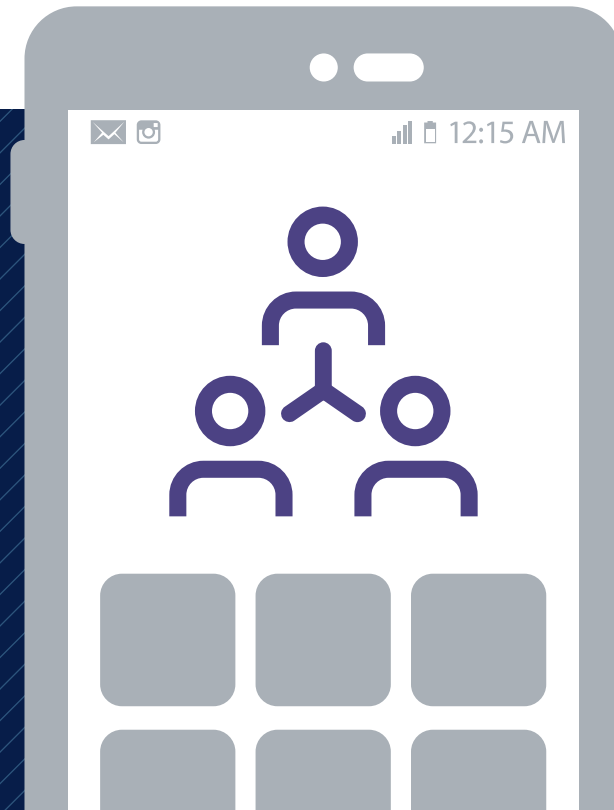# 3 Basic Reports Every Mobile Marketer Needs to Master

TUNE

3 Basic Reports Every Mobile Marketer Needs to Master

Significant improvement to mobile analytics coupled with other technological advances in the ecosystem have enabled mobile marketers to become far more data-driven and analytical than ever before. Measuring campaign performance has always been a priority, but considering global mobile ad spend is projected to reach $125B in 2018[1] - an increase of nearly 250 percent from 2014 - the ability to effectively analyze and optimize this marketing channel is of utmost importance.

Gaining meaningful insight into campaign performance is the key to successful mobile marketing. However, determining which metrics to measure and identifying actionable data patterns is an endeavor many mobile marketers find challenging. Having a thorough understanding of the three basic mobile marketing reports enhances a marketer's ability to analyze campaign data and recognize important performance trends.

The three fundamental reports essential to effective mobile marketing include:

Actuals Report: The broadest window into campaign data, the Actuals report can be used to identify ad clicks, determine revenue associated with a particular partner, better understand user behavior, reconcile data discrepancies, and much more.

Cohort Report: A powerful view into campaign performance that enables groups of users (cohorts) to be compared in a meaningful way. Through the Cohort report, mobile marketers can better understand user behavior, identify lifecycle patterns, and gain additional insight into how campaign adjustments impact performance.

Retention Report: Even the most popular apps struggle with user attrition, and the Retention report provides the quantifiable data necessary to accurately determine when and where app engagement declines. This insight enables mobile marketers to better understand user behavior, and informs re-engagement campaign strategies.

The following sections take a comprehensive look at these three reports and demonstrate how each one can be utilized by mobile marketers to access critical data and optimize campaign performance.

TUNE

ACTUALS REPORT

The Actuals report is an aggregation of the events, device details, demographic data, and other relevant metrics designated for measurement by the mobile marketer. This report serves as the broadest window into campaign data, and enables mobile marketers to gain significant insight into campaign performance.

Examples of measurable event and audience data that could be included in the Actuals report, as well as options for organizing the data:

GROUP BY
Mobile App
Partner
Campaign
Event

Destination URL
Integration
Agency
Country
Region

Currency
Attribution Method
Is View-Through
Is Re-Engagement
Purchase Validation Status

SHOW
Impressions
Impressions Unique
Clicks
Clicks Unique
Installs
Attribution Installs
Install Assists

Organic Installs
Updates
Opens
Events
Attributed Events
Event Assists
Non-Windowed Event Contributions
Non-Windowed Install Contributions

Payout
Revenues USD
Revenues Local
Margin
Publisher Count
Campaign Count

AUDIENCE
Device Type
Device Brand

Device Model
Device OS
Age

Gender
OS Jailbroke
Test Profile

PARTNER
Partner Publisher
Partner Campaign

Partner Site
Partner Ad Group
Partner Ad

Partner Keyword
Partner Placement

MINE
My Partner
My Site

My Campaign
My Ad Group
My Ad

My Keyword
My Placement

INTERVAL
Hour Of Day

Hour
Day

Week
Month

TUNE

Events that can be measured and incorporated in the report include:

