The State of
APP ENGAGEMENT

KEY FINDINGS

Retaining app users over time continues to be a major challenge for app marketers. Only 10-12% of users remain active seven days after downloading an app, and a mere 4-5% are still active after 30 days. When comparing organic and non-organic users, the former outperformed the latter by 15% on iOS and 21% on Android.

YoY retention rates are up. The good news is that a year-over-year comparison shows that overall retention has improved. The only drop in 2016 was seen from Android organic users (-6%), while Android non-organic user retention was up 4%. iOS did well in 2016, going up 9% overall and 25% among non-organic users. The improvement clearly demonstrates that marketers understand the importance of retention and have doubled down on their optimization efforts.

Organic/non-organic sessions gap only 7-9%. The average number of app opens per daily active users on Android is 3.8 vs. 3.56, and on iOS 4.3 vs. 4.

Monetizing users, especially non-organic ones, is tough. Fewer than 2% of those that download an app actually make purchases inside the app.

Android users more engaged, iOS users stronger buyers. Non-organic Android users are slightly more engaged earlier in the funnel (click-to-install, install-to-engaged rates), but when it comes to purchases, iOS users reign supreme. The chances of an engaged user turning into a buyer are almost 80% higher on iOS, while the odds of a user who installed an app becoming a buyer are 55% higher.

Lifetime activity significantly different across shopping and gaming. The average mobile gamer performs about 6 in-app events in 90 days, with owners of Android devices outpacing iOS device owners by 20%. The average user of a shopping app performs about 18 in-app events in 90 days, with iOS users almost 25% more active than Android shoppers across each stage in the funnel.

Regional comparisons show North America leading in purchase activity. North America is the leader in the share of buying users with the best iOS install-to-buyer ratio (2.25%) and the 2nd best ratio on Android (1.3%) - among non-organic users. North American shoppers are also most active in adding products to their in-app shopping cart and making purchases: on iOS with 9.5 "add-to-carts" and 2 purchases, and on Android with 7 and 2, respectively.

In the US, marketers will find highly-engaged app users where they may not expect it. Cities like Salt Lake City, Omaha, Kansas City, Albuquerque, Oklahoma City, Louisville and others in some less-prominent media markets see some of the highest rates of mobile app engagement in the country. Conversely, some of the largest media markets - like Seattle, Los Angeles, Silicon Valley and New York - have populations that are more selective about their app engagement. In fact, the places that Amazon, Google, Apple, Hollywood and Madison Avenue call home have populations that engage with mobile apps 30% less than those in top "flyover" cities.

Latin America has the lowest rate of purchase activity in gaming apps with only about 0.07 in-app lifetime purchases (90 days) per 1 install across iOS and Android. India is not far behind with only 0.09 IAPs. LATAM also has the lowest install-to-buyer ratio among Android apps (0.41%), followed by India (0.84%); on iOS, however, LATAM share of buying users is higher at 1.18%.

In terms of retention, North America has the best Android score among all regions, while CJK reigns supreme on iOS. India and Eastern Europe have the lowest retention score on Android and iOS, respectively.

INTRODUCTION

In today's freemium-dominated app environment, the install is no longer the mobile marketers' goal, but rather a means to an end. It's a stage in the funnel – an important one nonetheless – but still only a stage. With over two million apps in both Google Play and the App Store, every app has dozens, hundreds and even thousands of direct competitors. With numerous options to choose from, in addition to increasingly high user expectations, usage and engagement are dwindling, and without continued engagement, monetization becomes practically impossible.

The key lies in getting enough quality users who will engage with an app over time. To help marketers optimize towards this goal, AppsFlyer's *The State of App Engagement* offers detailed engagement benchmarks for:

- Retention rates
- Average sessions per daily active user
- Cross-funnel conversion rates
- Lifetime engagement

The report includes a breakdown by platform, category and region. It is the most comprehensive study of its kind to date covering billions of data points across the second half of 2016.

METHODOLOGY

With AppsFlyer's technology found on 98% of the world's mobile devices, our database has a massive scale. With such scale and after the removal of outliers, we were able to ensure statistical validity. When our strict thresholds were not met, data was not displayed – which explains occasional differences in specific regions and / or sections (for example, we did not include a funnel analysis of iOS apps in the Indian Subcontinent).

RETENTION RATES

- Time period: Q3 2016
- Installs measured: 3.5+ billion
- Number of apps: 5,000+

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 examined no less than 15 days and assigned more weight to each passing day to reflect the logic that the longer a user is retained, the higher the score.

AVERAGE SESSIONS PER DAILY ACTIVE USER
- Time period: October 2016
- Sessions measured: 150+ Billion

How we calculated this metric: We divided the total number of sessions during each day by the total number of unique users who were active on that day, and then averaged the daily figures.

NON-ORGANIC FUNNEL ANALYSIS
- Time period: October 2016
- Non-organic installs measured: 85+ million
- Number of apps: 800+

How we calculated this metric: To ensure an apples to apples comparison of unique user behavior across the funnel, we only used apps that implemented the specific event adhering to AppsFlyer's standard for in-app purchases – over 800 apps in total. We then calculated standard overall conversion rates among these apps. While the tracking of clicks and installs is standardized across all our apps, our default criterion for an engaged user is one with at least 3 in-app sessions. However, since this KPI may vary based on the specifics of each app, app owners can change this number based on their understanding of what constitutes an engaged user. Regardless, the count of engaged users is per app, so if the average among all apps is higher than 3 sessions, it is still a fair representation of an industry standard.
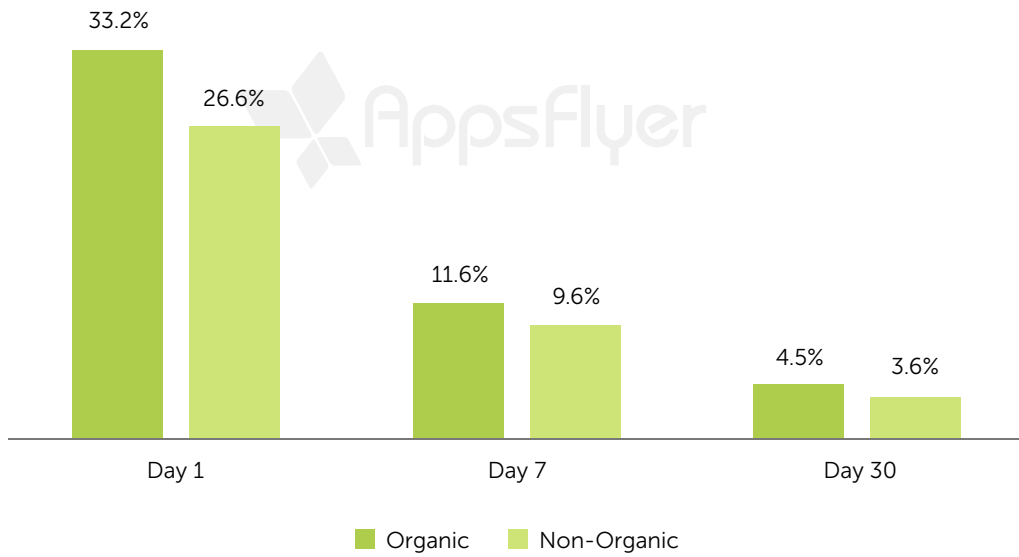
LIFETIME ENGAGEMENT
- Time period: Q4 2016 (based on a 90 day lifetime period)
- Installs measured: 380+ million
- In-app events measured: 700+ million
- Number of apps: 2,500+ (gaming and shopping only)

How we calculated this metric: We summed up the total of each specific in-app event analyzed across all apps where that event was measured and divided it by the total number of installs of these apps.

GLOBAL
BENCHMARKS

RETENTION RATES / GLOBAL

android

33.2% 26.6% 11.6% 9.6% 4.5% 3.6%

Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic

Retention Rates by Category

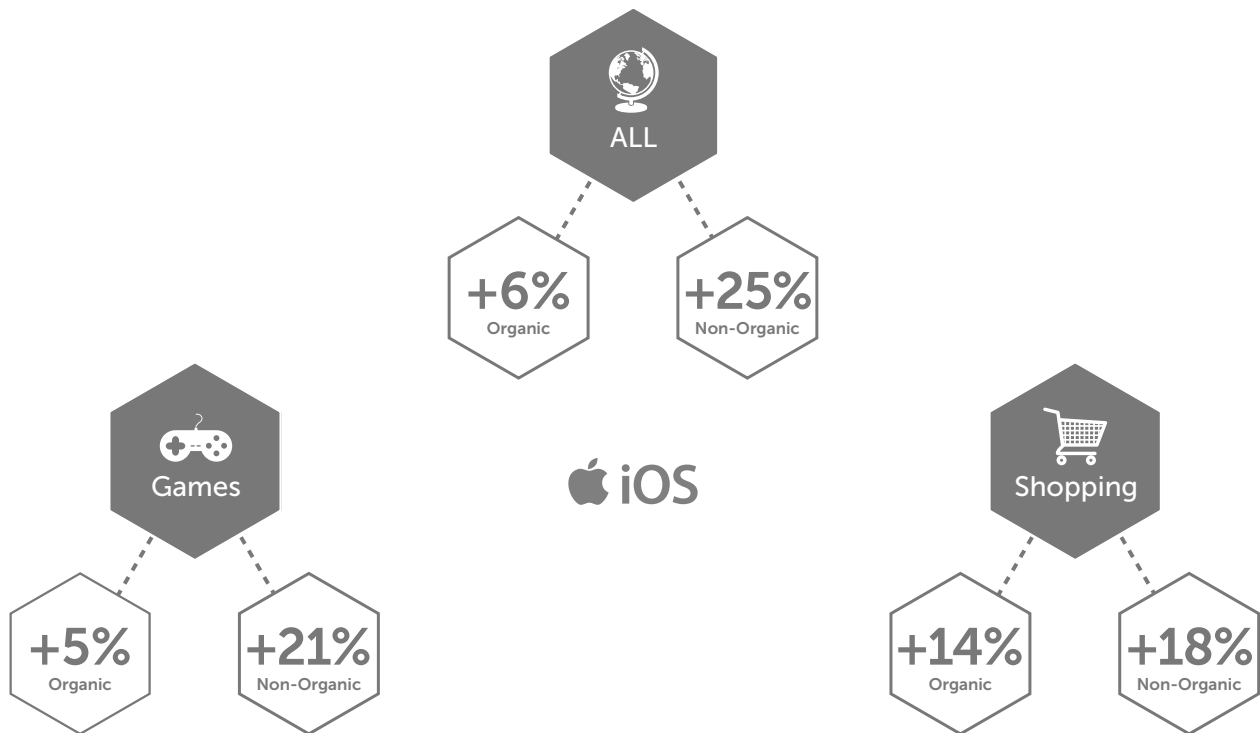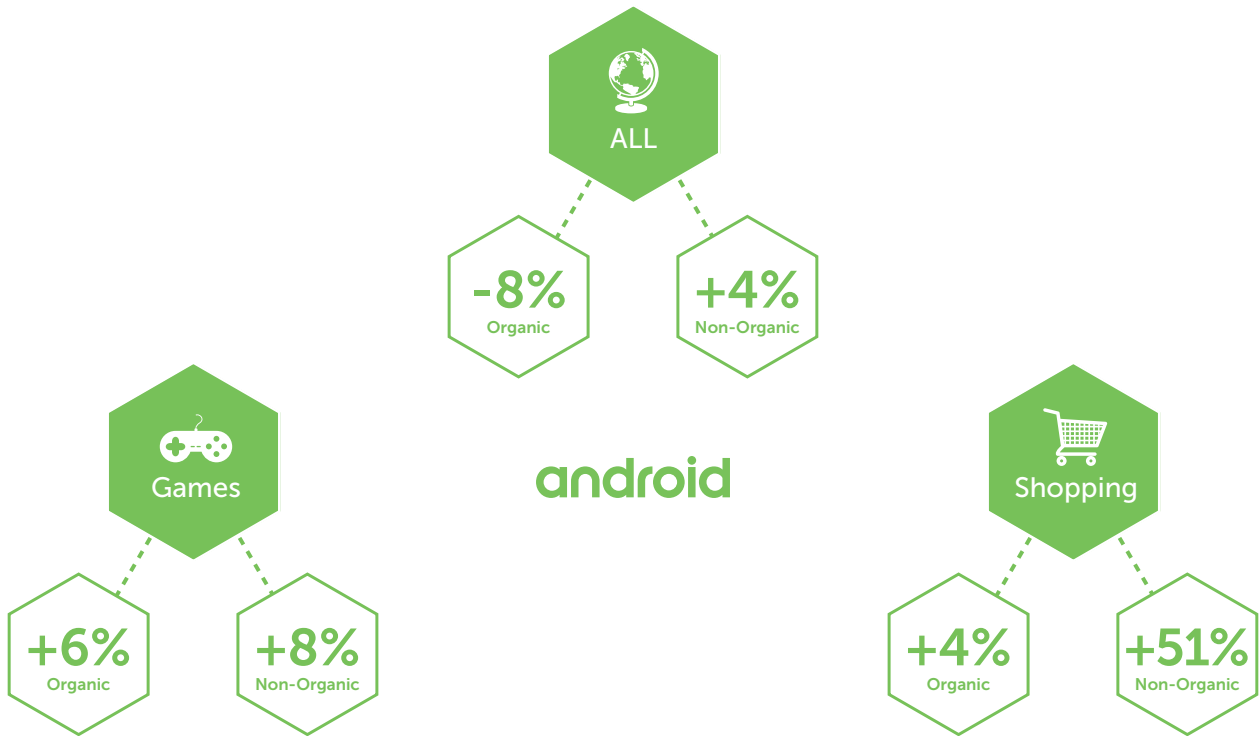|		Day 1	Day 7	Day 30
Games	Organic	36.9%	10.2%	2.6%
	Non-Organic	32.8%	9.2%	2.4%
Shopping	Organic	32.0%	14.5%	6.6%
	Non-Organic	23.3%	8.7%	4.3%
Travel	Organic	23.4%	8.1%	3.5%
	Non-Organic	15.9%	6.0%	2.7%
Productivity	Organic	33.4%	12.3%	5.0%
	Non-Organic	26.9%	11.1%	4.2%
Entertainment	Organic	29.3%	9.5%	3.6%
	Non-Organic	22.0%	6.7%	2.2%
Lifestyle	Organic	28.7%	10.2%	4.2%
	Non-Organic	19.2%	7.0%	2.3%
Health & Fitness	Organic	29.5%	11.6%	4.7%
	Non-Organic	19.2%	8.7%	2.5%
Personalization	Organic	34.1%	12.8%	5.7%
	Non-Organic	12.1%	4.6%	1.4%
Finance	Organic	27.2%	10.9%	5.7%
	Non-Organic	17.3%	7.4%	2.9%

RETENTION RATES / GLOBAL

iOS

30.7%

27.6%

11.4%

10.1%

4.8%

3.6%

Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic
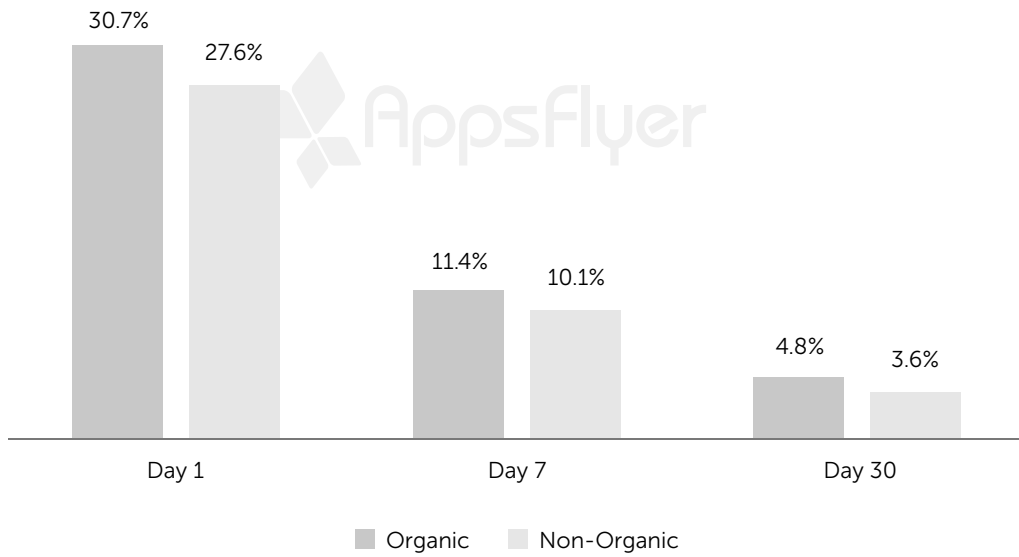
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	37.8%	13.6%	3.8%
	Non-Organic	35.5%	14.0%	4.4%
Shopping	Organic	30.6%	13.8%	7.0%
	Non-Organic	24.2%	9.7%	4.1%
Travel	Organic	20.4%	7.5%	3.4%
	Non-Organic	17.0%	7.4%	3.5%
Entertainment	Organic	27.7%	10.0%	3.9%
	Non-Organic	17.3%	7.9%	3.3%
Lifestyle	Organic	24.4%	9.6%	4.6%
	Non-Organic	17.0%	5.5%	2.3%
Health & Fitness	Organic	22.4%	8.7%	3.6%
	Non-Organic	19.1%	8.5%	3.3%
Finance	Organic	25.8%	11.6%	6.2%
	Non-Organic	15.9%	5.9%	3.4%
Social Networking	Organic	36.5%	14.7%	5.5%
	Non-Organic	30.9%	11.2%	4.0%
Food & Drink	Organic	15.8%	5.9%	2.4%
	Non-Organic	12.2%	4.6%	2.0%

YEAR OVER YEAR RETENTION RATE COMPARISONS
(Q3 2015 VS. Q3 2016)

ALL

-8% Organic
+4% Non-Organic

Games

+6% Organic
+8% Non-Organic

android

Shopping

+4% Organic
+51% Non-Organic

ALL

+6% Organic
+25% Non-Organic

Games

+5% Organic
+21% Non-Organic

 iOS

Shopping

+14% Organic
+18% Non-Organic

RETENTION DATA OBSERVATIONS

- Retention rates are a challenge: only 10-12% of users remain active seven days after installing an app, and a mere 4-5% are still active after 30 days. Separating organic and non-organic users, the data shows that the gap in favor of organic users is lower on iOS — 15% vs. 21% on Android.

