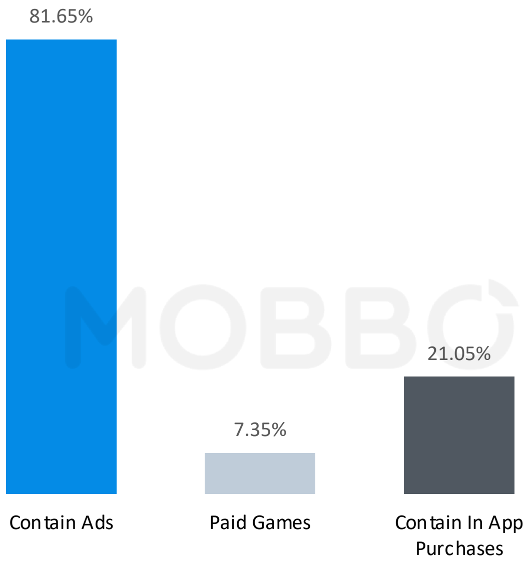


Android

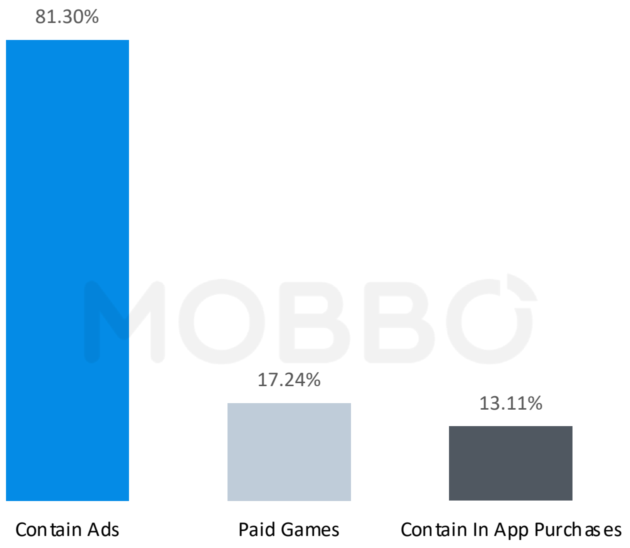


IOS

Monetization Methods - Games

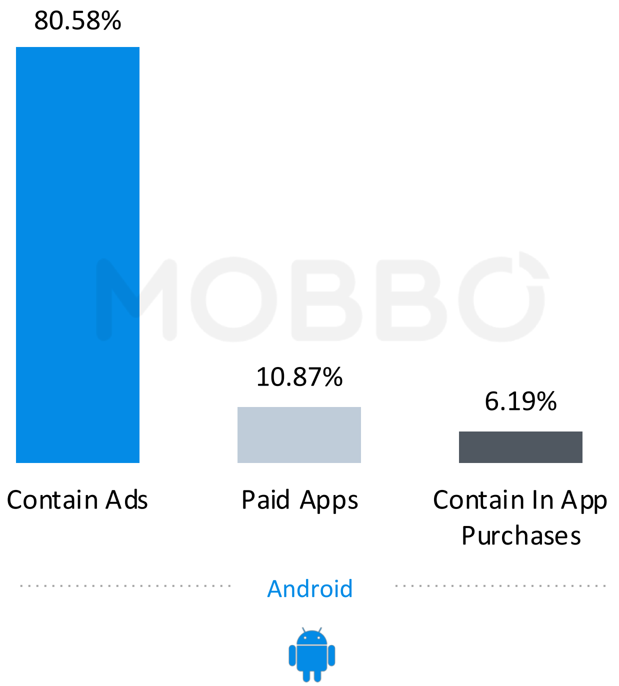


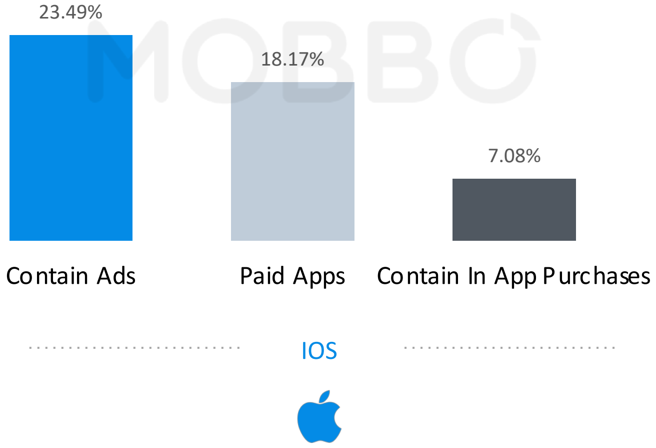
Android



IOS

Monetization Methods – Apps (Non Game Apps)

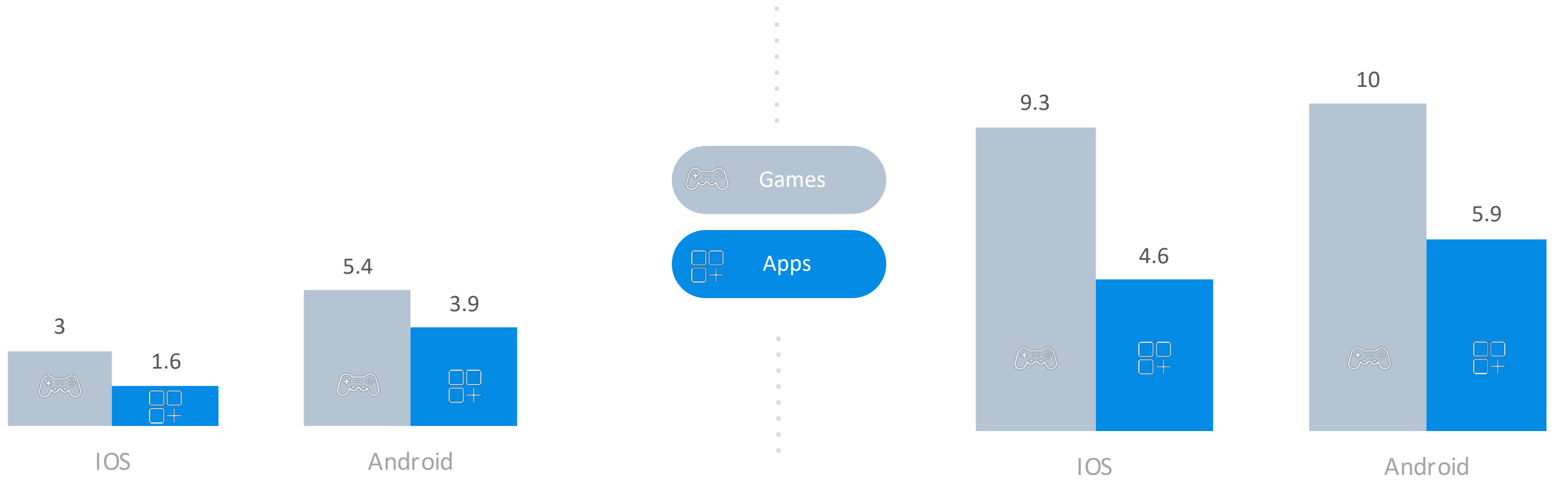




Advertising SDK count per app that contains adverts

3 Average Count across all apps with advertising SDK's

6.6 Average SDK count per app – Among Top Publishers + Popular Apps



Methodology - Top Publishers that were tested include: Miniclip, Kiloo, Outfit7, Chetah Mobile, Halfbrick Studios, Surpax, Fingersoft, Sega, Second arm

Monetization Methods. Key Observations

- Android game developers are slowly moving to in game ads instead of paid games and in addition to in app purchases.
- iOS game developers increased their use of in game ads and specifically with Rewarded ads.
- Android app developers are increasing their usage of in app ads.
- The Market share of apps monetizing only with in app purchases has declined slightly.

