THE NEW APP MARKETING METRICS

BROUGHT TO YOU BY: Apptentive

New App Metrics for a New App Ecosystem

One year ago, we published **The Five Mobile Marketing Metrics That Matter Most**.
One year ago, the mobile app industry was a different beast altogether.

Over the past year, the industry has seen some pretty remarkable changes:

01 JANUARY

Google Play boasted an astonishing 1.43 million apps, doubling its count from January of the previous year.

02 FEBRUARY

80%

Forrester found that mobile customers spend 80% of their time in just five apps.

03 MARCH

Google introduced app indexing with its new Mobile App Indexing API.

04 APRIL

Google rolled out an update (infamously known as 'Mobilegeddon') to give a ranking boost to mobile-friendly websites.

05 MAY

30%

Facebook added deep linking to its app install ads, and app install ads made up 30% of all mobile ad revenue.

06 JUNE

Apple introduced Search APIs to enable the use of deep links for searching within apps, and opt-out rates for push notifications reached 60%.

07 JULY

Advertising costs continued to soar, and the average Cost Per Install reached a record high of $2.23.

08 AUGUST

88% of respondents in an Apptentive survey reported using retail mobile apps.

09 SEPTEMBER

Google introduced a ranking boost to apps that employed indexing in an attempt to encourage adoption.

10 OCTOBER

An Appsflyer study found that the average 30-day retention rate had reached an abysmal 3%.

11 NOVEMBER

70-80% of all app installs came organically. Taking note of the movement toward App Store search, Apple took a cue from Google and updated its App Store ranking algorithm to contextual keywords and competitive benchmarks, placing less emphasis on the meta-tags of old.

12 DECEMBER

58%

Mobile app usage had achieved 58% year-over-year growth.

The mobile app industry is continuing to evolve eight years after the launch of the first mobile app.

What hasn't changed is the conversation around metrics. By and large, the typical mobile marketing reporting dashboard looks the same as it did eight years ago: Revenue is king, downloads are queen, and app store optimization is a one-and-done game of keywords.

But are these the metrics that really speak to mobile marketing performance in 2016? Can a static dashboard do justice to a dynamic industry?

At Apptentive, we believe it's time for a change. Sure, these metrics of old are far from broken. However, that doesn't mean they can't be fixed.

From what we've seen over the past 12 months, we've realized that some traditional mobile metrics have become watered down to all but insignificance. Worse yet, we've found that an over-reliance on these metrics may be costing you **missed opportunities** and a **sacrificed return on investment**.

To better guide your mobile marketing decision-making, we've identified six alternative metrics that speak to the current state of the mobile app industry. Read on to build a reporting dashboard capable of measuring whatever the new year throws at you.

OUT WITH THE OLD, IN WITH THE NEW:
Six Metrics Worth Adopting, and Six Worth Ditching

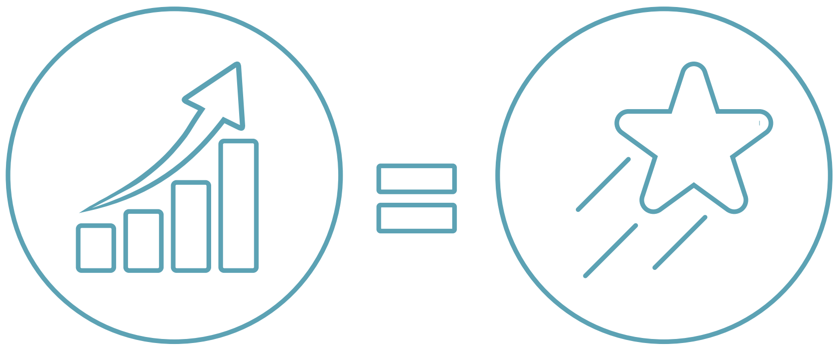
1 Uninstalls, Not Installs

Traditionally, installs (or downloads, or registrations) have stood out as the chief KPI of any mobile app marketing campaign. Yet, with everything we now know about an app's retention, usage, and monetization, installs are no longer the be-all, end-all that they were in the early days of the App Store. In 2016, we say farewell to installs and welcome in a more powerful metric: Uninstalls.

