Library Philosophy and Practice (e-journal)   Libraries at University of Nebraska-Lincoln

2019

COMPARATIVE ANALYSIS OF TWITTER ANALYTICS OF IFLA AND OCLC TWEETS USING UNION METRICS TWEET REACH ONLINE TOOL – A PILOT STUDY

Stephen G
stephenlisp@gmail.com

COMPARATIVE ANALYSIS OF TWITTER ANALYTICS OF IFLA AND OCLC TWEETS USING UNION METRICS TWEET REACH ONLINE TOOL – A PILOT STUDY

Dr.G.Stephen,
Assistant Librarian,
NIELIT – Itanagar Centre,
Arunachal Pradesh, India.
stephenlisp@gmail.com

Abstract

Twitter Analytics provides information that can help create meaningful tweets that will resonate with the target audience. Many businesses and professionals use Twitter to connect with and connect with their customers and colleagues. Benefits of Twitter include reaching out to a wider audience and enabling two-way communication with customers and followers. The loss involves possible negative feedback. All Twitter users can get a detailed report on their followers and personalized tweets, including impressions, clicks and engagement. This pilot study conducts to know the library and science professional association of IFLA and OCLC (OCLC is a global library cooperative that provides shared technology services, original research and community programs for its membership and the library community at large) how to reach the world wide via twitter, to find the reach among the LIS professionals, number of following / followers, Tweets, retweets, reply activity and impressions of previous 100 tweets using the Union Metric Tweet reach online Tool.

Keywords: *Twitter, @IFLA, @OCLC, Tweet reach, Tweet Impression, Retweeted Tweets, exposure, contributors*

Introduction

Twitter is an American online news and social networking service on which users post and chat with messages known as "tweets". Tweets were originally restricted to 140 characters, but on November 7, 2017, this limit was 280 for all languages except Chinese, Japanese and Korean. Registered users can post, like, and retweet the tweets, but unregistered users can only read them. Users access Twitter via their website interface through Short Message Service (SMS) or its mobile-device application software ("App"). Twitter, Inc. Located in San Francisco, California, and has more than 25 offices worldwide. Twitter is an online news and social networking site where people tweet in small messages. Tweeting is posting short messages for you to follow someone on Twitter, with the hope that your messages are useful and interesting to anyone in your audience. Another description of twitter and tweets can be microblogging.

Twitter is a treasure of information. Many organizations and users tweet links to interesting articles or new information and the site can be a great tool to broaden your

understanding of the world for young people. It's difficult to get down for specific reasons for Twitter's success, but there are some things that have contributed to the creation of a huge user base of more than 500 million people worldwide.

Traditionally, celebrities and other well-known people were kept away from "ordinary" people. But now, many high profile people are using Twitter. It gives information about what people have said and access to, and in a celebrity era, it makes Twitter very popular with the youth. Even though the young people are naturally born multicellular, Twitter is popular because it lives in the modern, face-to-face world, as mentioned, tweets fly around in cyberspace and youth likes it Because they can connect with it. Wherever they are, ever changing online world. But most of all, Twitter is popular because it is easy to use, easy to install and it is quite addictive.

Tweet Analytics

Twitter Analytics is a detailed report on their followers and individual tweets, including impressions, clicks, and engagement, replies, favorites, retweets and more. Twitter engagement refers to the retweets, follows, replies, favorites, and click-through user tweets get -- including the hashtags and links those tweets include. Twitter Impressions are the number of times a tweet appears in a user's timeline. A tweet's impressions are not limited to, users who follow the user, but this number also doesn't filter based on who has interacted with the tweet. Impressions are not to be confused with reach. Tweet Activity is a section of user Twitter Analytics dashboard that allows user to see various metrics related to user tweets' performance in chart form. User can see Tweet Activity for all of user tweets over a set time period, or for a specific tweet since it was published. Some notable tweet analytics views are below