In-App Advertising. Share of Voice

ANDROID

1. AdMob
2. Facebook
3. START APP
4. Chartboost
5. unity Ads
6. APPLOVIN
7. mopub
8. INMOBI
9. REVMOB
10. ADCOLONY
11. amazon Ads
12. Vungle
13. NEXAGE
14. heyZap
15. appnext
16. APPODEAL
17. Tapjoy
18. MobFox
19. Fyber
20. millennialmedia
21. myTarget
22. IronSource
23. FLURRY Ads
24. smaato
25. Cheetah Mobile
26. AppBrain
27. smart
28. avocarrot
29. Yandex
30. Swelen

In-App Advertising. Share of Voice

IOS

1. AdMob
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3. AppLovin
4. AdColony
5. Vungle
6. mopub
7. Facebook
8. StartApp
9. unity Ads
10. Flurry Ads
11. heyZap
12. InMobi
13. Tapjoy
14. ADLIB
15. millennialmedia
16. hyprMX
17. smaato
18. LeadBolt
19. Cheetah Mobile
20. ironSource
21. Fyber
22. RevMob
23. mobclix
24. AdBuddiz
25. Appodeal
26. adtapsy
27. appnext
28. avocarrot
29. Fiksu
30. LeadBolt

Share Of Voice. Key Observations

1

AdMob still number one

AdMob is holding strong to the first place with 85.5% SOV in games and 86.6% in Android apps.

2

Facebook Audience Network

Facebook Audience Network keeps growing among non-game apps, and is the second most popular monetization SDK on Android.

3

StartApp

StartApp overtake Chartboost and is now the third place.

Growth Rate – Q3 2018

ANDROID

Movers & Shakers in the In-App Advertising Category

1. Mobvista
2. OGURY
3. :tappx
4. FLURRY Ads
5. Fyber
6. myTarget
7. Facebook
8. Vungle
9. ironSource
10. NEXAGE
11. appnext
12. unity Ads
13. STARTAPP
14. Cheetah Mobile
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22. avocarrot
23. APPODEAL
24. ADCOLONY
25. millennialmedia
26. amazon Ads
27. Chartboost
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29. LeadBolt
30. smaato