Opens	Checkout Initiated	Tutorial Complete
Logins	Purchases	Content Viewed
Registrations	Reservations	Invites
Add to Cart	Spent Credits	Rated
Add to Wishlist	Achievement Unlocked	Shares
Added Payment Info	Level Achieved	Custom Events

These results can be filtered by more than 50 unique characteristics. Examples include:

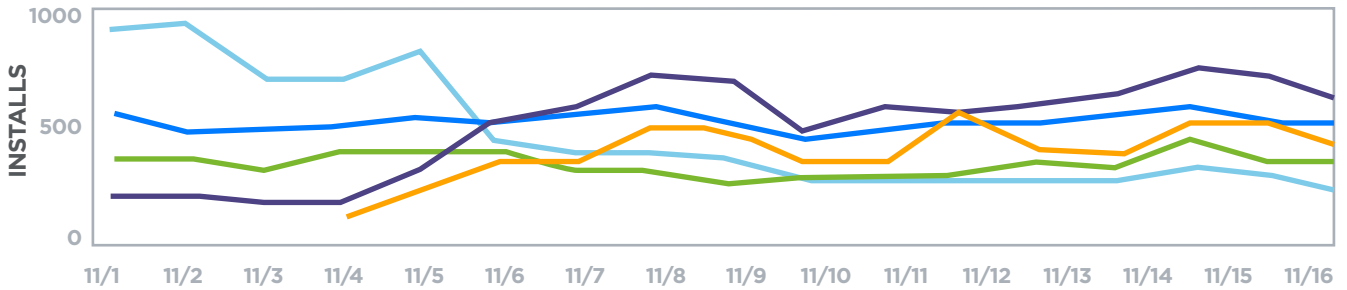|			
Age	Clicks	Device OS	Impressions Unique
Agency	Clicks Unique	Device Type	Installs
Attributed Installs	Country	Event	Integration
Attribution Method	Destination URL	Events	Is Reengagement
Campaign	Device Brand	Gender	Is View-Through
Campaign Count	Device Model	Impressions	Margin

Utilizing the Actuals Report

Through the measurement capabilities outlined above, the Actuals report is able to provide mobile marketers with highly-valuable and actionable data. Determining which data to measure is largely influenced by the app itself (e.g. the measurement data and the goals of a gaming app and a personal finance app will likely vary). To provide a few practical examples, a mobile marketer might use the Actuals report to:

Identify the total clicks and installs on a daily, weekly, or monthly basis: Measuring and comparing how campaigns perform over certain intervals of time enable mobile marketers to establish benchmarks and make responsive adjustments. For example, a marketer might set a weekly goal for total installs. If standard campaign efforts are yielding results that are lower than expected early in the week, the marketer could make adjustments to the ad or allocate additional resources to ensure the goal is achieved.

To provide an example of the Actuals report data, seen on the following page is a screenshot of a fictional music app called MobileMusic, measuring Clicks and Attributed Installs associated with a particular Partner and Partner Campaign.

TUNE

TUNE: MobileMusic

MOBILE APP ⟩	PARTNER ⟩	PARTNER CAMPAIGN ⟩	CLICKS ⌄	ATTRIBUTED INSTALLS ⟩
MobileMusic (iOS)	Starcom_US	dropdown_DE	236337	8929
MobileMusic (Android)	Shazam	integratedrow_US	78129	14458
MobileMusic (Android)	SoundHound	dropdown_TR	52475	1392
MobileMusic (Android)	Shazam	addonlink_DE	48570	9109
MobileMusic (Android)	Shazam	genericmobile	48053	8711
MobileMusic (Android)	Starcom_US	dropdown_DE	47142	18608
MobileMusic (iOS)	Shazam	addonlink_UK	44124	4617
MobileMusic (iOS)	Shazam	brand-mobile	43897	5100
MobileMusic (Android)	Starcom_US	dropdown_DE	40648	15823
MobileMusic (Android)	Starcom_US	integratedrow_US	40655	11985

Determine the revenue associated with a particular partner, agency, or region: Gaining insight into the revenue associated with a particular partner, agency, or region enables marketers to identify top performers, and allocate ad spend accordingly. For example, consider a scenario where a mobile marketer is allocating ad spend equally among three different partners, but achieving exceptionally higher results from one of these partners. Instead of continuing to distribute resources equally, a percentage of the ad spend from the two underperforming partners could be re-allocated to the top-performing partner, enabling the marketer to receive a higher return on investment.

Better understand user behaviors and preferences: Having the ability to measure clicks, installs, opens, events, as well as audience specific characteristics like device OS, type, model, etc. enables mobile marketers to better understand users and in some cases even infer certain information about the audience. This knowledge can then be used to inform campaign decisions.