- Search Query – Analyze any hashtags, accounts or keywords
- Reach – The number of potential unique Twitter accounts that received these Tweets
- Exposure – The total number of potential impressions
- Tweet Activity – Overview of the Tweet volume over time
- Tweet Type – Breakdown of the types of Tweets in the report
- Top Contributors – The top three influences in this snapshot
- Top Tweets – The three Tweets that received the most retweets
- Contributors List – Overview of all participants
- Tweets Timeline – A full transcript of all Tweets with timestamps

About IFLA and OCLC

The International Federation of Library Associations and Institutions (IFLA) is a major international body representing the library and information services and the interests of their users. This is the global voice of the library and information profession. IFLA is an independent, international, non-governmental, non-profit organization. IFLA handles Twitter account as @IFLA. The objectives of the IFLA are:

- ➢ Promote high standards of provision and delivery of library and information services.
- ➢ Encourage widespread understanding of the value of good library & information services.
- ➢ Represent the interests of our members throughout the world.

Figure 1. Screenshot of IFLA Twitter Home page

OCLC Online Computer Library Center, Incorporated OCLC is an American non-profit cooperative organization "dedicated to the public objectives of pushing access to information about the world and reducing information costs". It was founded in 1967 as the Ohio College Library Center. OCLC and its member libraries cooperate and maintain WorldCat's largest online public access catalog (OPAC) in the world. OCLC is primarily funded by the fee which libraries have to pay for their services (approximately $ 200 million annually as 2016).

Figure 2. Screenshot of OCLC Twitter Home page

OCLC also maintains the dewey decimal classification system. OCLC is a global library cooperative, which provides shared research services, basic research and community programs

for its membership and large-scale library community. We are librarians, technologists, researchers, pioneers, leaders and learners. With thousands of library members in more than 100 countries, we come together as OCLC to make information more accessible and more useful. Whether OCLC supports advances on the leading edge of science or helps children to form a strong learning foundation, common knowledge is common thread. People can find the answers needed to solve important problems in their lives, in their communities and in the world. Together, OCLC makes successes possible. Both big and small OCLC joined in April 2009 and retained an account on Twitter micro blogging as the user name of @OCLC.

Review of Literature

Sultan M. Al-Dahani, Suha A. Al Awadi, (2015) concludes that academic libraries used Twitter as a multilateral tool. The "News and Announcements" received the highest score as a type of information posted on Twitter by the library, followed by "Library Collection" and "Library Services". The subcategories receiving the most points were "library marketing and news", "answers and referrals" and "books". Academic libraries have shown a picture to post links more often than other content. Other results show different patterns of communication and interaction between libraries and their Twitter followers.

An advanced method was used by Jahanbakh, K., and Moon, Y (2014) because an advanced classifier was employed for the emotion analysis "The Letter Decline Allocation Model", in which the words in one subject were generated There are possibilities to do; First, the inherent topical structure was removed from the tweets; Second, 32 million tweets were analyzed to predict the 2012 US presidential election.

According to natural language processing (NLP) interaction between computer and human (natural) languages is. Effective emotion annotations should be used to evaluate the feeling of users online, especially on Twitter. Most studies use three general quote labels: positive, neutral and negative. In Saif, H., Fernandez, M., and Alaini, H (2013), the new feature was used to effectively empower the users; "Mixed sentiment label", it exists in tweets that have two different meanings. For example, "I like the iPhone a lot, but I hate the iPad". The "IPhone" unit has been annotated with positive expressions, and the "iPad" unit is annotated with the negative emotion label, which means that tweets have mixed emotions.

Woo, S., Hoffman, J.M., Mason, W., & Watts, DJ (2011) and Quack, H., Lee, C., and Park, H. (2010) agreed to identify effective users by ranking users, using the number of followers, PageRank, and retweet rate. Was employed by additional method, studying the response effect metric and identifying the number of answers to the original tweets. In addition to analyzing network-topology, Jahanbakhsh, K., & Moon, Y. (2014) the authors examined another methodology by analyzing the number of tweets, the date of join, and the previous history of influential users.

Objectives

This pilot study expressed IFLA and OCLC most recent 100 Tweets and its quick insight with the following objectives.

