Mastering Mobile App Engagement & Retention

Build campaigns that keep more of your app users from churning







A practitioner's guide for mobile marketers

In our current market where 97% of apps are abandoned within 30 days of install, it is clear that retaining users is difficult.

The cost of acquiring a user has skyrocketed in the past year by a sharp 113%, bringing the cost per new user to \$3.09. With fierce competition as more apps enter the market, churn becomes a critical issue.

The savviest of marketers will focus their strategies on utilizing smart engagement tactics, which cost a fraction of traditional acquisition campaigns and have much higher retention rates. The magic key?

Understanding user behavior. It is by providing users with relevant, personalized experiences early on that you can keep your marketing costs under control, while achieving the net effect: a loyal customer base that keeps coming back.

In this paper, you will learn to create campaigns that run across the user's entire lifecycle, to:

- 1. Retain acquired users
- 2. Drive app engagement
- 3. Win back lost users

Related Article

The Core Tenets of User Retention with Master Product Psychologist Nir Eyal



TABLE OF CONTENT

PART ONE	
A Quick Mobile Retention Primer	4
1. Mobile Retention Depends on App Category	5
2. New User Retention Will Plummet for All Apps	6
3. The User Retention Lifecycle	8
4. Your Tools of the Trade	g
5. Honing Your Retention Tactics	12
PART TWO	
The Onboarding Stage	13
1. Early Engagement Is critical	13
2. Tips and Tricks for Successful Onboarding Engagement	14
Use Case 1: Use Funnels to Track Conversions by Acquisition Channels	15
Use Case 2: Use Funnels to Drive Sales in e-Commerce App	17
PART THREE	
The Nurture Stage	19
1. Notifications	20
2. Remarketing Campaigns	24
Use Case: Retention Analysis for an e-commerce app	25
3. The Advocacy Stage	27
PART FOUR	
The Attrition Stage	28
1. The First Seven Days	29
2. Win Back Non-Returning Users	29
3. How Soon to Reach Out?	29
4. Keep Refining	30
5. Confront Attrition Head On	30
Use Case: App Uninstalls	3′
Conclusion	33

A Quick Mobile Retention Primer

To win in the current market, the responsibility of a mobile marketer needs to extend beyond acquiring new users. It needs to include retention.

An effective retention strategy means engaging users in their *mobile moments* while they are active inside the app.

To learn more about Mobile Moments, we invite you to read another CleverTap

white paper: "Get Up Close and Personal with Your Users."



1. Mobile Retention Depends on App Category

Retention and loyalty are highly dependent on the category of your app and your business vertical. For example, a social app such as Facebook Messenger will likely see a higher retention and usage frequency compared to an Amazon e-commerce app. Consumers will continue to spend most of their time in only a few apps, but will increasingly turn to aggregation apps and a handful of platforms to get the content and services they need.

Julie Ask

FORRESTER RESEARCH



A. The 'Stickiness' Factor

Research has shown that apps with the highest retention rate belong to the publication category. This is mostly due to frequent changes in content and users' set preferences that make them return to their favorite content apps. Close behind are social and gaming apps, which by design call for frequent information and data exchange with peers.

Education, business, commerce, health, lifestyle and utility apps have a lower stickiness factor and therefore lower retention rates. Apps with lowest retention belong to travel, entertainment and food-themed categories. The sort of content provided by these apps lacks the urgency of news and tends to be consumed more sporadically with a leisurely attitude.



B. The First Seven Days

While it's difficult to discern what the long term user loyalty will be after 30 or 60 days post download, research indicates that the most significant metric to long term retention is what happens in the first seven days. App categories and subsequent retention rates will dictate the type of engagement strategy that will be most effective for your app.

2. New User Retention Will Plummet for All Apps

Retention will initially plummet even for the best of apps. In the early days, users are still testing the waters and it is all too easy for most of them, even those you paid for, to switch to a competitor's app. Users try out a lot of apps but decide which ones they want to 'stop using' within the first 3-7 days. For 'decent' apps, the majority of users retained for 7 days stick around much longer. The key to success is to get the users hooked during that critical first 3-7 day period.

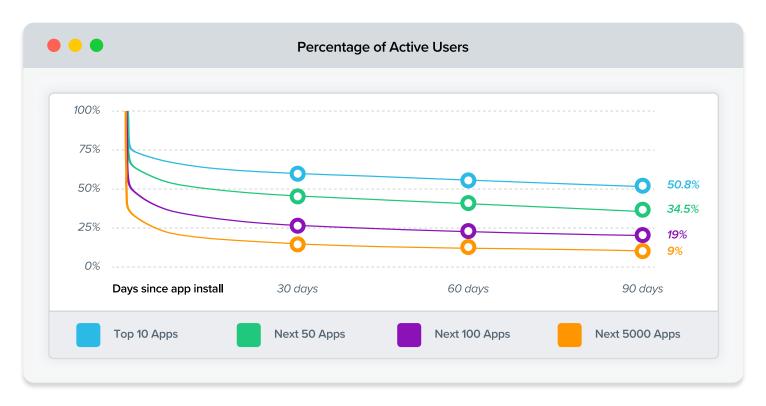
Ankit Jain

CEO & FOUNDER

QUETTRA MOBILE INTELLIGENCE

Retention Rates Go Down Quickly Within the First 7 Days[1]

While the top 10 apps keep half of their users active after 90 days, only 9% of users are active for most apps.