- A year-over-year comparison shows that overall retention has improved across platforms. The only drop in retention in 2016 was seen from Android organic users, which in turn drove the overall Android score down. The overall retention score of Android non-organic users was up 4%, while iOS showed improvement across the board in 2016, particularly among non-organic users with a 25% improvement. Clearly, advertisers and networks are getting better at improving iOS retention.

The year over year improvement was also seen across shopping and gaming apps on both platforms. iOS gained 15% and 11% respectively, which was mainly driven by a rise in the non-organic retention score (+18% and +21%). A significant 51% increase was recorded in the retention score among Android non-organic users in shopping apps.

- Overall, iOS and Android had similar retention rates in 2016: Android leads among organic users by 3.5%, while iOS leads among non-organic users by 3.5% as well.

- On Android, organic users outperform non-organic users with the highest gap in Personalization apps (+200%), followed by Finance (+90%); the gap is lowest among Games (+11%) and Productivity (+18%).

- On iOS, the gap between organic and non-organic users is highest among Finance apps (+75%), followed by Lifestyle (+60%); the gap is lowest among Games (+1%) and Travel (+9%).

WHAT THIS MEANS FOR MARKETERS

The good news for marketers is that retention has mostly improved – especially among non-organic users on both platforms. App marketing has shifted from a focus on installs to a focus on engagement, and the results of marketers' optimization efforts are clearly evident.

However, retaining users over time continues to be a major challenge for apps. Marketers need to continue using data to boost their app's usage and revenue potential. This includes data-driven user acquisition, granular in-app measurement for funnel optimization and sharper segmentation, cohort reporting, uninstall tracking, and various method and tools to boost engagement such as retargeting, push notifications, and deep linking to streamline the user experience.

Data's instrumental role in app marketing success is especially coming to fruition for gaming apps. Gaming marketers are considered the savviest of them all, and this is demonstrated by relatively similar retention rates among organic and non-organic users. Following their deep-dive approach to data-driven optimization is therefore highly recommended.

AVERAGE SESSIONS PER DAILY ACTIVE USER

android

OVERALL

3.81 Organic
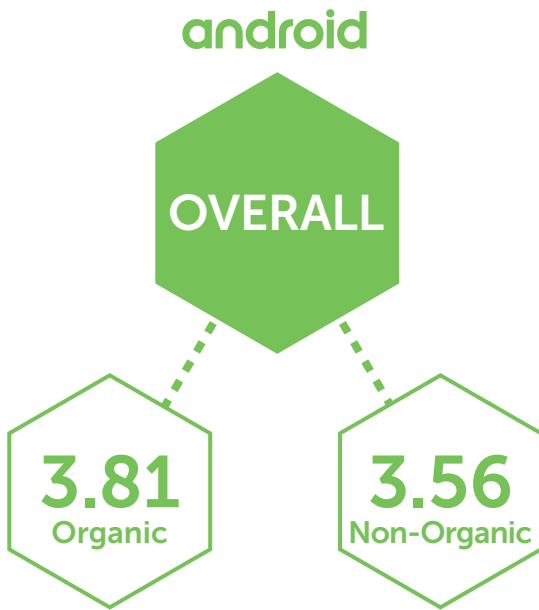
3.56 Non-Organic

Games	Organic	3.58
	Non-Organic	3.11
Shopping	Organic	4.55
	Non-Organic	3.73
Travel	Organic	2.92
	Non-Organic	3.18
Utilities / Tools	Organic	3.13
	Non-Organic	3.70
Entertainment	Organic	3.97
	Non-Organic	3.51
Lifestyle	Organic	4.31
	Non-Organic	4.07
Health & Fitness	Organic	3.67
	Non-Organic	4.22
Social	Organic	7.27
	Non-Organic	4.77
Finance	Organic	3.46
	Non-Organic	2.86

iOS

OVERALL

4.32 Organic
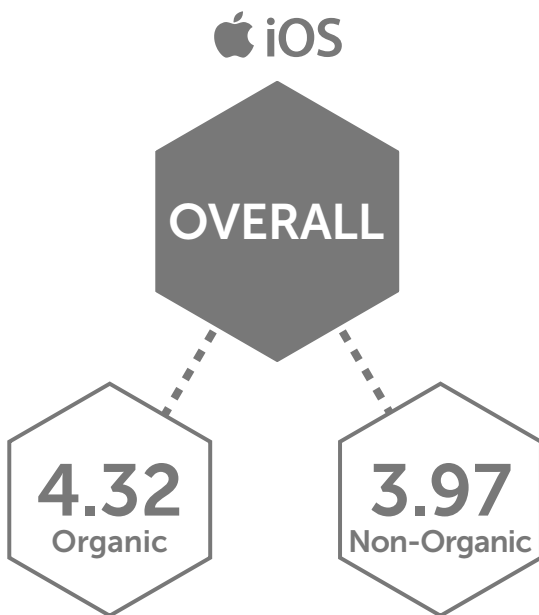
3.97 Non-Organic

Games	Organic	4.78
	Non-Organic	3.93
Shopping	Organic	3.72
	Non-Organic	3.86
Travel	Organic	3.42
	Non-Organic	3.35
Utilities / Tools	Organic	5.53
	Non-Organic	4.75
Entertainment	Organic	4.18
	Non-Organic	4.00
Lifestyle	Organic	5.50
	Non-Organic	2.96
Health & Fitness	Organic	3.51
	Non-Organic	3.56
Social	Organic	6.55
	Non-Organic	5.03
Finance	Organic	3.66
	Non-Organic	2.74

SESSIONS DATA OBSERVATIONS

- Android organic users outperform non-organic users by only 7% with 3.8 vs. 3.56 sessions per daily active user. A breakdown into category level shows that organic users are more engaged than non-organic users across all categories except Travel, Health & Fitness and Utilities/Tools (+9%, +15% and +18% in favor of non-organic users, respectively).

- On iOS, the gap is slightly higher with organic users outperforming non-organic users by 9%, with Lifestyle and Finance leading the way (+86% and +34%, respectively); among Shopping and Travel apps, the difference between both types of users is the smallest (2-4%).

- When comparing operating systems, iOS users have 12-13% more sessions than Android users; among organic users, the gap is highest among Utilities/Tools, Games and Lifestyle apps; the only examined categories in which Android users reign supreme are Shopping (+22%) and Social (+11%); among non-organic users, iOS users lead in all categories examined except Lifestyle, Health & Fitness and Finance.

WHAT THIS MEANS FOR MARKETERS

The gap between organic and non-organic users across platforms is relatively small (7-9%), which means that there is substantial quality to be found among non-organic users. With the right data, marketers are now able to find those users and optimize their investments according to quality.

A category breakdown shows that the differences between organic/non-organic and iOS/Android are highest among Social, Utilities/Tools and Lifestyle apps, and lowest among Travel, Entertainment and Health & Fitness apps (based on a standard deviation calculation).
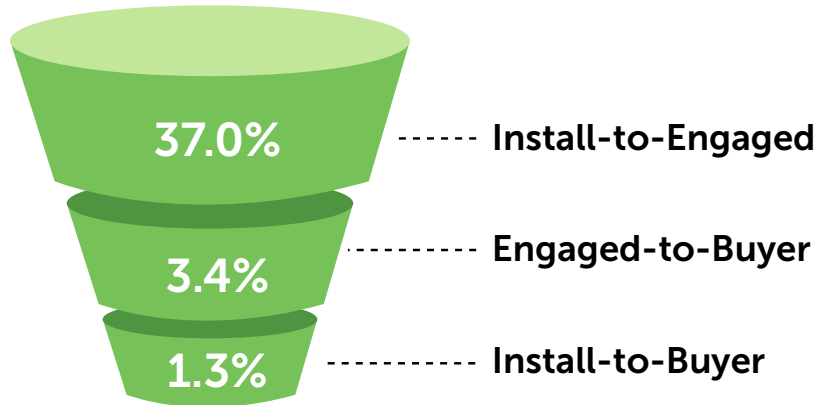
As such, marketers with Social, Utilities/Tools and Lifestyle apps have more room for optimization following an analysis and understanding what factors contribute to ongoing engagement. For example, if the difference between operating systems for utility apps is 76% for organic, and 28% for non-organic, there is a greater chance that by focusing on the underperforming Android organic users will yield the best results.
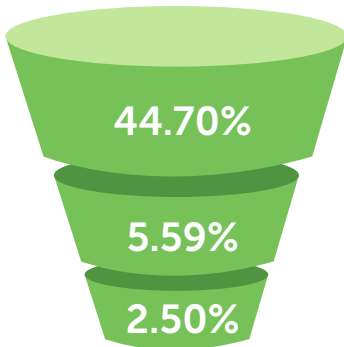
NON-ORGANIC FUNNEL ANALYSIS

android

🌐 OVERALL

0.6% Click-to-Install
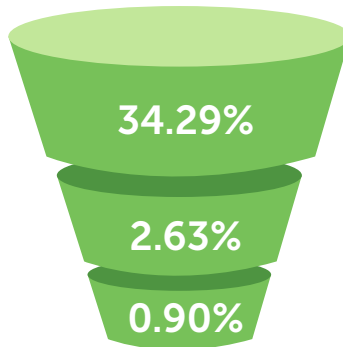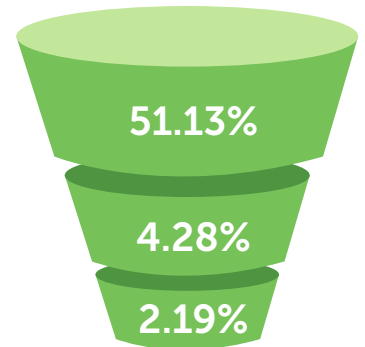
37.0% ------ Install-to-Engaged

3.4% -------- Engaged-to-Buyer

1.3% ---------- Install-to-Buyer

🛒 SHOPPING

0.46%

44.70%

5.59%

2.50%

🎮 GAMES

0.63%

34.29%

2.63%

0.90%

🧳 TRAVEL

0.92%

51.13%

4.28%

2.19%

NON-ORGANIC FUNNEL ANALYSIS

iOS

🌐 OVERALL

0.52% Click-to-Install

34.89%	------ Install-to-Engaged
4.96%	--------- Engaged-to-Buyer
1.73%	---------- Install-to-Buyer

🛒 SHOPPING

1.32%

47.39%
4.38%
2.70%

🎮 GAMES

0.40%

36.17%
4.24%
1.54%

🧳 TRAVEL

0.60%
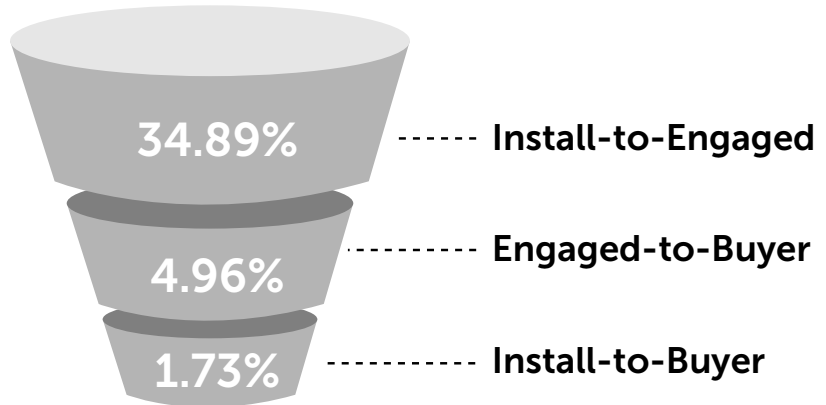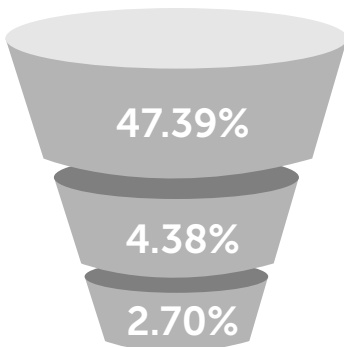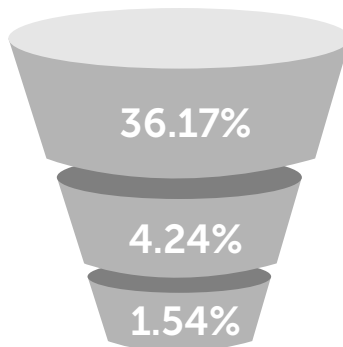
37.01%
15.67%
3.10%
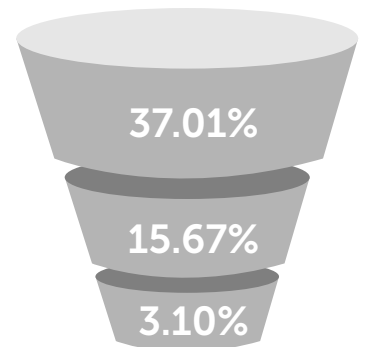
FUNNEL DATA OBSERVATIONS

- Overall, monetizing users via in-app purchases – especially non-organic ones – is challenging. On average, fewer than 2% of installers for a given app end up making in-app purchases.

- Non-organic Android users are slightly more engaged earlier in the funnel (click-to-install, install-to-engaged). However iOS users are stronger buyers: The chances of an engaged user turning into a buyer are almost 80% higher on iOS, while the odds of a user who installed an app becoming a buyer are 55% higher.

- Gaming apps have a harder time monetizing non-organic users across both platforms, trailing far behind travel and shopping apps (60% fewer installers go on to make a purchase in a game)

- Travel apps have the widest differences across platforms: while more Android clickers install apps (+50%) and more installers become engaged users (+38%), the tables are turned when purchasing is involved. Engaged iOS users are 2.5x more likely to become buyers, while installers are 40% more likely to become buyers.

WHAT THIS MEANS FOR MARKETERS

Mobile marketers need to focus on buying users and understanding exactly a) which channels, media sources, publishers, campaigns and even creative variations delivered these users, b) whether and how retargeting, push notifications, emails or other engagement tools can be used to drive users past the finish line, c) what separates converted users from other users in earlier stages of the funnel, and d) what characterizes these users so that effective lookalike campaigns can be created.

Also, marketers should consider opening additional revenue streams where appropriate. This applies particularly to the use of in-app advertising which is the largest revenue stream, and the one that is projected to grow the fastest in many verticals, according to App Annie. The use of a paid or a free trial model can also be considered, but only if the app is right for it (offering a unique or high value proposition/service/content). A subscription model may work (especially since Apple announced developers would get 85% instead of 70% of the cut after 1 year), but only if an app can offer ongoing value to users such as regularly updated features or content.

The fact that almost 40% of installers become engaged is a good sign, but this can be further improved with the right welcome screen and a seamless onboarding process, which should be very carefully planned out based on data and multiple iterations.

Low click-to-install rates can partially be explained by the fat finger phenomenon (accidental clicks). It is clear that a) app store pages are underperforming (make sure you test multiple variations of descriptions, images and videos to pinpoint the best performing version), and / or b) the ad creative does not match the app store page (remember that ad relevancy is key to engagement.)

