A Report On "Flurry" (Mobile Analytics tool)

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INTRODUCTION:

Flurry is the most adopted app analytics platform to understand and enhance customer journeys in mobile applications. It securely processes billions of data points every day in the cloud and on-premises in order to help companies across the globe grow their business.

Flurry gives deep insights on how the users are experiencing your app. From a button click to swipe screens to time spent on the app, it also captures each and every information of the app movement and stores it in the database.

Flurry is created by Yahoo!.

Overview:

Flurry Analytics helps you understand how your mobile application performs. It was world's first iOS and Android app analytics solution. It's used in over 250+ companies, on 1 Million+ applications. Its use spans over 2 Billion mobile devices. And it collects tens of billions of mobile data every month.

It connects and gets real-time sessions, users, countries and time spent together with this top platform, top resolution, top carrier views and more.

Using Flurry, you can go on with data analytics even while travelling as it is cloud based.

Purpose:

The main purpose of Flurry is to provide you with the detailed analysis of all the application that you created on the basis of the performance of each and every application individually.

It provides you each aspect of analysis, right from checking the crashes, the events created by user like forwards, tracking installs, sessions, time spent, etc.

Need:

In order to perform its task efficiently Flurry needs to be used in devices/platforms like Android and iOS devices as a mobile application and Linux OS and Windows as a Web application.

You also require your own app to analyse the usage.

Installing Flurry Mobile Application:

Flurry mobile application is freely available for download.

It can be downloaded from the Google Play Store

for Android devices and Apple App store for iPhones.

Google Play Store Link:

https://play.google.com/store/apps/details?id=com.yahoo.flurry

Apple App Store link:

https://apps.apple.com/us/app/flurry-analytics/id1079687315

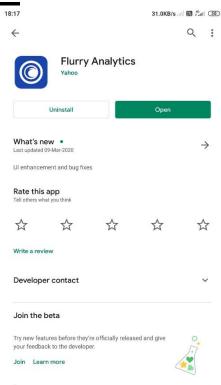


Fig. 1 Play store application

Features:

Here are some of the notable feature of Flurry:

- Flurry push
- Real-time metrics
- Revenue analytics
- Crash analytics 2.0
- Dashboards
- Analytics reporting API

Features of Flurry in detail:

Flurry Analytics features and capabilities, include:

- <u>Flurry Push</u> enables app developers to send targeted messages to re-engage and retain users
 across Android and iOS. Mobile developers can leverage the power of push notifications to
 effectively grow usage and revenue all for free, all now available in Flurry.
- Real-Time Metrics, providing you with real-time data on how your app may be impacted by user updates, user acquisitions, or enhancements.
- Focused **Dashboards**, in fullscreen mode, that let you view all the metrics from a given metric
 area on a single page.
- <u>Revenue Analytics</u> within Flurry allows you to track your In App Purchase (IAP) Revenue from
 transactions that occur within your iOS app or Android app in order to determine if your app is
 producing revenue from in app purchases at the levels you expect.
- <u>Crash Analytics 2.0</u> in Flurry gives you, **in real time**, information about crashes, exceptions and
 errors in your app. This allows you determine the root cause of any issue quickly, keep your app
 running well and the users of your app happy.

- The <u>Analytics Reporting API</u> enables you to export your data, based on standard formats such
 as CSV and JSON, allowing you to integrate it into web dashboards, data warehouses and any
 other system you might use for managing your business.
- Comparison capability, with context controls, that lets you select multiple items for display at the same time and to quickly move between comparisons.
- **Filtering** of data, so that you can apply filters, like Country, Age, Gender and Language on the fly and view the results instantly.
- **Groups**, which let you take items, like Apps or Events, and group them together to quickly move between the contexts that matter for you.
- Explorer, with support for Measures, Funnels, Retention analysis, User Journeys, and User Segments, with each returning results based on your most complex queries within seconds.