Since most apps are competing for the time users spend on their mobile phones, it is difficult to maintain high retention numbers for any single app over a long term^[2].

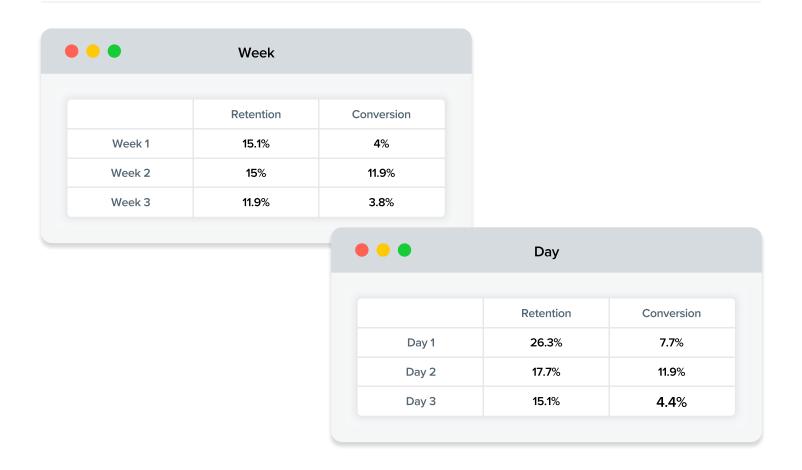
While pulling them back is not impossible, it will require the utilization of smart tactics.

Understanding trends and patterns of your users in their early days will set the course for your success in the long run.

Platforms such as CleverTap display retention patterns for your app out of the box. In addition to retention, the platform will also measure engagement and conversion.

Depending on your preferences, the CleverTap dashboard will showcase what day 1, 3, 7 looks like in terms of user retention and conversions.

For an even more in-depth look into retention, your analysis should also include app function and frequency of use, also available in CleverTap.



3. The User Retention Lifecycle

Mobile engagement starts the moment a user downloads your app. A mobile marketer's job is to manage the user's journey by keeping them engaged through the following three stages.



A. The Onboarding Stage

Which acquisition channels are driving your downloads? How are these users moving along in their customer journey? And what factors are helping or hurting?



B. Nurture Stage

What is the frequency with which users return to your app after their first visit over a specific amount of time? What makes those users return to your app?

And what makes them go from using to promoting the app to potential users, growing your reach?



C. Attrition Stage

What makes your users leave? And how can you defer it for as long as possible?

Your retention rate will reveal how valuable your app is to your users.

In the sections that follow, we will outline specific strategies, with examples for engagement and retention, list tactics to help you navigate your users through the lifecycle stages, and teach you how to measure your success.

But before we go there, let's look at key analysis tools that will assist you in building effective engagement and retention strategies.

4. Your Tools of the Trade



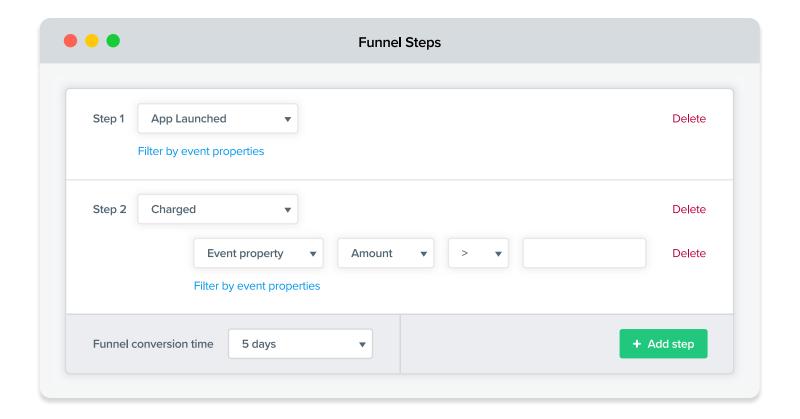
A. Funnels

Funnels analyze drop-offs within a sequence of user actions that are supposed to lead to an end goal within a period of time. Their ability to chronologically analyze user actions is invaluable in breaking down a user's journey into small pieces of intent-fueled paths.