* Growth during Q3 2018

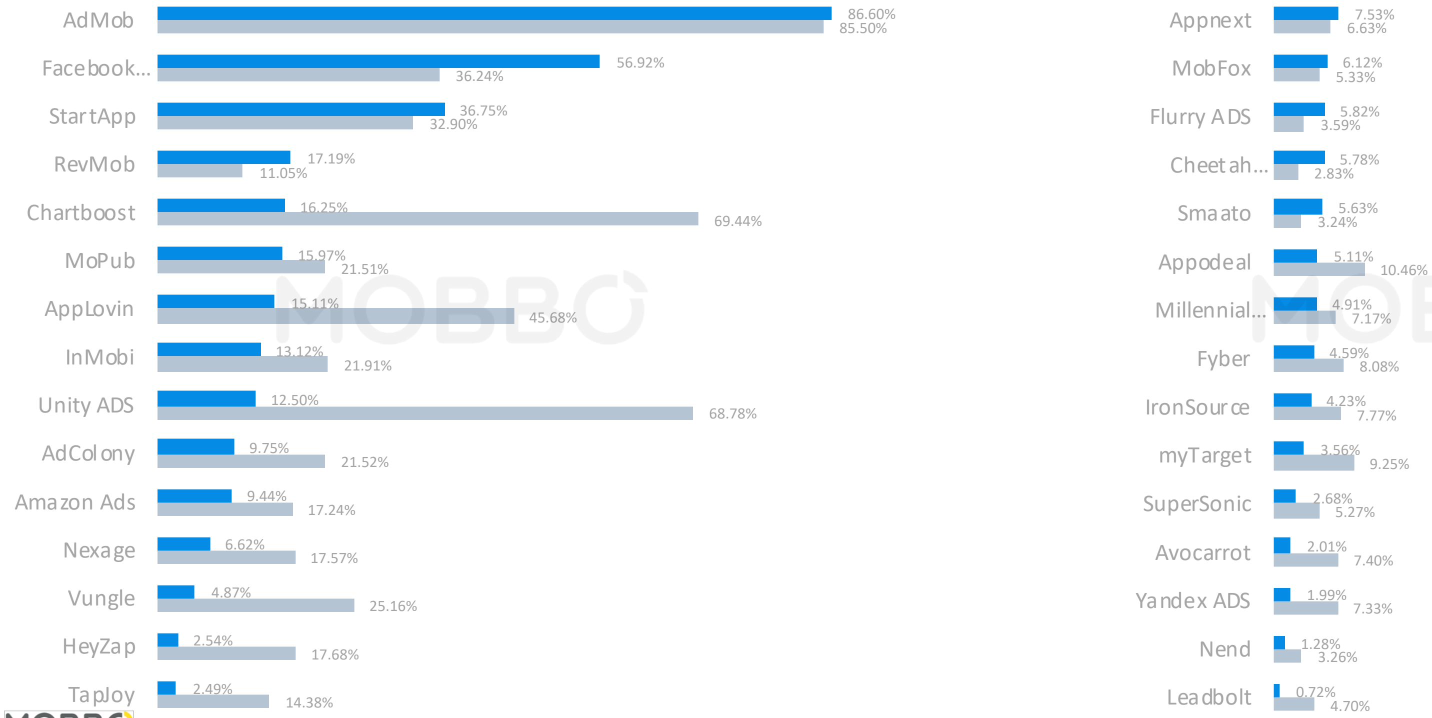
Growth Rate. Key Observations

1. Mobvista had the best growth rate in Q3 2018 over doubling the number of apps.
2. Ogury is slightly behind with 1% difference.
3. Tappx is in third place with growth rate of 36%.
4. Flurry Ads had a great third quarter with 28% growth rate.

