
Team RIM Report

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Research In Motion has been going through an exceedingly difficult time over the last few years. Since Apple iOS and Google Android have emerged as the two most popular operating system platforms for mobile devices, both smartphones and tablets. Its mobile market share is dwindling; its former co-CEOs Mike Lazaridis and Jim Balsillie nearly ran the company into the ground; it has watched its core market-the enterprise-start to slip away as an increasing number of companies back away from BlackBerry smartphones and turn to iPhones, iPads and, even in some cases, Android handsets. After months of delays, RIM released it's newest mobile operating system and devices and changed it's name to BlackBerry. No doubt RIM want to turn things around. However, is it enough? Will it be worth the wait or will it save RIM? With these questions, we tried to use some web analysis skills to find the answers.

1. INTRODUCTION

Hardware, Operating System, mobile apps and content deals are the four most important things in mobile industry these days. Our project focus on Operating System and try to compare it with other popular Operating System including Apple iOS, Google Android and Microsoft Windows Phone.

2. DATA SOURCE

In order to get enough data, we choose Twitter and The Verge as our data source. Twitter is an online social networking service and microblogging service that enables its users to send and read text-based messages of up to 140 characters, known as "tweets". The Verge is an American technology news and media network publishes news items, long form feature stories, product reviews, podcasts, and an entertainment show. We use Twitter's stream api to search the keyword predefined from tweets. However, since using stream api can only give us limited data generated in a fixed time period, we choose to get the user's comment from The Verge in which each comment is from the topic matches our keyword. This will give us enough comments data belong to our keyword.

3. DATA COLLECTION

We collected related tweets by running our program and setting the maximize tweets to 5000 so that we can get 5000 tweets for each Operating System keyword. Here, our keyword is iOS 6, Jellybean, Windows Phone 8 and BlackBerry 10. We also use another keyword list iOS, Android, Windows Phone BlackBerry to generate another data list for general popular analysis. Getting data from The Verge's comment is not as simple as from Twitter since we don't have exist API to use. Our method include two part. Firstly, we use google's search API as a web crawler by which we can get the recent article matches our OS keyword and save it in our url data structure. We also saved the article's publish date and comment count to the data structure. Secondly,

we use the article url extract from before to get all of the comments. Since The Verge uses AJAX to dynamically refresh its comments list as users page down to read, we cannot get data from html source directly. However, we find each time the page refresh comments list, it will send a request to The Verge's comment data server and get the comment data in JSON form. From our inspection, we find there exist a comments entry list id by which the page uses to send such id to the data server. By simulating this process, we can get data from the comments and save it in our comments data structure.

4. ANALYTICS

We uses several ways to do the analytics as the figures showed on our presentation slide. Firstly, we compare the total number of data from The Verge and Twitter to answer why we want to choose The Verge as our data source. Secondly, we count the tweets per second to find the most popular Operating System in twitter. Thirdly, we compared each OS's positive and negative tweets. From above we conclude that the data extracted from twitter has many limitations so we choose The Verge as our main sources in the following analysis. Fourthly, we compare the comment trend of each OS in recent 12 months. We find that the comment peak of each OS is around the released date. Fifthly, we compare the total comments of each OS and find that iOS is the most popular Operating System in the market. Sixthly, we compared each OS's positive and negative comments but it is hardly to say which OS is the best. However, it gives us the information that BlackBerry has no completely different with others OS that makes people like or hate. Seventhly, We compare the frequency of keyword mentioned other OS in each OS's comments and we find that iOS and Android are the most popular OS in the market. Eighthly, we compare each brand and find that Apple and Google is the most popular brand in the market. At last, we count the keyword related to our topic and find what people care about most.

5. CONCLUSION

Can BlackBerry 10 success in the future? We answer that BlackBerry 10 is a start in the right direction but a long path to cover. It do attract some attentions from user and has some good features, however, considering the popular of iOS and Android, There has lots of things to do. It needs to keep update

its platform frequently. It needs to find a way to transition its users and developers away from old one to one that is still unproven. It needs to ensure to give users a full ecosystem of apps, music, movies, and content on this new platform. It needs to find ways to keep even its most loyal customers in the face of bigger competition.