The Belt and Road Initiative: Analysis of Twitter Communication During Second Belt and Road Forum for International Cooperation

Nosharwan Arbab Abbasi¹, Dianlin Hunag² & Furqan Rao³

Abstract

China's Belt and Road Initiative (BRI), also known as One Belt, One Road (OBOR), was launched in 2013 by President Xi Jinping. BRI opens "gateway to opportunities" and establishes a new grand geopolitical strategy for regional development, international economic cooperation and new world order. To foster BRI, China hosted the second Belt and Road Forum for International Cooperation (BRF) in Beijing on 25-27 April 2019. New media tools including dedicated web pages and social media sources were utilised to promote the BRF 2019. Particularly, Twitter was used by government and media organizations to promote and share the proceedings of the event. Topics related to Belt and Road Initiative were trending on social media resulting in a wide reach and engagement. A large number of pertinent tweets appeared with trending hashtags such as #brf2019, #BeltandRoad and #BRI. Major contribution to this tweet activity came from politicians, government officials and media groups, This study analyses the trending hashtags #brf2019 and #BeltandRoad (N=20,727) on Twitter on the occasion of second BRF 2019 to understand the patterns of Twitter data. Specifically, this study attempts (1) to investigate how Twitter was used by media groups to promote the second Belt and Road Forum; (2) to identify top influencers to promote the second Belt and Road Forum; (3) to analyse overall sentiment towards the second Belt and Road Forum. The study follows mixed method for Social Media performance data by combining qualitative content analysis and sentimental analysis of tweets. All the tweets collected were publicly posted and were tracked using Twitter streaming API and Python programming language. For analysis, parameters such as; users, reach, impression, engagement, type of tweet, trending topics, source of tweets and main themes were analysed.

Keywords: Belt and Road Forum, Social Media, Twitter, Sentiment Analysis

¹ Assistant Professor, National University of Modern Languages (NUML), Islamabad. Email: abbasinosharwan@gmail.com

² Associate Professor, Communication University of China.

³ Head of Chinese News Service, Associated Press of Pakistan

Introduction

The Belt and Road Initiative (BRI), also known as One Belt One Road (一带一路), was proposed by China's President Xi Jinping. Initially, the concept of The Silk Road Economic Belt was pronounced by President Xi during his visit to Kazakhstan and later in his speech at the Indonesian parliament in 2013. This initiative was regarded as the most impressive strategy of China's opening policy and, therefore, included in Party Constitution at the 19th party Congress in 2017 and introduced into the 13th Five-Year Plan (2016-20) (Ohashi, 2018). BRI integrates new trade networks, free trade zones, new economic corridors, higher people-to-people connections, and increased diplomatic relations (Kozłowski, 2018). This network would significantly link China, Central Asia, Middle East, Russia, and Europe and will have significant contributions to the promotion of dialogue and cooperation between civilizations (Deqiang & Zhengrong, 2017).

For promoting BRI soft image, China hosted the first Belt and Road Forum for International Cooperation (BRF) in 2017, focusing on the new world order of information and communication. Second BRF was held in Beijing on April 25-27, 2019 that focused on opening new horizons for improved and high-quality belt and road cooperation. The keynote speech by President Xi emphasized global connectivity partnership and mutual understanding to work together for mutual benefits and win-win outcomes. In this regard, he detailed ambitious and solid measures such as building high-quality infrastructure, risk resilience, sustainability, price balancing, accessibility and inclusiveness. Delegates from over 150 countries and up to 90 international organizations participated in BRF 2019. There were around 40 head of the states who, as partners in BRI, actively participated in this initiative. Since its inception, BRI has undertaken large investments, infrastructure development and diplomatic cooperation. More than 150 countries signed BRI cooperation agreements with China in the period 2013-2019. Similarly, the trade volume among Belt and Road countries has jumped up to \$6 trillion along with \$90 billion Chinese investment in connection with BRI (Belt and Road Portal, 2019).

In addition, cooperation among BRI countries emphasizes cultural and academic exchanges as well as deeper media and youth collaborations. Media cooperation aimed at public diplomacy is an imperative for strengthening overall exchanges. Scholars concluded that media cooperation for belt and road initiatives has the potential to attract foreign media and active promotions (Ruihong, 2016). According to Yimin (2013), propaganda by new media has fundamentally altered the process of information flow across borders. New media offers modern means to promote communication across borders that affects government diplomacy in a significant way. Scholars also suggested

strengthening the new media communication in three different dimensions for an effective response; 1) belt and road countries must equally participate in new media diplomacy, common exchange, and development; 2) government diplomacy should employ new media communication and play a bridging role between media and people in belt and road countries; 3) government should establish digital channels such as Facebook, YouTube, Twitter to update audience and generate attention and engagement (Hongxiu, 2018.).