TUNE

Reconcile data discrepancies: One of the advantages of working with a third-party attribution provider is the ability to reconcile data with partners when dissimilarities arise. It is not uncommon for data discrepancies to occur between mobile marketers and partner platforms. For example, suppose a user clicked on two different ads before installing an app. In theory, two publishers could take credit for the install, but only the publisher responsible for the final click before the install should be paid. Reconciling data discrepancies through the Actuals report helps protect campaign budgets and ensures marketers have an accurate perspective of performance.

These examples represent just a few of the numerous ways the Actuals report can be utilized to enhance mobile marketing efforts. Having access to powerful and dynamic tools that unlock foundational campaign data enables mobile marketers to make more informed, data-driven decisions and better optimize ad spend.

TUNE

COHORT REPORT

Think of a cohort as a group. More specifically, as a group whose members share a common characteristic at a designated moment in time. General examples of cohorts might include students entering a two-year graduate program at a university or individuals born in California between 1990 and 1995. In the mobile app marketing realm, a cohort might be users who installed an app during July, or users who clicked on an ad in the first seven days of a campaign.

Cohort Analysis

To illustrate why cohort analysis is necessary, consider this analogy to winemaking,[2] paraphrased here:
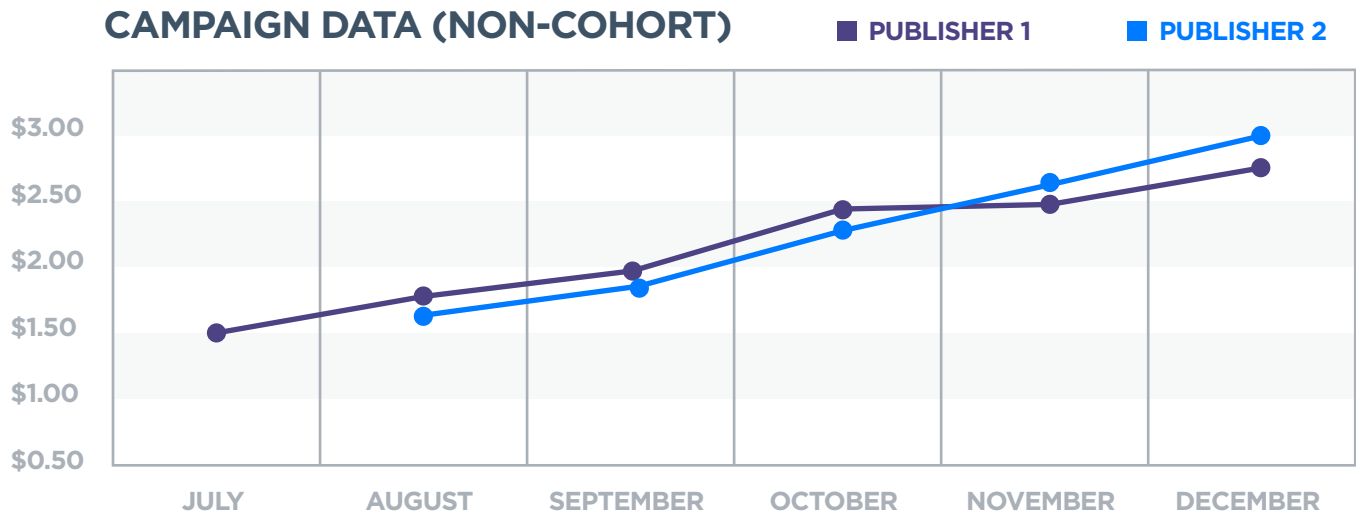
> A winemaker is interested in comparing new wine to older vintages to determine whether or not recent modifications to the winemaking process changed the flavor of the wine. In order to make this comparison, the winemaker might pour a glass from the most recent bottle and a glass from a much older vintage, and then ask the sommelier to do a blind test taste.
>
> However, even a novice winemaker would understand that this testing method would probably not provide the most astute comparison. The problem is easy to identify: the vintage bottle has aged, matured, and changed flavors over time. Consequently, in this moment the two wines are simply not comparable (and using this method, they probably never will be). An alternative method that accounts for the "interference" (i.e. the differences between the two wines that compromises comparison) is necessary. And this is precisely what cohort analysis provides.