Where Installs fall short

At its core, **installs are an acquisition metric**. The figure tells you how many people have discovered your app and proceeded to download and subsequently install it. It's a pretty straightforward metric and provides some considerable (albeit assumptive) insights into competitive advantage and sustainability:

- If you have more installs than your competitor, you're in good shape.
- If you see an upward trend in installs, your app is showing healthy growth.



Customer Acquisition

The only problem? **Installs aren't big-picture**. They fail to capture any data on the cost or the value of an install. With more information, the statements above can just as likely produce a negative result:

- Your competitor has more active and loyal customers, **even though your app has seen more installs**.
- More customers are leaving your app than installing it, making overall customer growth negative **even though install growth is positive**. Alternatively, you're paying more to acquire customers in the form of paid advertising than you're collecting, thereby generating a negative return on your growing installs.

Customer Acquisition

Customer Retention

In other words, **installs alone don't provide enough information to make any meaningful analyses.**

How Uninstalls provide a better indication of an app's health

A better metric for indicating an app's overall sustainability is the antithesis of an install, the uninstall.

While installs are an acquisition metric, uninstalls are a retention metric. They tell you how many of your mobile customers discontinue using your app each week and whether this trend is growing or diminishing. Unlike acquisition metrics, which can be assumptive or downright faulty, retention metrics provide indisputable evidence into the long-term sustainability of your app.

In this section, we've used uninstalls synonymously with churned customers. In reality, most churned customers will discontinue using your app without taking the time to uninstall it.

To demonstrate the difference between using installs and uninstalls to assess an app's health, consider the following scenario, taken from our previously published research on the data behind customer acquisition and retention for mobile games.

For example's sake, assume you've orchestrated an acquisition campaign, either organic or paid, capable of bringing in 100 new players a week for one month.

From an acquisition perspective, this would be a strong campaign. **You would measure a growth of 400 customers at the end of the month** (100 installs/week x 4 weeks). Not too shabby.

From a retention perspective, the results look a little bleak. True, you have 400 new installs; but few of those new players will continue to play your game 24 hours after the install, let alone at the end of the four-week period. Instead of the promising 400 new customers measured above, you'd measure 92 new customers by month's end to account for the dwindling retention rate. The math here is a little more complicated, but it essentially discounts for customer churn at the end of each week:

100 installs in week 1 x 4-week retention
100 installs in week 2 x 3-week retention
100 installs in week 3 x 2-week retention
\+ 100 installs in week 4 x 1-week retention

91.66 new customers, not accounting for churn of players who installed your app prior to the acquisition campaign

The result looks like this:

If your acquisition campaign was a paid one, this new uninstall-based ROI measurement carries an even stronger burden: As only one in four players will continue to use your game at the end of the month, **your cost per install is essentially 4x greater** if you only intend to measure loyal or profitable installs. Down the line, we'll see how this factors into our measurement of your return on investment.

With each of our proposed metrics, it's important to recognize that app marketing metrics are most effective when used in combination with other metrics. Used alone, uninstalls can't provide all of the information we need to address the assumptions in install measurement. Namely, they can't speak to the return on investment of a paid acquisition campaign. However, when used in tandem with other metrics like ROI or LTV, which we cover later on in this guide, we can address such questions.

2 The Silent Majority, Not (just) the Vocal Minority

Not a metric in and of itself, this next callout involves a range of metrics including the percentage of your mobile customers you've engaged/conversed with and the representativeness of your customer insights on your app's greater audience. Simply, we recommend moving away from the lowest-hanging fruit of the customer insights world (your ratings and reviews, customer service contacts, social media mentions, etc.) and toward a comprehensive understanding of the voice of all customers.

