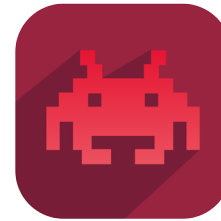




THE *GOOD* *PUSH* INDEX



How targeting boosts push messaging response rates

FOREWORD

Our previous [Good Push Index \(GPI\) study](#) quantified how push messaging impacts mobile app user engagement and retention.

On average, users opted in to push messaging are retained at nearly double the rate of those who are not; they are also much more engaged with 26% higher average monthly app opens per user. Results were even greater for some of the six industry verticals included.

As marketing's newest communications channel, push messaging is now a mainstream phenomenon generating tremendous results. Not only does it help overcome "APPathy"—the tendency of users abandon or delete an app within 30 days of download—push messaging helps businesses achieve their goals.

According to Forrester Research, "Marketers we interviewed already witness 50% higher

open rates on push notifications versus email. Click-through rates can be twice as high, too" ([Push Mobile Engagement To The Next Level](#), Forrester Research, Inc., 10/17/2013).

The average results highlighted in our GPI studies, and the success metrics that motivated marketers shared with Forrester Research, belie the juxtaposition of leaders and laggards. Blunt use of push notifications ring the death knell for abusive apps every day.

We've all experienced [Bad Push](#) and nothing is a more effective reminder to delete the offending app. The other side of the story is one of optimized rewards and long-term advantage gained through thoughtful, personally relevant messaging and mobile engagement strategies.



EXECUTIVE SUMMARY

Overall Findings:

- Highly targeted push messages drive 293 percent more response on average than broadcast messages
- Performance improvements were much greater for some industry verticals, two of which achieved more than 500% greater response to highly targeted messages

If push messaging works great, does targeted push work even better? That’s the primary question we sought to answer in our latest GPI study.



Greater push influenced app opens from highly targeted pushes vs. broadcast messages

We examined response rates of highly targeted push notifications—those sent to less than 5% of an app’s audience—compared to messages broadcast to 95% or more of an app’s audience. Analysis included more than 1,000 apps and 3.8 billion push notifications.

As expected—given the highly personalized, customized, utility-laden nature of mobile devices—targeted messages trounced the response rates of broadcast messages almost without exception.

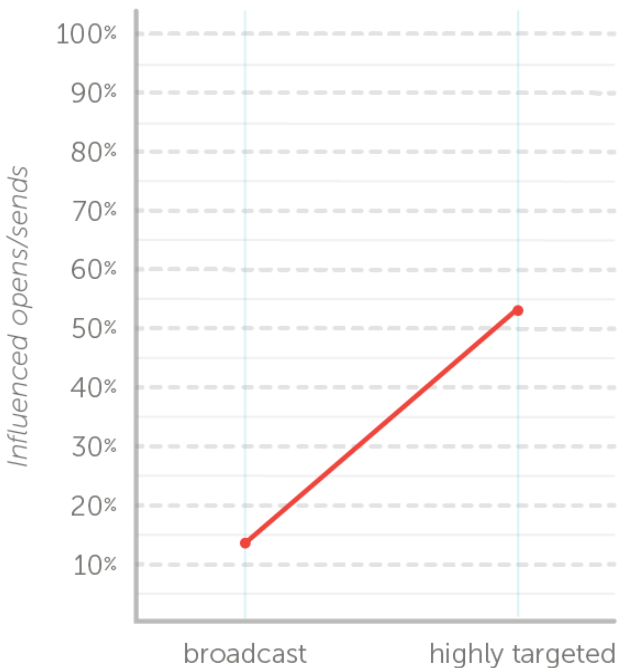
The Industry is in Early Stages of Realizing Targeting’s Potential

Mobile offers unparalleled customer insights, and push and in-app messages enable an unprecedented level of targeting. Audience segments for messaging can be built using any combination of explicit user preferences, in-app behaviors, or current and historical location and beacon proximity.

In addition, new marketing automation capabilities and dynamic segmentation based on users’ responses to push and in-app messages, makes targeting easier and more automatic, in addition to being more responsive and relevant for users.