The principles of the winemaking illustration have major application in mobile marketing. For example, after users download an app, their preferences, behaviors, and levels of engagement tend to change and evolve over time, and lifecycle patterns begin to emerge. As mobile marketers make modifications to campaign processes, it's challenging to determine the impact these changes have on users at different stages of the lifecycle. Consequently, examining two (or more) cohorts that are at completely different stages is not an astute comparison, and does not yield consistently reliable conclusions.
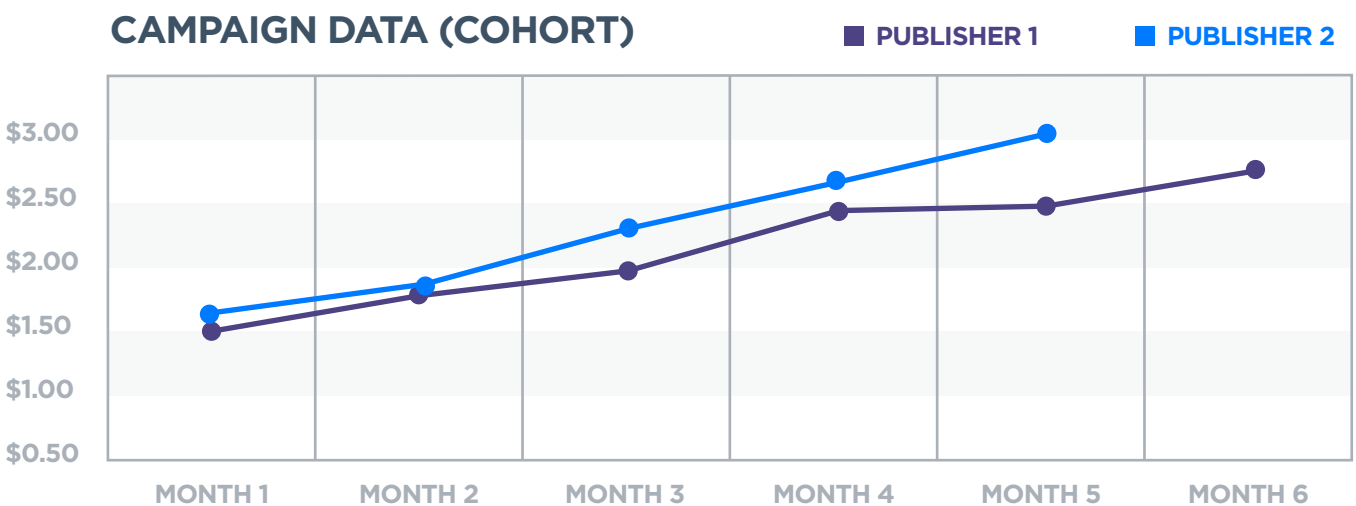
Identifying user lifecycle stages and implementing tactics to influence user behaviors are fundamental roles of mobile marketing. Through the Cohort report mobile marketers are able to more easily identify user preferences, behaviors, and patterns, and better discern how campaign changes impact key metrics. And perhaps most important, by removing interference, the Cohort report enables comparability between groups that would not be possible otherwise.

To illustrate, consider a scenario where a mobile marketer started working with two new partners, one month apart. The marketer would like to know which partner is delivering users with a higher average lifetime value (ALTV). If monthly data was simply collected and plotted linearly, the graph might look something like this:

CAMPAIGN DATA (NON-COHORT)

■ PUBLISHER 1 ■ PUBLISHER 2

Based on the data in this graph, the mobile marketer might conclude that Publisher Two is marginally better than Publisher One. However, as discussed, because users from each publisher are at different stages in the lifecycle (users from Publisher One are one month further into the lifecycle than those from Publisher Two, resulting in interference), comparing the cohorts in this manner is not particularly useful.

Interference is removed by directly comparing users at equivalent times in the app. By evaluating the ALTV for each cohort using the beginning of the partner relationship as the initial event (t0) and the ALTV each month following (i.e. t0+1, t0+2, etc.), a more astute comparison can be made. As seen in this second graph, through cohort analysis, the same data now tells a different story:

CAMPAIGN DATA (COHORT)

■ PUBLISHER 1 ■ PUBLISHER 2

It can now clearly be seen that the ALTV from Publisher Two is higher and grows more quickly than the ALTV from Publisher One. And by Month 5 the difference is considerable (whereas without cohort analysis the difference was almost negligible). Armed with this information, a mobile marketer might respond by cutting back ad spend to Publisher One and allocating additional resources to Publisher Two. Without Cohort reporting, the marketer may have continued splitting the budget 50/50 between the two publishers, missing out on a simple opportunity to acquire users with higher ALTV.

Cohort Reports
As illustrated in the following graphic, Cohort reports are a powerful and flexible report that can display a variety of events, calculate financial metrics, and be grouped in a variety of different ways. Similar to the Actuals report, the Cohort report can also be filtered by more than 50 characteristics.