- To know the total number of tweets, followers, photos, images in the Twitter account.
- To find out the estimated overall reach tweets.
- To examine out the exposure number of overall impressions generated by tweets.
- To identify the activity of the last of hundred tweets.
- To know the top contributors like highest exposure, most retweeted and most mentioned
- To analyze the most retweeted tweets and contributors.

Methodology

Union Metrics TweetReach is a free reporting tool that allows user to see how far user tweets and hashtags have traveled and who's engaged with them. User can also get "snapshot" reports of any user, hashtag, or tweets with certain keywords in them so users can understand what's being talked about in the user industry in real time. Researcher using this tool with @OCLC twitter account username in the tweet reach tool on March 06th of 2019 and collected the snapshot report and tabulated presented in this pilot study.

Data Analysis and Interpretation

The usual data available in the Twitter portal are available as a user name of @IFLA for IFLA and @OCLC for OCLC. Total tweets according to a March 6 (2019), 2870 (IFLA) and 11.7k (OCLC), which is almost five times higher than IFLA. Following the 363 twitter account after the follow-up category IFLA and 993 after the Twitter account OCLC which is compared to IFLA three times. 24.1k Followers are following IFLA and 27.4k followers are following OCLC only three thousand more to follow IFLA. IFLA got 806 likes from them, 1119 photos and videos shared by IFLA in Twitter account. But OCLC received from them 1889 likes, 3584 photos and videos are shared by the OCLC in the twitter accounts.

S.N	Item	IFLA	OCLC
1	User Name	@IFLA	@OCLC
2	Tweets	2870	11.7k
3	Following	363	993
4	Followers	24.1k	27.4k
5	Likes	806	1889
6	List	Nil	2
7	Photos & Videos	1119	3584
8	Link	https://www.ifla.org	https://www.oclc.org

Table 1 : General Data about OCLC Tweeter account

Estimated Reach and Exposure

Estimated reach means the overall reach of tweets. According to this report of estimated overall account reaching @IFLA Tweets, 114,195 and @OCLC Tweets are 253, 778 which is twice as compared with IFLA. The number of overall impressions generated by exposure tweets is the total number of time tweets was provided to the deadline (including repetition). This graph breaks down how many Tweets were sent by IFLA and OCLC and how many followers. The number of overall impressions generated by Exposure 150,034 (IFLA) and 1,010,588 (OCLC) tweets is IFLA out of the latest 100 tweets IFLA has sent 15 Tweets compared to 100 Followers, 54 Tweets less than 1000 Tweets, 30 Tweets with fewer than 10 thousand followers and there is a shortage of tweeters after one. The latest 100 Tweets about OCLC 17 Tweets, followers of less than 100, followers of 29 Tweets, less than 1,000 followers, 26 Tweets are less than 10 thousand followers and there is a lack of followers lacking only one tweet.
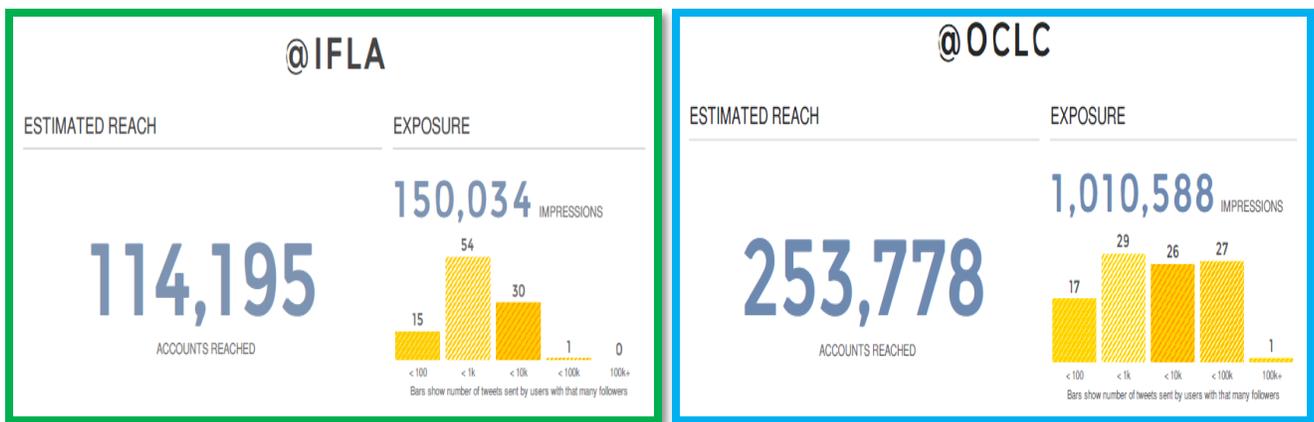

