Mobile Engagement Industry Benchmarks:

Notification Response Rates
Overview

Our series of Mobile Engagement Benchmark reports uses the industry's largest data set — nearly 3,000 apps and 100 billion push notifications sent to more than 500 million users through all of 2014 — to shed light on core questions facing every mobile innovator:

- How do my app's mobile engagement rates compare to those of my industry peers?
- What's the delta between average and top performers?
- How do push notification response rates vary by mobile OS?
- How effective are in-app messages?

This report details push notification engagement rates for iOS and Android apps in 15 verticals. The findings are presented as high, medium and low values using the performance of apps in the 90th, 50th and 10th percentiles.

Executive Summary

Similar to our first benchmark report on opt-in rates, the difference in push notification engagement rates between leaders (the 90th percentile) and the average (the 50th percentile) is massive. It's actually a bigger gap than what separates the low-performers from the average. On iOS, apps in the 90th percentile get more than six times the engagement rate with push notifications than average apps. On Android, it's nearly four times more than average.

This engagement differential cuts to the core advantage of apps: the ability to reach out beyond the confines of a brand's digital property to engage people on device home screens and smartwatch faces — the only screens that are hardly ever more than a glance away.
Forrester Research called push notifications “... the ideal tool to combine mobile marketing's unique benefits: intimacy, immediacy, and context.” (Push Mobile Engagement To The Next Level, Forrester Research, Inc., 10/17/2013). Stories about phenomenal push notification results abound, like Redbox's very first push notification generating 16 times more traffic than its busiest day ever. Their success comes from the great customer service that they provide their app users. On the other side of the coin, receiving push notifications from needy apps, feels like an interruption, especially when they lack any context.

Since powering the very first App Store app to use push notifications, we've tried to illuminate the path to “Good Push.” We wrote the book. We analyzed billions of messages to show marketers that they can get four to seven times the response rate from push notifications that are highly targeted versus broadcast to most, or all, of an app's users. We conducted surveys that reveal that brands are not capitalizing on their collected-app-user information to customize messaging. This report is also the very first to quantitatively evaluate push notification engagement rates across industries and mobile operating systems, offering average benchmarks for high-, medium- and low-performing apps. Some of the core findings:

- On average, Android users respond to push notifications more than twice the rate of iOS users — 20 percent vs. 8 percent (more on why later)
- The rate at which consumers engage with push notifications from medium-performing apps is holding relatively steady year after year (1 percent increase for iOS and -8 percent decrease for Android)
- High push notification engagement rates grew over 24 percent on iOS and more than 13 percent on Android year after year
- In-app messages can achieve five times more opens than push notifications on medium-performing iOS apps, as is the case in the Retail vertical.

Apps wanting to receive more engagement should focus on implementing greater targeting, rules-based automation, and general message optimization to boost audience response. Those apps in the 10th percentile of notification engagement rates — 5 percent on Android and 2 percent on iOS overall — should consider re-architecting messaging strategies immediately before users generally tune-out, or, at worse, delete the app.
The chart above shows 50th percentile push notification engagement rates by vertical for iOS and Android apps. We left out Charities, Foundations and Non-Profits as this vertical’s medium push notification engagement rate of 127 percent for Android skewed the chart. This vertical also had the highest medium notification engagement rate for iOS at 68 percent.

Push notification engagement rates are based on the influence, which calculates the 12-hour influence of a notification on app opens. Each app’s past 45 days of activity and direct user response to push notifications is established as a baseline, and it is constantly updated to determine the likelihood that an opt-in app open was the result of receiving a notification.

Notification Engagement Differences Between iOS and Android

Across all industry verticals, with the exception of Medical, Health & Fitness, engagement with Android push notifications led over iOS. Why? This difference is primarily due to the ephemeral nature of push notification handling on iOS. If you miss a push notification at the moment it arrives, it is easier to find that notification later on Android devices than it is on iOS.

Unless you look at your phone every time it buzzes, chances are you unlock your phone to complete a specific task (make a call, open an app, check your calendar, etc.). Once you power it on, you’ll see a list of push notifications that have recently arrived on the lock screen. If you tap a push notification, you’ll be immediately taken into the corresponding app on both iOS and Android.
This is where the consistencies in notification handling end.

