

# Identifying Influencers of Products by using Social Media Analytics

S. Surya Kumari, G. Anjan Babu  
Sri Venkateswara University,  
Tirupati

**Abstract:-** Social Networks has become a supervised platform to communicate with customers directly now a days, Facebook and Twitter stood on top of the ranks of social networking sites. This paper focused on analyzing two famous brands i.e., Microsoft and Apple data in two different social networks i.e., Facebook and Twitter by generating its reports by using social analytical tools, and also discussed about how to extract the information of influencers who are frequently posting, communicating and actively participating in sharing the information of the brands which are producing different products. Finally made some conclusion by comparing and contrasting the reports of two famous brands versus two familiar social networks.

**Keywords—** SMA, SNS, Apple, Microsoft

## I. INTRODUCTION

### A. Social Networking Sites[SNS]

The Social Networks playing an important role in present communication and interaction. The Social Network is a platform which providing the sharing of information through the connections with their friends [1]. The SNS have emerged as a powerful and effective means for people to not only link and get linked but to use these services as effectively as possible. SNS groups' people get in touch with people they have lost touch with. They also help people to stay in touch despite their geographical distances.

As said by Miles Walker, the social networking began in 1978 with "Bulletin Board System [BBS]". Later the very first copies of web browsers were distributed using the bulletin board "Usenet". The difference between Usenet and other BBS and forums was that it didn't have a dedicated administrator or central server; these are modern forums that use the same idea as Usenet today, including Yahoo groups and Google groups [2].

The first version of instant messaging came in 1988. It was used for link and file sharing. The first social networking site on the internet, launching its website in 1994. In 1995 theGlobe.com was launched, two years later in 1997, AOL instant messenger and SixDegrees.com was launched. Friendster was the pioneer of social networking. Later websites like classmates.com, LinkedIn and Tribe.net started. Facebook was launched in 2004 with intent to connect U.S. College students; In 2008 FB surpassed myspace and the leading social networking websites [4].

TABLE I

Website	URL	Registered Users
Facebook	www.facebook.com	900,000,000
Twitter	www.twitter.com	310,000,000
LinkedIn	www.linkedin.com	255,000,000
Pinterest	www.pinterest.com	250,000,000
Google Plus+	www.plus.google.com	120,000,000

The top 5 most popular SNS as on July-2014 as derived from the website eBizMBA which is a continually updated average of each websites shown in Table I [3]. In this paper, the top 2 social networking site fan pages has been taken to analysis the data of two famous brands.

Twitter is an important tool that can influence the user to get attract for a company and its products. Twitter makes an easy way to group users and communicate with the company directly. For a Company, grouping the audience who always had a positive opinion about its product helps in targeting the Positive audience. In Twitter, a user can follow many users and many users are in his following list. If the user post or share his status on twitter called as a 'Tweet', that can be shared by other users as their status. So an internal tree process will be done and the user have no idea how his/her tweet generates lots of 'Retweets'. An user with positive opinion can influence more than ten users with his/her tweets, so grouping the positive/negative users of social media can be done by using some simple clustering process. Accessing a twitter API datasets is a very simple process as compared to other social media datasets.

Facebook is a well known social networking service and website provides successful way of communicating/selling, real time communication of offers, establish relationship with customers, display evolution of brand/product, boosts up with increasing sales. Facebook Fan Pages helps in communication of consumer-to-customer and grouping customers so that the feedbacks of the customer directly reaches to the infrastructure people.

### B. Social Media Analytics[SMA]

The term "Social Media" groups a wide range of online activities, Blogs, Company discussion boards, Chats, Service rating websites and Micro-blogs etc., The main objective of social media is to maintain relationships,

conversations, sharing of opinions, getting relevant information through online activities.

“Social Media Analytics”(SMA) is a powerful tool related to constructing, forming Machinery tools and frameworks to gather, understand and process social media data[4]... to extract useful information of a particular product/service. The Reasons behind choosing SMA to promote your Product / Service.