To utilize funnels, begin by picking a chronological series of events that you expect to be performed by users in a sequence.

An example of a 5-step funnel sequence for an e-commerce app purchase flow could be:

- 1. Launch the app
- 2. Search for product
- 3. View a product
- 4. Add product to cart
- 5. Purchase the product.



Related Article

Funnel Analysis: How to Use Funnels to Convert More Users





B. Retention Cohorts

Retention cohorts help you identify and group users who have performed a specific action and then come back to perform the same or any other action within a given time period.

An example includes looking at users who launched your app for the very first time and then returned to launch it again. This shows you how frequently (days, weeks or months) most of your first time app users come back.

Another example is plotting a cohort of users who launched your app for the first time and have gone on to register with their email address within the app. This shows you what percentage of your user base goes on to register and within what time frame (days, weeks or months).

	Total Number of People	And then come back O Day Later	And then come back 1 Day Later	And then come back 2 Days Later	And then come back 3 Days Later	And then come back 4 Days Later
People who arrive on Day 1	104	100%	66%	71%	67%	21%
People who arrive on Day 2	90	100%	21%	22%	5%	_
People who arrive on Day 3	65	100%	7 %	4%	_	_
People who arrive on Day 4	32	100%	1%	_	_	_
People who arrive on Day 5	10	100%	_	_	_	_

How to read this graph:

Total number of people who arrived in the selected time-period

6% 66% of the people who arrived on Day 1 came back 2 days later

Out of the 104 people who arrived on Day 1, 90 came back on Day 2 $\,$

7% of the people who came back on Day 3 came back 2 days later

Related Article

Cohort Analysis: The Key to Improving User Retention for Your App





C. Segmentation

Isolating users who follow similar demographic and behavior patterns and tracking those segments over time is key to your retention strategy. You can build desirable segments, such as users who've listened to more than 10 songs in the past 7 days, and under-performing segments of users who've added a product to their shopping cart but didn't make a purchase. Savvy marketers will study and tweak these segments over time. Thus they will be able to gauge real growth, or lack thereof, and influence user behavior by applying various engagement strategies meant to target users within that segment.



D. Integrated Messaging

One of the best ways to influence user behavior is by messaging them directly. To yield beneficial results, the messages need to be personalized, timely and relevant. Mobile apps of today engage users via push notifications, in-app messages, SMS and email campaigns, depending on the nature of the message and user preferences. CleverTap combines your user analytics, segmentation and integrated messaging to give you complete control over how you reach your users.



E. The Golden Window

The time when your users are most primed to carry out a specific action is called the Golden Window. It is a moment in time related to a specific action that preceded it, such launching the app for the first time or user registration. For example, the Golden Window for someone who adds a product to her shopping cart and goes on to purchase that product could last three minutes. The Golden Window for someone who launches your app for the first time and goes on to register could last two days. These 'windows' depend on the steps involved in the in-app journey and the business category your app belongs to.

Once you know your Golden Window, you can setup the timing of your engagement messages by applying that knowledge to non-converting users. For instance, if you know that 75% of your users tend to register within fifteen minutes of downloading the app, then a timely notification sent exactly at that 15th minute marker to a segment of non-converting users will likely improve your registration rates.

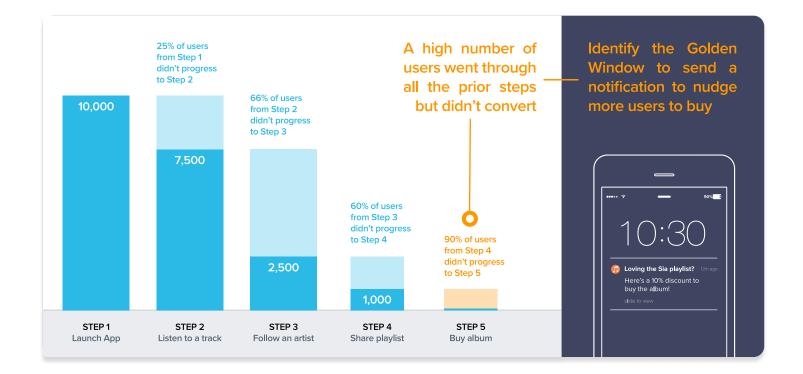
5. Honing Your Retention Tactics

The best time to start working on improving your retention rates from the moment a new user downloads your app. Start by setting up your funnel and cohort reports and defining your user segments based on their early behavior. You do that by looking at your user's' initial steps through the onboarding process and what they do once they're in.

Once you have an inside view of key behaviors at different stages of the customer journey, separate the users who did not convert at a specific step from the ones who did. Those users who did not convert will become the segment of your primary interest.

While segments help you monitor the people who did not convert, funnel reports reveal the Golden Window, the time it takes for your users to proceed to the next step.