Share of Voice. Apps vs Games

ANDROID

Mobile Monetization Share Of Voice: Apps vs. Games



Apps

Games

* Q3 2018

Android Apps vs Games - Key Observations

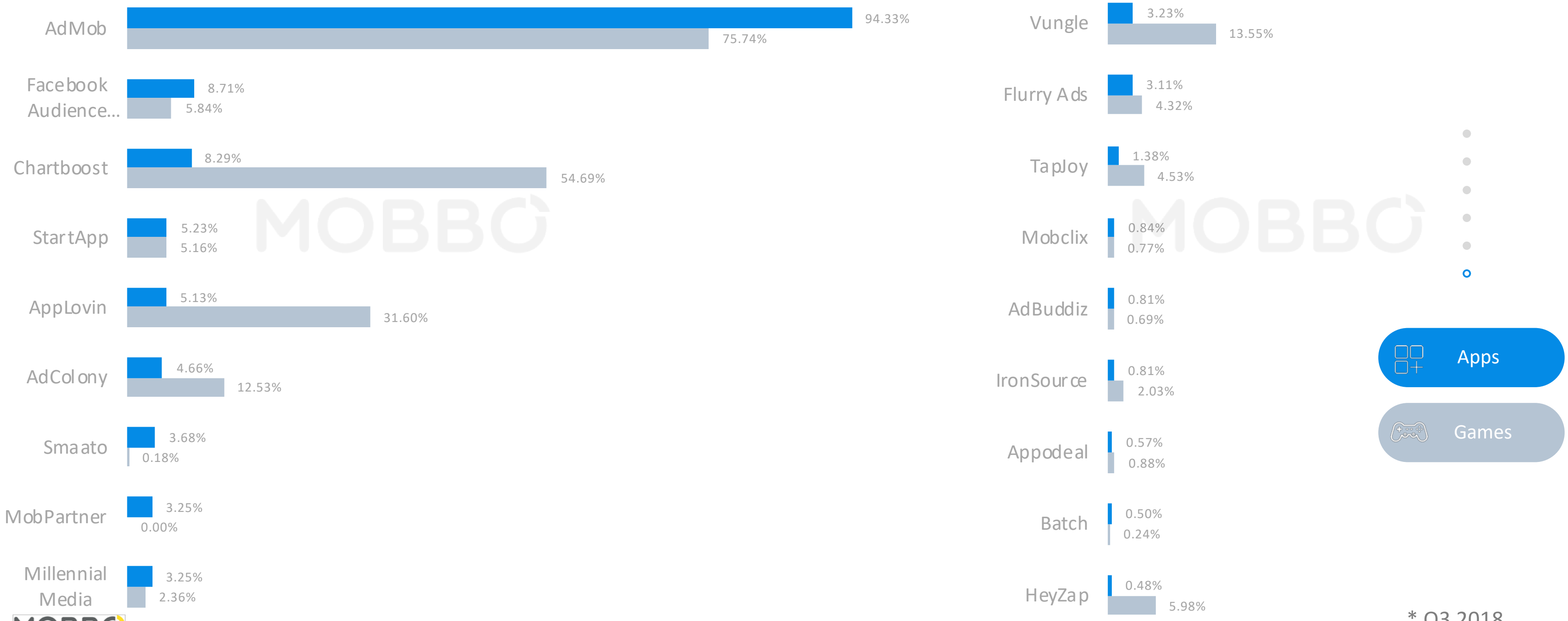
ANDROID

- AdMob is holding strong to the first place with 85.5% SOV in games and 86.6% in Android apps.
- Facebook Audience Network is still gaining traction in both Android games and Apps.
- StartApp is still in third place with nearly equal numbers in Android games and Apps.
- RevMob is holding onto 4th with 17.9% SOV in Android apps and 11% in Android games.