- Social Networking is the biggest online activity, become the daily activity of adults.
- Makes an easy way to Grouping of customers through online.
- Sharing of information about the Product / Service is easy and fast.
- Provides an easy way of gathering and reviewing the feedbacks of a particular Product / Service.

The Social media platforms like Twitter, Facebook came with effective utilities to share, communicate with hundreds and thousands of people at a time. Often the user use these platforms to share their opinion with different consumer products and services. Such Customer-to-Consumer communication provided by social media can impact many company's reputation and sales. Many organizations have official facebook pages and twitter accounts where consumers interacts with representatives of the organizations directly. Collecting feedback of customer through social media is a famous feedback gathering technique [5]. These techniques not only helps in collecting the feedback of customers but also to gather the information of the positive users of that product, so that we can map the locations of the customers and grouping the customers can help in attract more users of the product.

## II. METHODOLOGY

### A. Analysing Product Features

In this paper, two brands data i.e., Microsoft and Apple, both from twitter and facebook has been taken separately. The twitter account of Microsoft contains 6,418,772 followers and Apple contains 101,414 followers. The fan page of facebook for Microsoft contains 6.6 Million liked users and for Apple Mini Store, it contains 50000 users who r following the fan pages. In each page of the Brands, it contains its product details and the latest versions of its products, posts, likes, comments and shares of the postings etc.,

Simplymeasured is a website that provides social analytic tools to generate reports of fan pages, profile pages of facebook, reports of twitter id follower analysis etc., By using social analytic tools[6], we generated some reports of Microsoft and Apple by considering 15 days transactions of each social network data i.e., facebook and twitter data of Microsoft and Apple.

Figure-1 represents , 32 posts about Microsoft products has been shared on facebook, the posts got 3463 likes i.e., 108 per post, 126 comments i.e., 4 per post, 222 shares i.e., 7 per post is the total engagement of audience of Microsoft

on facebook. From the total posts, top 10 users of the Microsoft has been grouped according to their shares, likes and comments as shown in Figure-2. In the similar way, the follower analysis of Microsoft is done by using tweets in between the period of 15 days. 10706 were posted on the twitter page of Microsoft, more than 10000 followers posted in this report with average of 618 audience of total followers has been shown in Figure-3. Since the brand contains many products that may related to music, technology, business etc., so, the followers are responded to many topics related to Microsoft. The frequent followers who are posting about brand/product frequently can influence many people and the list of influencers along with their twitter id has been shown in Figure-4.

The same process is applied to Apple, here Apple mini store data of Egypt has been taken to analyze the data. Figure-5 represents Facebook analysis of Apple products, a total of 11 posts were made on the wall of Apple store page and it got 484 likes, 34 comments and 18 shares and the average audience found as 51, which is equal to 0.1 percent of total audience. Since we applied the analysis process for small data and that too for small period, so we unable to get the total engagement report but from the active audience, but top 10 frequent followers list has been derived as shown in the Figure-6. From Figure-7, 22 tweets about Apple products were made in the period of 15 days and average audience of 1605 members followed the tweets, it is equal to 0.2 times a day of average of the audience tweets and the list of influential followers has been shown in Figure-8.

A fifteen days engagement of the posts that are shared and engaged and the overall comparison of brands Microsoft, Apple On social networks Facebook, Twitter has been represented in Table-II.

## III. CONCLUSION

This paper specifies the analysis of a particular brand/product by using social analytic tools. For an organization/company it is very much needed to know how the features of its products satisfying the users, social network is the best platform to communicate and get feedbacks of the users by using the fan pages, followers posts etc., In this, we generated two Product based company/brand reports by using its twitter id and facebook fan page address by using social analytic tools. The top 10 users list of influencers who are frequently posting on the pages of Microsoft and Apple has been analyzed so that it makes an easy way of identifying the targeted audience which helps in promoting and increasing the sales of product/service. From the information of Table-I, if we compare the usage levels of the users of Microsoft and Apple, the reports that are draft from Facebook data giving more information than the reports that we got from Twitter data since grouping the influencers of facebook fan pages according to likes, comments and shares makes more easy understanding than the Twitter follower analysis report.