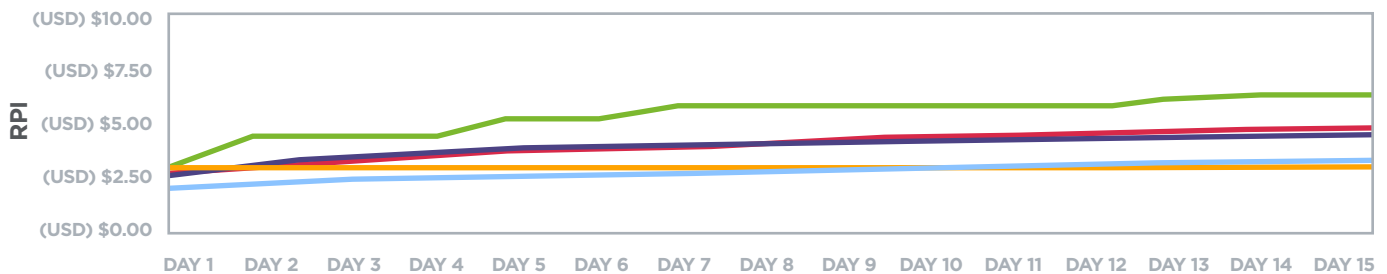| **GROUP BY**	Device OS	My Keyword
Mobile App	OS Jailbroke	My Placement
Campaign	Test Profile	Partner Publisher
Partner	Purchase Validation Status	Partner Site
Event	Is View-Through	Partner Campaign
Destination URL	Attribution Method	Partner Ad Group
Country	My Partner	Partner Ad
Region	My Site	Partner Keyword
Device Type	My Campaign	Partner Placement
Device Brand	My Ad Group	
Device Model	My Ad	
SHOW	Payout	Average Time To 2nd Purchase
Installs	Revenues USD	2nd Opens
Events	1st Purchases	Average Time To 2nd Open
Purchases	Average Time To 1st Purchase	
Opens	2nd Purchases	
CALCULATE	RPI	OPI
CPI	EPI	% To Payback
INTERVAL	Week	Year
Day	Month	All Time
VALUES	Cumulative	Incremental

TUNE

Utilizing Cohort Reports

Cohort reports enhance a mobile marketer's ability to:

Make astute comparisons: Cohorts can be defined by any relevant characteristic that is shared. The possible combinations of attributes, event data, time intervals, and other factors available through Cohort reporting introduces mobile marketers to a number of opportunities. For example a mobile marketer might compare:

- Financial metrics like Lifetime Value (LTV), Cost per Install (CPI), Revenue per Install (RPI), or % To Payback.
- Engagement metrics like Events per Install (EPI) or Opens per Install (OPI).
- Other highly relevant campaign activity, such as time to first purchase or average time to second open.

Each of these metrics can be compared in accordance with a specific time interval (e.g. Daily, Weekly, Monthly, Annually, All Time). For example, the following graphic shows the RPI and OPI for five different partners on a daily basis. A mobile marketer might respond to this information by reducing ad spend allocated to partner 5 and redistributing to Partner 1 as it has a notably higher RPI rate.

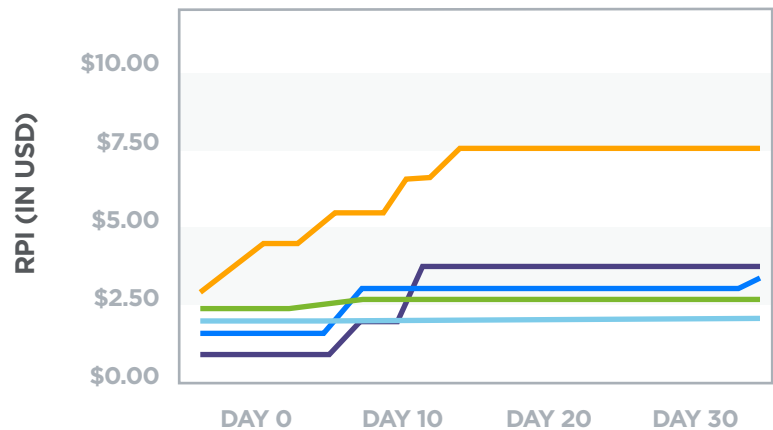| DATA GROUPINGS	SHOW ALL INTERVALS	RPI		OPI	
PARTNER	❯		**TOTAL**	❯	**TOTAL**
Partner 1			$5.96		1.8900
Partner 2			$3.75		2.6400
Partner 3			$3.85		2.1500
Partner 4			$2.50		4.6000
Partner 5			$2.60		2.1100

Identify important patterns: One of the primary benefits of Cohort reports is the ability to identify trends, patterns, and consistent user behaviors. For example, a mobile marketer might monitor the total number of app users and notice that roughly 25 percent of total users stop engaging with the app each month. This information is useful, but without a solid understanding of when users drop off, the impact of re-engagement campaigns is relatively limited.