LIFETIME ENGAGEMENT

android Gaming

1 INSTALL ORGANIC
- 0.90 Tutorial Completion Events
- 3.85 Level Achieved Events
- 0.37 Purchase Events

1 INSTALL NON-ORGANIC
- 0.66 Tutorials
- 3.35 Levels
- 0.22 Purchases

android Shopping

1 INSTALL ORGANIC
- 16.38 Content View Events
- 6.56 Add to Cart Events
- 1.69 Purchase Events

1 INSTALL NON-ORGANIC
- 7.79 Content Views
- 4.07 Add to Cart
- 0.67 Purchases

iOS Gaming

1 INSTALL ORGANIC
- 0.90 Tutorials
- 2.97 Levels
- 0.45 Purchases

1 INSTALL NON-ORGANIC
- 0.63 Tutorials
- 2.76 Levels
- 0.22 Purchases

iOS Shopping

1 INSTALL ORGANIC
- 19.85 Content Views
- 7.18 Add to Cart
- 2.19 Purchases

1 INSTALL NON-ORGANIC
- 10.39 Content Views
- 5.41 Add to Cart
- 0.72 Purchases

LIFETIME ENGAGEMENT DATA OBSERVATIONS

- Overall, the average app gamer performs about 6 in-app events in their first 90 days, with owners of Android devices outpacing iOS device owners by 20% (in-app events are any action a user performs in-app: launch, purchase, level pass, content view, add to cart or any other action defined by the app owner)

- Android gaming installs generate higher engagement with 30% more levels achieved than iOS, and 25% more registrations. However, when it comes to purchases, iOS users make almost 20% more in-app purchases than Android users.

- Organic gaming users are more active than non-organic users across the board, and this is especially true with in-app purchases: organic iOS users make almost twice as many purchases, while organic Android users make 70% more purchases.

- The average user of a shopping app performs about 18 in-app events in their first 90 days. In this category, iOS users are almost 25% more active than Android shoppers across each stage in the funnel.

- Organic iOS shoppers are far more engaged than non-organic users: organic iOS shoppers view 90% more content pages, perform 35% more add to cart actions and most importantly and significantly make no less than 3x more purchases than non-organic users. On Android, the situation is similar with organic shoppers generating 110% more content views, 60% more add to cart events and 2.5x more purchases than non-organic shoppers.

WHAT THIS MEANS FOR MARKETERS

Overall, Android gamers are more engaged than iOS gamers. However, there are stark differences when it comes to early funnel vs. late funnel usage. For gaming apps with a focus on in-app purchases as their primary revenue source, Android marketers need to focus on UA sources that deliver paying users, while their iOS counterparts should focus on UA sources that deliver better early funnel engagement.

At present, few gaming advertisers accurately attribute in-app advertising and are thereby left to optimize based on either engagement or in-app purchases. With the introduction of integrated in-app advertising last quarter, we expect to see stronger marketing performance across the board.

Since organic users outperform non-organic users in every stage of the funnel, it is important to understand what characterizes organic users through in-depth measurement (user level data analysis is best). Armed with this knowledge marketers can create organic lookalike audiences for improved non-organic targeting, and smart re-engagement to further optimize spend based on organic data.

NORTH AMERICA

RETENTION RATES / NORTH AMERICA
android

35.8%
27.3%
11.2%
10.0%
4.1%
3.5%

Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic
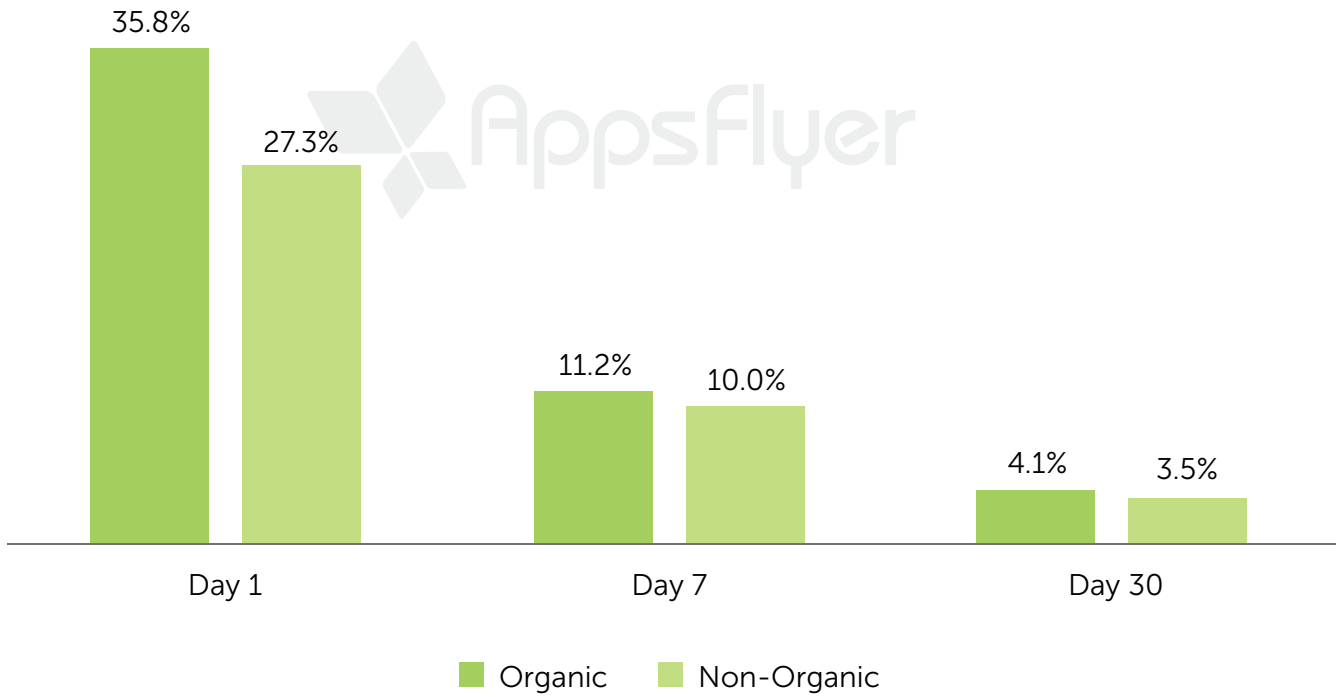
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	40.7%	10.6%	2.9%
	Non-Organic	29.1%	9.8%	2.8%
Shopping	Organic	32.6%	15.9%	8.1%
	Non-Organic	26.5%	11.5%	4.7%
Travel	Organic	27.5%	8.7%	4.3%
	Non-Organic	16.5%	7.0%	3.2%
Entertainment	Organic	28.8%	10.7%	4.9%
	Non-Organic	20.1%	7.6%	2.7%

RETENTION RATES / NORTH AMERICA
iOS

30.6%

26.3%

12.5%

9.9%

5.1%

3.1%

Day 1   Day 7   Day 30

Organic   Non-Organic
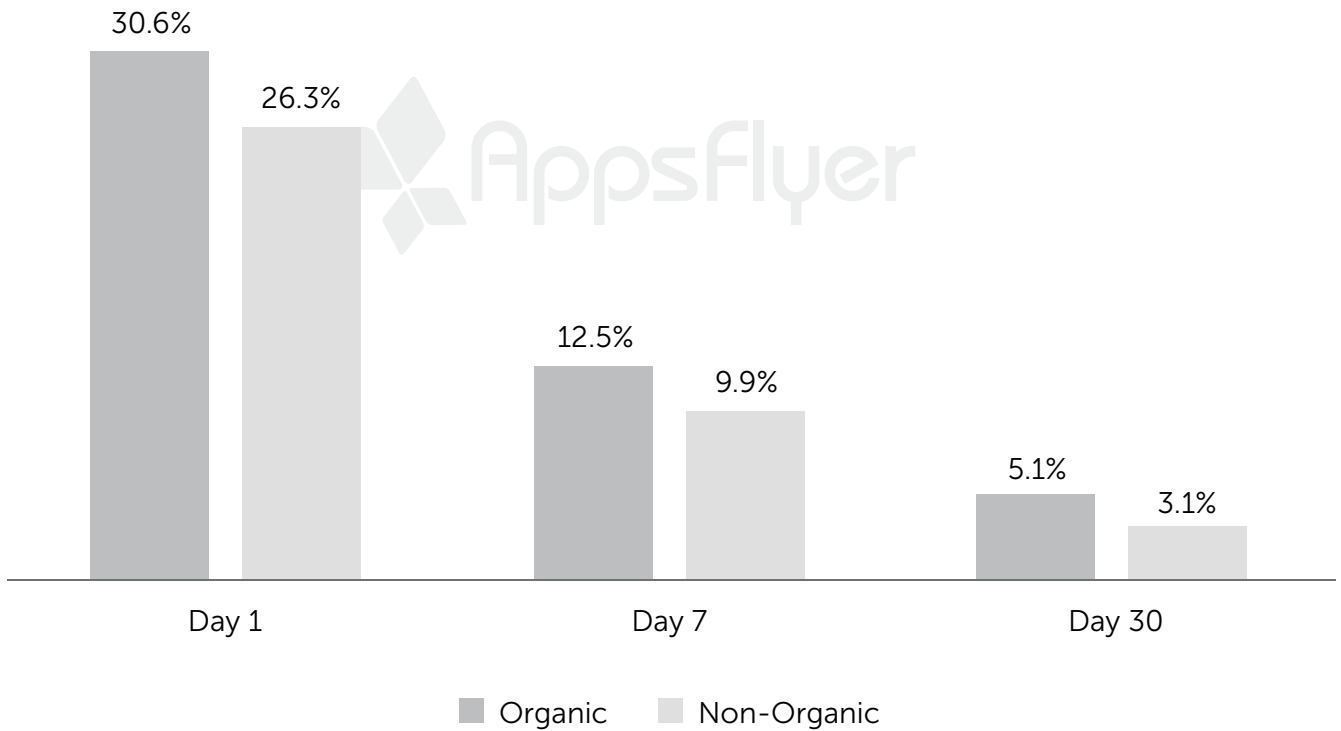
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	38.4%	13.9%	4.2%
	Non-Organic	32.9%	12.8%	4.0%
Shopping	Organic	29.7%	13.0%	5.9%
	Non-Organic	19.3%	5.9%	1.9%
Travel	Organic	19.3%	6.2%	2.6%
	Non-Organic	13.5%	3.9%	1.4%
Entertainment	Organic	27.3%	8.8%	3.1%
	Non-Organic	18.3%	7.5%	2.4%

BONUS: ENGAGEMENT BY CITY

App Engagement Score (Normalized, Oct-Nov. 2016)
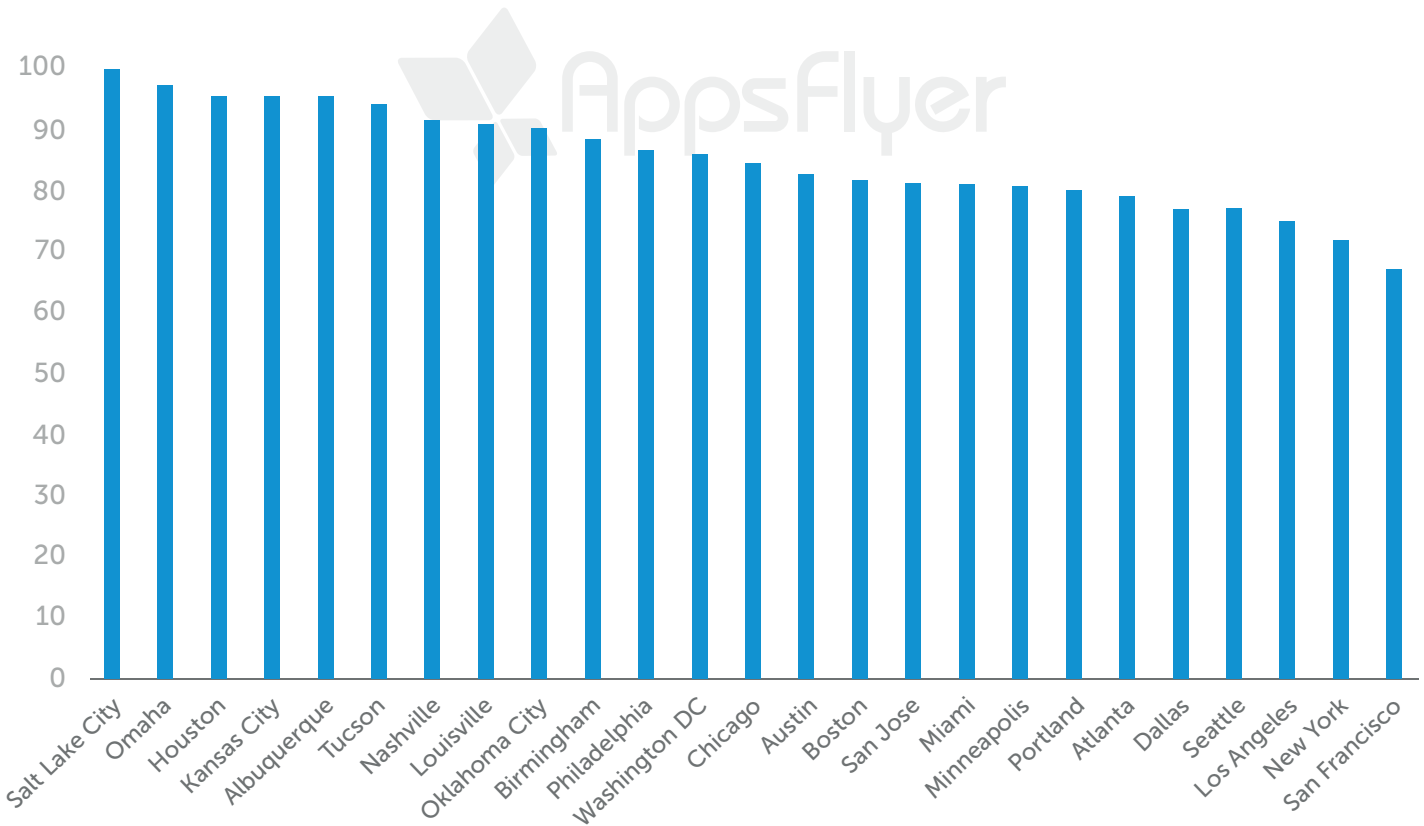
Methodology: The app engagement score is a factor of both the retention score and average sessions per daily active user. Select cities from the top 100 media markets in the US were included.