While emphasizing on new media for BRI and BRF promotion, China's government and media adopted multiple platforms including social media, web portals, online news websites, and microblogs. BRF web portal included videos related to BRI and provided all official updates about the forum activities. Similarly, news media websites such as China Daily created a dedicated space for publishing news related to BRI and BRF. They also focused on news and updates related to economic cooperation and people-to-people exchanges. In addition, separate pages focused on BRI updates for different regions such as Asia, Europe, Africa, and the Middle East.

China venturing into global social media started after 2009 when its local media created accounts on Twitter. Many scholars have referred to Twitter as a major platform for news consumption widely used by media groups (Gottfried & Shearer, 2016; Newman, Fletcher, Levy, & Kleis Nielsen, 2016). However, the influence of China's media on Twitter rarely appeared in academic research (Guo, Mays, & Wang, 2019). China started a significantly proactive strategy for global communication through China's state-owned media. This brings a positive image to China on Twitter when Chinese media actively tweet about the achievements of the country. Following this online propaganda strategy, China promoted Belt and Road initiative extensively using new media platforms. Web platforms of China's media participated actively to promote this initiative.

Furthermore, social media appeared as a major focus to promote BRI by both government and local media groups of different countries. Twitter played an important role in BRI promotion and was highly used by traditional media groups and governments of different countries to disseminate information and the latest developments. Opinion leaders and influencers on Twitter from different countries have also participated in tweets and retweets related to BRI. Similarly, governmental Twitter accounts of different countries on BRI also promoted content and information about BRI development and projects related to this initiative. As a flagship project, belt and road have to get through different countries with their own government and media structures. China had to deal with each country in a unique way to make communication effective.

Considering the role of Twitter as a platform enabling the connections between countries and distributing information with high reach, it was prominently used for the second Belt and Road forum in 2019. Topics related to Belt and Road Initiative were trending on social media resulting in a high reach and engagement. During this forum, a large number of pertinent tweets appeared on the Twitter feed and some of the related hashtags were found trending including #brf2019, #BeltandRoad, #BRI, etc. Media groups, government, BRI officials, influencers, and other stakeholders actively participated to tweet and contributed in making BRI a popular topic on Twitter.

This study aims to identify elements of recent communication about BRF on Twitter and to understand how Twitter was used by media organizations to promote the second BRF meeting. Media around the world covered this event, and special coverage was given by media from participating countries. China as a host country put significant efforts in promoting BRF using new media channels such as media websites and social media platforms including Weibo, Twitter, and Facebook. Based on coverage by media organizations at a large scale, it also influenced citizens to interact with the promoted content. Opinion leaders, scholars, diplomats, government officials, journalists, and other influencers talked about BRF and participated in belt and road discourse on social media.

Therefore, it is important to identify top influencers who actively promoted this event because influencers are the key source of high reach and feedback in the shape of comments and retweets on Twitter. Tweets generated by influencers and the feedback on their shared content provide an overview of different types of sentiments such as positive, negative, and neutral, also known as three class sentiment classification (Gupta et al., 2017). So, this study also aims to understand the overall sentiments regarding the second BRF 2019.

Twitter Diplomacy

Digital communication research suggests that social media channels are the most appropriate platforms for digital diplomacy (J. Zhang, 2013) and highly suitable to interact and communicate with a large number of stakeholders (Watersa, Burnett, Lammb, & Lucas, 2009). However, social media must be utilized properly to engage the public with interactive communication. Using two-way communication that is interactive communication between online users (Liu & Shrum, 2002) on Twitter appears significant as it creates engagement among stakeholders. According to previous studies, when politicians use interactive communication styles on social media, they are positively evaluated (Lee & Shin, 2012). In addition, scholars have also discussed twitter use for the purpose of public diplomacy (Harris, 2013; Kampf, Manor, & Segev, 2015) and believe that the "interactivity" feature of Twitter has generated a positive

effect with respect to the relationship between the public and organizations (Saffer, Sommerfeldt, & Taylor, 2013).