Figure 3: Estimated Reach and Exposure of IFLA and OCLC

S.N	Item	@IFLA	@OCLC
1	Estimated Reach	114,195	253,778
2	Exposure	150,034	1,010,588
3	< 100	15	17
4	< 1k	54	29
5	< 10k	30	26
6	100k	1	27
7	100K+	0	1

Table 2 : Estimated Reach and Exposure of IFLA and OCLC

Activity

The total number of tweets in the activity and details about tweets including unique contributors has been provided, along with the breakdown of a graphical timeline and tweet type showing the amount of tweets during the last 100 tweets, the time duration of the last 100 tweets. The IFLA's last 100 tweets include 89 unique contributors from 4 March to 6 March 2019, three

days of IFLA tweets. Out of 100 Tweets, 12 Tweets, 86 retweets, and only 2 replies. The OCLC's last 100 Tweets include three days from March 4 to March 6, 2019; 53 unique contributors to OCLC Tweets are included. Out of 100 tweets, 34 tweets, 60 are retweets, and only 6 replies.

S.N	Activity	@IFLA	@OCLC
1	Contributors	89	53
2	Tweets	12	34
3	Re tweets	86	60
4	Replies	2	6

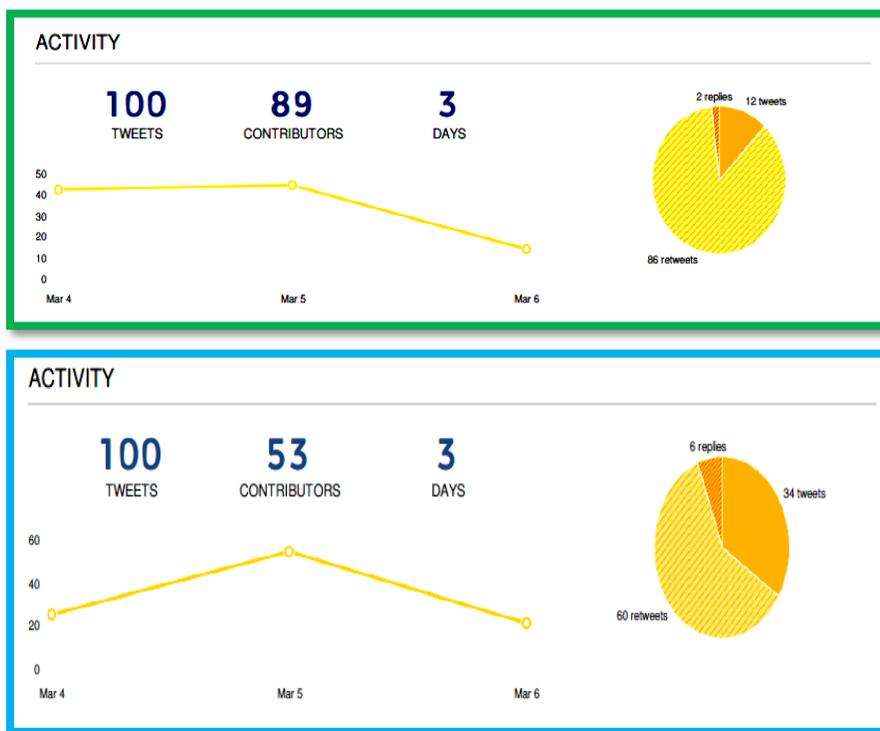*Table 3 : Activity of @IFLA and @OCLC*

Figure 4,5 : Activity of @IFLA and @OCLC

Top Contributors and Most Retweeted Tweets