Knowing your Golden Window for critical user actions is an investment that will pay dividends in the growth of your apps. Later in this paper, we'll look at examples of notifications designed to boost retention rates.



The Onboarding Stage

Early engagement is critical.

It is soon after a download when users are most receptive to direct communication. They have just crossed their first threshold and are likely excited about the product.

To sustain their enthusiasm, guide them to discover what's great about the app, especially during those critical first seven days, until their usage becomes habitual.

Tips and Tricks for Successful Onboarding Engagement



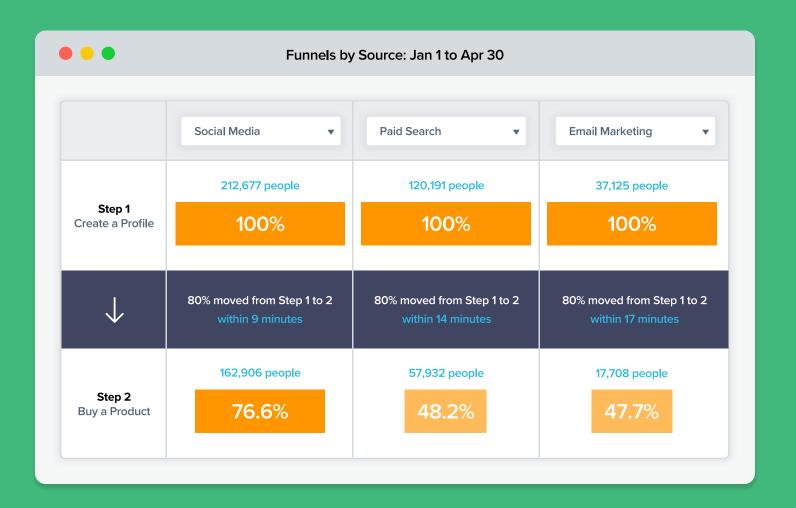
A Warm Welcome

Display a welcome in-app message to your new users when they open the app for the first time. Reinforce the message with an email for registered users within 24 hours. A good first impression goes a long way.



Gentle Reminders

If new users drop off and don't return within a specified period of time, remind them of what drew them to the app in the first place. The key is to make them open the app frequently during those critical early days increasing your chances at better retention. You can set your funnels to track conversions according to the type of acquisition channel they came through, such as direct sales versus paid search or social media.



USE FUNNELS TO TRACK CONVERSIONS BY ACQUISITION CHANNELS

Analysis

Funnel tracking allows you to see when one channel performs better than another and why. For example, better social media performance compared to direct email marketing could mean that the content and strategy that was adopted for this specific channel should be extended to other channels.

When repurposing content, take into account which type of content is most suitable for which devices. For example, if your analysis shows that images work better on your social media campaigns, but that text works better on paid search, then the image from social media will need to be repurposed by converting it into text.

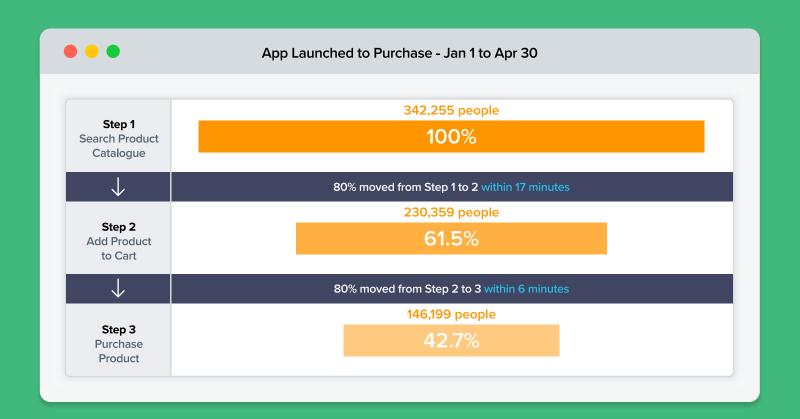
Recommended Campaign

The content utilized for the winning social media campaign will need to be repurposed through triggered or scheduled push notifications and sent to those users who didn't convert on the paid search channel.

To Utilize Funnels in Sales Tracking, the User's Journey Needs to be First Divided Into a Set of 'Events.'

These events are the steps users take, to reach their final destination. In the case of an ecommerce app, the final step is making a purchase.

CleverTap's funnel analysis will show you how many users are retained at which step versus how many are lost. Bottlenecks reveal where users get stuck. Removing obstacles and guiding users forward, increases your chances of gaining a paying customer. A well timed contextual notification could be all that's needed.



USE FUNNELS TO DRIVE SALES IN E-COMMERCE APP

Analysis

When more than half of users who added a product to a cart did not complete the purchase, it's worth conducting an analysis to find out why. It is also possible to increase these conversion rates by creating push campaigns that are connected to your funnels and engage with users with the right message at the critical junctions in their journey.