Letting the squeaky wheel get the grease

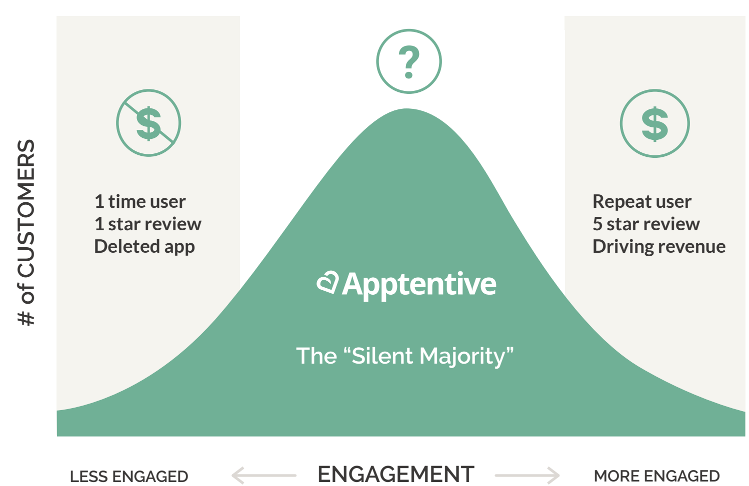
Today, the average publisher is lucky if it has heard from even 1% of its app's customers. Mobile app customers are hard-pressed to leave feedback in any form, and the wall between customers, publishers, and the app stores makes it all-too-easy to forget that there are real people on both ends of the app.

A national consumer survey we conducted last year sheds some light on the reason we hear from so few of our app's customers:

- The process of leaving an App Store review (often, the only channel available for customer-to-publisher communication) takes no fewer than six steps, including requiring the customer to exit the app, launch the App Store, and log in. The whole process can easily take longer than the average 5-minute app session.
- As a result, only those customers who really have something to say will take the time to leave a review. The vast majority of your customers, who neither adore nor detest your app, have no incentive to go through this six-step process.
- Of those who do leave reviews, they are 56% likelier to invest the time to review an extremely negative experience than an extremely positive one.

Together, these findings confirm something we've long speculated. **The average app's customer engagement resembles a bell curve**, with a great unknown covering the first two or even three standard deviations, representing the "silent majority" of customers from whom you have yet to receive feedback.

But while your lovers and haters are certainly two groups worth your attention, **the danger lies in forgetting that these two groups are not representative of your average customer**. By catering to your 5-star reviewers, you can increase profits from your most loyal 1%. By catering to your 1-star reviewers, you can increase retention within your most critical 1%. Yet, catering to neither group will create a better experience for the 98% of customers that lie somewhere between these two extremes.



Ultimately, you'll find yourself chasing a red herring, prioritizing features that your average customer has no need for or investing limited resources into areas that only a few, albeit vocal, customers really desire. In the end, you'll be left with a lot of requests but no real insight into the holistic Voice of the Customer.

The power of knowing your customers

Instead of settling for the lowest-hanging fruit**, those publishers who succeed in 2016 will be the ones who plant new seeds for customer communication and engage a greater, more representative portion of their audience.**

Without tooting our own horn, we'll leave you with just a few links to our tools that help give a voice to your mobile customers:

In-App Surveys | Message Center | Notes | Ratings Prompts | Reporting

However you come to engage the silent majority, you'll soon be rewarded with insights into the wants and needs of your customers. When dictated by neither extreme, these insights can guide your product roadmap in a way that improves the experience for all customers, building loyalty, earning love, and creating value along the way.

3 Return on Ad Spend, not Cost Per Install

Cost Per Install (CPI) is widely regarded as the dominant factor in cost-benefit analyses of paid advertising campaigns. It's a metric that spreads your advertising cost over all installs generated by those ads. It's also a metric that fails to take into account the increasingly complex nature of mobile marketing.

Just one piece of the puzzle

When mobile apps first caught on, the Cost Per Install metric was a favorite of marketers everywhere for its familiarity. The metric relied on the same intuition that guided digital marketing for years: **minimize cost (in digital, PPC or CPM) and maximize results (clicks, impressions)**.

Yet, as we've seen above, mobile app marketing is more complicated than this simple rule of thumb suggests (as is modern digital marketing, shown in its movement toward attributional metrics). The rule of thumb works well when there's a small number of ad networks to choose from and a consistent, definable value that you can place on each result, or ad-generated install.

In mobile, we don't just have Google and Bing to navigate. Today, there are hundreds of advertisement display networks, ranging from programmatic to geolocal, affiliate, and everything inbetween. Each network specializes in different customer segments and has a slightly different variation and CPI metric. Knowing the cost of working with any one network is a start, but tells you nothing about the opportunity cost of not working with any of the networks that could offer superior results.