To join this section, a person has to tweet at least once. The top three contributors are the highest exposure (Contributors who generated the highest exposure with direct impact), Most retweets (the most frequently received contributor and most mentioned contributor) that was according to this pilot study. @IFLA Top Contributions affected @DanzadanceOrg with 22.8k impressions, @GPSalmeron got 10 retweets and 19 times @GPSalmeron was mentioned. In OCLC top contribution impressed by @OCLC with 711.6k impressions, @OCLC received 50 retweets and 71 times are mentioned @OCLC.

Concerning about most Retweeted Tweets including retweet count for each tweet. This includes both new style automatic retweets and old style manual returns that start with RT @Username".
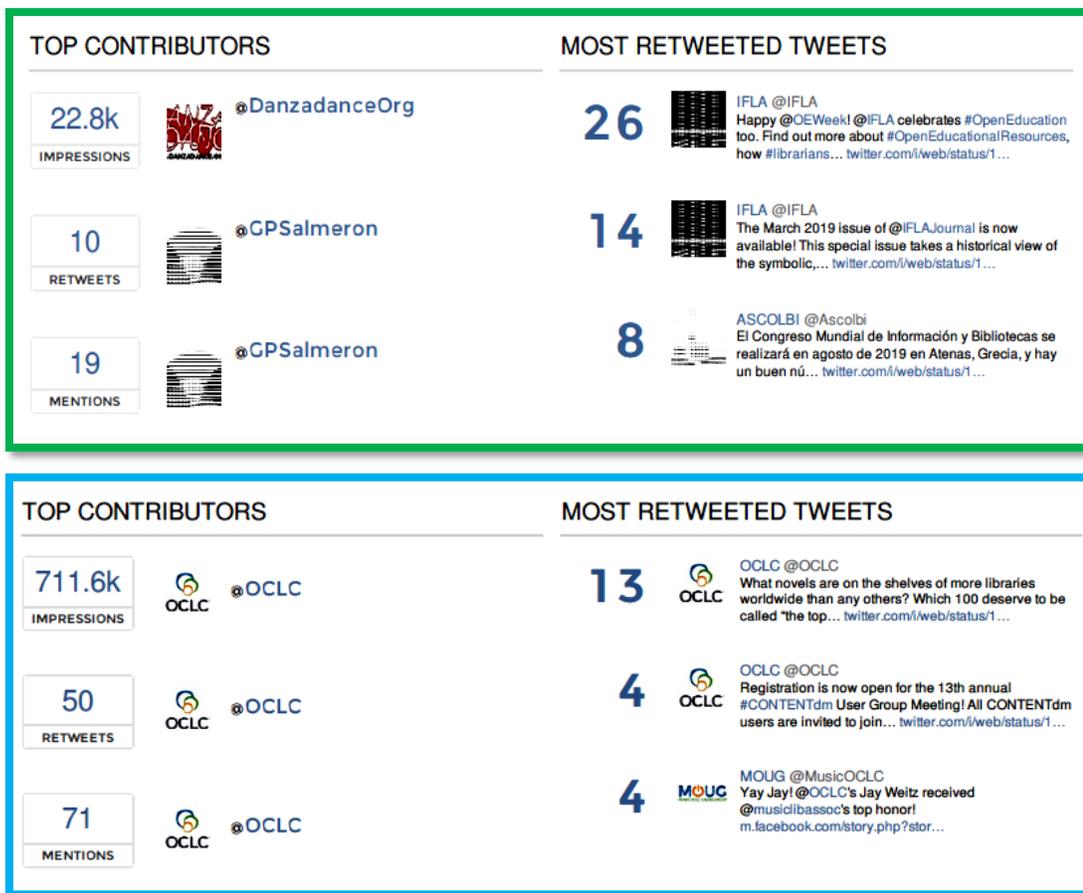

Figure 6,7: Top Contributors and Most Retweeted Tweets of @IFLA and @OCLC

List of Contributors

A complete list of all the contributors (participants) in which they posted how many tweets, how many retweets they received, and how many tweets were the raids generated by them. This list is ordered by impressions. Only tweets, RTs and impressions of the top 15 contributors are displayed in the table below for only 53 contributors for IFLA and 89 contributors for OCLC.