You can fortify a standard funnel by adding intelligent markers, such as the time it takes for a percentage of users to move from one step to another. This is the Golden Window and it will help you track the performance of a specific area of the in-app journey and impeccably time your campaigns.

Recommended Campaign

For the users who searched the product catalog but did not add any items to their cart, you can send a notification with a first time offer. If they still don't act on it, send a second notification within the Golden Window informing them that the stocks are running low and they need to make the purchase soon.

The Golden Window approach will also work for users who added products to their cart but didn't buy. You can send them a reminder that the discount will expire at a certain time. A notification indicating that the stocks are running low would also be effective here.

66

Notifications are the singlemost effective way to get users to return and transact on the app

Durga Raghunath

CEO JUGGERNAUT

The Nurture Stage

Your retention depends on how well you know your users. The more you understand their motivations by studying their behavior, the more successful your engagement strategy will be. Knowing where they are and what they do inside your app allows you to engage with them the most effective way.

Identifying and segmenting those users who are slipping away, gives you the ability to reach them with a very different message than you would those who are active.

This is the essence of highly targeted nurturing campaigns.

Take a segment 'Frequent Buyers You Haven't Seen Lately.' You could set it up to include people who bought 4-5 times in the past two months but made no purchases in the past week.

These users are prime candidates for an engagement campaign with a special offer or a notification about the newest feature, article or exciting update.

This is how you drive retention—identify scenarios that work for a target audience that shares similar traits and behaviors and use notifications, remarketing and advocacy to keep them engaged.

1. Notifications

Many users will uninstall an app they've downloaded even before they get to know your product. Main reasons are due to poor user interface, technical bugs, or unmatched expectations. Understanding user behavior and employing it to drive engagement is the key to retention in the first days of app use.

A. Notifications Based on Timing



Scheduled Notifications

Scheduled notifications are delivered to users according to preset calendar time. They can be immediate or deferred. Immediate notifications reach a select group of users 'immediately' after the marketer pushes 'send.' Deferred notifications are set to be sent at a pre-designed date and time in the future.

Examples:

Notifying users of a short term sale or a contest 'happening now!'

Nudging app users to vote on their favorite reality show contestant.

Scheduling a notification to inform users of a Black Friday sale.

Scheduling a notification alerting users of a new app version available for download.

Scheduling a recurring notification at 9 am with a "good morning" message.

The content of each notification will depend on the segment it is designed for. For instance, if you're sending scheduled notifications to re-engage dormant customers, you may want to offer a higher discount to users who haven't bought anything in 3 months compared to users who bought something more recently.



Triggered Notifications (Based on User Actions)

Until recently, most mobile marketing automation tools generated campaigns based on user's past behaviors. Such tools are very limited. Notifications are not personalized and run the risk of interrupting or even annoying users. Since mobile moments are brief, such data is outdated by the time it is utilized.

CleverTap's concept of 'user time' is about sending contextual messages related to the user's current activity. The goal is to connect with them in the perfect moment. To do so, you'll need triggered notifications.

Triggered notifications are sent when certain conditions are met. For example:

Single action: user receives a notification the moment their friend tags them in a social media post.

Combination of actions: user reads five articles in a content app. The moment they finish reading the fifth one, they join a segment that triggers a subscription notification.

Combination of actions and inactions: user adds items to cart but doesn't make a purchase. Based on the user's buying patterns, they will receive a reminder, an update on stock running low or a special discount notification.

To illustrate, think of a festival ticket sales app sending you a notification a day before the show to inform you of parking, lineup changes, etc. Or a notification to remind you of your restaurant booking, weather at your travel destination or a seat upgrade availability.

The key is make the notification contextual, personalized and impeccably timed. When sent in user time, rather than an arbitrary moment, such message will not bother but benefit the user.

B. Notifications Based on Channel Type

Extending your app environment to include push notification capabilities can help you bring users back to your app. The best notifications are those that are delivered to the right customer segment, at the right time, with the right message. Pick a communication channel based on user's context and preference.



In-App Notifications

Useful at a number of mobile moment stages, in-app notifications are especially effective when sent freshly post-install but before an in-depth product exploration takes place. This example includes the 'warm welcome' notification type to create a positive sentiment between the new user and the app.