Similarly, simply calculating your average revenue per user is no longer enough to guide your CPI investment. Not only is mobile ad blocking beginning to pose a serious threat to the advertising industry, but few ads are generating the sort of loyal customers that marketers anticipate when factoring in the hefty cost of paid acquisition. As above, few of your newly acquired customers will continue to use your app after the first week—meaning that much of your advertisement expenses are going toward unprofitable ads. Fiksu research echoes our findings, revealing that the cost of acquiring a loyal customer (defined as someone who opens your app at least three times) is almost three times greater than that of the original CPI.

In other words, **knowing your customer acquisition costs is necessary but not sufficient in guiding your investment decision**.

The confidence of a calculable return

In the rapidly evolving mobile ad landscape, marketers require a more robust metric to guide their ad dollars. They require a metric that tells not just the absolute cost, but the relative cost as well. They require the warranty that they're not just making a good decision, but the best decision—one that maximizes profits while minimizing costs (both in absolute and opportunity terms). In other words, they require a quantifiable and predictive return for their ad spend investment.

Whereas CPI falls short when it comes to relative costs, Return on Ad Spend (ROAS) does the job well by measuring your ad spend directly against the results it produces. While the results you're interested may be in terms other than monetary, ROAS typically takes the form of:

ROAS = Ad revenue – Ad spend

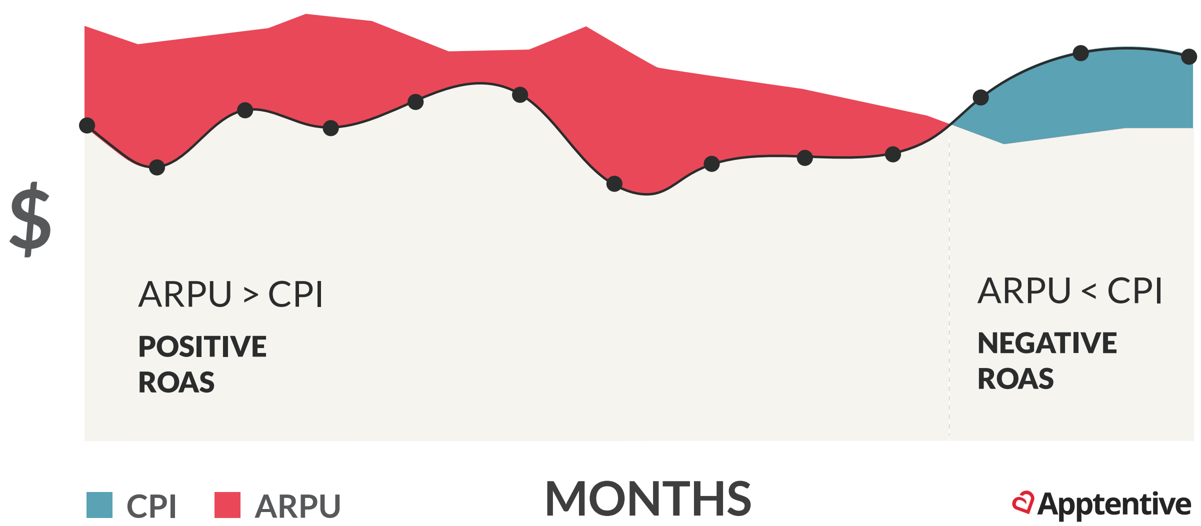
or, more precisely,

ROAS = (# of new customers acquired from campaign x LTV of a new customer) – Ad spend

If you're measuring your anticipated return in dollars, you'll be left with a single value for ROAS. This value allows you to allocate your marketing budget with confidence, with two simple, yet effective guidelines:

- Continue investing in ads, if ROAS is positive (that is, ad revenue > ad spend)
- Allocate your budget elsewhere, if ROAS is negative (that is, ad spend > ad revenue)

Are your App Install Ads Generating a Positive Return?



While this math may seem elementary, app publishers continue to throw money away on campaigns that cost more than they're worth. We see this most commonly in the mobile game category, where the average ROAS sits around -$1, meaning every player introduced to the game by an ad costs the publisher a dollar.