S.N	Contributors	Tweets	RTs	Impressions	Contributors	Tweets	RTs	Impressions
1	DanzadanceOrg	1	0	22.8k	OCLC	26	50	711.6k
2	GPSalmeron	3	10	14.8k	Richard_Florida	1	0	194.9k
3	fesabid	1	0	9.2k	alstarkey	7	0	23.6k
4	LISResearch	1	5	8.1k	Powerofthebrick	1	0	11.7k
5	kallmane	1	0	7k	WebJunction	1	0	6.6k

6	kimtairi	1	0	6k	OSUengineering	1	0	6.3k
7	infodocket	1	0	5.4k	tigranhaas	1	0	5.6k
8	agenda21culture	1	0	5.2k	txescu	2	0	5.3k
9	egiordanino	1	0	4.5k	bibliofernando	2	0	4.5k
10	SABCMediaLib	2	0	4.2k	xolotl	1	0	4.1k
11	CCBiblio	1	0	4k	agorathauma	1	0	3.5k
12	StabiHH	1	0	3.8k	OCLC_NL	3	0	3.4k
13	NSLA	2	0	3.4k	OCLC_FR	3	0	2.8k
14	lianzaoffice	1	0	3.3k	xabuci	4	0	2.7k
15	margymaclibrary	1	0	3.1k	BAnQ_milieuxdoc	1	2	2.4k

Tweets Timeline

This report can be filled with all the tweets, generating quick insight into the reverse chronological order (new FIR). This list included time stamps. The researcher showed the tweet timeline on the day of the study and only March 6
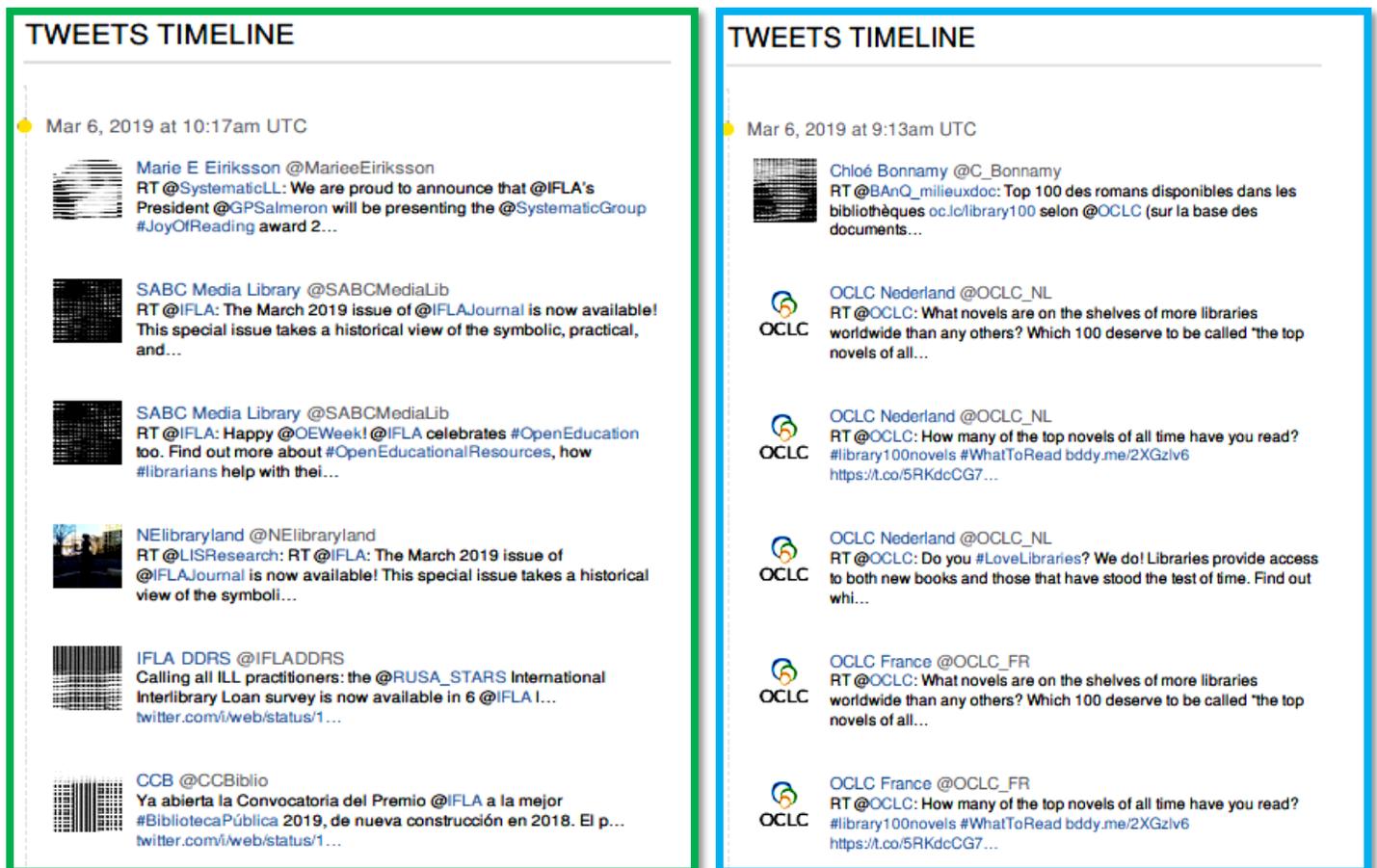