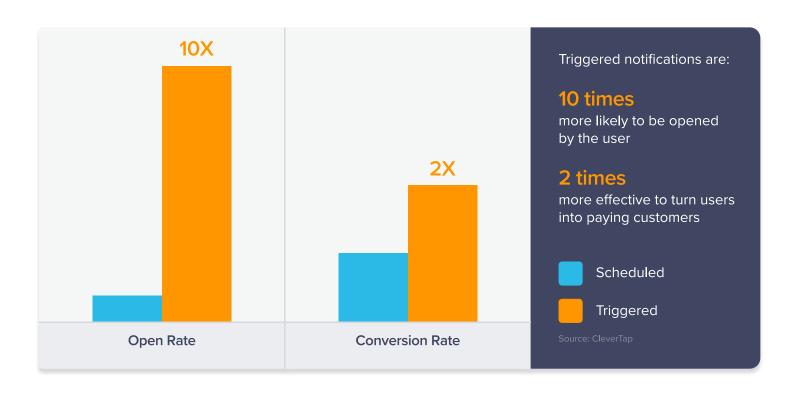
Email Notifications

Emails facilitate longer form of communication, which is useful especially for content apps. Add snippets of articles to tempt the user to read more in-app or contact a users who uninstalled your app with a personally crafted message about exciting upgrades that might be of interest.



SMS Notifications

For those users who choose to opt out of push notifications, engage them is via SMS. To increase personalization and response rate, trigger the message based on user's activity and include in the copy relevant fields from the user's profile. Coax their visit with deep links to specific pages.



C. Tips and Tricks for Successful Nurturing Engagement



Send Upgrade Reminders

Nudge users to upgrade to the latest version of your app. Automate the process by setting up triggers to go out every time you release a new version of your app.



Catch the Opportunity

To speed up and increase conversions, it is best not to wait too long before triggering engagement. In the fast changing mobile sphere, messages based on shopping cart abandonments from a week ago will have less relevance than those sent within 15-20 minutes of cart abandonment.



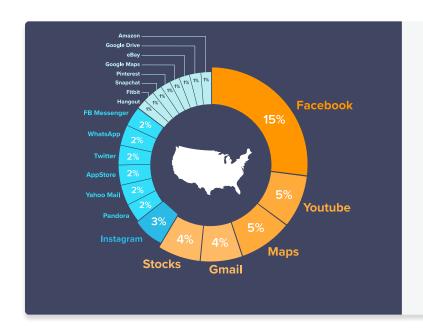
Prevent Uninstalls

Use your analytics platform to understand patterns leading up to churn. To prevent uninstalls, be sure to reach out at the right time. For example, send a push notification to users when they've not opened the app for longer than twice their previous frequency.

Most effective notification campaigns will include a combination of scheduled and triggered notifications.

2. Remarketing Campaigns

In a crowded marketplace, discoverability of a new app has become very difficult. While a typical user interacts with about 25 apps a year, 90% of their time is spent with only 5 of them. According to Forrester Research, majority of those are social media apps.



Distribution of total minutes spent on apps by all US smartphone owners (+18)

BASE

1997 US online smartphone owners (+18)

NOTE

Preinstalled (native) email and messaging apps are not included in the analysis

Source: Forrester's US Consumer Technographics Behavioral Study, August 2015 to October 2015

Utilize the Influence of Facebook

At the moment, Facebook is one of the most popular apps used. CleverTap integrates with Facebook to give you the ability to remarket to your users via the social channel. This is especially relevant, since an increasing number of users deny app owners permissions to send them push notifications.

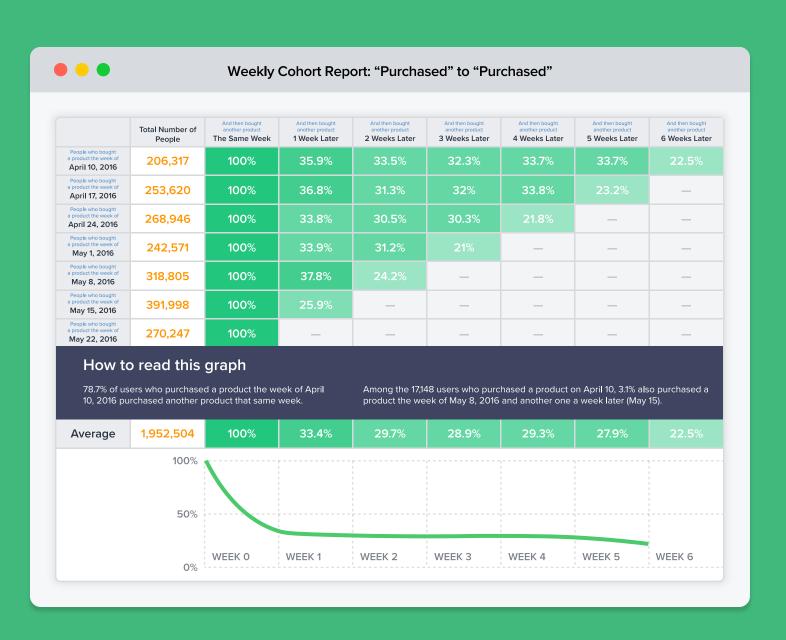
Enforce Higher Brand Recall

As a savvy marketer, you can harness this integration to your advantage. You can use Facebook notifications to remind a user of your app and therefore enforce higher brand recall. Or, the next time an inactive user opens Facebook, they will see where they had dropped off in their journey with your app, potentially triggering an action.