NON-ORGANIC FUNNEL ANALYSIS / N. AMERICA

android

🌐 OVERALL
0.6% Click-to-Install

Install-to-Engaged -------- **37.0%**

Engaged-to-Buyer ---------- **3.4%**

Install-to-Buyer -------------- **1.3%**

🎮 GAMING
0.91% Click-to-Install

40.11%

2.50%

1.00%

🛒 SHOPPING
0.47% Click-to-Install

38.54%

7.45%

2.17%

🍎 iOS

🌐 OVERALL
0.36% Click-to-Install

Install-to-Engaged -------- **42.04%**

Engaged-to-Buyer ---------- **5.36%**

Install-to-Buyer -------------- **2.25%**

🎮 GAMING
0.43% Click-to-Install

43.68%

4.92%

2.15%

🛒 SHOPPING
0.48% Click-to-Install

25.71%

9.58%

2.96%
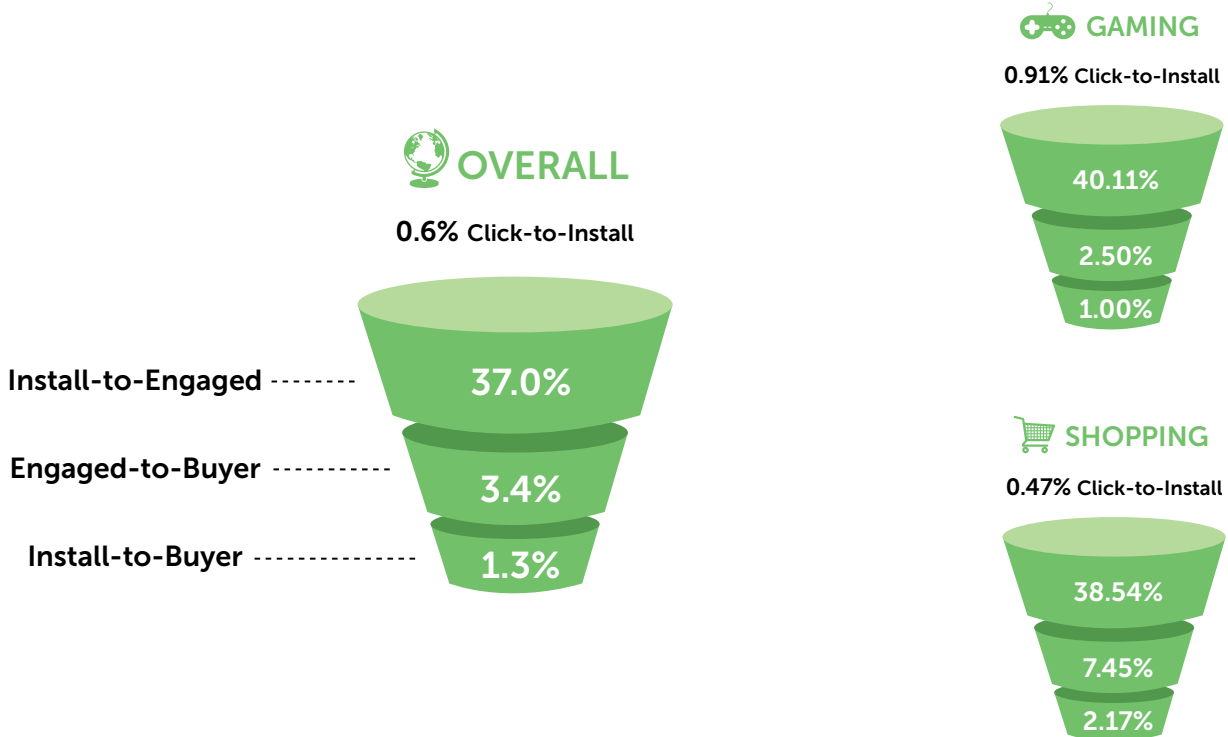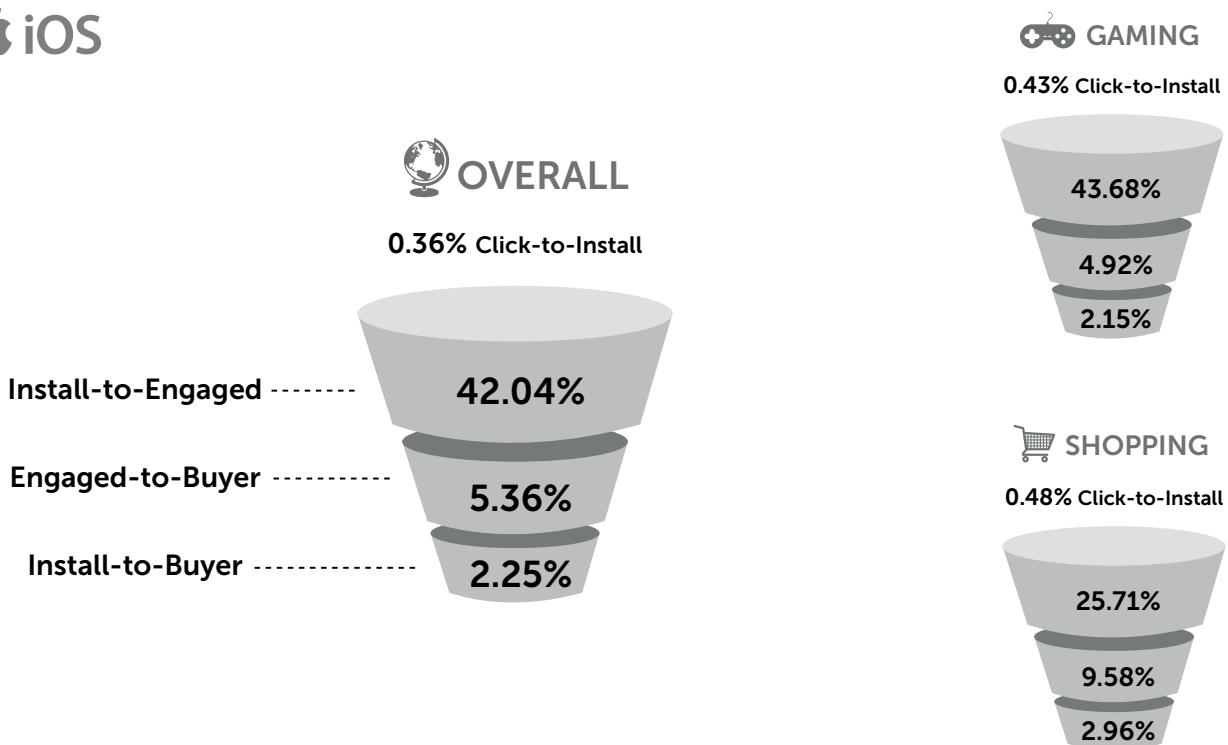
LIFETIME ENGAGEMENT / NORTH AMERICA

android Gaming

1 INSTALL ORGANIC
- 0.88 Tutorials
- 5.49 Levels
- 0.36 Purchases

1 INSTALL NON-ORGANIC
- 0.87 Tutorials
- 6.91 Levels
- 0.21 Purchases

android Shopping

1 INSTALL ORGANIC
- 41.94 Content Views
- 7.41 Add to Cart
- 2.78 Purchases

1 INSTALL NON-ORGANIC
- 26.14 Content Views
- 6.62 Add to Cart
- 1.06 Purchases

iOS Gaming

1 INSTALL ORGANIC
- 0.98 Tutorials
- 3.95 Levels
- 0.50 Purchases

1 INSTALL NON-ORGANIC
- 0.66 Tutorials
- 3.92 Levels
- 0.38 Purchases

iOS Shopping

1 INSTALL ORGANIC
- 29.46 Content Views
- 9.91 Add to Cart
- 3.04 Purchases

1 INSTALL NON-ORGANIC
- 12.14 Content Views
- 9.02 Add to Cart
- 1.12 Purchases

LATIN
AMERICA

RETENTION RATES / LATAM
android

Organic   Non-Organic
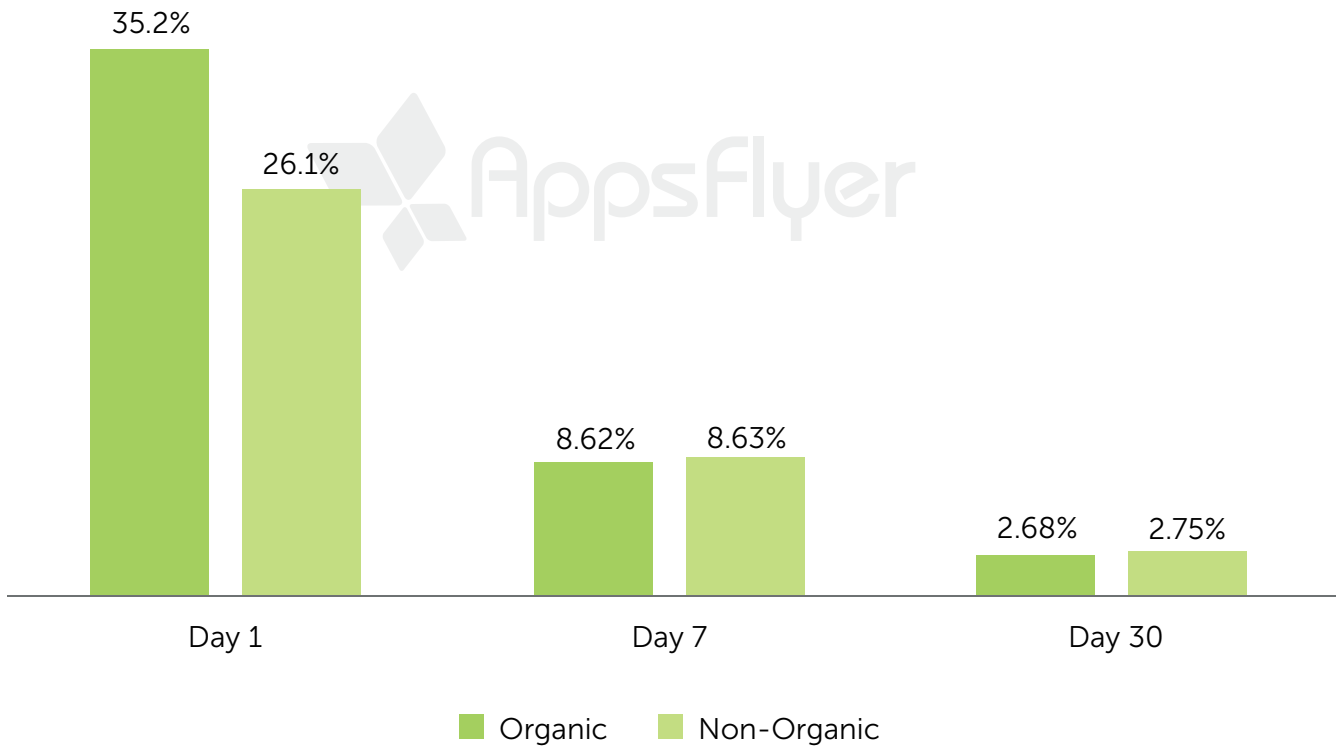
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	38.1%	7.3%	1.4%
	Non-Organic	26.5%	6.8%	1.6%
Shopping	Organic	32.2%	12.4%	5.4%
	Non-Organic	22.7%	8.5%	3.0%
Travel	Organic	26.9%	6.5%	2.4%
	Non-Organic	14.6%	4.2%	1.4%

RETENTION RATES / LATAM
iOS

30.1%

24.3%

10.4%

8.1%

3.6%

2.6%

Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic
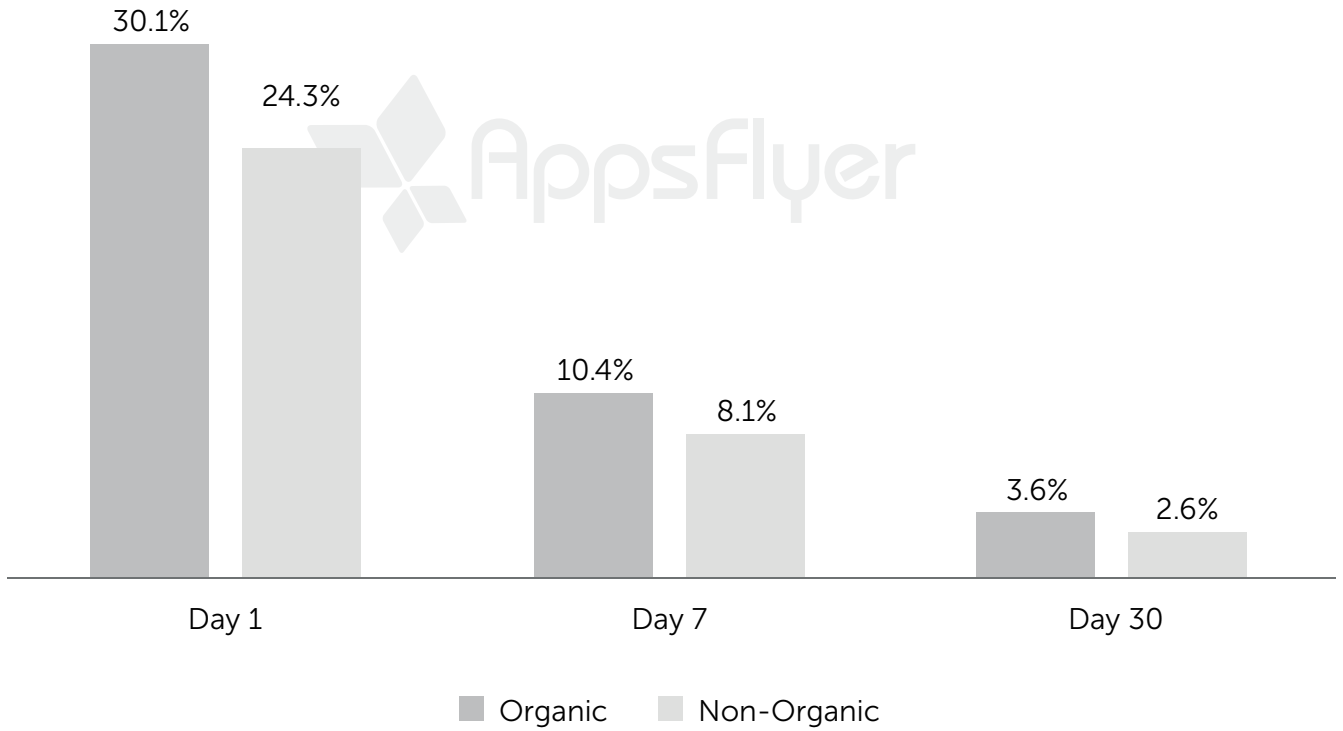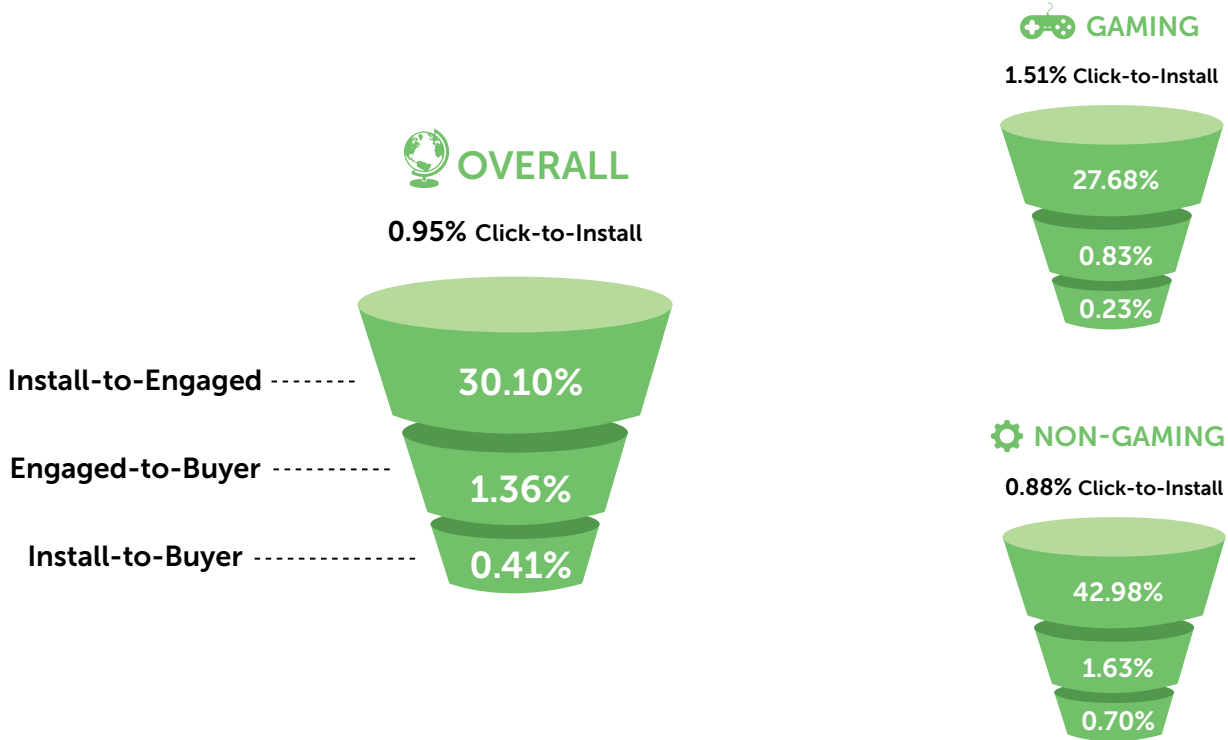
Retention Rates by Category
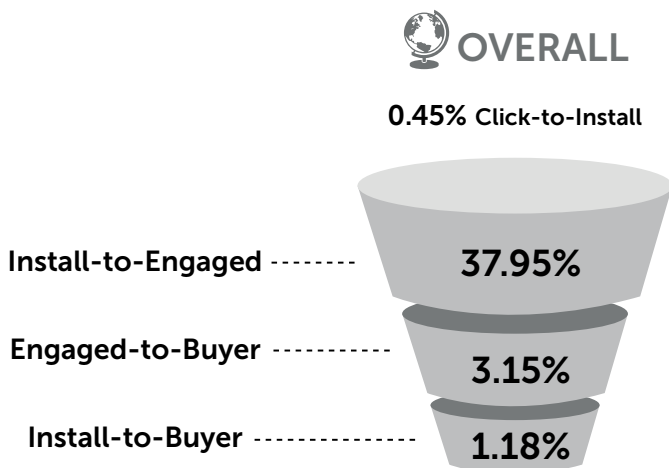
		Day 1	Day 7	Day 30
Games	Organic	37.4%	12.5%	3.4%
Games	Non-Organic	28.9%	9.3%	2.9%
Shopping	Organic	28.8%	11.5%	5.0%
Shopping	Non-Organic	21.1%	7.8%	3.0%
Travel	Organic	20.8%	6.7%	2.7%
Travel	Non-Organic	14.0%	3.9%	1.2%