Alternatively, with a Cohort report the marketer might see a consistent drop in user engagement right at the three-week mark. Instead of running a broad campaign trying to connect with the entire user base, a mobile marketer could run a re-engagement campaign or special promotion specifically targeting new users right at that vulnerable three-week mark. Identifying patterns like these is almost impossible without cohort analysis.

Understand the impact of campaign adjustments: Cohort analysis enables marketers to better understand the impact of deliberate campaign changes. In the previous example, the mobile marketer adjusted the standard campaign and started targeting users at a specific point in time (the three-week mark). Through cohort analysis, the marketer would be able to clearly discern whether or not these targeted campaign efforts resulted in higher levels of engagement.

Cumulative vs. Incremental View

The Cohort report is often viewed in a cumulative and incremental manner. It's important to understand the difference between each view, as distinct campaign insights can be gained from each perspective.
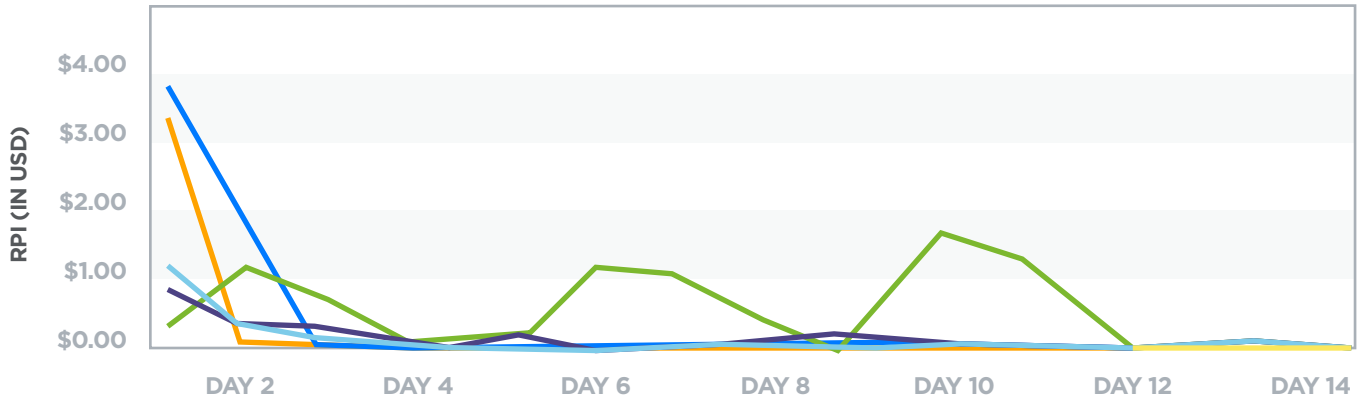

Cumulative

As indicated by the name, the cumulative option displays results in an increasing, aggregated view. For example, a marketer utilizing the cumulative view to measure Revenue per Install (RPI) over a given month would see the RPI combine over the course of the 30-day period. Consequently, the cumulative view should trend upward and to the right.

The cumulative view of the Cohort report provides mobile marketers with a great window into user growth over time.

Incremental

The incremental view displays cohort data in a non-aggregated fashion. The following graphic displays two weeks of RPI data. Instead of trending up and to the right, the lines move up and down in harmony with the RPI each day.

The incremental view of the Cohort report enables marketers to gain insight into user retention. For example, a mobile marketer could view the incremental data of the previous 12 months and identify the peaks, low points, or other changes correlated with a specific sale or campaign. This knowledge can then be used to inform future campaigns.

Through the Cohort report, mobile marketers are able to make meaningful comparisons between groups of users that would not be possible otherwise. The primary value provided to mobile marketers is the ability to more easily identify patterns and better understand the impact of campaign adjustments.

RETENTION REPORT

User acquisition has always been a prominent priority for mobile marketers. However, after the initial acquisition event, focus immediately shifts to ensuring users stay active and engaged with the app over time. Even the most popular apps struggle with maintaining existing users, and without tools or resources to identify app usage rates, mobile marketers have no meaningful way to effectively battle user attrition.

The Retention report provides the quantifiable data needed to accurately determine when and where app engagement is declining, enabling mobile marketers to better understand user behavior and gain further insight into the complete user lifecycle. This knowledge can then be used to design engagement campaigns that focus on the point(s) in a user's lifecycle where the risk for attrition is highest. Considering that acquiring a new user has been estimated to be up to 95 percent more expensive[3] than re-engaging an existing user, the value of the Retention report is clear.

Calculating Retention

The most common measure of retention is the number of unique opens by each user. However, simply measuring and assessing the number of unique opens an entire user base produces does not provide insight sufficient to draw any significant conclusions. By making the Retention report cohort-based, far greater insight can be derived.