Share of Voice. Apps vs Games

IOS

Mobile Monetization Share Of Voice: Apps vs. Games



* Q3 2018

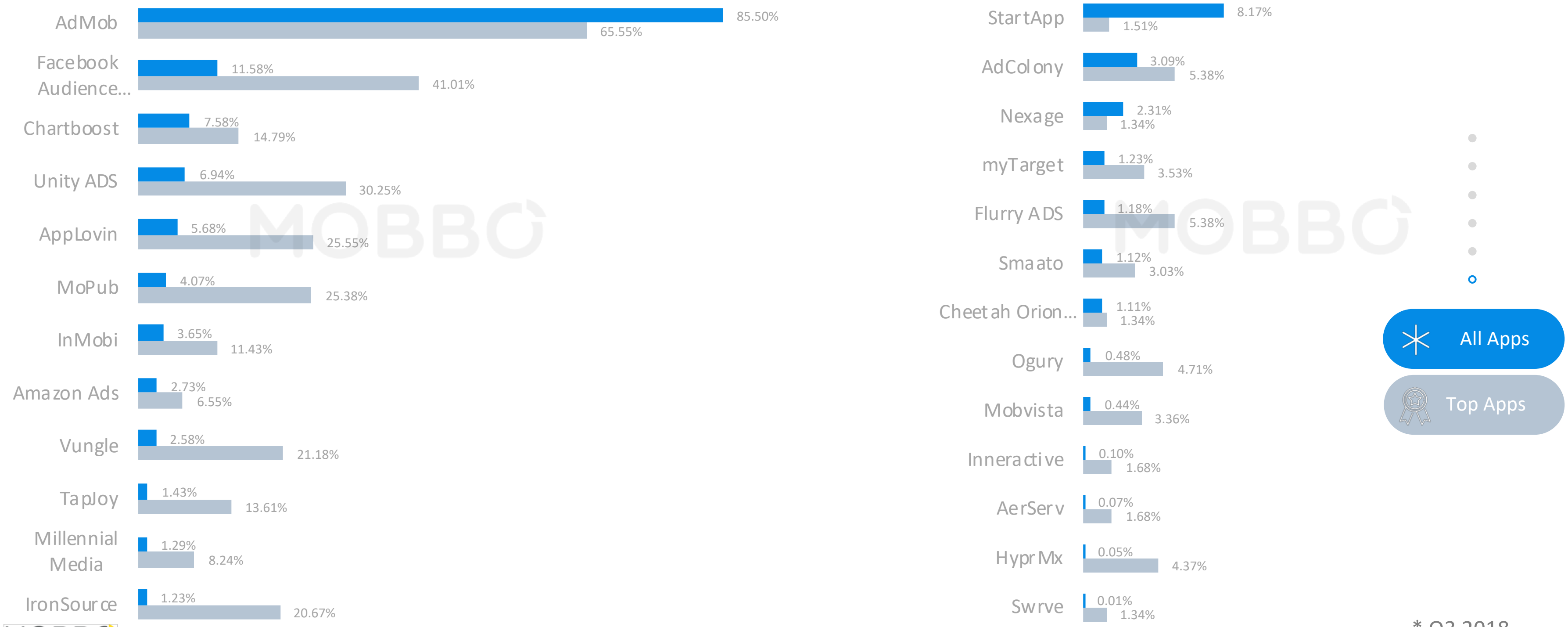
iOS Games vs Apps. Key Observations

- AdMob is the most popular monetization SDK.
- Facebook Audience Network is still in second place without much change from the last report.
- Chartboost is in third place with over half iOS games using them.
- StartApp has about the same market share in both iOS games and apps.
- AppLovin holds a third of the market share in iOS games.

Share Of Voice. Top Apps

ANDROID

Mobile In-App Advertising Share Of Voice By Platform: Top Apps vs. All Apps



* Q3 2018

Share Of Voice. Top Apps Key Observations

ANDROID

AdMob

Facebook Audience

Chartboost

Unity ADS

AdMob has increased their market share in the top apps.

Facebook Audience Network is has increased their market share among the top apps b y over 10%.

Chartboost is still holding the third place even though they lost some market share.

Unity ADS nearly doubled their market share among the top apps.

In-App Advertising. Retention Rate

ANDROID

1. tappx
2. AdMob
3. Fyber
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14. APPODEAL
15. Facebook
16. Tapjoy
17. adwhirl
18. REVMOB
19. FLURRY Ads
20. FIKSU
21. brightcove
22. avocarrot
23. kiip
24. CONVERSANT
25. unity Ads
26. Fyber
27. millennialmedia
28. mobclix
29. mopub
30. amazon Ads

Retention Rate. Key Observations

Android

- Tappx had the best retention this quarter with 98%.
- AdMob is the second best with 97% retention rate.

iOS

- Cheetah Media Link had a 100% retention rate this quarter.
- AdTapsy is the second best with 99.5% retention rate.

Power Index

Top 20 Advertising SDK's

TOP 20
ANDROID ADEVERTISING SDK'S

Powered By
MOBBO

01 AdMob by Google
02 Audience Network
03 unity
04 mopub
05 APPLOVIN
06 Vungle
07 Chartboost
08 Tapjoy
09 ADCOLONY
10 START/APP
11 INMOBI
12 ironSource
13 mobile ad network amazon
14 millennialmedia
15 FLURRY from YAHOO!
16 Fyber
17 Mobvista.
18 NEXAGE
19 my
20 appnext

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13 Fyber
14 heyZap
15 smaato
16 AdLIB
17 ironSource
18 hyprMX
19 LeadBolt
20 appnext

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MOBBO

Mobile Ad-Tech Industry Overview

With the ever-increasing pace of technical and creative innovation across app development, the past few years have brought some unanticipated market developments, particularly in terms of market consolidation, all of which benefits the advertiser, the app development industry and end users.

This paper sets out some of the movements in the ad-tech sector and looks at industries seeking to increase their involvement with software developers. There are a number of advantages perceived by both buyers and the SDK providers in aggregating their resources, which we will outline. We will look at the movers and shakers in the changing mobile ad-tech landscape and what can be learnt by any company seeking to scale up their operations, maximize their In-App Advertising and keep up with the competition to keep their edge.

The Push For Ad Industry Consolidation

There have been numerous high ticket M&A's in the advertising industry in the last few years, with optimism looking set to continue for the foreseeable future. TechCrunch reported that in the first quarter of 2016 alone, there were 72 merger and acquisitions between advertising and marketing technology and digital media firms: "…*to bolster or establish their own audience, round out their tech stack or neutralize potential threats*." [*1]

Acquisitions of ad-tech companies come not just from within the tech sector, but from other industries. Verizon, a telecoms company, for instance, has been involved in over a dozen acquisitions to date. Market leaders such as Oracle in the Cloud and Data sector have been involved in ten and Walmart seven moves apiece. Industries as diverse as telecoms, retail and business software are investing in ad-tech as trends involving their verticals and those in tech merge.