NON-ORGANIC FUNNEL ANALYSIS / LATAM

android

🌐 OVERALL

0.95% Click-to-Install

Install-to-Engaged -------- **30.10%**

Engaged-to-Buyer ---------- **1.36%**

Install-to-Buyer -------------- **0.41%**

🎮 GAMING

1.51% Click-to-Install

27.68%

0.83%

0.23%

⚙ NON-GAMING

0.88% Click-to-Install

42.98%

1.63%

0.70%

🍎 iOS

🌐 OVERALL

0.45% Click-to-Install

Install-to-Engaged -------- **37.95%**

Engaged-to-Buyer ---------- **3.15%**

Install-to-Buyer -------------- **1.18%**

LIFETIME ENGAGEMENT / LATAM

android Gaming

1 INSTALL ORGANIC
- 1.23 Tutorials
- 2.42 Levels
- 0.07 Purchases

1 INSTALL NON-ORGANIC
- 1.12 Tutorials
- 1.63 Levels
- 0.03 Purchases

android Shopping

1 INSTALL ORGANIC
- 20.32 Content Views
- 2.08 Add to Cart
- 0.36 Purchases

1 INSTALL NON-ORGANIC
- 8.71 Content Views
- 0.71 Add to Cart
- 0.11 Purchases

iOS Gaming

1 INSTALL ORGANIC
- 1.53 Tutorials
- 4.42 Levels
- 0.12 Purchases

1 INSTALL NON-ORGANIC
- 1.87 Tutorials
- 7.04 Levels
- 0.07 Purchases

iOS Shopping

1 INSTALL ORGANIC
- 20.63 Content Views
- 3.91 Add to Cart
- 0.94 Purchases

1 INSTALL NON-ORGANIC
- 10.15 Content Views
- 2.82 Add to Cart
- 0.95 Purchases

SOUTHEAST ASIA

RETENTION RATES / SEA

android

37.2% 29.1% 10.4% 9.6% 3.6% 3.2%

Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic
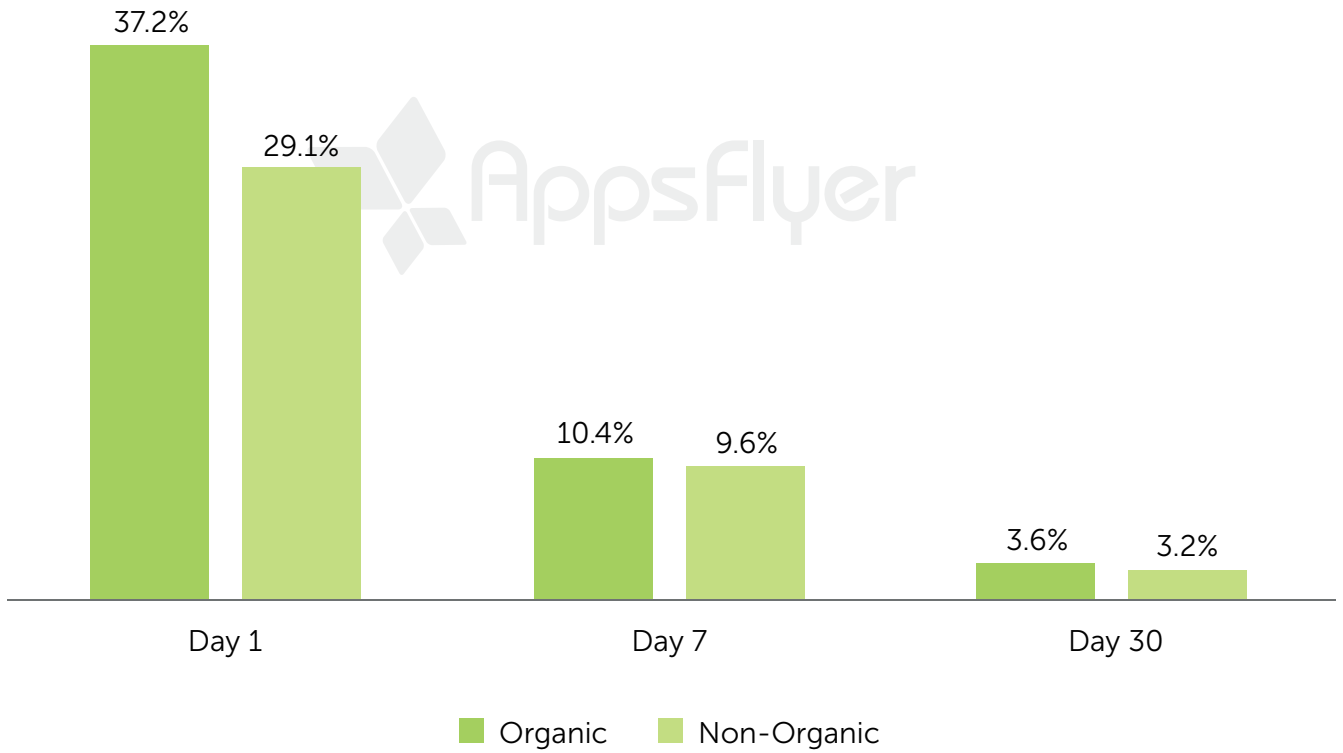
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	40.1%	8.6%	2.0%
	Non-Organic	31.4%	8.7%	2.2%
Shopping	Organic	32.7%	12.4%	5.2%
	Non-Organic	22.7%	8.4%	3.3%
Travel	Organic	20.8%	6.0%	2.2%
	Non-Organic	16.1%	4.7%	1.8%

RETENTION RATES / SEA
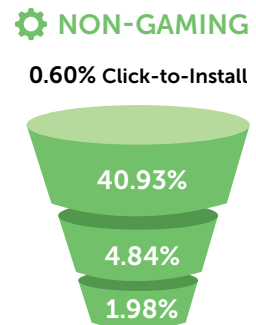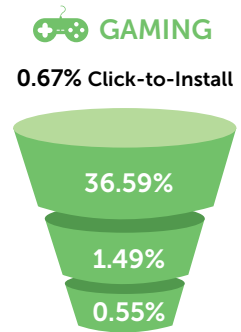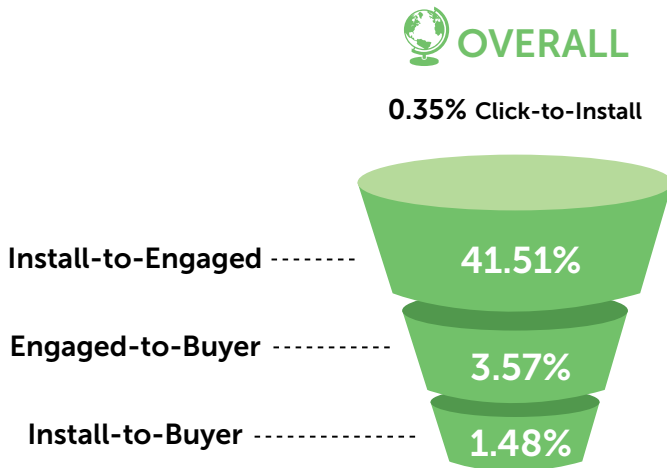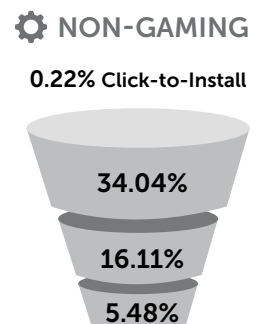## iOS

Organic   Non-Organic
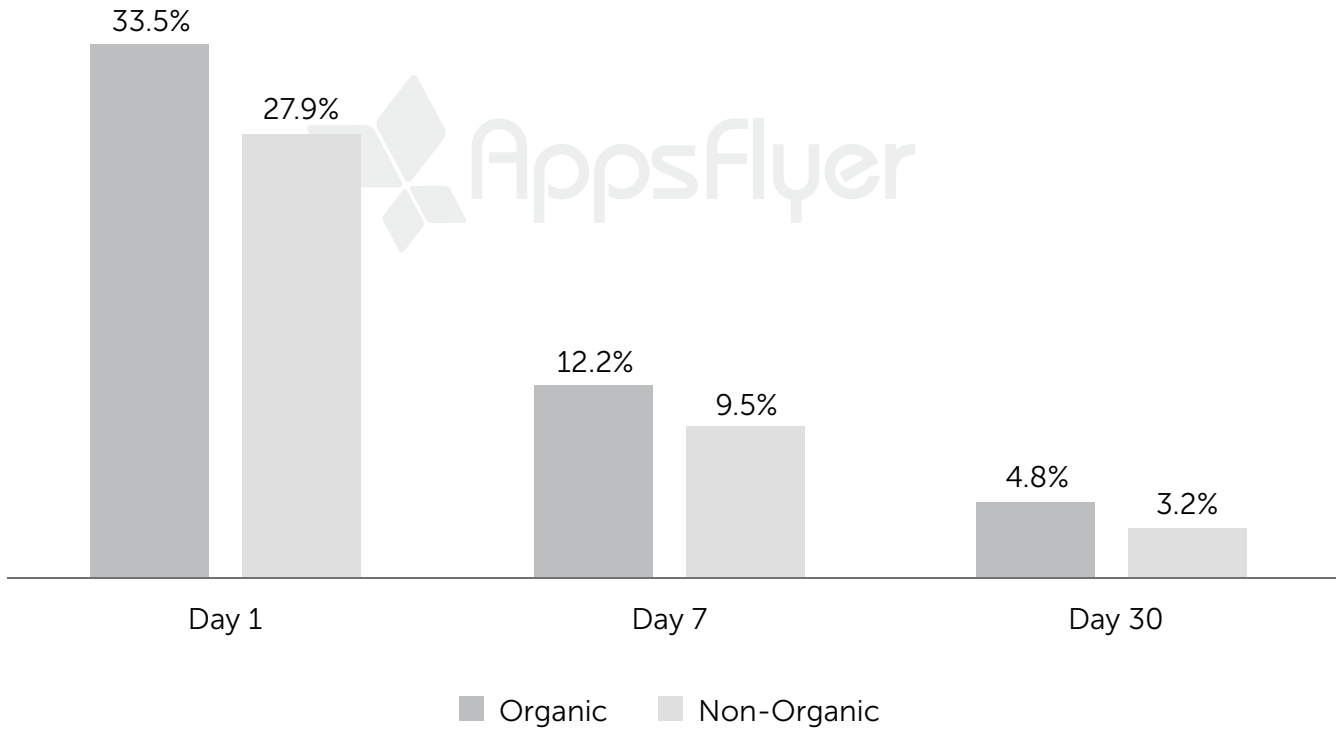
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	39.1%	12.5%	3.6%
	Non-Organic	31.6%	10.1%	3.1%
Shopping	Organic	32.8%	14.2%	6.7%
	Non-Organic	28.4%	11.8%	5.1%
Travel	Organic	22.8%	9.1%	5.1%
	Non-Organic	19.4%	8.6%	4.0%

NON-ORGANIC FUNNEL ANALYSIS /SEA

android

🌐 OVERALL

0.35% Click-to-Install

Install-to-Engaged -------- **41.51%**

Engaged-to-Buyer ---------- **3.57%**

Install-to-Buyer -------------- **1.48%**

🎮 GAMING

0.67% Click-to-Install

36.59%

1.49%

0.55%

⚙ NON-GAMING

0.60% Click-to-Install

40.93%

4.84%

1.98%

🍎 iOS

🌐 OVERALL

0.43% Click-to-Install

Install-to-Engaged -------- **41.81%**

Engaged-to-Buyer ---------- **1.77%**

Install-to-Buyer -------------- **0.74%**

🎮 GAMING

0.82% Click-to-Install

40.60%

1.67%

0.68%

⚙ NON-GAMING

0.22% Click-to-Install

34.04%

16.11%

5.48%
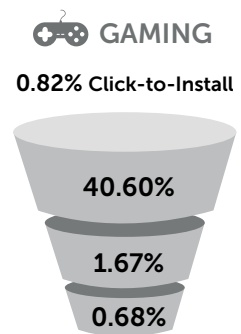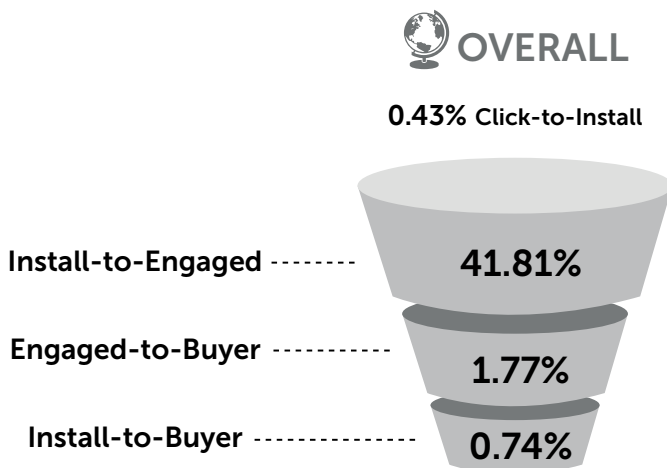
LIFETIME ENGAGEMENT / SEA

android Gaming

1 INSTALL ORGANIC
- 1.01 Tutorials
- 6.23 Levels
- 0.28 Purchases

1 INSTALL NON-ORGANIC
- 0.90 Tutorials
- 4.91 Levels
- 0.18 Purchases

android Shopping

1 INSTALL ORGANIC
- 26.47 Content Views
- 6.75 Add to Cart
- 0.97 Purchases

1 INSTALL NON-ORGANIC
- 8.34 Content Views
- 1.84 Add to Cart
- 0.24 Purchases

iOS Gaming

1 INSTALL ORGANIC
- 0.92 Tutorials
- 7.43 Levels
- 0.30 Purchases

1 INSTALL NON-ORGANIC
- 1.26 Tutorials
- 7.17 Levels
- 0.15 Purchases

iOS Shopping

1 INSTALL ORGANIC
- 27.96 Content Views
- 4.40 Add to Cart
- 1.21 Purchases

1 INSTALL NON-ORGANIC
- 11.76 Content Views
- 1.38 Add to Cart
- 0.32 Purchases

INDIAN SUBCONTINENT

RETENTION RATES / INDIA
android

30.7%
23.0%
8.1%
7.1%
2.7%
1.9%

Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic
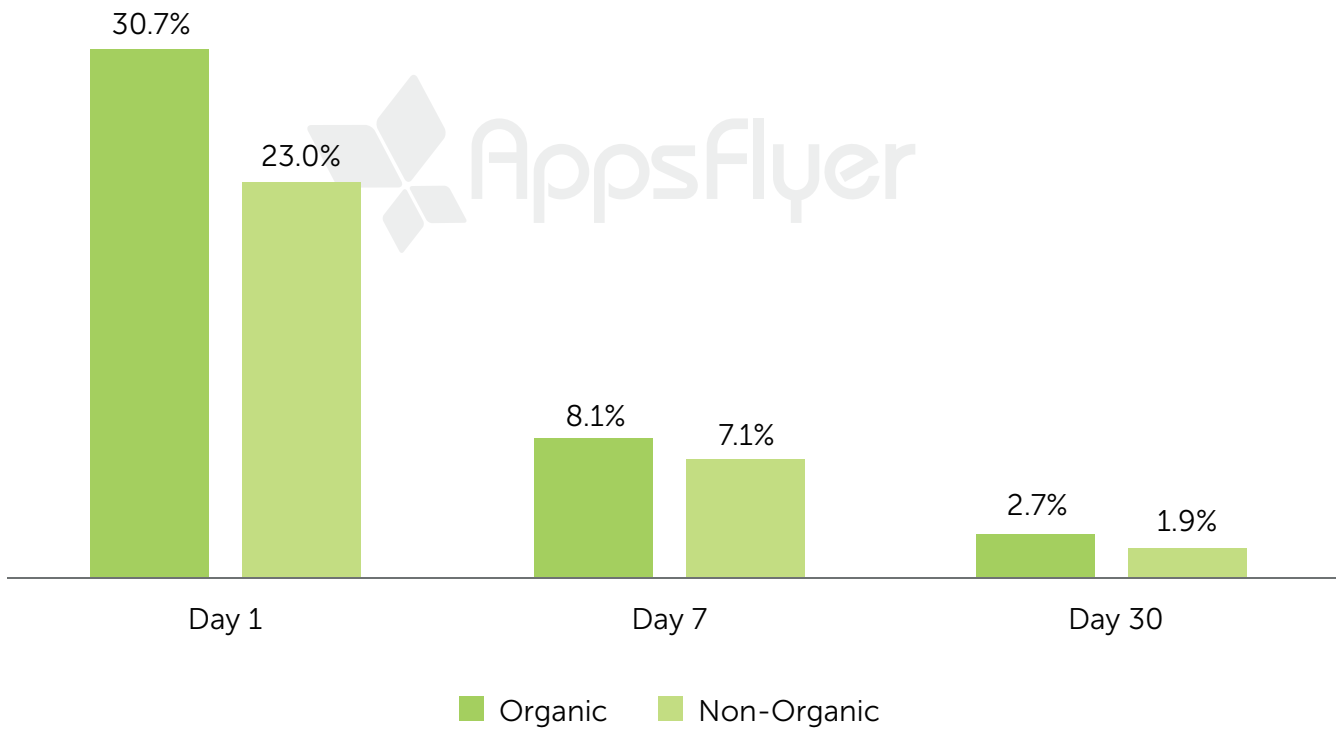
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	33.0%	6.3%	1.2%
	Non-Organic	21.2%	5.2%	1.1%
Shopping	Organic	33.3%	11.9%	4.4%
	Non-Organic	19.4%	6.5%	1.8%
Travel	Organic	27.1%	6.0%	2.1%
	Non-Organic	13.6%	3.6%	1.1%

