ABSTRACT

Nowadays Web paradigm has shifted towards Mobile paradigm. Web goes more mobile, that’s why there is a need to understand behaviour of mobile visitors and their engagement with mobile apps to make it more interesting. Here, we are trying to explore an emerging field as Mobile App Analytics. We can explore Mobile Analytics field in 3 ways, the mobile app as a data source, the analytics tools needed to turn the data into deep insights, and the organizational aspect of using actionable insights to inform decision-making. In this paper, we are going to develop mobile analytics dashboard or a Tool-Rolopanel which will easily help to track, analyse traffic of mobile app visitors through events tracking functionality. Events are nothing but actions that users takes while using any app. Particularly we are analysing here gaming apps data and the engagement of users with that mobile app. We have tried to build multifunctional dashboard which can display different tracked user data on single platform in a very simple manner as well it will help to understand its semantics easily.

Keywords: Dashboard, Events Tracking, Mobile App Analytics, Rolopanel, User Engagement and Adoption

1. INTRODUCTION

‘Mobile’ a component has penetrated into every single aspect of our life either it is gaming, shopping apps, retailers, business and for many more things. Mobile has become the front and centre for marketers and businesses because advancement in mobile technology and launching of new mobile and its products almost every day has shifted web users to mobile users. There are millions of apps are available on App Store, Play Stores and many being added single day. So the competition of curse has increased for apps to stand out different in market. One cannot comprehend how exactly an app is performing just by looking at the App store or Play Store reviews and number of downloads. This isn’t give correct insights to user’s engagement with app.

Nowadays, Mobile app analytics is widespread and has been adopted by companies and developers globally. There is no more scarcity of insights into apps’ usage and adoption. App analytics is crucial for success of an app and its continuous improvement (Debajyoti, 2014).

Mobile App analytics enables us to measure the impact our app has made. Analytics provide insights into user behaviour and engagement, and scenarios like why an app has low usage, why
an app is getting poor adoption, etc. These insights can be used to improve user engagement, increase user retention, and enhance the user experience. Mobile app analytics provides insights like how many active users are there for the app, on what devices and platforms are these users active on, from which geography, and how did they reach the app. These insights enable the developer to discover new and relevant users, and help in allocating resources for his/her app promotion (Debajyoti, 2014).

Many users download apps, use it once or twice and then become inactive. App analytics gives insights on who is using your app in real time, so that you get to know the actual number of users using the app. Several app analytics tools show the user path and engagement inside the app, such as where the user has taken actions, how much time the user has spent on a particular screen, on what screen he quit the app, etc. App developers can leverage these insights to troubleshoot the app and also check loyalty and frequency of user visits (Debajyoti, 2014).

In this paper, we are going to build mobile analytic tool based on certain parameters. We will demonstrate segmentation analysis, retention analysis for particular days as well geographically distributed users with the help of world map. All the output data collected will get displayed on dashboard. We will be considering daily active users, new users as well session started users for analysis. Then for retention analysis we will be calculating it for particular days as 1st day, 7th day, 30th day as well for various versions of app individually. To demonstrate all these features, we are considering Gaming Applications in particular 5 topmost mobile games as well to build this we will take help of Mixpanel API’s and other latest technologies.

2. LITERATURE SURVEY

Mobile analytics is a growing field. A significant amount of research is in progress to enhance performance of Mobile Analytics. We have surveyed different research papers and other whitepapers related to Mobile Analytics and Web Analytics. The paper titled “Web Analytics and Metrics: A Survey” (Kumar, Singh, & Kaur, 2012) have contributed in process of Web Analytics. They also discussed different metrics and mechanism of evaluating websites and collecting information about behaviour of the user. Analysis of social media such as Twitter, Facebook with business activity with web-based API’s provided by these services. (Batrinca & Treleaven, 2014) Different benefits of web analytics data suggests that this data sometimes used to perform technical troubleshooting and optimization. It also throws light to use of web analytics to understand their audiences, often for curiosity or entertainment, as well as for more site- design oriented tasks like increasing traffic and optimizing content. (Sleeper, Consolvo, & Staddon, 2014) The paper (Verbert, Govaerts, Duval, Santos, Van Assche, Parra, & Klerkx, 2014) aims to supports learning analytics through dashboard applications, ranging from small mobile applications to learnerscapes on large public displays. Dashboards term refers to tools for the graphical visualization of key performance indicators (KPIs) complemented by reporting functions for data analysts. The author of the paper (Chen, Ullah, Kaafar, & Boreli, 2014) investigate the risk of privacy leakage through mobile analytics services and demonstrate the ease with which an external adversary can extract individual’s profile and mobile applications usage information, through two major mobile analytics services, i.e. Google Mobile App Analytics and Flurry. This whitepaper (Peterson, Berger, & Pottjegort, 2009) exposes the lies being told about mobile analytics. They have discussed most common lies about mobile analytics which includes its accuracy, analytical solution correctness, hardware/software required as well measuring mobile visitors. A framework for Mobile Analytics to understand user engagement with mobile application is discussed in Fowler, Becker, Scullin, and Ricci (2012). It also focuses on industry challenges to mobile analytics.
The iPad in the Classroom: Three Implementation Cases Highlighting Pedagogical Activities, Integration Issues, and Teacher Professional Development Strategies
Nathaniel Ostashewski and Doug Reid (2013). Pedagogical Applications and Social Effects of Mobile Technology Integration (pp. 25-41).
www.igi-global.com/chapter/ipad-classroom-three-implementation-cases/74903?camid=4v1a

Mobile Camera-Based User Interaction
www.igi-global.com/chapter/mobile-camera-based-user-interaction/21851?camid=4v1a