Recoup Campaign Costs

Such recall could very well be enough to motivate your users to return to your app and complete their in-app journey. Not only will you get your customer back, you will also optimize your campaign costs and get a higher return on investment because you now understand what user segment responds best to what kind of messaging, and see the behavior that follows.

Product Purchased to Product Purchased: How Often do Paying Customers Come Back to Buy More Products?



For a typical e-commerce app, the retention problem presents a bigger challenge than it does for social or content apps. The rate at which repeat purchases happen will vary depending on business type. For example, mattress sales will occur less frequently than book sales. The frequency and context of use will also play a role.

Analysis

Studying retention cohorts inside the CleverTap platform will help you identify patterns and understand how they affect your sales. You will see which product categories are performing best, so you can expand your campaigns to showcase these products more often and through more channels.

Recommended Campaign

The campaign will have to ensure that the right products are showcased in the right context to a user engrossed in their mobile moment. Doing so is critical to making them take specific actions, such as purchasing an item that they have placed in the cart fifteen minutes ago.

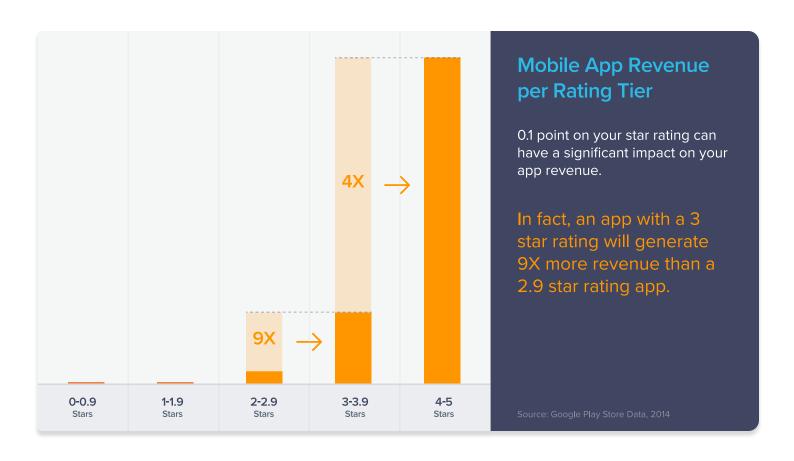
You can set it up so that the push notification is triggered by action (items placed in cart) followed by inactivity (not buying). The system will send the user a push notification with a last-minute discount on the cart items. In the end, besides making a sale, this can contribute to making your user more invested in your app.

3. The Advocacy Stage

When you engage with your users in meaningful ways throughout their in-app journey, then advocacy, the final stage of your nurture lifecycle, will happen organically. In a nutshell, advocacy occurs when your loyal users promote you to their peers.

To drive advocacy, learn and replicate best practices, such as proactively prompting your users to refer to a friend shortly after they had a positive experience with your app. Another proactive approach is to set up a 'Potential Advocates' segment. Such segment could include power users who within two weeks' time had seen 25 videos on your app but have not invited any of their friends to try the experience. Once they finish watching the 25th video, the system would trigger an in-app message requesting them to rate the app and invite friends for a trial, maybe even offering an attractive perk in return.

Finally, the ratings are key, especially when preceded by a positive experience, yielding average quality scores for any given app. This score is what people use to decide if they'll install your app in the first place. If your app's score is above 3.0, it is posed to *generate 9 times more downloads* than if it falls below that score.



The Attrition Stage

Losing users due to inactivity is normal and should be expected for all apps. Still, your objective should be to maximize retention and delay attrition for as long as possible.

The best time to prevent the seven-day steep user drop off is when a user first engages after an app download. The degree of participation and depth of engagement you bestow upon your new user will determine where your user activity baseline will most likely settle. Will they remain active, or turn dormant?



1. The First Seven Days

It's been shown that the most effective strategy in minimizing attrition is encouraging your users to do things in the app soon after a download. That's when they are most influenceable. You want them invested.

For a content delivery app, this may mean asking your users to set preferences for their favorite topics immediately after they open their app for the first time. Social apps could ask users to upload a picture and import their contacts, both of which could be immediately followed by a feed experience.



2. Win Back Non-Returning Users

After a period of inactivity, reach out to your users by sending them a push notification to lure them back in. Make sure you understand their behavior and preferences beforehand.

Content apps could notify users of exciting new content based on their past reading history. Game apps could alert users when their friends join the platform. An e-commerce app could coax with collected rewards to encourage shopping.