However, despite the tremendous potential of a directly addressable audience that you know more about than ever before, recent [Mobile Maturity Self-Assessment](#) data from more than 500 respondents suggests the industry is in early stages of using mobile to establish stronger customer relationships. While 85% of respondents have adopted mobile apps and identified them as the most “essential channel” for engagement above all other common mobile tactics, **the majority deliver the same messages and app experience to all users.**

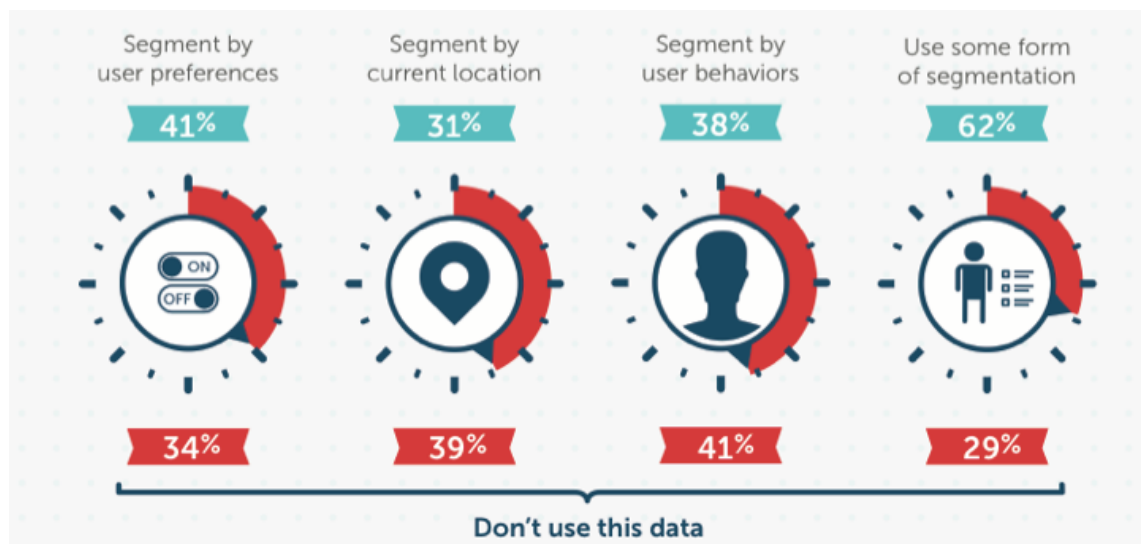
EFFECT OF TARGETING ON PUSH RESPONSE





MANY COMPANIES DO NOT TAKE ADVANTAGE OF COLLECTED DATA

Of the companies that use audience segmentation, about a third of those who gather data don't use it to create a differentiated experience for users.



Shockingly, more than one-third of companies that collect user preferences, behaviors and location data don't actually use it to tailor app content or messaging ([Urban Airship's Mobile Maturity Benchmarks Report](#), February 2014).

Location as One Targeting Opportunity

Even adopting a single variable for targeting can drive massive improvements in response, let alone combining multiple points of user insight for precision-targeting. Location has long been mobile's obvious advantage—it's what makes mobile, mobile. Now, iBeacons join the mix as a top-of-mind targeting option, but one that requires users to share their current location and opt in to push to be able to receive proximity-triggered messages.

In regards to the patch of Earth each one of us currently occupies, it's commonly assumed that people are reluctant to share their location. Without a clear sense of what the data will be used for, location can feel a lot more like big brother, versus opting in to push notifications where messages received offer immediate and ongoing evidence to validate the opt-in decision.

Back in November we set out to estimate what percent of users who had been given a chance to opt in for location had ever done so. We identified apps with a significant number of location users and plotted the average opt-in rate for both location and push notifications for each app.



First off, it's clear that **60-70% of app users opting in to share their location is not uncommon**. Apps are effectively integrating location-based functionality to encourage these high opt-in rates. Second, given the relative higher position of red to blue data points, many apps see more users opt in to share their location than opt in to push.

Considering location and push notification opt-in rates together, the majority of apps in this sample have the capability to reach around half of their app users with push notifications triggered by current or historical location and beacon proximity.