In order to calculate the retention rate on a cohort basis, four factors are needed:

Retention metric: Opens, purchases, or other events deemed relevant by the mobile marketer.
Cohorting event: The initial engagement event (i.e. the app install event).
Timeframe of interest: The timeframe interested in evaluating (during which the cohort event occurred).
Cohort time interval: The time interval in which users are grouped (e.g. a weekly basis).

The Retention rate is calculated by dividing the number of unique app opens (within a specific time interval) by the total number of app installs (essentially, the base cohort size or retention potential), and then multiplying the quotient by 100.[4]

$$\text{Retention on Day X} = \left(\frac{\text{Number of Unique "app open" events on Day X}}{\text{Total number of "app install" events on Day 0}} \right) \times 100$$

For example, the calculation for an app with 5,000 downloads on Day 0 (i.e. the day of the install) and 3,100 unique opens seven days after the install would look like this:

Retention on Day Seven = (3,100/5,000) x 100 = 62%

To provide an illustration of how the Retention report works, consider a scenario where developers made significant updates to an app. Following the release, developers and mobile marketers are interested in understanding whether or not the modifications impacted retention. Two weeks following the release, cohorts from before and after the modifications could be compared, and the impact on retention could be identified:

COHORTING EVENT: INITIAL INSTALL		RETENTION INDICATOR METRIC: APP OPENS (X WEEKS AFTER INITIAL INSTALL)		
COHORT TIME INTERVAL	COHORT SIZE	+1 (WEEK)	+2 (WEEKS)	+3 (WEEKS)
June 1, 2014 (2 weeks prior to Update)	3548	**72%** (2,554 users opened the app)	**53%** (1,880 users opened the app)	**21%** (745 users opened the app)
June 8, 2014 (1 week prior to Update)	2968	**68%** (2,018 users opened the app)	**48%** (1,424 users opened the app)	**19%** (564 users opened the app)
June 15, 2014 (1 week after Update)	4321	**98%** (4,234 users opened the app)	**74%** (3,197 users opened the app)	**56%** (2,419 users opened the app)
June 22, 2014 (2 weeks after Update)	3874	**91%** (3,525 users opened the app)	**67%** (2,595 users opened the app)	**54%** (1,552 users opened the app)

As indicated in the chart above, the changes to the app resulted in significant improvement to retention. Prior to the release, the three-week retention rates were 21% and 19% for the June 1 and June 8 cohort. Following the changes, the three-week rates come in at 56% for the June 15 cohort, and 54% for the June 22 cohort. By utilizing the Retention report, app developers and marketers now have the data to clearly determine that the major updates to the app had a positive impact on user retention.

Utilizing the Retention Report
Through the capabilities described above, the Retention report enables mobile marketers to understand the levels of user engagement associated with specific campaigns, partners, regions, operating systems, or other key characteristics. To provide a few examples of how the Retention report might be used, consider the following scenarios:

• Simultaneously running multiple campaigns is the norm in mobile marketing. Suppose a mobile marketer ran five different campaigns in the month of August. The Retention report could be used to determine which of those five campaigns was most effective at delivering users with the highest engagement rates. Future campaigns could then be modeled after the campaign that achieved the most active users.

The following graphic shows the retention rate of three different cohorts in the month of November.

Nov 01, 2014 - Nov 30, 2014 ⌄	Measures (1) ⌄	Filters (1) ⌄	Segments (1) ⌄	Selected (1) ⌄

Interval ⌃	Attributed › Partner	Cohort › Size	Active Weeks After First Install (Opens) + 0	+ 1	+ 2	+ 3
2014-11-01 to 2014-11-02	Shazam	19,847	99.9% 19,836	56.8% 11,279	39.9% 7,915	32.4% 6,438
2014-11-03 to 2014-11-09	Shazam	63,301	100% 62,274	50.5% 31,484	37.3% 23,211	30.2% 18,799
2014-11-10 to 2014-11-16	Shazam	57,591	99.9% 57,556	51.5% 29,415	36.3% 20,890	13% 7,464

• A mobile marketer might work with dozens of advertising and publishing partners and be interested in acquiring users that make an in-app purchase within the first two weeks following the install. Through the Retention report, the marketer could determine which partners were delivering the most users that met the in-app purchase criteria, and use this information to allocate additional resource to the highest performing partners.

• A mobile marketer might be interested in reaching a broader audience and could run campaigns in three new regions. Through the Retention report, the marketer could determine which of the new regions produces the most engaged users, and allocate future ad spend based on that insight. Similarly, the Retention report could be used to inform the marketer about which regions currently deliver users with high engagement rates.