3. How Soon to Reach Out?

The number of days to wait before you send a notification will vary, depending on your app category and market vertical.

For instance, a social engagement app will have users returning multiple times per day, while a banking app will only have them login an average of perhaps once per week. Set your parameters wisely.

4. Keep Refining

For better conversions, the analytics tools in CleverTap will assist you in working out your Golden Window, which once more is the time period when your users are most primed to carry out a specific action.



Sometimes it will be best to delay a bit, sometimes your golden opportunity will be immediately post action. Keep monitoring and making tweaks until you identify your optimum moment.

5. Confront Attrition Head On

Unfortunately, losing users is a common scenario for many apps today, irrespective of the vertical they are in. If your newly launched app were to lose 90% of its users within the first three months, you can try one of the three strategies below to remedy the situation:

Strategy 1

For users who did not launch the app within 30 days post download, create a segment called 'High Value Users Likely to Churn.' You may send a personalized push notification to each user in this segment, as soon as they qualify, to motivate re-engagement.

Strategy 2

For users who uninstalled the app within 60 days post download, create a segment called 'High Value User That Churned.' Send a product update email or feedback request email to each user the moment they qualify for this segment.

Strategy 3

Reach out to your users to find out what is the reason why they are dropping off and ask them how you could offer a better service.

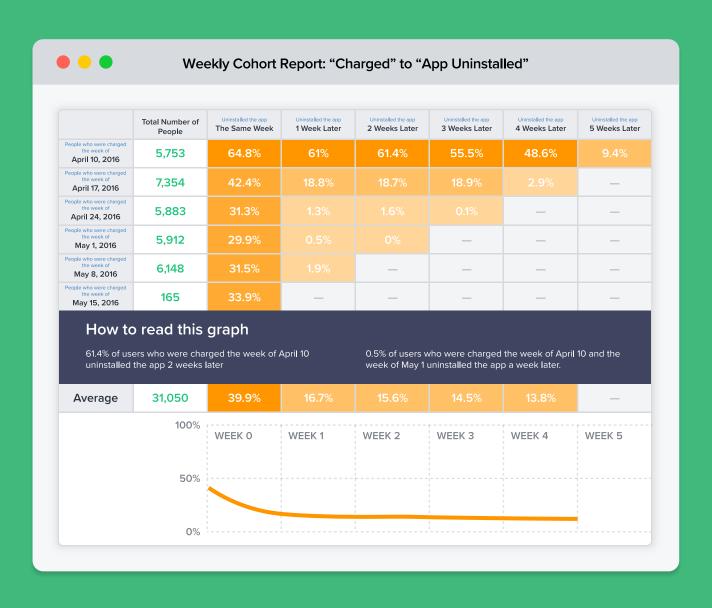
Gather this data and use it to build a better product. Sometimes letting them know that you care is all it takes to change their mind and win them back.

Related Article

Churn Rate: Calculations and Strategies for Reducing Mobile App Attrition



Charged to App Uninstalled: How Many Customers Churn Right After a Purchase?



Analysis

For users uninstalling an app soon after performing a conversion action, such as making a purchase or consuming a piece of content, a cohort analysis can offer valuable insights.

Based on the research by CleverTap labs, such cases often occur after app crashes. These are scenarios that sometimes are unavoidable, but some can be remedied with targeted campaigns.

Recommended Campaign

Immediately after an uninstall, send an email to a dissatisfied user to ask them what went wrong. Remember to ask for suggestions on how you can make the experience better for them.

Possibly, entice the user to return by offering a free perk or a free subscription for a period of time. Such real-time trigger messages can significantly improve your retention rates help you regain lost users.

Conclusion

We hope that after reading this paper, you have gained a more holistic view of today's mobile marketing environment.

To serve you time tested strategies on customer acquisition and retention, we've listened to and learned strategies from some of the leading brands who have mastered the art of engagement.

After analyzing hundreds of millions of app launches, tens of thousands of marketing campaigns and the behavior of millions of users, we've come to a firm conclusion.

While mobile marketing is continually evolving, we are confident that the key to sustained growth and advocacy among your customer base lays in early engagement.

What to Read Next

Why Machine Learning is the Future of Mobile Marketing





Need help engaging and retaining more of your mobile app users?

CleverTap is the leading user engagement platform for today's top mobile apps. Professional marketers from over 4,000 different companies love CleverTap because you can...

ANALYZE

See exactly how your users are behaving in your mobile app.

SEGMENT

Group users based on their behavior, location, or lifecycle stage.

ENGAGE

Send targeted, personalized messages to one or millions of users.

OPTIMIZE

Measure the effectiveness of your mobile marketing campaigns

Chat with one of our mobile growth specialist to learn more

SCHEDULE A DEMO >