IV. REFERENCES

- [1] Na Shi, Matthe K.O.Lee, Christy M.K.Cheung and Huaping Chen, "The Continuance of Online Social Networks: How to keep people using Facebook?," Proceedings of the 43<sup>rd</sup> Hawaii International Conference on System Sciences(HICSS)-2010, IEEE Computer Society, pp. 1-10, doi:10.1109/HICSS.2010.369.
- [2] The History of Social Networking - Miles Walker <http://www.webmasterview.com/2011/08/social-networking-history>
- [3] Top 5 most popular Social Networking Sites, [www.ebizmba.com](http://www.ebizmba.com)
- [4] Weiguo Fan and Michael D.Gordon, "Unveiling the Power of Social Media Analytics", University of Michigan, Ann Arbor, Forthcoming at Communications of the ACM.
- [5] Sumit Bhatia, Jingxuan Li, Wei Peng and Tong Sun, " Monitoring and Analyzing Customer Feedback Through Social Media Platforms for Identifying and Remediating Customer Problems", IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining-2013.
- [6] Simplymeasured website address
- [7] , [www.simplymeasured.com](http://www.simplymeasured.com)

TABLE-II

	Microsoft			Apple		
	Posts	Average Audience	Total Users	Posts	Average Audience	Total Users
Facebook	32	4020	6.6 Million	11	51	50000
Twitter	10706	618	6.4 Million	22	1605	1.1 Million