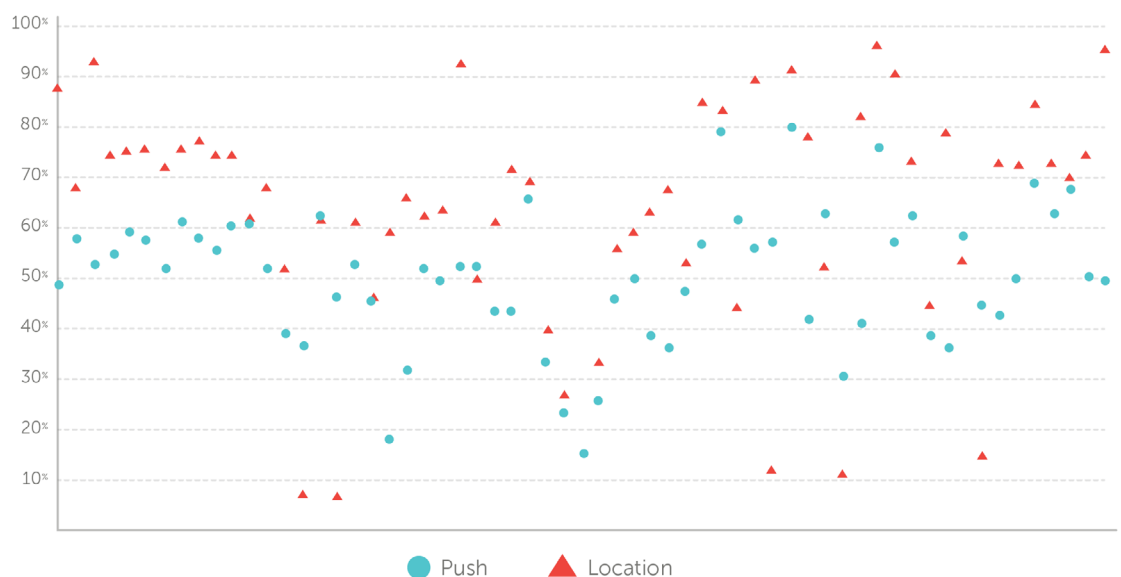
Many companies are leveraging customers' willingness to share their location in order to drive greater response rates. "REI's core purpose is to inspire, educate and outfit for a lifetime of outdoor adventure and stewardship. It's critical to tailor messaging to our customers' interests and deliver messages in a time and place that's

relevant," said Chris Marley, mobile program manager, REI. "We recently ran a test in most of our retail markets, targeting users who had been near a store in the prior three months to notify them of a local in-store GoPro training class. Response rates to these messages, and similarly targeted REI Garage Sale notifications, were four times greater than non-targeted messages."

"As the U.K.'s largest betting company, William Hill Plc. (LON:WMH) has thousands of retail locations, not to mention the stadiums, playing fields and racecourses where betting occurs," said Alex Rutherford, head of mobile sportsbook. "After seeing William Hill's location-targeted push messages achieve 400 percent greater engagement than non-location-targeted messages, we're evaluating getting even more granular with proximity-targeting through beacons."

For most apps, more users opt in to share their location than opt in to push notifications. Roughly half of users opt in to both.

OPT-IN RATES FOR PUSH NOTIFICATIONS AND LOCATION-SHARING





INDUSTRY VERTICAL OVERALL FINDINGS

Across different app categories, which we extrapolated to more traditional industry classifications—Retail, Media, Entertainment, Sports, Games, Gambling—there are differences in both the use and response to different types of push messages.

Some apps leverage highly targeted notifications as core functionality, such as Sports alerts on your favorite teams, “your turn” alerts for Games apps, or last-minute betting offers from Gambling apps. Apps of all types also send highly targeted notifications leveraging integrations with enterprise systems, such as shipping notices or real-time content feeds.