RETENTION RATES / INDIA
iOS

30.3%

26.9%

11.4%

8.4%

5.2%

2.8%

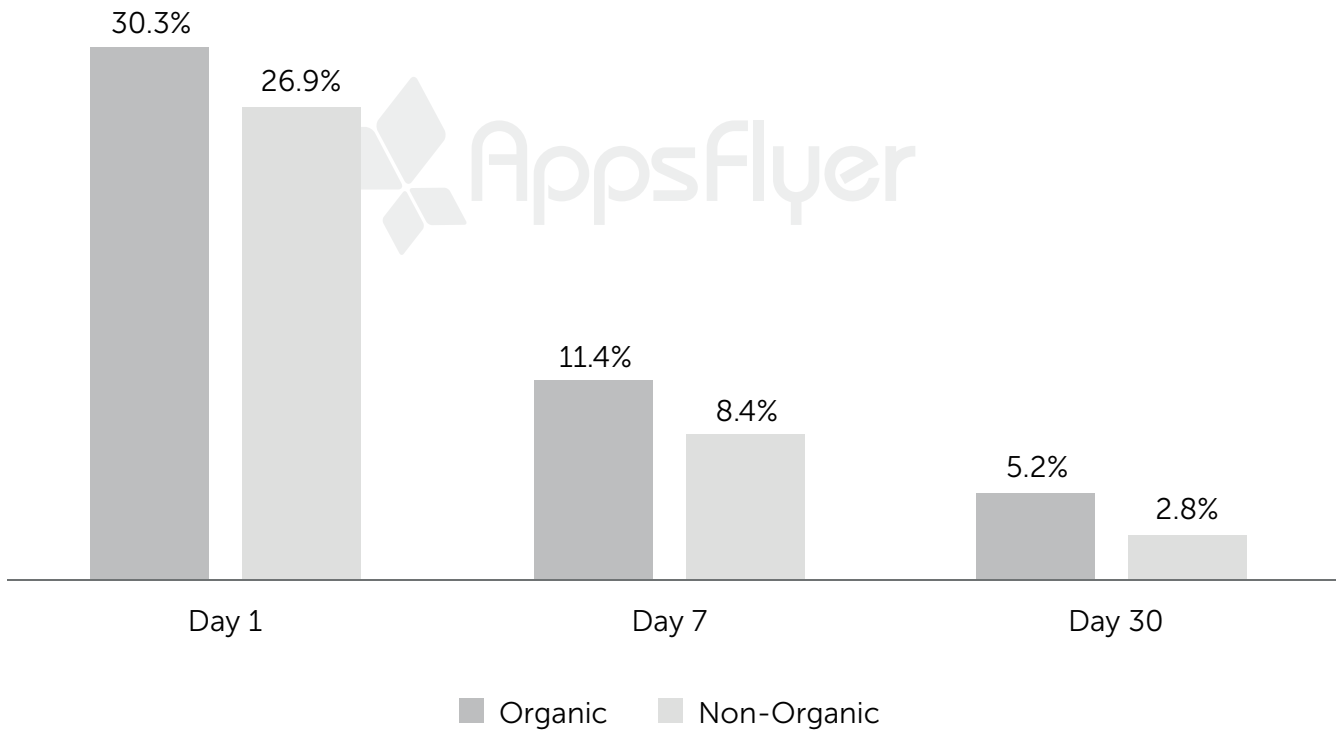Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic

Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	38.0%	12.6%	3.7%
	Non-Organic	29.3%	10.2%	3.3%
Shopping	Organic	32.2%	11.8%	4.7%
	Non-Organic	21.9%	7.4%	2.7%

NON-ORGANIC FUNNEL ANALYSIS /INDIA

android

OVERALL

0.95% Click-to-Install

Install-to-Engaged -------- **35.22%**

Engaged-to-Buyer ---------- **2.38%**

Install-to-Buyer -------------- **0.84%**
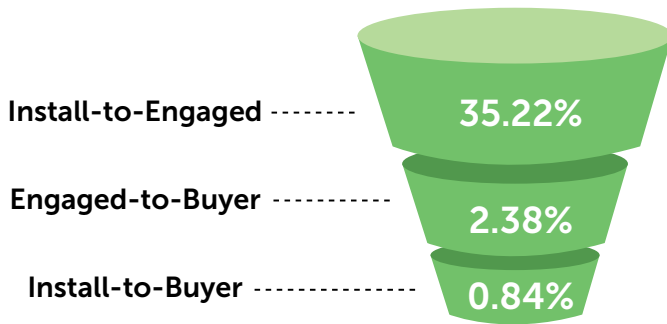
GAMING

1.78% Click-to-Install

19.71%

2.48%

0.34%
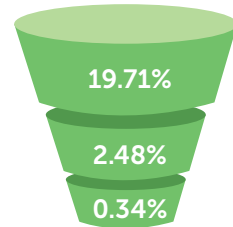
NON-GAMING

0.83% Click-to-Install

41.55%

4.37%

1.82%
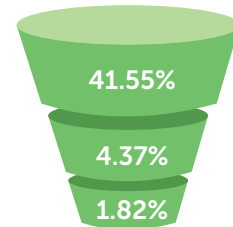
LIFETIME ENGAGEMENT / INDIA

android Gaming

1 INSTALL — ORGANIC

0.82 Tutorials
3.11 Levels
0.18 Purchases

1 INSTALL — NON-ORGANIC

0.42 Tutorials
1.94 Levels
0.05 Purchases

iOS Gaming

1 INSTALL — ORGANIC

1.13 Tutorials
3.85 Levels
0.12 Purchases

1 INSTALL — NON-ORGANIC

1.28 Tutorials
4.06 Levels
0.03 Purchases

CHINA
KOREA
JAPAN

RETENTION RATES / CJK
android

37.6%

26.6%

12.1%

10.7%

5.5%

4.0%

Day 1   Day 7   Day 30

■ Organic   ■ Non-Organic
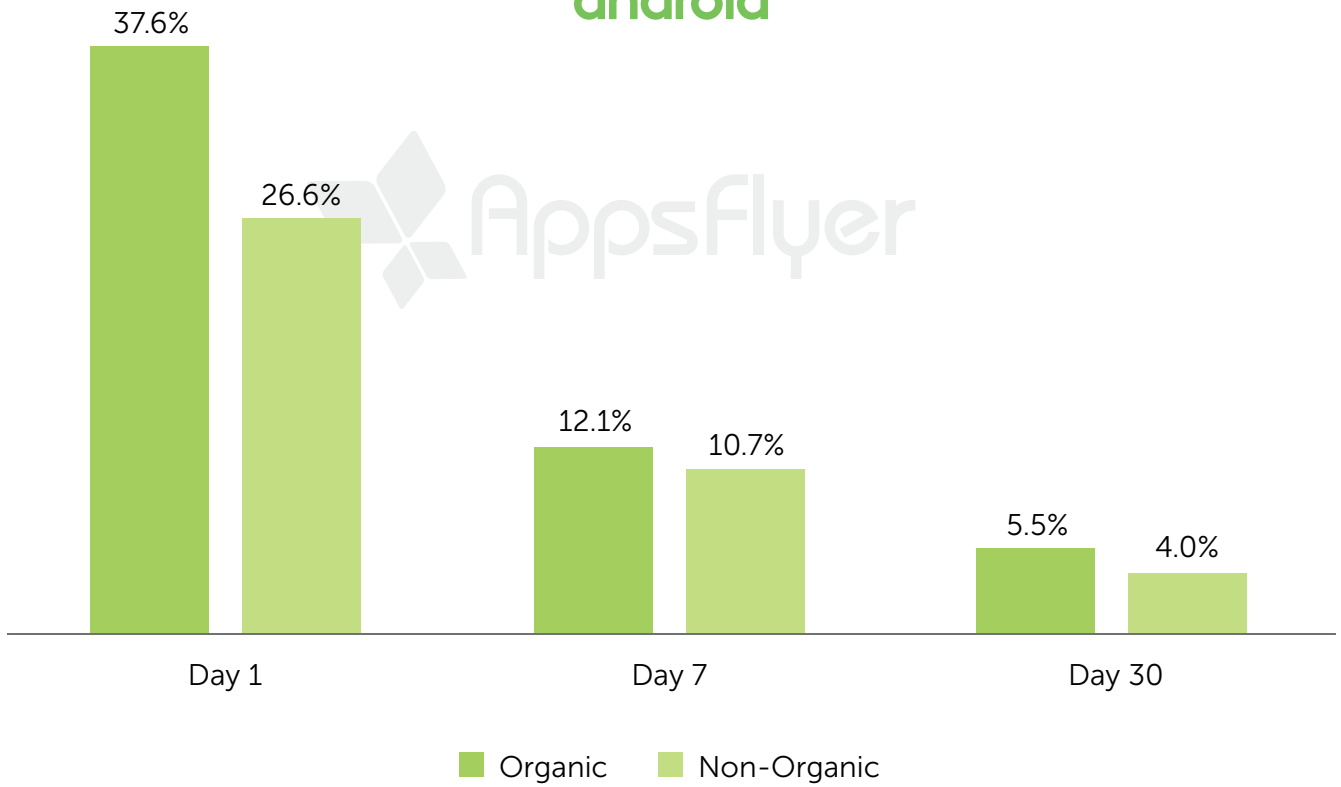
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	38.1%	9.6%	2.8%
	Non-Organic	27.1%	9.8%	2.8%
Shopping	Organic	29.0%	9.8%	5.3%
	Non-Organic	16.0%	5.6%	2.2%
Travel	Organic	22.0%	7.2%	2.8%
	Non-Organic	17.1%	6.0%	2.4%

RETENTION RATES / CJK

iOS

Day 1: Organic 31.5%, Non-Organic 31.6%
Day 7: Organic 12.9%, Non-Organic 11.6%
Day 30: Organic 5.9%, Non-Organic 3.9%

■ Organic   ■ Non-Organic
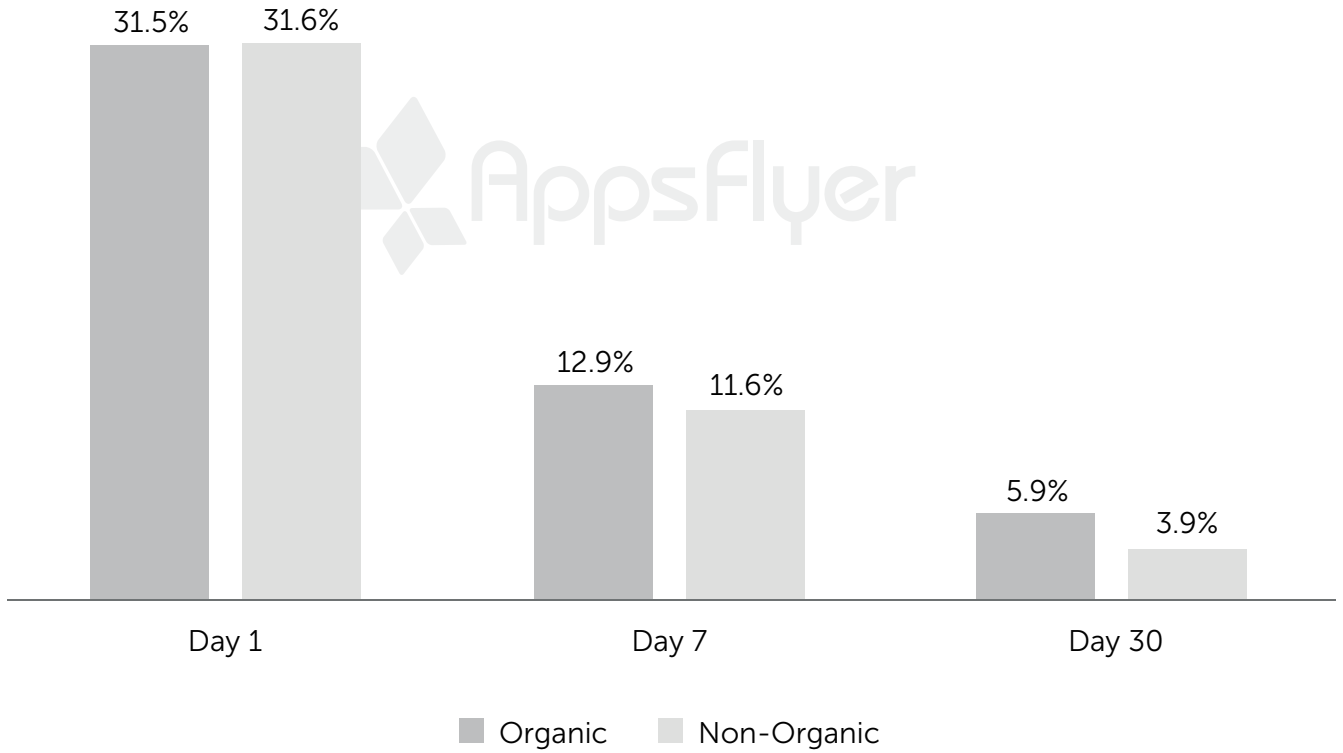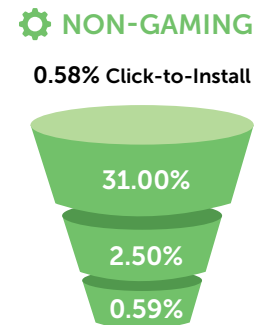
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	35.9%	12.1%	3.7%
	Non-Organic	35.8%	12.6%	3.9%
Shopping	Organic	30.6%	12.5%	6.2%
	Non-Organic	18.4%	8.3%	2.1%
Travel	Organic	23.2%	7.8%	3.0%
	Non-Organic	17.7%	5.9%	2.0%

NON-ORGANIC FUNNEL ANALYSIS /CJK

android

🌐 OVERALL

0.61% Click-to-Install

Install-to-Engaged -------- **40.22%**

Engaged-to-Buyer ---------- **4.18%**

Install-to-Buyer -------------- **1.68%**

🎮 GAMING

0.42% Click-to-Install

42.81%

4.92%

2.11%

⚙ NON-GAMING

0.58% Click-to-Install

31.00%

2.50%

0.59%

🍎 iOS

🌐 OVERALL

0.79% Click-to-Install

Install-to-Engaged -------- **40.93%**

Engaged-to-Buyer ---------- **3.10%**

Install-to-Buyer -------------- **1.27%**

🎮 GAMING

0.64% Click-to-Install

34.35%

4.19%

1.44%

⚙ NON-GAMING

0.96% Click-to-Install

43.89%

2.94%

1.29%
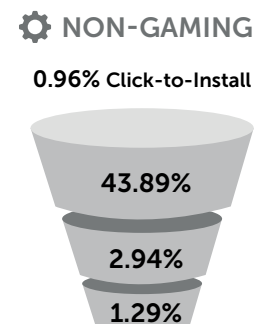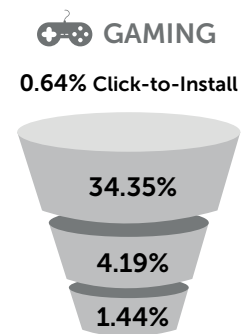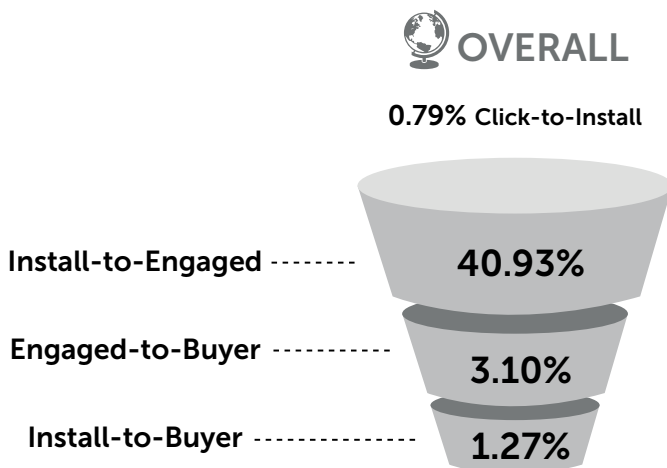
LIFETIME ENGAGEMENT / CJK