In addition to directing your ad dollars, **ROAS makes comparing the anticipated returns of different ad networks possible**. This single monetary value can be directly compared across campaigns and across ad networks to show where your dollars can be spent most effectively. Instead of comparing an array of incompatible acronyms (CPI, CPLU, CPM, CPC, CPA), ROAS leaves you with just one number that remains meaningful and relevant regardless of the eccentricities of the campaign.

4 Criticism, Not Adoration

Less of a question of metrics and more of a shift in priorities, this next tip deals with the mentality that so many of us have around one-star and five-star reviews. We all love five-star reviews. They serve as self-validation, social proof, and a reminder of the loyal audience you've fostered. When a one-star review comes around, things are different. We feel disheartened and don't give the review the time of day. We're left refreshing our screens, just waiting for a new five-star review to push down that stain on our app's reputation. Yet, in 2016, this mentality has never been more dangerous to the process of continuous innovation an app needs to stay relevant in the eyes of its customers.

Falling victim to confirmation bias

There's a reason five-star reviews fill us with a warm and fuzzy feeling. They tell us exactly what we want to hear.

For app publishers, however, there's a big difference between hearing what we want to hear and hearing what we need to hear. Five-star reviews indicate that our app is right on track. Perfect as is. No changes needed.

Yet, **the app stores are no place for stagnation**. Even the top 100 apps average one update per month to maintain their prominent ranks and new market entrants are constantly embracing mobile and vying for share of a saturated market.

Five-star reviews trick us into thinking that there's no more to be done; but just as soon as we come to believe this, a competing app is bound to show that there is more to be done in the dog-eat-dog world we call the app stores.

A new respect for one-star reviews

As our own Robi Ganguly told Forbes, "Negative reviews are the holy grail of customer feedback."

A negative review means more than a single dissatisfied customer. What so many app publishers don't realize is that **negative feedback, of any sort, is incredibly rare**—and not because their apps are just that great. The reality is that the average company only hears from one out of every 27 unhappy customers. That means that for every one negative review, 26 other customers will simply stop using your app without providing any indication why. So while no one likes to read criticism, that one review may just be the gift you need to improve your app and improve the experience for not only that one customer, but everyone who shares their thoughts in silence.

In addition to providing invaluable suggestions and feedback to guide your product roadmap and next app update, one-star reviews provide you with an opportunity to engage customers one-on-one and win them back. According to our recent joint report with SurveyMonkey, 55% of customers who leave feedback indicated that they are unlikely to remain customers if their feedback goes seemingly ignored. An additional Lee Resources survey found that 70% will do business with you again if you resolve their complaint.

So next time you see a one-star review, we urge you to think of it not as a stain on your app's reputation, but as a gift—a gift of improved retention, revenue, and product quality. That is, if you know what to do with it.

5 Message Quality, Not Quantity

Often, app marketing is measured in actions: In push notifications sent, customers messaged, or rating prompts shown. As a result, we're surrounded by brand communication, to the point where we're exposed to 5,000 ads each and every day. But as marketers ramp up their communication, they're greeted with marginally worse results (fewer clickthroughs, more app exits, etc.). They enter into a vicious cycle of increasing their messaging volume to make up for the poor results, all the while the customer is inundated with an app that now looks like Times Square. In 2016, we predict app publishers will recognize the need to move away from such volume-based metrics, and focus instead on the quality of their messaging.

Becoming pushy with push

In the mobile app industry, messaging is often synonymous with push notifications.

On the surface, push notifications seem perfectly harmless. They're simple, bite-sized alerts that customers can simply swipe away to dismiss. Their simplicity, however, is also their downfall. They're so easy and so seemingly unintrusive that app publishers have come to use them as an alternative social network, sending out several news blasts a day regardless of the recipient's interest or timezone. Ultimately, push has grown in popularity to the point where over one trillion notifications were sent in 2014 alone.

Push is primarily seen as a vehicle for driving customer retention. Inactive customers who see your messages on their lock screen will, in theory, recall your app and find themselves lured back into its clutches. **The irony, however, is that push is a primary driver of customer churn**. In an Appiterate survey, annoying push notifications topped the list of the top seven reasons people uninstall apps, with 71% of respondents claiming to have uninstalled an app due to excessive or irrelevant messaging.