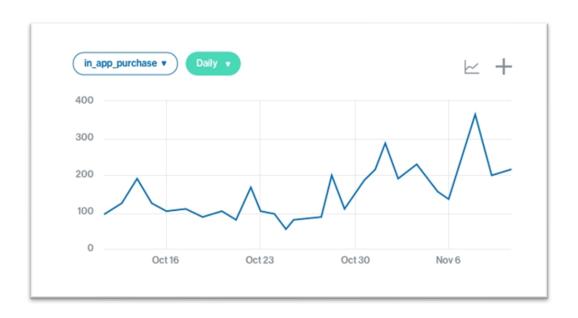


Fig.2 In-app purchases as per days

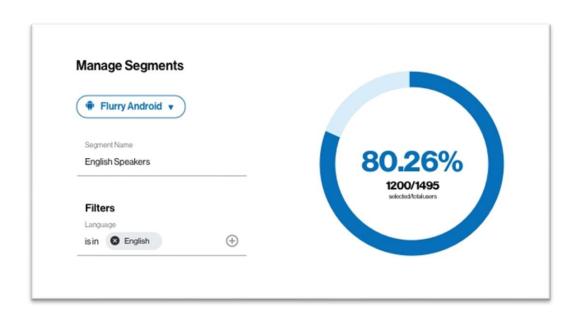


Fig. 3 Users as per their language

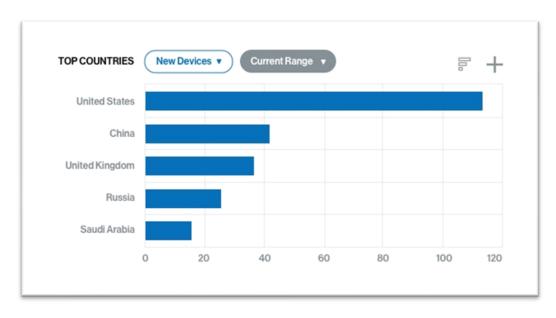


Fig. 4 Top countries using your app

Integrating Flurry with Android apps:

Initialize Flurry

```
public class MyApplication extends Application {
    @Override
    public void onCreate() {
        super.onCreate();

        new FlurryAgent.Builder()
            .withDataSaleOptOut(false) //CCPA - the default value is false
            .withCaptureUncaughtExceptions(true)
            .withIncludeBackgroundSessionsInMetrics(true)
            .withLogLevel(Log.VERBOSE)
            .withPerformanceMetrics(FlurryPerformance.ALL)
            .build(this, FLURRY_API_KEY);
    }
}
```

Tracking user sessions in Java Application (Mobile):

```
import com.flurry.android.FlurryAgent;
public class MyApplication extends Application {
   public void onCreate() {
      super.onCreate();
      new FlurryAgent.Builder()
           .withLogLevel(Log.VERBOSE)
           .withLogEnabled(true)
           .build(this, FLURRY_APIKEY);
      //your code
   }
}
```

Similarly, we can install Custom events, Revenue analytics, Crash analytics and other Advanced features.

Funnels & Conversion Funnel Analysis

<u>Flurry Analytics</u> facilitates conversion funnel analysis, which means to track the conversion of users as they progress through a series of defined steps. This enables you to visualize the completion rate of user progression through any event flow and identify which steps users are not converting through.

Including a Dimension allows you to visually compare conversion rates by different attributes. Adding Filters allows you to narrow the scope of the funnel to analyze a subset of users.

Funnel Basics

Funnel types are comprised of the following:

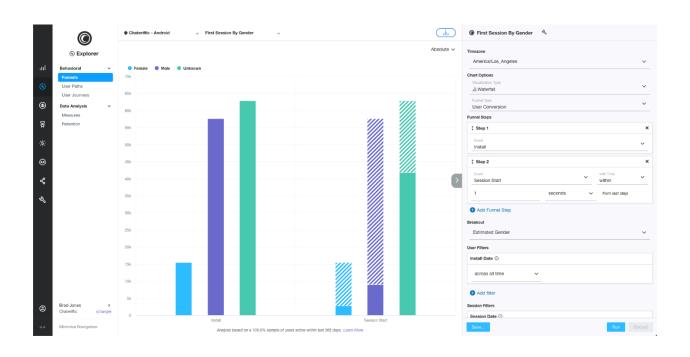
Туре	Description
User Conversion	Reports unique user conversion through the funnel where a unique user will only be counted once through the funnel. When you build and run a query, this type will report on the conversion rate for your app users.
Repeated Conversion	Reports unique occurrences of user conversion through the funnel where a unique user can be counted multiple times through the funnel.