On iOS, push notifications are stored in the “notification center” and grouped by app rather than chronologically, making it difficult to determine which one was sent to your phone.

On Android, push notifications persist on the lock screen, requiring you to swipe left or right to dismiss them. If your Android phone is unlocked, you’ll see icons in the notification status bar on top of your home screen for apps that recently sent notifications, which can be directly accessed by tapping them.

There are certainly other differences that could contribute to the much greater engagement Android apps receive over iOS. iOS users decide how they want to see push notifications on their phone (alert box or banner) and if their arrival will be accompanied by sound. Get too pushy, and you might get muted. On Android, the choice is binary: “Show” or “Do Not Show.”

Android also supports enhanced push notification formats in Android 4.1 and above including expanded text, big text, rich content and inbox style (pictured on the following page) that could continue to grow comparatively greater push notification engagement rates, as more devices adopt the latest operating system. Android users swipe down on push notifications to expose these formats, sharing only one similarity with iOS, where interactive notifications buttons are exposed by pulling the push notification to the left (where you also have the option to dismiss it).
Push notifications are just one tactic to engage mobile app users. Many apps are adopting customizable message centers, which are great places to engage all app users — opt-in or not — with persistent rich content they can consume at their convenience. Message centers are great places to store sales promotions, discounts or freebies to remind users why they have the app without necessarily sending push notifications. Or they can also be paired with push notifications as shown on the next page. Message centers are especially great on iOS, which allows badging app icons to inform users that content is awaiting them.

There are also in-app messages that are mobile engagement channels that don't require developer resources (get the “Inspiration Guide” here). These messaging channels also reach most users, while being compatible with iOS 8 and Android 4.0 and above.
Retail apps are early adopters of message centers — the impact messaging boosts sales and pre-shopping activities, making this fact unsurprising. Of the six industry verticals tracked in 2013 and 2014, Retail saw the largest decline in push notification opt-in rates (9 percent), even while they doubled holiday push notifications and saw consumer response to push notifications double.

To evaluate push notification engagement rates versus message center engagement rates, we compared message centers opens with direct notification taps/swipes. In both cases, the behavior is an explicit opening of the message. The latest data shows that medium-performing retail apps achieve five times more opens of message center messages than they do from push notifications. High-performing retail apps achieve an amazing 54 percent average open rate for messages sent to message centers.

Redbox uses push notifications with its message center with real-time marketing automation to deliver a freebie promo code to new app users within one hour of their first app open. Open rates for these message center messagers were 33 percent higher with 300 percent greater redemption than its typical freebie promotions.
Driving Greater Engagement

Our data proves that the app users receiving push notifications are four times more engaged and two times likelier to stay than opted-out users. It’s also important to think about push notifications being valuable for more than driving people in to the app.

Push notifications have the potential to deliver much much more. They provice useful, timely information that users need, serving them unique value from the app without the user having to open it. Though low, Media’s push notification engagement rates offer value to users as the headline or the sports score that pops up on the screen is all the information users need. Flight gate changes, shipping alerts and a whole host of transaction-related push notifications that streamline and improve customer experiences, keep the app and its value top-of-mind.

In fact, push notifications with interactive buttons for smartphones and wearables like the Apple Watch increase “glanceable mobile moments,” while extending greater control to users’ home screens and Watch faces. Simple interactive buttons within push notifications provide powerful ways to respond to messages, set preferences, and execute actions within an unopened app. These lightweight, quick interactions offer new opportunities to build customer understanding far beyond explicitly set preferences and implied interests gleaned from in-app behaviors, greatly amplifying the signal brands can tune into in order to serve more relevant content and messaging. While push notifications broadcast to the majority of app users may and get higher response rates than other marketing channels today, don’t be lulled into complacency as the space is only becoming more competitive.