android Gaming

1 INSTALL ORGANIC
- 0.88 Tutorials
- 5.83 Levels
- 0.69 Purchases

1 INSTALL NON-ORGANIC
- 0.54 Tutorials
- 3.50 Levels
- 0.40 Purchases

android Shopping

1 INSTALL ORGANIC
- 20.27 Content Views
- 3.30 Add to Cart
- 1.02 Purchases

1 INSTALL NON-ORGANIC
- 15.24 Content Views
- 3.13 Add to Cart
- 0.60 Purchases

iOS Gaming

1 INSTALL ORGANIC
- 1.56 Tutorials
- 11.38 Levels
- 0.76 Purchases

1 INSTALL NON-ORGANIC
- 1.90 Tutorials
- 5.88 Levels
- 0.33 Purchases

iOS Shopping

1 INSTALL ORGANIC
- 23.82 Content Views
- 4.93 Add to Cart
- 1.09 Purchases

1 INSTALL NON-ORGANIC
- 14.17 Content Views
- 4.54 Add to Cart
- 0.83 Purchases

WESTERN
EUROPE

RETENTION RATES / WESTERN EUROPE

android

32.9%

27.4%

12.1%

9.8%

4.6%

3.4%

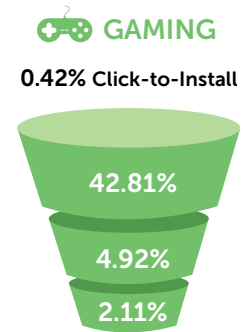Day 1   Day 7   Day 30
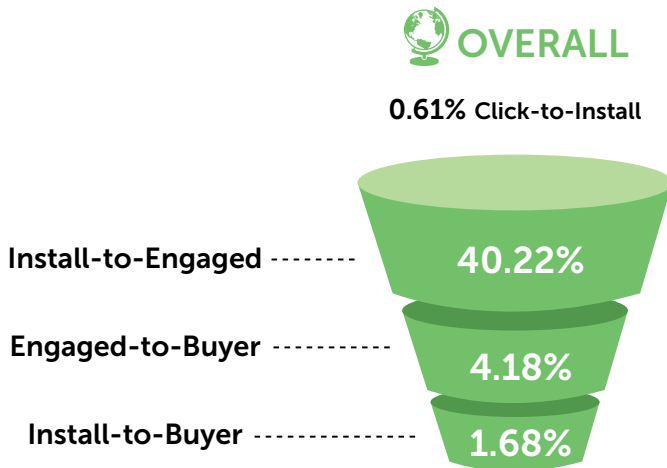
■ Organic   ■ Non-Organic
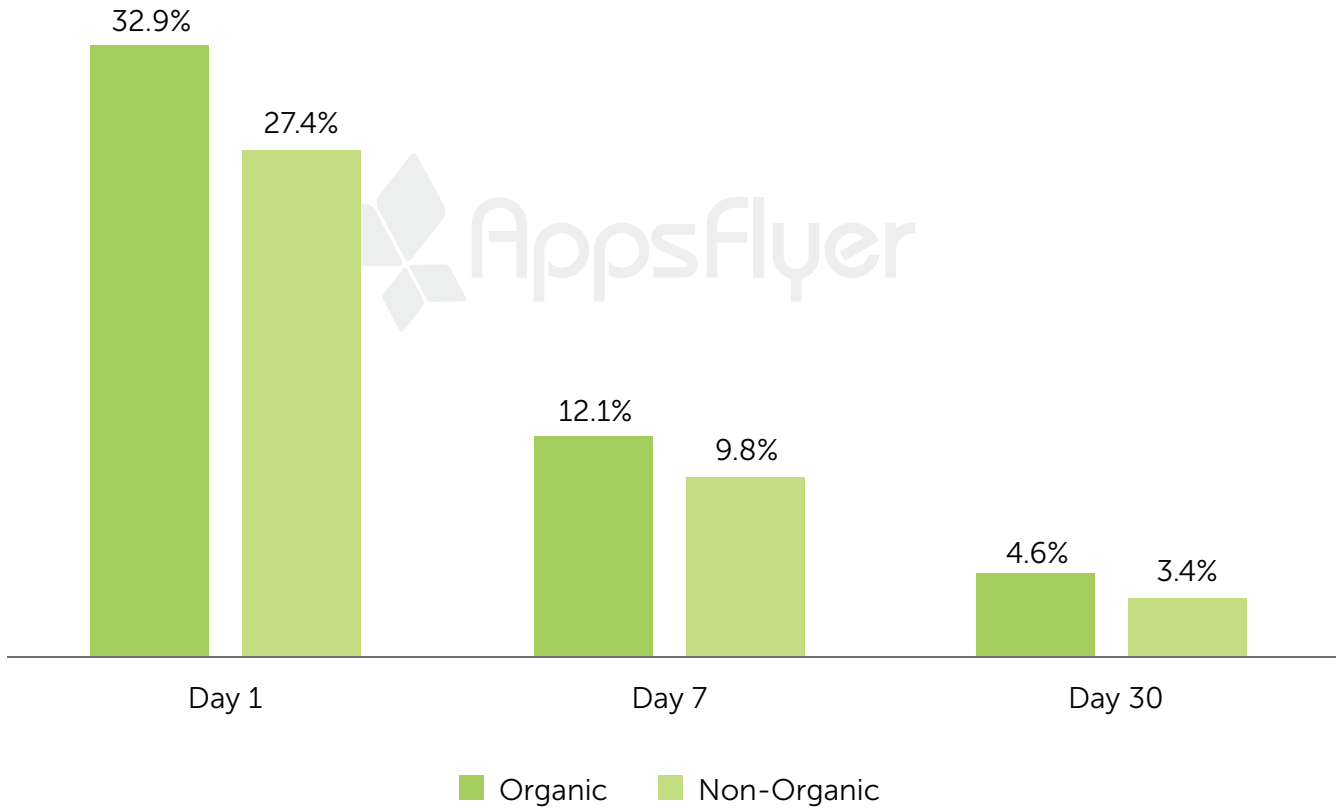
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	38.3%	11.5%	3.0%
	Non-Organic	30.0%	10.1%	2.8%
Shopping	Organic	35.1%	17.2%	7.9%
	Non-Organic	30.9%	12.0%	4.9%
Travel	Organic	22.9%	8.1%	3.1%
	Non-Organic	16.9%	5.6%	2.1%

RETENTION RATES / WESTERN EUROPE
iOS

Day 1 — Organic 32.4%, Non-Organic 26.9%
Day 7 — Organic 12.8%, Non-Organic 9.9%
Day 30 — Organic 4.9%, Non-Organic 3.0%

Organic   Non-Organic
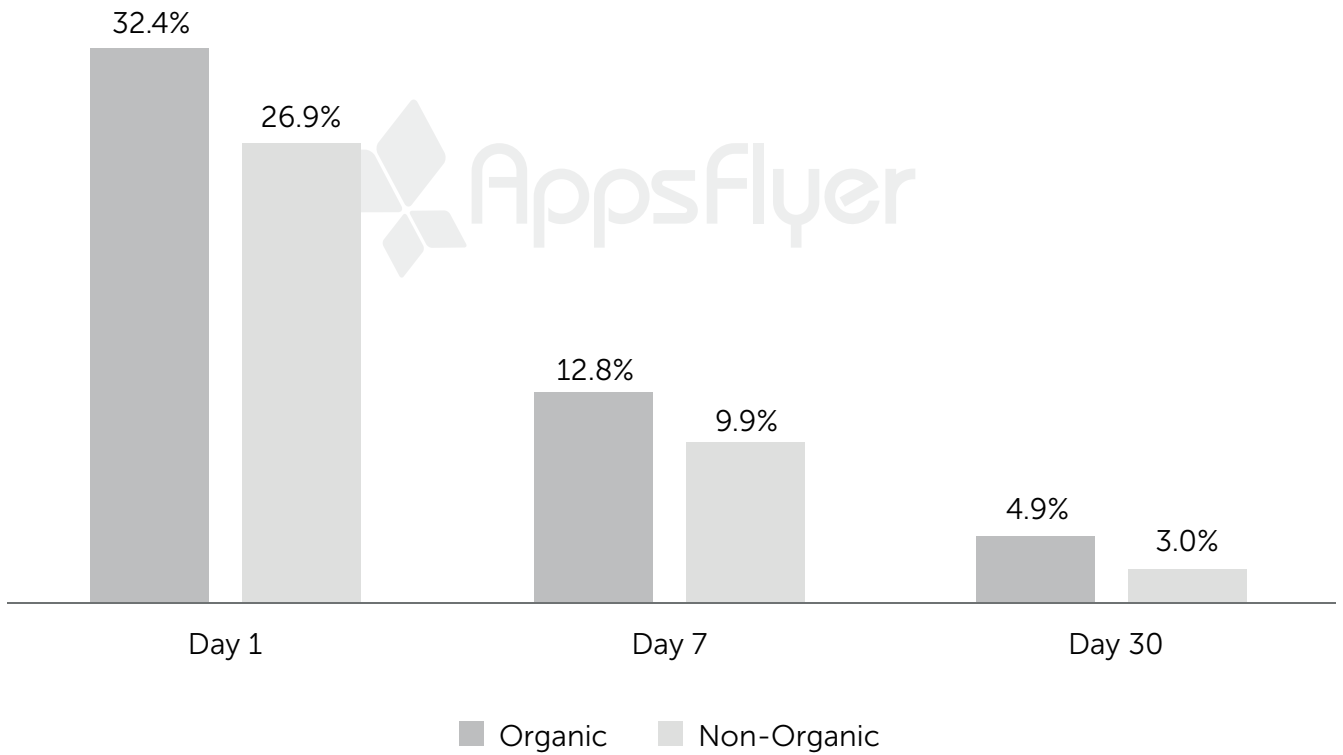
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	39.8%	13.9%	3.7%
	Non-Organic	30.5%	11.3%	3.5%
Shopping	Organic	29.5%	12.6%	5.6%
	Non-Organic	17.8%	6.1%	2.2%
Travel	Organic	17.7%	6.1%	2.5%
	Non-Organic	13.5%	4.4%	1.5%

NON-ORGANIC FUNNEL ANALYSIS / W. EUROPE

android

🌐 OVERALL
0.74% Click-to-Install

Install-to-Engaged -------- **38.09%**

Engaged-to-Buyer ---------- **3.13%**

Install-to-Buyer -------------- **1.19%**

🎮 GAMING
1.27% Click-to-Install

34.21%

2.68%

0.92%

⚙ NON-GAMING
0.79% Click-to-Install

32.08%

10.42%

3.34%

🍎 iOS

🌐 OVERALL
0.61% Click-to-Install

Install-to-Engaged -------- **38.49%**

Engaged-to-Buyer ----------- **4.27%**

Install-to-Buyer -------------- **1.64%**

🎮 GAMING
0.61% Click-to-Install

35.27%

4.17%

1.47%

⚙ NON-GAMING
0.43% Click-to-Install

26.10%

19.59%

3.10%
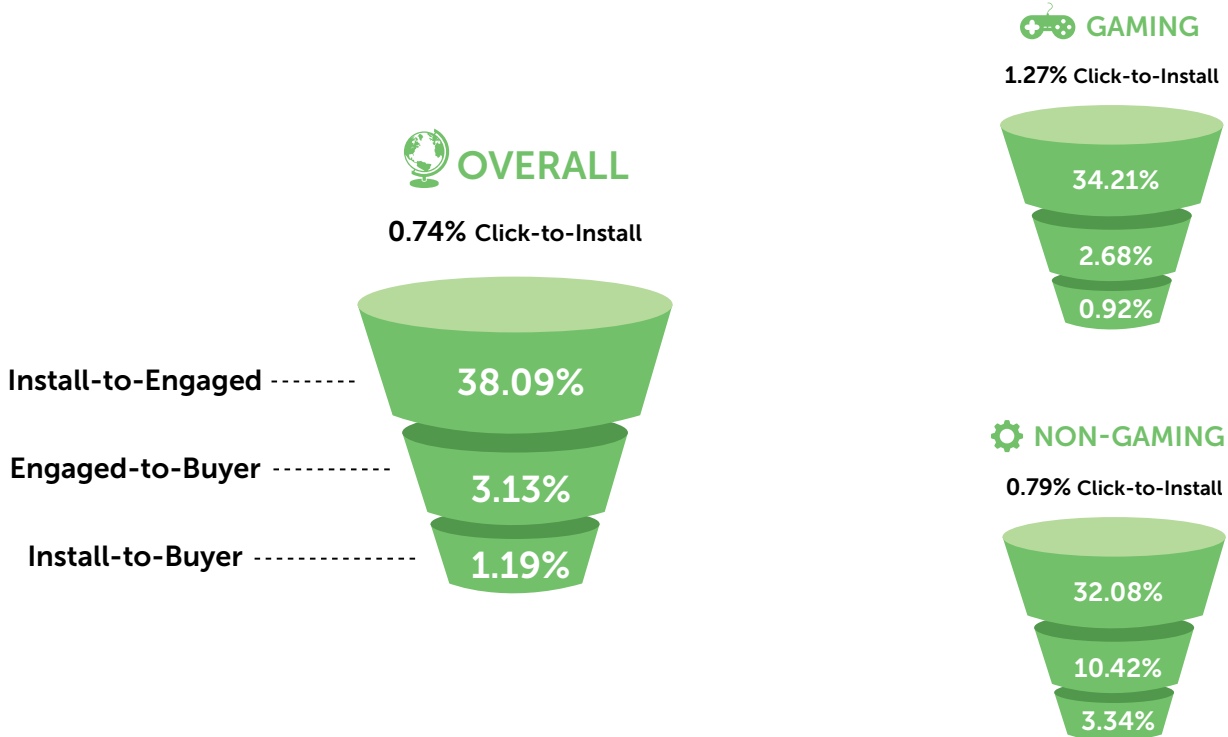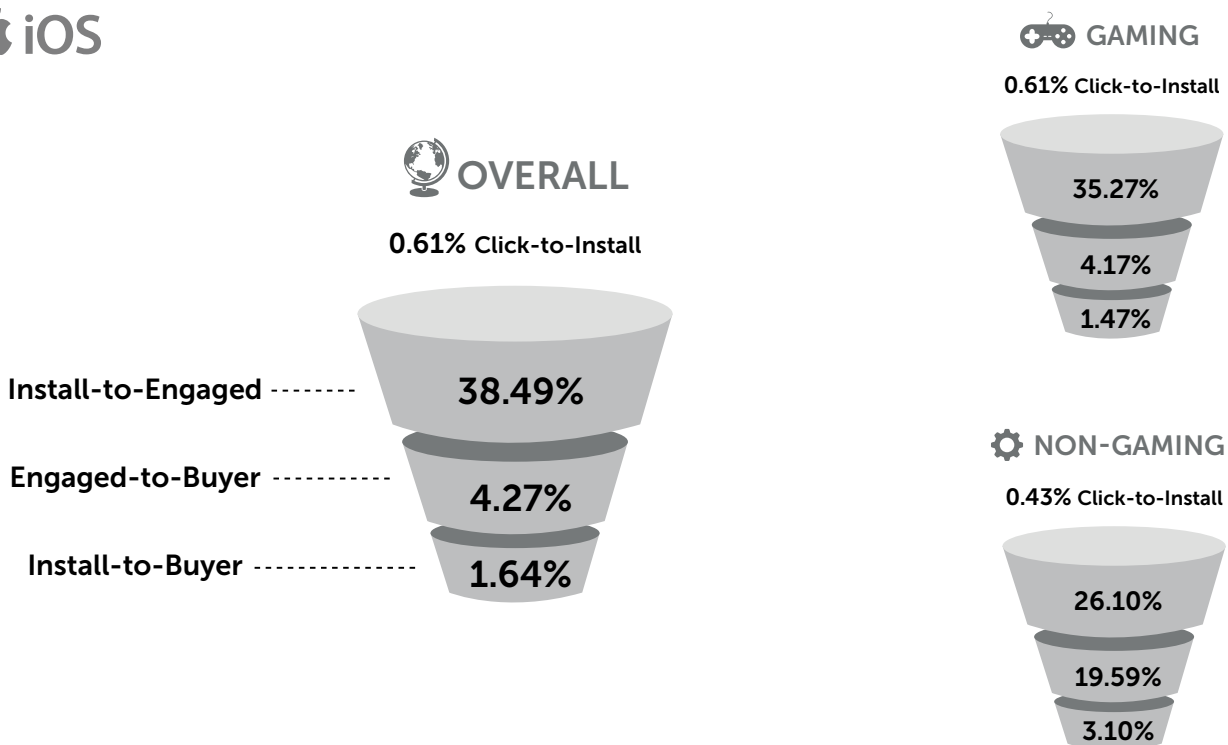
LIFETIME ENGAGEMENT / W. EUROPE

android Gaming

1 INSTALL ORGANIC
- 0.91 Tutorials
- 6.31 Levels
- 0.30 Purchases

1 INSTALL NON-ORGANIC
- 0.58 Tutorials
- 6.87 Levels
- 0.19 Purchases

android Shopping

1 INSTALL ORGANIC
- 29.06 Content Views
- 4.70 Add to Cart
- 1.64 Purchases

1 INSTALL NON-ORGANIC
- 17.56 Content Views
- 1.50 Add to Cart
- 0.66 Purchases

iOS Gaming

1 INSTALL ORGANIC
- 0.87 Tutorials
- 4.77 Levels
- 0.36 Purchases

1 INSTALL NON-ORGANIC
- 0.71 Tutorials
- 5.59 Levels
- 0.30 Purchases

iOS Shopping

1 INSTALL ORGANIC
- 20.45 Content Views
- 4.02 Add to Cart
- 1.86 Purchases

1 INSTALL NON-ORGANIC
- 11.94 Content Views
- 1.71 Add to Cart
- 0.62 Purchases

EASTERN EUROPE

RETENTION RATES / EASTERN EUROPE
android

33.8%			

Day 1 — 33.8% (Organic), 25.8% (Non-Organic)
Day 7 — 11.1% (Organic), 8.2% (Non-Organic)
Day 30 — 4.4% (Organic), 2.9% (Non-Organic)