Augmenting the customer experience with contextualized messaging

There's a reason push notifications and other forms of brand communication are becoming increasingly less effective. Customers are bombarded.

In order to deliver the intended results, **your communication must break through the clutter**. It must be relevant, respectful, and most importantly, valuable in the eyes of the recipient.

Delivering value-packed messages is less a matter of which vehicle you use for communication and more about how you use it. Whether it's a push, an in-app message, or an email campaign, approach it through the lens of the customer: **How will this add value to their experience?**

At Apptentive, we've pioneered a framework and set of related tools for a better way to communicate with your mobile customers communication—one that breaks through the clutter and adds value. This comes down to two things:

- **Personalization:** Is the message relevant to the recipient? Is it unique to their individual wants and needs? Does it enhance their relationship with your app?
- **Contextualization:** Will your message make sense at the time and place it is delivered? Is it tied to the customer's journey with your app?

To help you run your next message through each of these questions, we've created a free guide on the five pillars you can leverage to personalize and contextualize your message.

In 2016, push and other forms of communication will become less of a general announcement and more of a personal conversation. And the publishers that move in this direction will find that messaging can, once again, be used to drive retention and engagement.

6 Customer Lifetime Value, Not Average Revenue Per User

Our final metric re-evaluation is one we've touched on in several of the propositions above. Just as installs fail to capture the retention piece and just as CPI data fails to account for relative costs, the Average Revenue Per User (ARPU) metric that so many app marketing dashboards highlight is a misguided and overly simplified figure. In 2016, we expect to see publishers getting more granular with their revenue estimations and attributions and being able to operationalize non-monetary elements of customer loyalty to better guide their financial projections.

Not all customers were created equal

Just as its name implies, ARPU spreads your entire app revenue (from ads, downloads, in-app transactions, or whatever your unique business model may consist of) over your entire active customer base:

$$\textit{ARPU} = \frac{\textit{Total revenue generated within a given time frame}}{\textit{Total \# of active users within a given time frame}}$$

The metric is commonly used to guide financial projections, revealing insights into:

- How many active customers your app needs to make a profit
- How much an active customer is worth
- How much you can spend to acquire a customer

But, while ARPU does a decent job at addressing the above questions, its insights are limited. It's subject to however you define 'active' and the fact that some of your revenue, particularly in the form of ad impressions, will likely have been generated by customers who fall outside of this bucket.

The metric further relies on the assumptions that all active customers generate the same amount of revenue and that all active customers will continue to use your app for the timeframe you've chosen for the calculation, typically one month. In reality, as few as 0.15% of your customers will generate half of your total app revenue and fewer than 40% of customers will use your app for a period lasting longer than 30 days.

In other words, **publishers relying on ARPU risk misallocating their revenues and forming projections on the assumption that all active customers will generate the same amount of revenue as a customer who uses your app for an entire month**.

Seeing customers as more than dollar signs

By no means is ARPU a bad metric. It is, however, an overly simplified metric; and when you're dealing with something as precise as financial planning, simple can be dangerous.

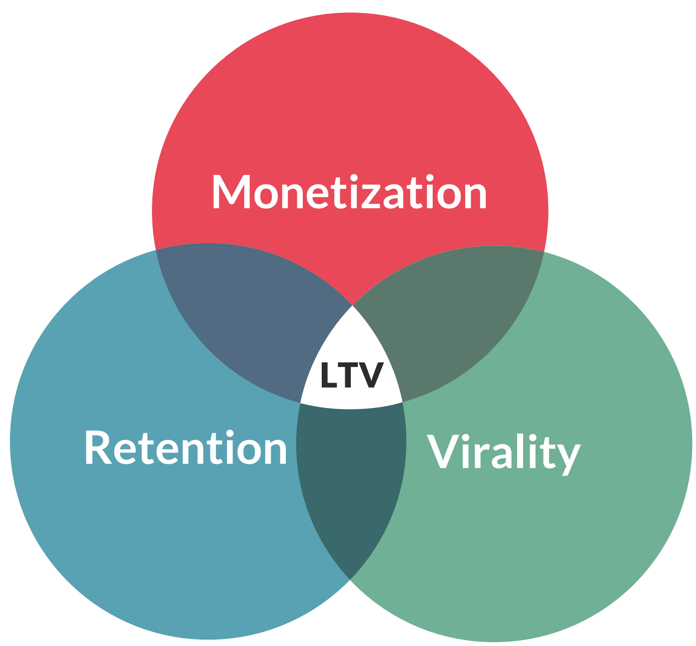
For reliable projections, you need a more all-encompassing metric: **Customer Lifetime Value (LTV)**.