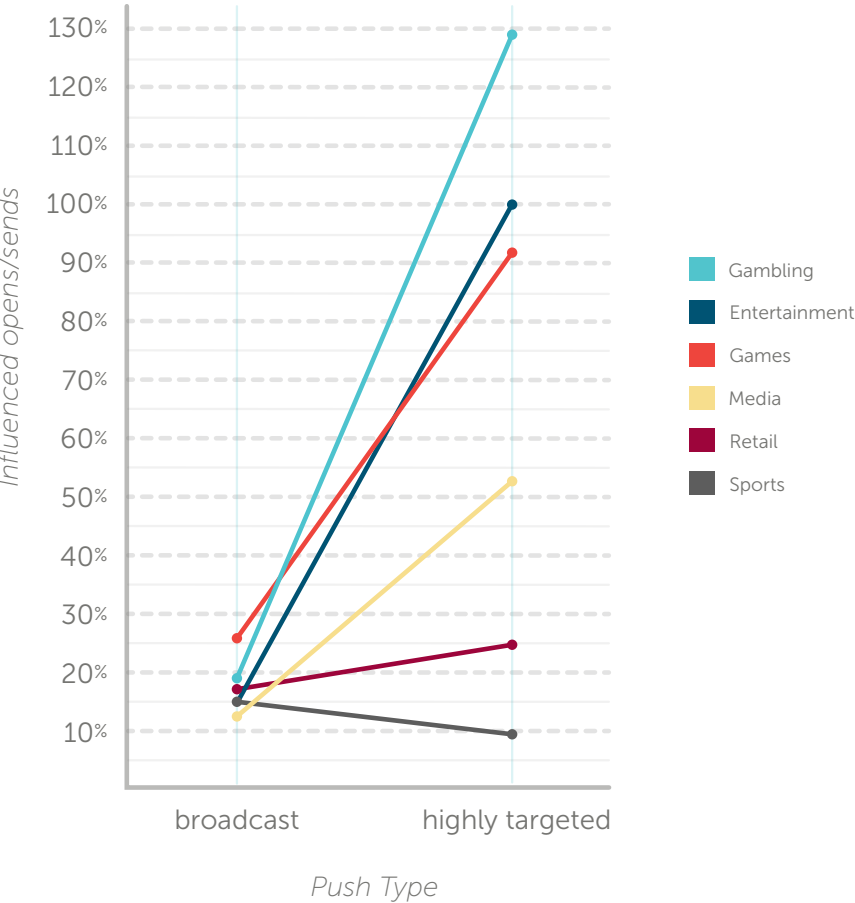
Apps also deploy sophisticated segmentation for highly targeted messages using a combination of users’ preferences, behaviors, location and proximity as real-time triggers or as defined audience segments for campaigns.

Compared to broadcast messages, **highly targeted notifications make it 35% to nearly seven times (582%) more likely that users will open the app after receiving the message** for five of the six industry verticals.

Diving into each vertical with a focus on these differences offers important points of contrast and key considerations.

Average response rates for broadcast notifications and highly targeted push messages show the dramatic performance lift targeting delivers.

EFFECT OF TARGETING BY VERTICAL





SPORTS

- Broadcast Push Influenced Open Rate: 14.98%
- Highly Targeted Push Influenced Open Rate: 9.29%
- Ratio of Broadcast to Targeted: 1.14 : 1

As the only category of apps where highly targeted notifications drive less influenced app opens than broadcast messages (-38%), one might assume less targeting is more beneficial. However, a primary function of Sports apps is to give users game time alerts, score updates and league rankings for their favorite teams—all highly targeted notifications—where users get exactly what they want just from the push message without needing to open the app. In addition, many of these score alerts are relevant for a matter of minutes and there is no additional content within the app to point users too. Our last GPI study identified Sports apps as having the second highest push opt-in rates and the second highest retention improvements for opt-in audiences, demonstrating that users love

this predominant push use case.

There are largely untapped opportunities to use targeted push messaging to better achieve business objectives that rely on getting users to open Sports apps more frequently. The same personalization driving favorite team score notifications can be used to push more in-depth, in-app content spanning video recaps, player interviews and insider fan information.

These types of targeted messaging strategies are exactly what the NHL recently detailed as its playbook for 2014 at the MMA Forum New York. The league is focused on leveraging in-app behaviors and explicit preferences to drive more targeted content to the front of the app including videos recaps of goals, suspensions, and amazing saves from users' favorite teams. The NHL is also evaluating how to empower teams to be able to interact with fans throughout arenas across the country.



RETAIL

- Broadcast Push Influenced Open Rate: 17.67%
- Highly Targeted Push Influenced Open Rate: 23.82%
- Ratio of Broadcast to Targeted: 11.88 : 1

Retail apps ranked fifth in terms of the lift in influenced app opens gained from highly targeted messages compared to broadcast notifications. Yet, on average, that improvement was still an impressive 35% lift. While some of the highly targeted pushes in this vertical are transactional (e.g., order shipped, point reward balances), others are segmented by explicit and inferred product affinities, abandoned shopping carts, wish list/shopping list items, social shares, in-store products scanned and location profile information – with proximity soon to join the targeting mix.

In our prior GPI study, Retail apps led all industries in retention and engagement improvements from push messaging, keeping an average of 116 percent more opt-in than opt-out users each month, with 40 percent higher average monthly app opens per opt-in user. This time around, by purely examining the influenced app open behavior of opt-in audiences by type of message received, it is clear Retail apps

can boost results further by continuing to adopt targeting to refine the relevancy of messages.