Funnel steps can be any custom event instrumented and these pre-defined standard events:

- Install: App is installed on the device.
- Session Start: A session is started on the device.
- Session End: A session is ended on the device.

To build and run a new Funnel query:

- 1. Select + New Query from the Query dropdown.
- 2. Define the Funnel Type: User Conversion or Repeated Conversion.
- 3. Specify the first step in the funnel by selecting an event for Step 1.
- 4. Specify the second step in the funnel by selecting an event for Step 2.
- 5. Optional: Add other steps in the funnel.
- 6. Optional: Select a Dimension to contrast across the funnel.
- 7. Optional: Add Filters to limit the scope of the funnel.
- 8. Optional: Add Constraints to any of the steps to narrow the qualifying events.
- 9. Click Run Query.



Advantages:

1. Free to use

Highlights in that post are that Flurry is free, is quick and easy to integrate, has rich analytics capabilities.

2. Freely scalable

Scales with your app's growth and has a robust SDK's for iOS/Android/mobile web/other platforms.

Categorized metrics

With Flurry, you also get "the power of the network". You can compare your app's metrics with benchmarks for that category. You can look at your app's users by age, gender and "personas" (Flurry-defined attributes of user behavior across multiple apps).

4. Help in monetizing

Finally, we don't think of Analytics as a lead-gen for ads. We've got tens of thousands of apps and developers that don't use ads - and that's fine with us. But if/when you are ready to either monetize your app or promote your app through ads, you can do so with the same Flurry SDK and service. And Flurry will let you use your Analytics data for more effective promotion and/or monetization (e.g. letting you target ads only to users who have never made a purchase in your app).

Screenshots:

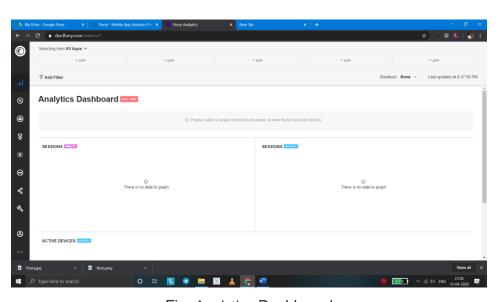


Fig. Analytics Dashboard

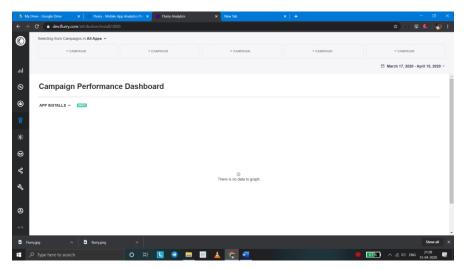


Fig. Campaign performance dashboard

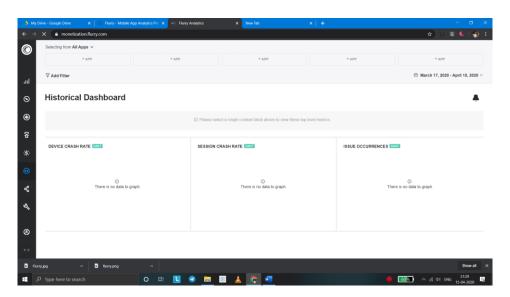


Fig. Crash analysis

Conclusion:

Thus in this study we learnt about Mobile analytics application, Flurry Analysis application, created by Yahoo!. We also learnt how to use it, how to integrate it with an application in Java and its advantages.