LTV overcomes many of the limitations of ARPU by incorporating everything you know about your customers to calculate a more precise metric of value. Whereas ARPU is plagued by an assumption of a common (one-month) use period, LTV builds retention right into the calculation to determine the true length of a customer relationship. The resulting formula typically takes the form of:

$$CLTV = ARPU \times \frac{1}{Churn} + (referral\ value)$$

We won't get too much into the math here (if you're interested, we've broken down this math in a free guide), but from this formula, we can see that LTV has three components:

- **Monetization, or ARPU:** The dollar amount that a customer contributes to your bottom line over a given timeframe
- **Retention, or 1/Churn:** The level of engagement and loyalty customers exhibit for your app, expressed in the length of the average use period
- **Virality, or referral value:** The sum value of additional installs that a customer will send your way



By adding the elements of retention and virality to the more traditional ARPU metric, **LTV provides a more holistic view of the worth of a customer relationship**. It shows the power of retention marketing and the benefit of making an app that customers not only love but love to share.

Additionally, the LTV metric allows for meaningful segmentation or even reporting on the level of the individual customer. With the right analytics and customer insights, app publishers can get as granular as they like when it comes to deciphering customer value, exploring questions including:

- What levers do I have for increasing revenue?
- Is it more profitable to go after the monetization, retention, or virality angle?
- Are customers who discovered my app organically more valuable than those acquired by paid means?
- What role do referrals play in my app's success?
- How much does a lost customer cost?

Like most of the metrics we've proposed for app publishers in 2016, LTV isn't a radically different concept from ARPU. It still provides roughly the same information and can be similarly used to guide your decisions and ad dollars. It is, however, an improvement upon ARPU. It fills in the information gaps that ARPU skims over with assumptions, and it recognizes the importance of less quantifiable elements, such as retention and referrals.

Wrapping up

If you managed to make it through this guide, you're well on your way to mobile app success. If not (and let's be real, 18 pages on metrics is quite the endeavor), we've summarized the highlights with six quick tips:

1. Measure uninstalls instead of installs to better gauge customer growth and trends in retention.
2. Give a voice to the silent majority to understand the wants and needs of your app's customers and cater your product accordingly.
3. Track ROAS instead of CPI to compare acquisition campaign apples-to-apples and recognize the relative costs of advertising.
4. Recognize the value inherent in one-star reviews in fueling continuous improvement and avoid equating five-star reviews with a perfect product.
5. Focus on the quality, not the quantity, of your messages by personalizing and contextualizing your brand communication.

6. Add precision to your financial projections by ditching ARPU for LTV, a metric capable of monetizing non-monetary contributions and robust enough to be calculated individually or on a cohort basis.

The app industry is rapidly evolving and increasingly complex. 2015 dramatically redefined what it means to compete in the app business, and 2016 is likely to pose just as many obstacles and opportunities to the world of apps.

These six metrics are designed to ensure that you're ready for both the obstacles and opportunities of 2016. Mastering these metrics will set you up for success with the precision and accuracy to guide your mobile app strategy in today's app ecosystem.

As always, we're here every step of the way with a library full of resources on the math of the app business and a suite of mobile engagement solutions designed for data-driven marketing.

Wishing you all the best in your app performance measurement!

Team Apptentive

About Apptentive

Apptentive's mobile customer engagement software helps companies listen to, engage with, and retain their customers. The product gives brands the opportunity to identify who to talk to, intelligently engage user segments, and mobilize customers to take action through in-app messages, surveys, and ratings prompts. Integrated into thousands of mobile apps, Apptentive helps companies engage mobile customers, boost app ratings, drive downloads, and earn customer loyalty.

Apptentive

Build Loyalty, Spread the Love