The SnipSnap app, which enables consumers to convert paper coupons to digital for easy retrieval on their phones, found coupon redemption rates are boosted an additional 10-20% when consumers opt-in to receive location-aware reminders.

Over the 2013 Black Friday weekend, SnipSnap sent 400,000 push notifications including location-aware reminders, expiration alerts and Black Friday coupon bundles, resulting in 150,000 coupons saved to phones and 75,000 redemptions—a 20% end-to-end conversion rate.

SnipSnap also sends broadcast push messages about once every two weeks to keep users engaged without overwhelming them. These contain big offers, news and coupon reviews. Users also get personalized push messages, such as when friends join SnipSnap or when the user has shown interest in specific products. For example, if a user bought baby wipes in the past, they might receive an offer for other baby-related gear.



GAMBLING

- Broadcast Push Influenced Open Rate: 18.86%
- Highly Targeted Push Influenced Open Rate: 128.72%
- Ratio of Broadcast to Targeted: 1 : 95.15

Gambling apps, a robust international category and now legal in a few U.S. states, take the top spot for driving the greatest targeting lift with 582% more influenced app opens from highly targeted push messages than broadcast notifications. Another category of apps, Entertainment, also achieved 500%+ improvements, but having money on the line is clearly an engaging experience and one that Gambling apps focus on with the vast majority of messages sent being highly targeted.

Our prior GPI study found Gambling apps gained the second-highest retention and engagement lifts, keeping on average 109 percent more opt-in users each month and 36 percent higher average monthly app opens per opted-in user. Clearly these push benefits are amplified by highly targeted messaging. It should be noted that the comparatively smaller sample of 20 Gambling apps may have impacted

results with a smaller number of higher quality apps using sophisticated messaging strategies.

[Paddy Power](#) described some of its core objectives as reducing broader communication and growing more targeted relationships with message segmentation, as well as driving high-touch contact with push through each phase of the customer lifecycle. App users' preferences are combined with behavior tagging and location segmentation to provide Paddy Power insights into what gamers want. For example, app users who have previously played the slots, might receive a push with details of the current jackpot value, whereas high value customers receive VIP treatment with exclusive push messages and offers targeted to keep the bets rolling in.

"The future plans for our mobile strategy are rolling in more advanced features of push—we want to continually be developing the possibilities of rich push, high-touch segmentation and advanced geolocation," said Lucinda Kelly, Mobile Games Manager for Paddy Power.



ENTERTAINMENT

- Broadcast Push Influenced Open Rate: 15.49%
- Highly Targeted Push Influenced Open Rate: 99.87%
- Ratio of Broadcast to Targeted: 5.44 : 1

Entertainment apps have the second highest targeting lift with 545% more influenced app opens from highly targeted push messages versus broadcast notifications. While there are many different types of Entertainment apps, many are dependent on the context of the user—where they currently are, what types of activities they are interested in and even

what time of day it is. With the second lowest broadcast influenced open rate (tied with Sports at 15%), but the second highest influenced open rate for highly targeted messages, users are demonstrating what spurs them to action.

In our prior GPI study, Entertainment apps were found to have the third-highest retention improvement comparing opt-in audience behavior to opt-out users.



MEDIA

- Broadcast Push Influenced Open Rate: 12.55%
- Highly Targeted Push Influenced Open Rate: 52.91%
- Ratio of Broadcast to Targeted: 59.67 : 1

Media apps achieve a 321% improvement in push influenced open rates from highly targeted push messages versus broadcast messages. As a category, Media apps appear to be very early in their push targeting efforts sending one highly targeted message for every 60 broadcast messages. Although this disparity is somewhat expected as highly targeted messages create fewer sends than broadcast messages, it is also a reflection of the traditional use of push in this category—sending breaking news headlines.

In many cases the low broadcast app open rate doesn't necessarily mean Media apps are doing a bad job as our prior GPI study showed they have the highest opt-in rates and highest six-month opt-in retention rates. In addition, for many breaking news situations additional content to deep-link within the app does not yet exist—making

push notifications the message and the medium.

All that said, a 321% targeting lift points to incredible opportunities to drive more app opens and bolster largely advertising-supported business models.

This past fall, ABC News Digital became one of the first major news organizations to introduce an entirely new level of personalized push alerts enabling users to “star” a story of interest to receive follow-up stories via a personalized News Inbox along with corresponding highly targeted push message. A simple swipe is all it takes to unfollow a story and continue to curate this personalized news feed.