Twitter's take on public diplomacy has emerged a new type of diplomacy known as Twitter diplomacy or twiplomacy (Su & Xu, 2015). The term twiplomacy shows its engaging characteristics and refers to those actors who communicate on social media, including state, government organizations, NGOs and related individuals. Su & Xu, (2015) identified three objectives of twiplomacy—forming image, disseminating news and information, and communicating opinions and emotions. These objectives are achieved through official social media accounts of the government, global organizations, and official personnel such as ambassadors.

According to Nye Jr (2008), soft power is the ability to understand and shape attention towards cultural resources of any country and can be achieved through global broadcasting, organizing cultural exchange programs, improving the cultural exports, and making policies towards cultural exchanges. This definition shows that soft power requires people to people contact and public diplomacy as a soft power tool to reach and influence audience across borders by increasing cultural communication. Reaching a foreign audience leads to the development of new public diplomacy such as twiplomacy that can influence and inform the diverse audience. It lets governments to shape public opinion to grab support from Twitter users and can bring strength to a certain policy. Thus, Twitter appears as a tool for soft power propagation by reaching and communicating with a global audience.

Twiplomacy has been adopted by various governments globally during last decade. It started when Barak Obama signed up for a Twitter account in 2007 being Senator of Illinois and became the first global leader to appear officially on Twitter. Following this trend, nearly 78% of the United Nations member states started using Twitter officially and by 2018, 97% of them joined Twitter officially. After winning the presidential elections in 2016, President Trump became the most popular politician on Twitter and reached 61 million followers by 2019. Similarly, many other heads of the states became popular on Twitter, such as by March 2019, Narendra Modi had 48 million followers, Recep Tayyip Erdogan had 13 million followers and Imran Khan had over 9 million followers. Politicians use Twitter not only for diplomatic communication globally but also for personal and political promotion (Sobaci & Karkin, 2013). According to Hwang (2013), Twitter has a positive influence on the credibility of politicians and this tends to increase the use of Twitter by political parties and political figures.

These arguments raise the question whether a single tweet is enough to deliver the message and run a promotion or marketing campaign for public diplomacy and political activity. However, with 140 characters limit, it has been challenging. The increased

demand and use of the Twitter platform, the company decided to extend the word limit to 280 characters. The increased space added value to the Tweets and consequently the campaigns got much more public attention and impact.

Government agencies use Twitter for public diplomacy and create channels for delivering message to audience and their counterparts from other countries (Xiguang & Jing, 2010). Apart from diplomats, scholars also appreciated its role in disseminating information and news believing that journalists follow political leaders on Twitter and also generate their feedback on Twitter (Ekman & Widholm, 2015).

Borondo, Morales, Losada, & Benito (2012) identified another important characteristic of Twitter, viz. diverse networks which are scattered in the sense that twitter users are connected with diverse type of people. They are connected with common users and, at the same time, they are connected with opinion leaders. Users are following their friends and also following popular accounts on Twitter having a simultaneous interaction with friends and public figures. This connection phenomenon creates an opportunity for governments and organizations to engage with citizens using a network of public figures and opinion leaders. Twitter allows to directly communicate with other accounts by "@" symbol and the use of hashtags with the "#" symbol. This creates a network of opinion under the same topic.

Belt and Road Initiative and Twiplomacy

Twitter has been widely used by governments to deliver their messages to people both within and across the countries. The trend of posting tweets by the head of state and diplomats has increased over the years. Twitter allows country leaders to send a public message to other countries and has become an essential tool for diplomatic purposes. Many state leaders give their policy statements on Twitter and address other countries and their counterparts via tweets. Similarly, it has also become a branding tool for governments to promote events organized by them. Though Twitter is blocked in China, Chinese leadership realized the implications of the Western-dominated global communication order and, therefore, allowed Chinese diplomats and media to use Twitter and reach the global audience. This strategy appeared to step into new avenues of public opinion formation and increase China's presence in global communication to build a new order of global communication (Li, Congjun, 2013).

Belt and Road Initiative includes many countries and the communication networks between China and the partner countries. People-to-people connection between the countries along belt and road is an important goal for China. To meet such requirements, Belt and Road Initiative was aggressively promoted through new media channels including both news media and social media. From the beginning of this initiative, China focused to promote it on new media channels and started a discourse on Twitter.

Furthermore, BRF provided an opportunity to China and its allies to discuss and promote this initiative on social space. Chinese diplomats engaged with people globally to discuss, respond and explain the opportunities associated with BRI. Belt and Road Forum gathered diplomats, media and experts at one place and made a collective effort to discuss, strengthen and promote BRI. The BRF events held in 2017 and 2019 branded it as an international political and economic forum and engaged global masses in discussion on new media platforms especially Twitter. China's media dominantly reported this event not only on their media platforms but also on Twitter.