■ Organic   ■ Non-Organic
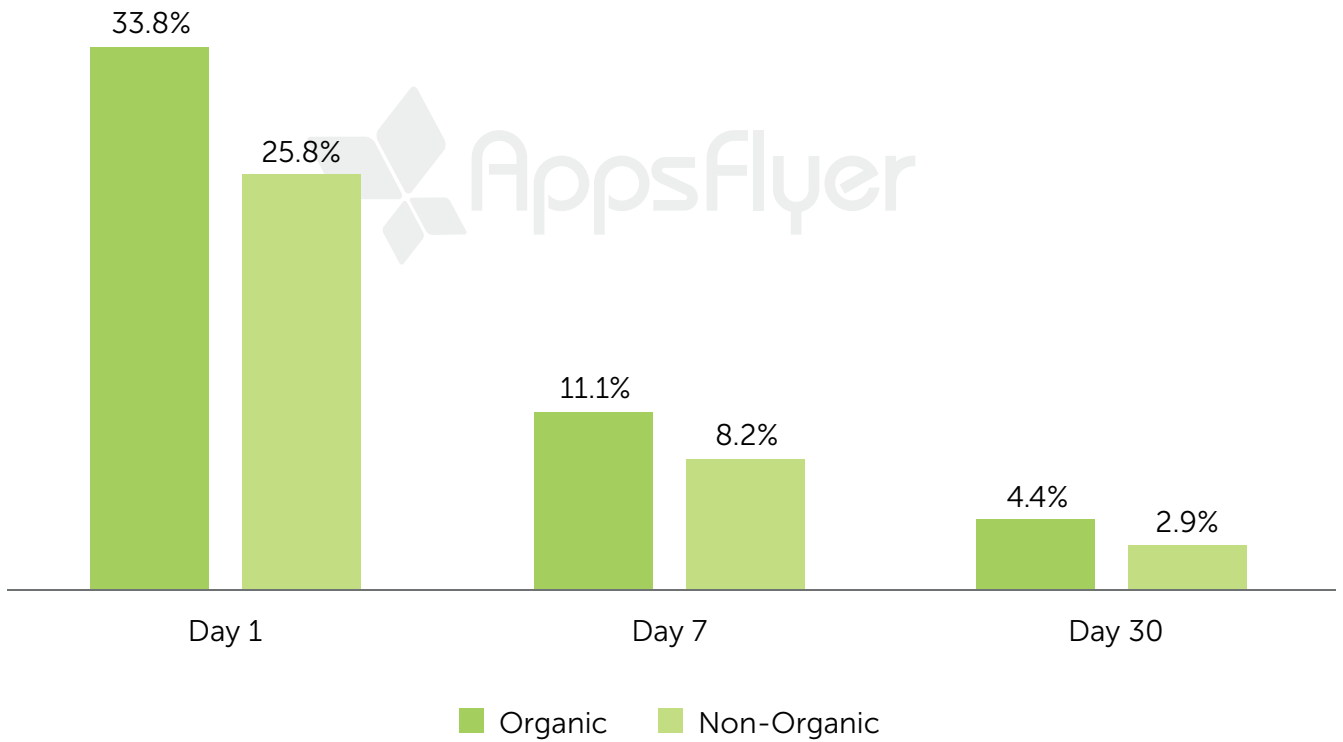
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	35.8%	8.1%	1.8%
	Non-Organic	28.0%	7.7%	2.2%
Shopping	Organic	29.0%	10.7%	4.6%
	Non-Organic	21.2%	7.2%	3.0%
Travel	Organic	27.5%	9.8%	4.4%
	Non-Organic	15.4%	4.8%	1.7%

RETENTION RATES / EASTERN EUROPE
iOS

27.9%
24.0%
9.6%
7.8%
3.9%
2.8%

Day 1

Day 7

Day 30

■ Organic   ■ Non-Organic
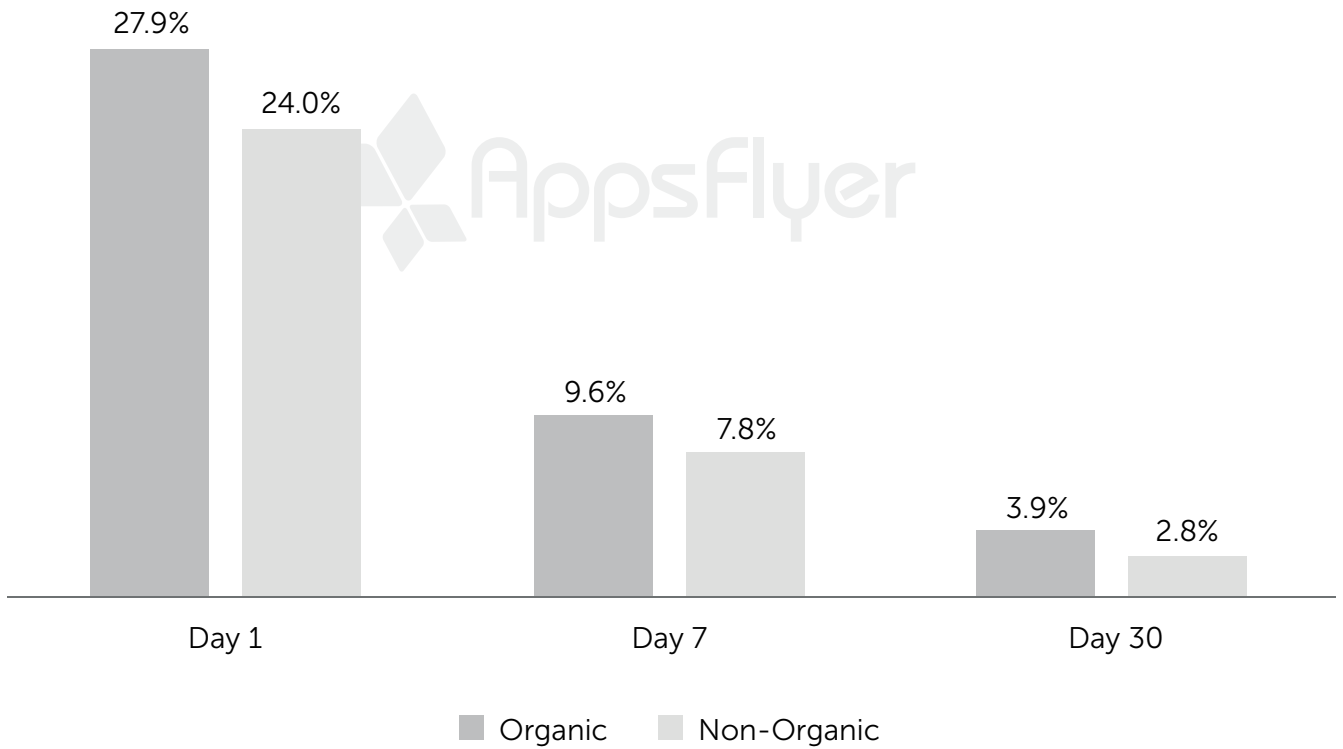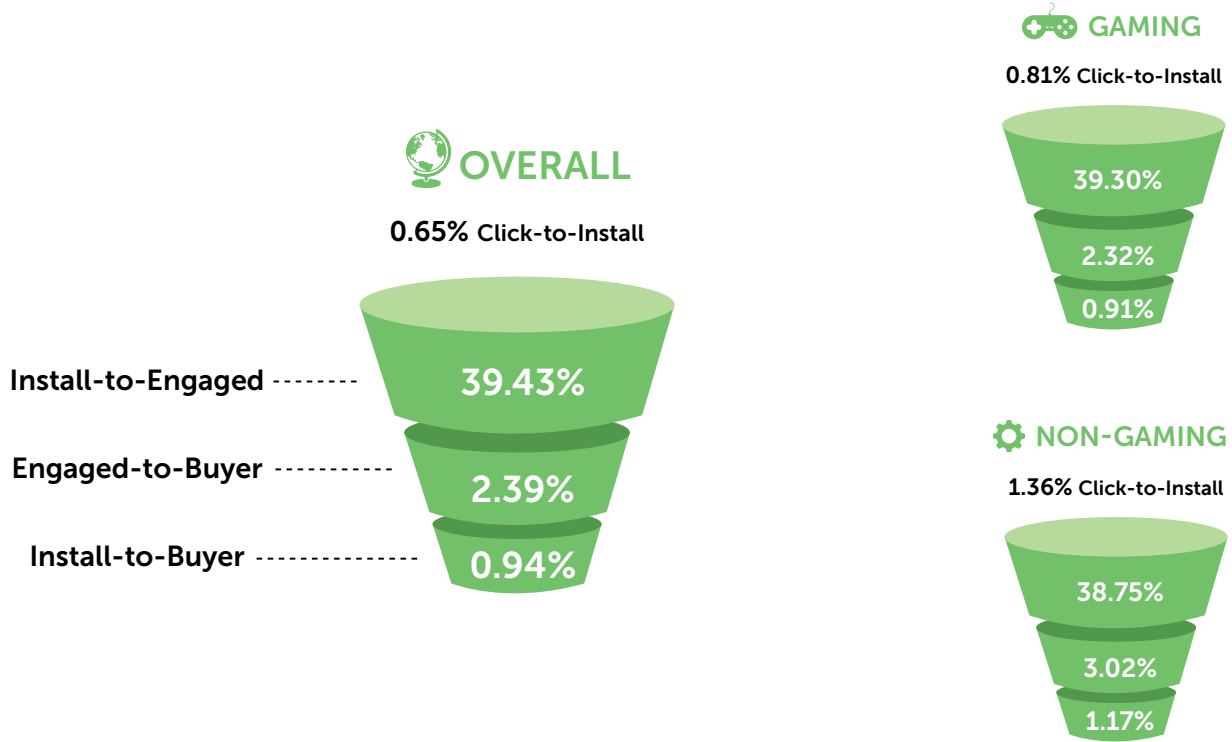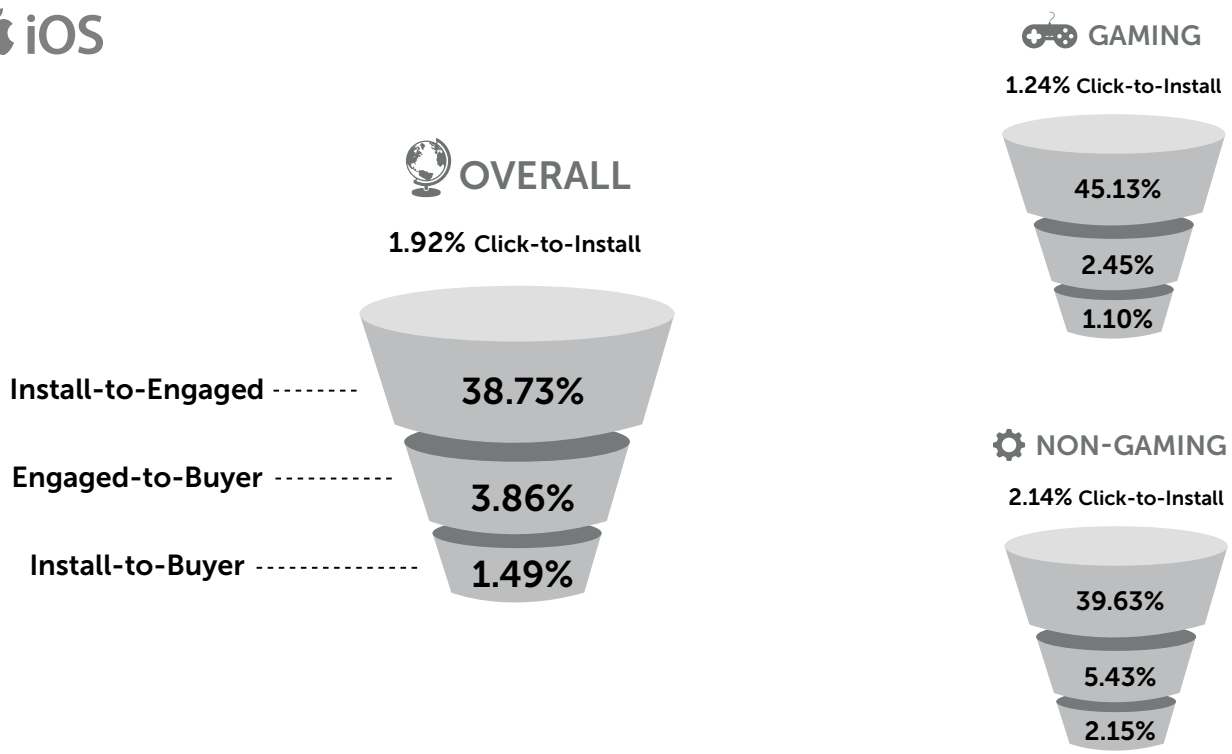
Retention Rates by Category

		Day 1	Day 7	Day 30
Games	Organic	38.5%	12.3%	3.5%
	Non-Organic	31.0%	10.6%	3.8%
Shopping	Organic	26.9%	10.1%	5.0%
	Non-Organic	20.2%	5.9%	2.4%
Travel	Organic	22.2%	7.4%	2.9%
	Non-Organic	16.4%	6.0%	2.5%

NON-ORGANIC FUNNEL ANALYSIS / E. EUROPE

android

🌐 OVERALL

0.65% Click-to-Install

Install-to-Engaged -------- **39.43%**

Engaged-to-Buyer ----------- **2.39%**

Install-to-Buyer -------------- **0.94%**

🎮 GAMING

0.81% Click-to-Install

39.30%

2.32%

0.91%

⚙ NON-GAMING

1.36% Click-to-Install

38.75%

3.02%

1.17%

iOS

🌐 OVERALL

1.92% Click-to-Install

Install-to-Engaged -------- **38.73%**

Engaged-to-Buyer ----------- **3.86%**

Install-to-Buyer -------------- **1.49%**

🎮 GAMING

1.24% Click-to-Install

45.13%

2.45%

1.10%

⚙ NON-GAMING

2.14% Click-to-Install

39.63%

5.43%

2.15%

LIFETIME ENGAGEMENT / E. EUROPE

android Gaming

1 INSTALL ORGANIC
- 0.86 Tutorials
- 4.76 Levels
- 0.15 Purchases

1 INSTALL NON-ORGANIC
- 0.54 Tutorials
- 3.88 Levels
- 0.06 Purchases

android Shopping

1 INSTALL ORGANIC
- 20.87 Content Views
- 2.26 Add to Cart
- 1.18 Purchases

1 INSTALL NON-ORGANIC
- 15.38 Content Views
- 0.83 Add to Cart
- 0.42 Purchases

iOS Gaming

1 INSTALL ORGANIC
- 0.92 Tutorials
- 6.58 Levels
- 0.23 Purchases

1 INSTALL NON-ORGANIC
- 0.88 Tutorials
- 6.93 Levels
- 0.12 Purchases

iOS Shopping

1 INSTALL ORGANIC
- 27.61 Content Views
- 2.13 Add to Cart
- 1.34 Purchases

1 INSTALL NON-ORGANIC
- 33.05 Content Views
- 2.10 Add to Cart
- 0.20 Purchases

About AppsFlyer

AppsFlyer's technology is found on 98 percent of the world's smartphones, making it the global leader in mobile attribution and marketing analytics. Data-driven marketers rely on AppsFlyer for independent measurement solutions and innovative tools to grow their mobile business. AppsFlyer's platform processes billions of mobile actions every day, empowering app marketers and developers to maximize the return on their marketing investments. Trusted by Facebook, Google, Twitter, Pinterest, Snap Inc., Tencent, HBO, Playtika, Waze, Alibaba, Kayak and 10,000+ other leading brands and partners, AppsFlyer has 12 global offices to support marketers everywhere. To learn more, visit www.appsflyer.com.

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About the Author

Shani Rosenfelder is the Content & Mobile Insights Lead at AppsFlyer. He has over 10 years of experience in key content and marketing roles across a variety of leading online companies and startups. You can follow him on LinkedIn.