Another major network, the NBC-owned startup Breaking News, offers users guidance in creating custom push alerts. Cory Bergman, General Manager, Breaking News [wrote](#): “We’ve learned that the best solution is to empower people to get the push notifications they want, reserving universal push notifications for truly big stories. That’s why we created [custom push alerts](#) for any topic, warning people in advance how many alerts they can expect.”



GAMES

- Broadcast Push Influenced Open Rate: 25.88%
- Highly Targeted Push Influenced Open Rate: 91.87%
- Ratio of Broadcast to Targeted: 1.34 : 1

Games apps have the highest influenced open rate for broadcast notifications but also the the fourth highest lift (255%) for highly targeted messages. Our prior GPI study showed that opt-in users open Games apps more frequently on average each month than any other app type,

but also suffer from the lowest long-term retention rates. Taken together, the comparatively high broadcast app open rate seems symptomatic of fast-and-furious user behavior—Games apps are played frequently for short periods of time. Games use of highly targeted pushes drives tremendous returns with messages going well beyond friends' activities and "your turn" notifications to target certain behaviors like being stuck on a certain level or critical lifecycle moments such as inactivity.



THE BIG LESSON FOR MOBILE MARKETERS

There's a good reason Forrester Research said, "Push notifications are 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). Push and in-app messaging can take advantage of everything you know about your mobile customers, including leveraging data from other systems, in order to serve up personally relevant and valued information.

We've evangelized [Good Push](#) best practices for more than two years, yet [Bad Push](#) and concerns over push fatigue persist. Breaktap recently rounded up current frustrations, [calling out](#) "the trend of vague, undefined messages that seemed like they were just put in place to disrupt you and try to pull you away from what you were doing, back into their app."

While we've shown that retention of app users opted into push notifications can be more than double that of opt-out users and that even broadcast messages

drive more response than is typical of traditional marketing channels, the future of push messaging and your long-term effectiveness depend on concerted efforts to make every interaction as personally relevant as possible. Targeting will not only boost your business results, it's broader recognition that mobile is different. An off-the-mark email just gets deleted or ignored and poorly targeted direct mail hits the round file, all with nary a thought. But when brand-centric, irrelevant pushes light up your mobile device home screen, it's a personal affront and often an emotional experience.

The best push messages should pull people into your apps by being personally valuable in that particular moment. The best in-app messages are just as targeted but perhaps not as immediate, giving users the ability to consume the content at their convenience. The most successful brands will find a balance between respecting privacy and making the most of everything they know about users to deliver mobile moments of delight.



METHODOLOGY

Urban Airship analyzed its customers' data in aggregate to compare push influenced open rates for messages sent to more than 95 percent of an app's active audience (broadcast) versus messages sent to less than 5 percent of an app's active audience (highly targeted).

Push Influence calculates the 12-hour influence of a push on app opens by establishing a baseline of each app's past 45-days of activity and user response to push notifications. In order to isolate the effectiveness of message types, without user attrition impacting results, analysis focused on response by active users, or those who had opened the app at least once the month before the push message was sent.

Analysis included 3.8 billion push notifications and more than 1000 apps, which were manually categorized into more traditional industry verticals.

ABOUT URBAN AIRSHIP

Urban Airship enables brands to build relationships with their constantly connected customers through Mobile Relationship Management. Its solutions streamline the creation, delivery and management of highly targeted cross-platform mobile push messages, in-app messages, rich app pages, Apple Passbook passes and Google Wallet cards.

With billions of messages and tens of thousands of passes delivered each month, Urban Airship's technology sparks exceptional consumer experiences, drives app engagement and increases customer loyalty and lifetime value for the world's largest retail, media & entertainment, sports and travel & hospitality brands. For more information, visit www.urbanairship.com and follow us on Twitter @urbanairship.

| Vertical | Broadcast Pushes | Highly Targeted Pushes |
|------------------------------|------------------|------------------------|
| Entertainment | 79,396,237 | 14,594,503 |
| Gambling | 515,432 | 49,043,086 |
| Games | 89,397,561 | 66,825,482 |
| Media | 2,892,076,000 | 48,469,019 |
| Retail | 253,875,771 | 21,365,434 |
| Sports | 167,850,037 | 146,701,564 |
| Total Broadcast | | 3,483,111,038 |
| Total Highly Targeted | | 346,999,088 |
| Total All | | 3,830,110,123 |