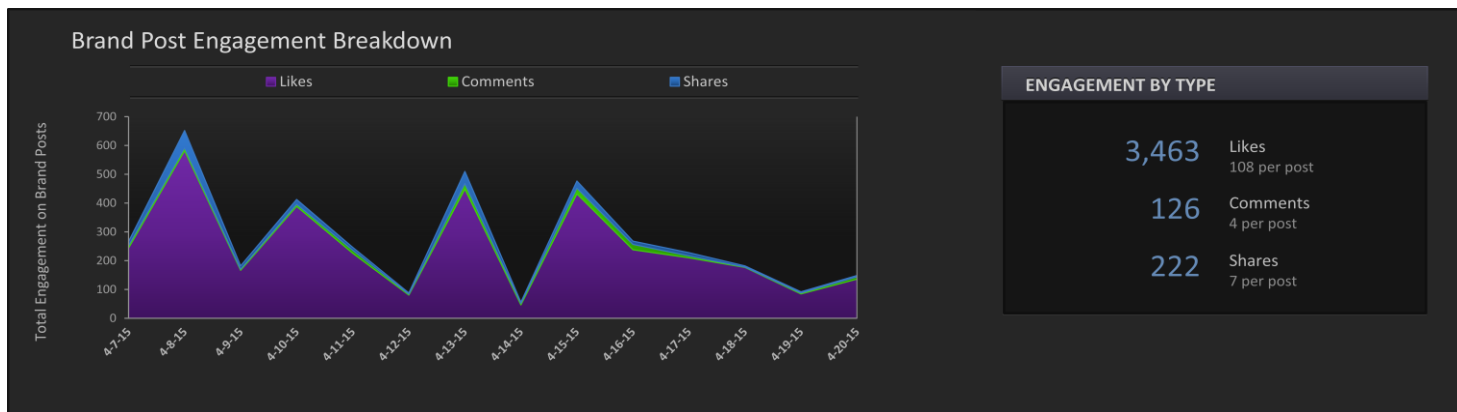


Figure-1. Facebook fan page analysis of Microsoft

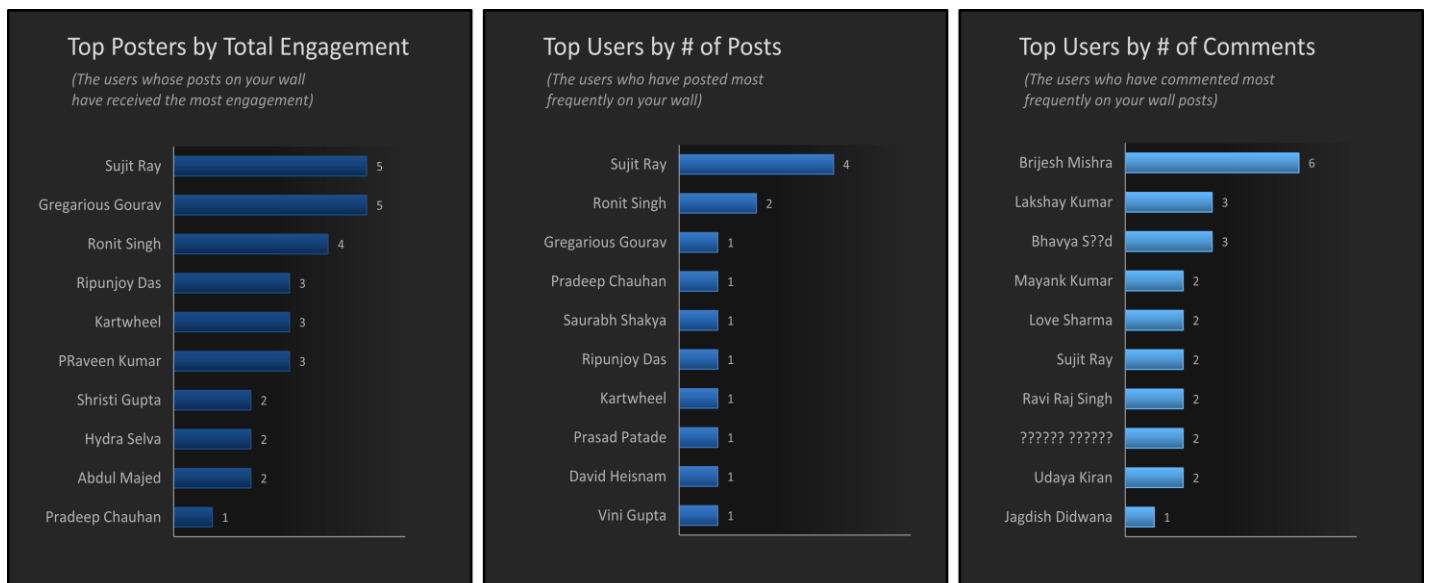


Figure-2. Top 10 frequent users of Microsoft

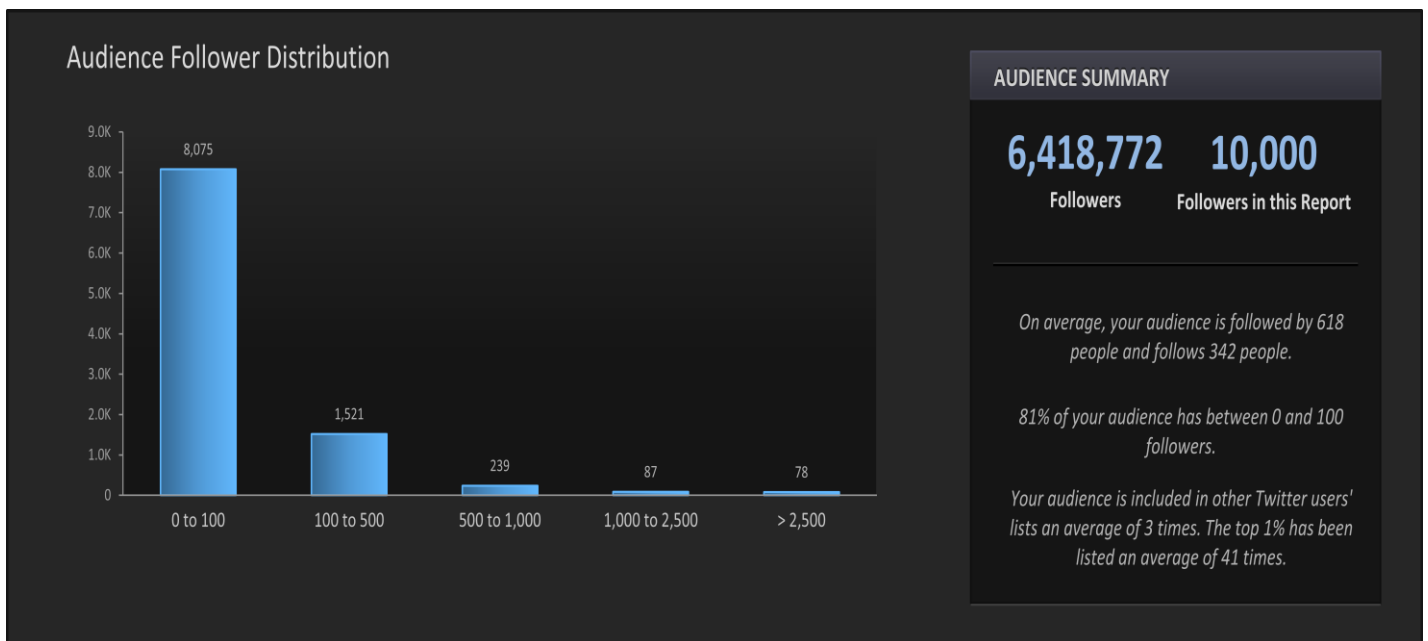


Figure-3. Twitter follower analysis of Microsoft

Username	Followers	Following	Followers-to-Following	Tweets	Listed
<u>gucci1017</u>	2,232,401	2,307	967.7	11,196	6,133
<u>SciencePorn</u>	1,565,025	19,540	80.1	4,928	9,307
<u>sharonleal17</u>	162,503	8,868	18.3	2,453	201
<u>contrariansmind</u>	143,856	80,926	1.8	21,756	692
<u>HybridVigorFilm</u>	133,839	47,354	2.8	25,215	941
<u>Netizen Online</u>	106,232	1,429	74.3	486	2
<u>R99pc</u>	92,105	4,434	20.8	37	4
<u>ConcPowell</u>	62,788	8,561	7.3	4,256	21
<u>KevinKNIGHT13</u>	56,569	58,610	1.0	11,536	141
<u>NINJYA</u>	47,239	28,231	1.7	17,677	74
<u>Calligraphy1</u>	46,268	13,854	3.3	4,149	107
<u>harry_bond008</u>	41,124	27,336	1.5	27,967	59
<u>WilliamTCooper</u>	39,541	35,014	1.1	13,788	375
<u>CAKE_BOSS_PANDA</u>	31,413	1,054	29.8	370	0
<u>KingFlame1993</u>	31,386	6,293	5.0	213	9
<u>affordablehome</u>	31,060	8,021	3.9	9,446	72
<u>FAirdate</u>	30,813	110	280.1	118,956	521
<u>positivehydr8n</u>	30,292	484	62.6	18,361	123
<u>upticknewswire</u>	28,709	3,399	8.4	2,052	12
<u>3wsocial</u>	22,441	10,247	2.2	1,447	55