Mobile Ad-Tech Industry Overview

Conversion By Consolidation: Mobile Ad-Tech M&A activity

In a world, that is increasingly shifting its focus to a mobile first scenario, the *Desktop Internet* as we know is slowly declining. Companies are gradually understanding the impact of an app ecosystem and many of them are taking the plunge from being mobile-first to an app-only model. One of the driving factors behind this change of outlook has been the success of mobile-focused ad networks showcased in our report that have been the key in driving user interaction inside apps by placing targeted ads based on meticulous user profiling. While Google did have a head start in the business with Admob being the current global market leader, things are starting to change.

Over the past years' buy ups of SDK in-app advertising companies have continued apace, e.g.:

- AerServ - Acquired by inMobi
- AdinCube – Acquired by Ogury
- HeyZap - Acquired by (- Fyber's parent company) RNTS
- InnerActive – Acquired by RNTS
- MobPartner - Acquired by Cheetah Mobile
- AdColony - Acquired by Opera
- Nexage - Acquired by Millennial Media owned by AOL
- Avocarrot - Acquired by company Glispa
- Smaato - Acquired by Spearhead
- SuperSonic – Merged with IronSource
- AppLovin - Acquired by Orient Hontai Capital
- Aerserv – Acquired by inmobi
- Glispa - Acquired by Justad
- TapJoy - Acquired by Offerpal-Media
- Mopub - Acquired by Twitter
- Flurry - Acquired by Yahoo
- Millennial Media – Acquired by AOL (Verizon)
- MobFox – Acquired by Matomy.
- Fiksu - Acquired by ClickDealer.
- PlayhHaven - Acquired by RockYou
- NativeX - Acquired by Mobvista

Mobile Ad-Tech Industry Overview

Drivers of Ad-tech Aggregation Trends

Corporations face a market increasingly constrained from various angles; finding new ways to create revenue is challenging. U.S. Telecoms providers foresee their wireless market reaching its peak domestically. Furthermore, the Federal Communications Commission and Department of Justice prevents mergers and acquisitions within their own sector (e.g. AT&T lawsuit for trying to purchase T-Mobile USA).

Diversifying into ad-tech allows them to profit from their biggest existing asset i.e. specific and unique data about their consumers. They can build and offer services that are precisely targeted, measurable and flexible for 3rd party advertisers. Everyone benefits. Companies wanting to monetize data assets can tap into new technical resources, offering measurable ROI to clients marketing to mobile consumers. Advertisers monetise their marketing budgets more effectively. Tech companies benefit from investment and reach fresh huge markets their partner has access to.

Tech buyers bring media buying, digital advertising and marketing automation capabilities in-house, simultaneously solving their own media agency transparency challenges. Cohesion of financial, development and marketing strategies also improves.

Demand for digital and mobile advertising is increasing exponentially amongst business to customer companies. According to e-Marketer [*4], Consumer Packaged Goods (CPG) advertisers are estimated to spend nearly $6 billion on digital advertising in 2016; this offers exponential growth for service providers.

Some corporations see transitioning from hardware to software as vital to adapt to this emerging digitally aggregated environment. As clients of software behemoths such as IBM, Oracle and Salesforce increase their spend on digital marketing, so Saas and DaaS companies expand their cloud-based marketing services and parent companies capitalise on digital's developments.

Technology M&A's are helping companies evolve their business strategy in keeping with market trends, ultimately securing their survival.

"…technology the key focus for growth… Without a winning technological product to provide additional value for mobile advertisers, the battle for market share for most networks is already lost." [*2]

Mobile Ad-Tech Industry Overview

Disruptive Tech Trends and The Drivers For M&A

It seems that telecoms companies, B2C enterprises, SaaS/DaaS, gaming companies and Chinese firms investing in tech will be the market movers to watch in the emerging market re-structuring.

"…mobile ad tech is transforming, and only those with superior technology or size will survive." [*2]

Whatever the background the rationale for entering into M&A arrangements will vary, but the statistics will doubtless drive investments.