Figure 8,9: IFLA and OCLC Tweets Timeline on March 6th, 2019

Findings and suggestions

According to the March 6, 2019, In this study found 2870 (IFLA) and 11.7k (OCLC) total tweets, which is nearly five times higher than IFLA. Following follow-up category IFLA, 363 Twitter accounts and 993 Twitter account OCLC, which is compared to IFLA three times. 24.1k Followers are following IFLA and following 27.4k Followers OFL are only three thousand to follow IFLA. IFLA received 806 likes from them, 1119 photos and videos shared by IFLA in Twitter account. But OCLC got 1889 likes from them, 3584 pictures and videos shared in OCLC Twitter account. According to this report of the estimated overall account, @IFLA Tweets, 114,195 and @OCLC Tweets are reaching 253, 778, which is twice as compared to IFLA.

This study also found the number of total impressions generated by Exposure Tweets has been provided to the time frame of the total time tweets (including repetition). Number of total impressions generated by Exposure 150,034 (IFLA) and 1,010,588 (OCLC) Tweets. IFLA has 1,568 more than 100 followers, less than 1000 Tweets, less than 10 thousand, 30 Tweets are a follow-up and there is a lack of tweeter after one. OCLC 17 Tweets about the latest 100 Tweets, less than 100 followers, followers of 29 Tweets, less than 1,000 followers, 26 Tweets are less than 10 thousand followers and there is a lack of followers who lack only one tweet. IFLA's last 100 Tweets include 89 unique contributors from March 4 to March 6, 2019, three days of IFLA Tweets. 12 of the 100 tweets, 86 tweets, and only 2 replies.

This research also indicated the OCLC's last 100 tweets include three days from 4 March to 6 March 2019; OCLC Tweets have included 53 unique contributors. Out of 100 Tweets, 34 Tweets, 60 retweets, and only 6 replies. @IFLA's top contribution impressed @DanzadanceOrg with 22.8k impressions, @GPSalmeron was mentioned to @GPSalmeron 10 retweets and 19 times. Top contribution from @OCLC with 711.6k impressions in OCLC, @OCLC received 50 retweets and 71 times @OCLC was mentioned.