Additionally, the engagement gap between top performers and the average is only widening, requiring concerted efforts to adopt push notification best practices and more sophisticated targeting strategies, as well as expanding mobile engagement touchpoints to best serve customers in their moment of need whether that’s through a push notification, in-app message, digital wallet campaign or smartwatch experience.
Industry Notification Engagement Benchmarks

The following are the average notification engagement rates for high-, medium- and low-performing apps in 15 verticals by mobile operating system.
Industry Notification
Engagement Benchmarks

Top performing verticals.
Methodology

Urban Airship analyzed customer data in aggregate to identify apps with at least 5,000 downloads that had sent at least 1,000 cumulative push notifications in one month. Analysis included 2,946 apps that had collectively sent more than 93 billion push notifications to more than 533 million users. For industry-specific insights, apps were manually categorized into 15 industry verticals. To offer performance benchmarks, results were grouped into high-, medium- and low- ranges using 90th, 50th and 10th percentiles.

Push notification engagement rates are based on influence, which calculates the 12-hour influence of a notification on app opens. Each app’s past 45 days of activity including users’ direct interactions with its push notifications are used to create a baseline that is constantly updated in order to determine the likelihood that an opt-in app open was the result of receiving a push notification.

This report was generated by Urban Airship’s Strategic Consulting group and its data scientists. Strategic Consulting partners with brands to deliver tailored, relationship-based mobile strategies that increase app engagement and boost business metrics. Please contact Urban Airship to schedule a benchmark review.

About Urban Airship

Urban Airship is leading the movement of mobile innovators, helping them build high-value relationships through mobile apps and mobile wallets. Its mobile engagement and insight products mobilize all aspects of a business, powering exceptional mobile and omnichannel customer experiences. Studies have found that Urban Airship’s engagement solutions can drive an 878 percent return on investment for customers and overcome APPathy by increasing app user engagement 4X and doubling retention. Thousands of companies and some of the most demanding brands in retail, media & entertainment, sports and travel & hospitality, trust Urban Airship to deliver the mobile moments that matter to their customers and their business.

For more information, visit www.urbanairship.com and follow us on Twitter @urbanairship.
Industry verticals

**BUSINESS**
Apps offer a B2B or B2E utility for use by B2B customers or employees of businesses. Includes app interfaces or versions of B2B SaaS platforms.
*Number of apps represented in vertical: 88*

**CHARITIES, FOUNDATIONS, NON PROFIT**
Apps that provide an interface between the end user and a non-profit entity, charity, foundation, and/or apps whose purpose is to generate revenue for a cause.
*Number of apps in vertical: 15*

**EDUCATION**
Apps that provide training and learning opportunities for consumers, and apps for schools or learning institutions.
*Number of apps in vertical: 49*

**ENTERTAINMENT**
Apps that provide entertainment in the form of video streaming, music, movies, TV, radio, artist apps.
*Number of apps in vertical: 309*

**FINANCE**
Apps to manage finances, banking, investment, insurance.
*Number of apps in vertical: 43*

**FOOD & DRINK**
Apps managed by restaurants and beverage companies as well as recipe/cooking content apps.
*Number of apps in vertical: 62*

**GAMBLING**
Apps that allow you to place bets/gamble.
*Number of apps in vertical: 195*

**GAMING**
Free and paid gaming apps.
*Number of apps in vertical: 195*

**MEDIA**
Apps that include national & breaking news, local news, newsstand, books, magazines and radio.
*Number of apps in vertical: 973*

**MEDICAL, HEALTH & FITNESS**
Apps for fitness tracking, health management, pharmacy, health reference.
*Number of apps in vertical: 90*

**RETAIL**
Grocery, discount/deals, specialty retail (i.e. greeting cards or toys), fashion, big box/warehouse.
*Number of apps in vertical: 239*

**SOCIAL**
Networking, messaging, dating, communication.
*Number of apps in vertical: 102*

**SPORTS & RECREATION**
Team apps, sports news, recreation.
*Number of apps in vertical: 274*

**TRAVEL & TRANSPORTATION**
Airline, automotive, hotel, bookings, rail, vacation rental, public transportation.
*Number of apps in vertical: 115*

**UTILITY & PRODUCTIVITY**
Navigation, reference, weather, other tools for productivity.
*Number of apps in vertical: 302*