For instance, according to NewZoo, the mobile gaming market continues its exponential growth and is, "… *set to reach about 50% of the entire game market by 2020*." [*2] NewZoo's latest quarterly Global Games Market Report [*5] says that the gaming market has already reached $99.6bn this year. Of this market, 37% (valued at $36.9bn), is mobile users. As a whole, the market is healthily up 8.5% compared to 2015. APAC currently have 47% of market share.

Verizon has shown aggressive, high value market acquisitions in the ad-tech sphere. For example: AOL was purchased in 2015 for $4.4 billion, then Yahoo in July 2016 for $4.8 billion. This brought exposure to a larger audience, through content sites such as The Huffington Post, Yahoo! Finance and TechCrunch; 'ownership' and monetizing connections to audiences is key to adding value.

In the retail sector, the global brand Walmart has been acquiring multiple marketing, engagement and analytics service providers. In 2014, WalmartLabs purchased Stylr, a fashion app drawing on inventory from local outlets to help customers find clothes they like more easily. They then bought Adchemy, an e-commerce technology company. 2015 saw them purchase PunchTab, a platform that collects data about customer in-store activity and loyalty. Their buy-up of Jet.com e-commerce software developers further highlight the importance Walmart places on digital objectives for customer monetization.

In 2014 Oracle invested heavily in consumer data and advertising technology capabilities, investing $400 million in acquiring BlueKai, $1.2 billion in Datalogix for, buying Maxymiser in 2015 and recently, AddThis for $200 million. [*1] Oracle Data Cloud has been critically boosted via their acquisitions [*8] and has increased their competitiveness e.g. Adobe. Protection of market position by leveraging technology to use data more affordably offers competitive advantage.

ABOUT MOBBO

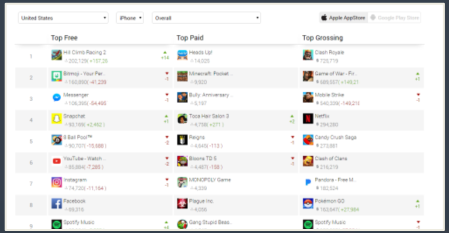
Mobbo measures the Mobile world, monitors the mobile technology stack of Millions of apps and offers a robust sales intelligence software for service providers in mobile app economy.
Mobbo tells sales teams which prospect to contact, and how.

Mobbo's provides powerful data driven market research tools, providing insights to help publishers, investors, marketers and analysts across the world, make more informed decisions, and succeed in the global app economy.

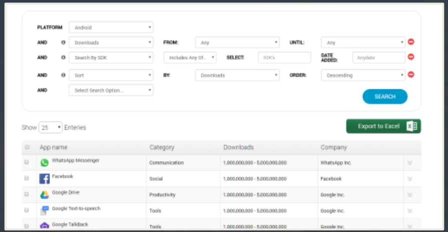
With Mobbo App Intelligence and SDK Intelligence, one can easily measure and compare the metrics that matter most to their business.

Efficiently identify acquisition targets, determine a prospect potential and conduct public company due diligence by combining download and revenue estimates with data around engagement and usage with a robust competitive analysis tool for measuring the mobile world.

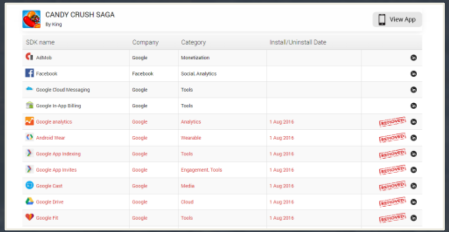
App intelligence



Top charts

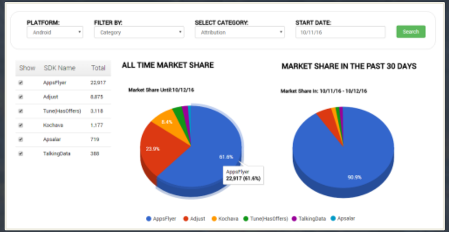


Market Explorer



App Inspector

Timeline



Market Share

mobbo.com