Figure-4. Influential followers of Microsoft

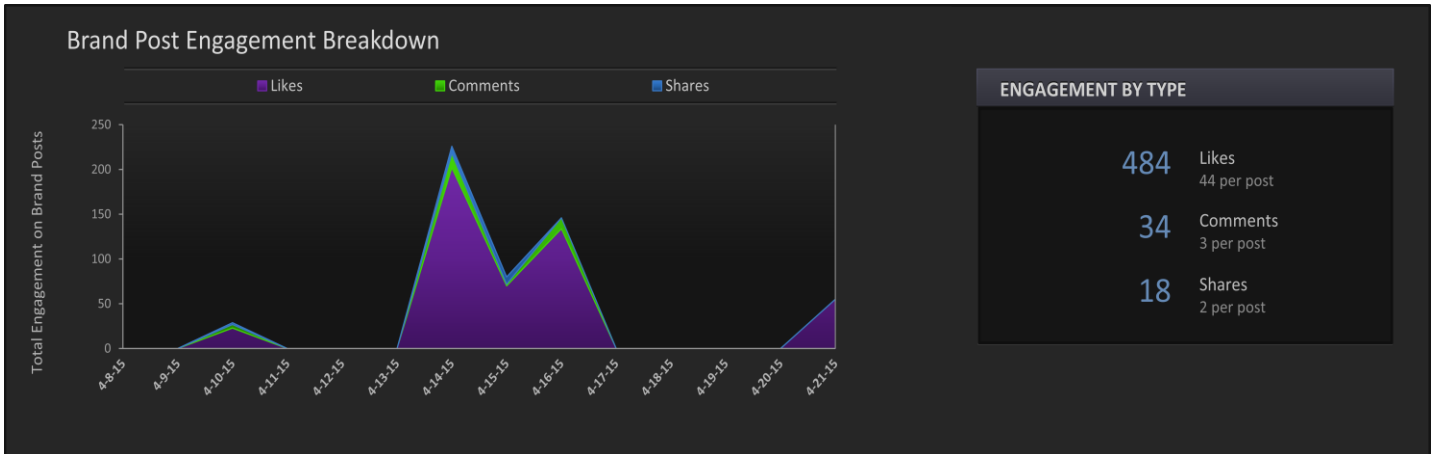


Figure-5. Facebook fan page analysis of Apple Mini Store

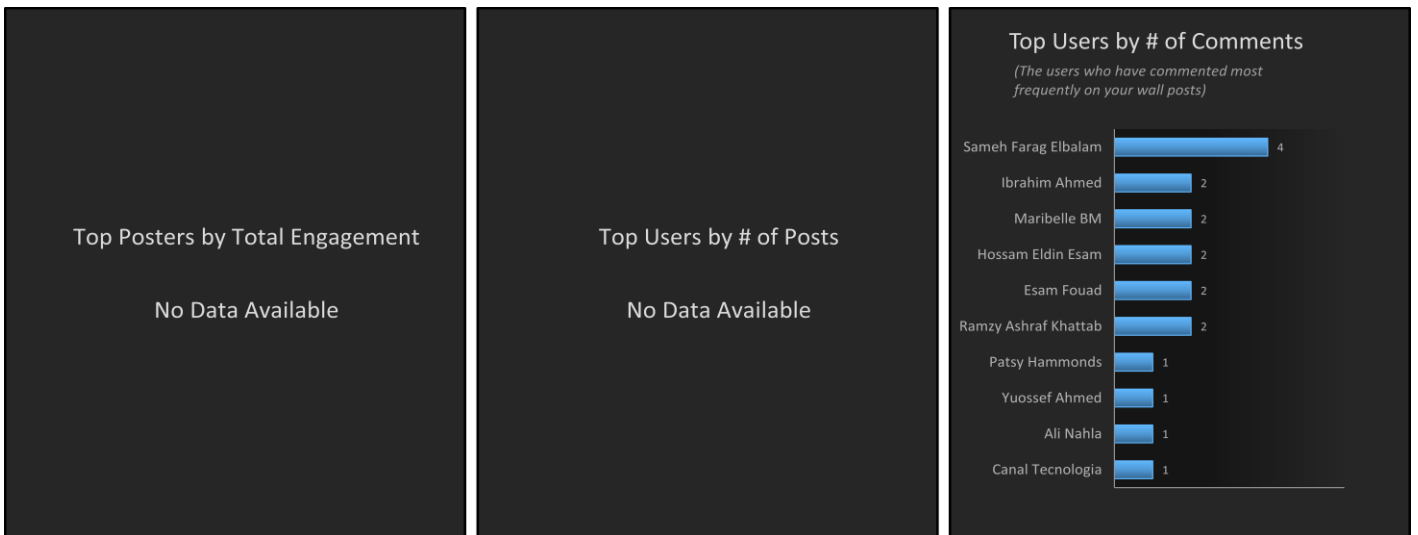


Figure-6. Top 10 frequent users of Apple Mini Store

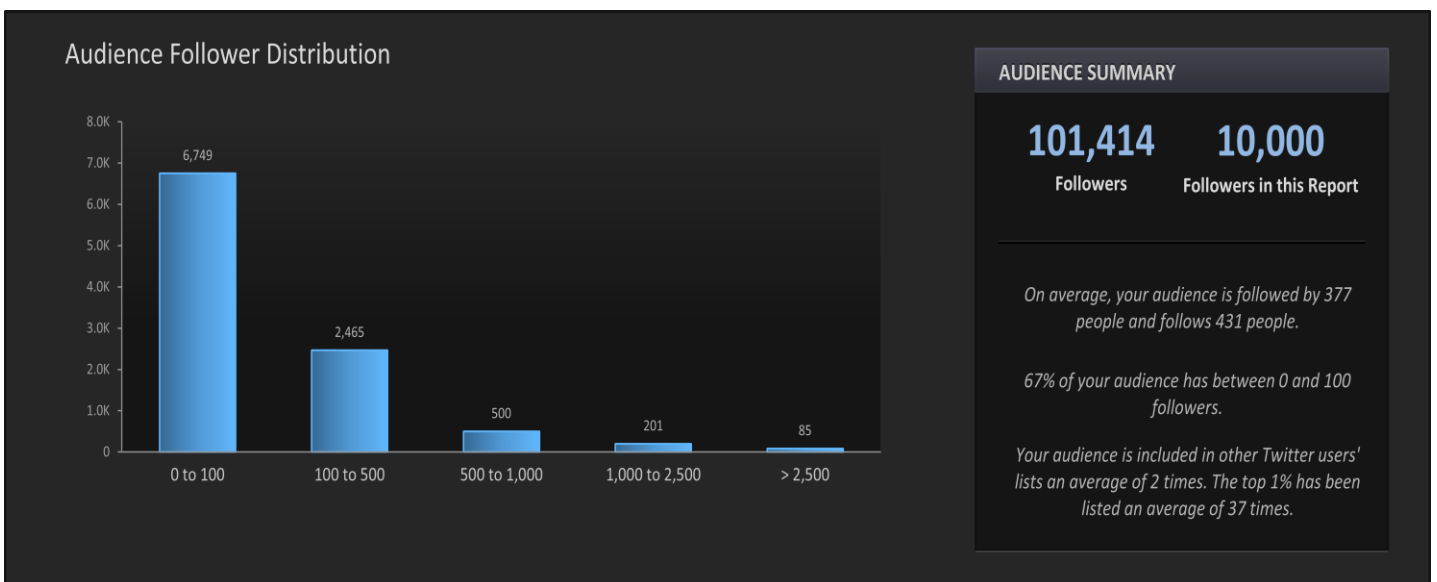


Figure-7. Twitter follower analysis of Apple

Username	Followers	Following	Followers-to-Following	Tweets	Listed
<u>GodsKid504</u>	684,311	141,654	4.8	943,882	20
<u>Tegnologist</u>	246,550	3,075	80.2	8,062	316
<u>lilktrigga</u>	213,357	5,875	36.3	5,089	34
<u>ChrisCaggs</u>	180,728	67,638	2.7	3,481	89
<u>AppAdapt</u>	174,504	187,151	0.9	1,747	625
<u>Jim Jim 24</u>	115,501	305	378.7	11,018	11
<u>chipbully1</u>	91,984	28,206	3.3	7,528	51
<u>CronikYT</u>	48,743	2,863	17.0	1,619	15
<u>OliverChristie</u>	33,743	23,845	1.4	781	82
<u>BettyFellows</u>	32,763	79	414.7	3,189	1,070
<u>CJamesMedia</u>	30,533	3,031	10.1	4,317	35
<u>michael_rava</u>	26,686	29,353	0.9	3,318	97
<u>Ahmed_Radwan_</u>	23,437	9,094	2.6	298	13
<u>coach_jeffscott</u>	23,269	1,495	15.6	3,134	136
<u>Go2TechNews</u>	19,733	14	1,409.5	54	0
<u>ariinss</u>	19,164	19,743	1.0	12,846	99
<u>CrissCerdeira</u>	15,086	791	19.1	95	2
<u>ShoeShinr</u>	14,440	173	83.5	403	0
<u>Negocios Verdes</u>	14,246	1,224	11.6	4,021	317
<u>DJJDub MMI300</u>	14,239	3,907	3.6	77,801	79

Figure-8. Influential followers of Apple