• Mobile marketers often promote apps on at least two operating systems. Through the Retention report, the mobile marketer might compare engagement levels between Android and iOS users over a specific time period (i.e. month, quarter, etc.), and use that knowledge to inform future campaigns.

The examples above represent just a few of the ways the Retention report can be used to provide valuable insight to mobile marketers. The important factor to note is that in each of these examples, the Retention report is providing actionable data that enables marketers to identify the partners and channels that bring in the most active and engaged users. With the Retention report, a marketer's ability to build and maintain an active and engaged user base improves considerably.

The significant value of reporting in a single dashboard

Mobile marketers have access to a wide variety of tools and resources to help them be successful. But contemporary marketing is not a simple, one-dimensional role. On any given day a mobile marketer might be managing multiple paid social campaigns, running organic campaigns to drive inbound traffic, optimizing a landing page and improving app store optimization, making media buys, or several other tasks - all while working with numerous partners across a broad number of channels.

Mobile marketers rely on data to help them optimize campaigns and maximize return on ad spend. One of the challenges facing mobile marketers is the need to work in several different programs just to manage campaign data. Consequently, many marketers spend their time toggling between multiple dashboards, trying to piece together information to make data-driven decisions. This fractured, multi-dashboard strategy is not only incredibly impractical, it introduces opportunities for inaccurate comparisons to be made and misguided inferences drawn.

Alternatively, having all marketing campaign data aggregated and displayed in a single dashboard not only eliminates the inconvenience of toggling between several programs, it provides marketers with the ability to reliably compare all marketing platforms and channels and gain insight and understanding into which are performing at the highest levels. And that's where the true value of a single dashboard is found - making comparisons and gaining insight that may not be possible any other way.

Summary

Modern mobile marketers have access to tools and resources that enable them to be far more data-driven and analytical than in years past. But with access to huge volumes of data, many marketers struggle with determining which metrics to measure and understanding how to leverage campaign data. As an unprecedented percentage of global ad spend migrates to mobile, mastering the three basic mobile marketing reports is essential.

The three basic reports include:

Actuals Report: The broadest window into campaign data, the Actuals report can be used to identify ad clicks, determine revenue associated with a particular partner, better understand user behavior, reconcile data discrepancies and much more.

Cohort Report: The Cohort report is a powerful view into campaign performance that enables groups of users (cohorts) to be compared in a meaningful way. Through the Cohort report, mobile marketers can better understand user behavior, identify lifecycle patterns, and gain additional insight into how campaign adjustments impact performance.

Retention Report: Even the most popular apps struggle with user attrition, and the Retention report provides the quantifiable data necessary to accurately determine when and where app engagement declines. This insight enables mobile marketers to better understand user behavior, and informs re-engagement campaign strategies.

Having the ability to compare campaign data from diverse platforms, channels, and partners all in a single dashboard is a significant advantage for mobile marketers. Through these reports, mobile marketers are able to the gain the insight necessary to understand user behavior and identify lifecycle patterns, and use this knowledge to optimize campaigns and inform future ad spend decisions.

About TUNE

TUNE is on a mission to make mobile marketing better for everyone. As the most adopted measurement and attribution provider for the top 100 apps across iOS and Android, TUNE is trusted by Expedia, Sephora, Starbucks, Amazon, and many other world-class brands. TUNE builds solutions that arm marketers and their partners with insights to help effectively engage consumers with timely, personalized marketing messages. Headquartered in Seattle, Washington, with over 325 employees in eight offices worldwide, TUNE's solutions are globally recognized as the most innovative, reliable, and best supported in mobile marketing.

References

1. "eMarketer and Starcom MediaVest Group Release Fourth Annual Report on the State of Global Media Usage and Spending." eMarketer. 30 Sept. 2014. Web. 10 Dec. 2014. <http://www.emarketer.com/newsroom/index.php/emarketer-starcom-mediavest-group-release-fourth-annual-report-state-global-media-usage-spending/>

2. Kendall, Simon. "Why Cohort Analysis is a Game-Changer for Mobile App Businesses." Venturebeat. 30 Jan. 2014. Web. 11 Dec. 2014. <http://venturebeat.com/2014/01/30/why-cohort-analysis-is-a-game-changer-for-mobile-app-businesses/>

3. Henshcel, Christian. "Re-engagement and Retargeting - a Couple of My Favorite Power Marketing Tools." Mobile Market Portal. 30 Jun. 2014. Web. 11 Dec. 2014. http://www.mobilemarketportal.com/mobile-apps/articles/382589-re-engagement-retargeting-couple-my-favorite-power-marketing.htm>

4. Chen, Kevin. "Running Retention Reports." MobileAppTracking Support. 3 Jun. 2014. Web. 11 Dec. 2014. <http://support.mobileapptracking.com/entries/42179044-Running-Retention-Reports>