Comparative data (IFLA and OCLC followers are available for all Twitter as well as for viewers' groups), Tweet Engagement and Engagement Rate, Follower Growth, Event and Trending Topic Data Analysis can also analyze the @IFLA and @OCLC account in the future. Typically Twitter provides to analyze those details in the Twitter Analytics menu for a 28-day observation of recent months or cumulative impressions. Capitalize this information by replying to get the most impression tweets or tweeting on similar topics. Events and trending topics seek out upcoming holidays, events and recurring trends about data, and find out who tweets about them. This is a great way to find potential new content ideas and join the conversation.

Conclusion

Twitter is an incredibly powerful marketing and connecting tool for businesses and professionals. Twitter allows the professional to share updates and content quickly, as well as engages with current and potential followers on a forum that is praised for immediate use of

information. As important as Twitter's use of Twitter for businesses and professions to create a positive brand image and communicate with customers, Twitter, like any social media platform, allows Twitter businesses to influence consumers, does not control them. This means that businesses and professionals need to be on top of external engagement in erse Twitterverse, such as competing profiles and brand awareness, as well as internal Twitter metrics such as follower count and retweets. Twitter analytics is important, and knowing that finding the right conclusions from the data and finding it can be difficult.

Reference

1. Bastos, M. T., Travitzki, R., & Puschmann, C. (2012). What sticks with whom? Twitter follower- followee networks and news classification. Proceedings of 6th International AAAI Conference on Weblogs and Social Media—Workshop on the Potential of Social Media Tools and Data for Journalists in the News Media Industry
2. Bruns, A., & Stieglitz, S. (2013). Towards more systematic Twitter analysis: Metrics for tweeting activities. International Journal of Social Research Methodology, 16(2), 91-108.
3. Carnegie Mellon University. "Quarter of tweets not worth reading, Twitter users tell researchers." ScienceDaily.
4. Free Twitter analytics report. (n.d.). Retrieved from https://tweetreach.com/
5. Jahanbakhsh, K., & Moon, Y. (2014). The predictive power of social media: On the predictability of U.S presidential elections using Twitter. arXiv preprint arXiv: 1407.0622.
6. Krikorian, Raffi. (VP, Platform Engineering, Twitter Inc.). "New Tweets per second record, and how!" Twitter Official Blog.
7. Kumar, S., Morstatter, F., & Liu, H. (2014). Twitter Data Analytics. Springer, New York.
8. Kwak, H., Lee, C., & Park, H. (2010). What is twitter, a social network or a news media? Proceedings of the 19th International Conference on World Wide Web. Raleigh, North Carolina, USA
9. Natural language processing. (2019, May 25). Retrieved from https://en.wikipedia.org/wiki/Natural_language_processing
10. Natural language processing.From https://en.wikipedia.org/wiki/Natural_language_processing
11. Neethu M S, Rajasree R. Sentiment Analysis in Twitter using Machine Learning Techniques. IEEE 2013.
12. Sultan M. Al-Daihani, Suha A. AlAwadhi, (2015) "Exploring academic libraries' use of Twitter: a content analysis", The Electronic Library, Vol. 33 Issue: 6, pp.1002-1015.
13. Twitter Analytics. (n.d.). Retrieved from https://analytics.twitter.com/about
14. Twitter Engineering. "200 million Tweets per day." Twitter Official Blog. June 30, 2011.
15. Twitter. (2019, June 05). Retrieved from https://en.wikipedia.org/wiki/Twitter

16. Weil, Kevin. (VP of Product for Revenue and former big data engineer, Twitter Inc.). "Measuring Tweets." Twitter Official Blog.
17. Wu, S., Hofman, J. M., Mason, W. A., & Watts, D. J. (2011). Who says what to whom on twitter. Proceedings of the 20th International Conference on World Wide Web. ACM New York, NY, USA.
18. Ye, S., & Wu, F. (2013). Measuring message propagation and social influence on Twitter.com. International Journal of Communication Networks and Distributed System, 11(1), 59-76.