Users on Twitter discussed about BRI and BRF using hashtags such as #BeltandRoad #BRI #BRF. These hashtags were commonly used by diplomats, media, and the public while discussing about BRI. China's media and diplomats engaged directly with people interested in these hashtags and followed communication on Twitter. Meanwhile, six economic corridor flagship projects also appeared in discussion and helped in targeted promotion in specific geological locations. China Pakistan Economic Corridor appeared as the most discussed project on Twitter with a hashtag "#CPEC" and appeared trending on Twitter multiple times.

Twitter platform produced significant results in branding BRI as a global political and economic forum. It has engaged the general public to discuss the BRI and share their views about BRI with others. Diplomats such as Lijian Zaho (@zlj517) increased their followers on Twitter by engaging hugely in discussions concerning China and BRI. Contrary to the positive response, there have been challenges on Twitter as well, particularly from the rivals of the BRI. Such threats were appearing majorly from news media of the western countries while Indian media was noticed as opposing the CPEC. Twitter is an open platform and allows anyone to express and promote a different perspective and can only be countered by building a different narrative. Opposition to BRI and CPEC was responded with arguments centered on the significance of these projects in terms of regional and global economic development.

Method

It is a mixed-method study that combines sentiment analysis and Social Media performance of tweets. These tweets were posted publicly with hashtags #brf2019, #BeltandRoad during the second Belt and Road Forum and were extracted using Twitter API and Python library named Tweepy within PyCharm IDE. These hashtags were tracked from 24 April (9:00 a.m) to 28 April (10:00 p.m) with a focus on tweets that appeared during the second BRF 2019. Consequently, extracted tweets were saved in CSV files, and all raw data files were combined for the analysis process. Tweets collected were saved with posting date, however large number of tweets appeared with the missing dates and were removed. For initial analysis, the parameters that were

measured are mentioned in Table 1, and include user, reach, impressions and engagement. It is important to mention that reach and impressions are two different terms with different meanings. Reach means the total number of unique visitors who view the tweet while impressions refer to number of times users see the tweet. A similar concept is used to define the web analytics (Pageviews vs Visitors) and other social media analytics.

Another significant feature in social media analysis is related to the factors and patterns of influence. While looking at influence patterns, influencers are the major players but they are actually minority users with high reach and influence to persuade others (Katz & Lazarsfeld, 2017). High influencer users or accounts during Belt and Road Forum were identified with their tweet and retweet frequency.

Table 1 Statistics of the tweets using #brf2019 & #BeltandRoad

Measure	Definition	Total			
Users	The number of users who tweeted with hashtags	3,105			
	mentioned above				
Reach	The number of unique users who viewed tweets with				
	hashtags mentioned above				
Impressions	Numbers of times users viewed tweet with hashtags mentioned above				
Engagement	gagement Interaction on the tweets such as likes, comments and retweets				

The dataset collected had to undergo preprocessing stage of data that is an important step and involves the syntactical arrangement of tweets data. The purpose of preprocessing is to make data more machine-readable by removing irrelevant or repeated words. Initially, re-tweets were removed along with repeating or duplicate tweets and re-tweets. Furthermore, the stop words were deleted and all upper case were converted to lowercase.

Sentiment analysis of tweets was conducted to classify the tweets in various sentiment classes accurately. It is also known as opinion mining and is used to extract sentiments and opinions from unstructured and complex text. The purpose is to identify if the text depicts a positive, negative or neutral opinion towards the subject (Pang & Lee, 2008). For this study, we used the Lexicon-based model for sentiment analysis which has previously been used in many studies for measuring sentiments (Bakliwal et al., 2013; Thelwall et al., 2010; Liu et al., 2011).

Furthermore, we required a pre-coded dictionary of words for sentiments. There are various types of dictionaries available such as PMOS (Profile of Mood States), ANEW

(Affective Norms for English Words), LIWC (Linguistics Inquiry and Word Count) with unique characteristics and features. In this study, we used the LIWC dictionary to determine the sentiments of the tweets as it supports lexicon-based sentiment analysis and shows results as positive and negative sentiments.

Another important aspect in the Twitter analysis is the significance of word frequencies used in tweets. For visualizing results of text extracted from collected tweets, word clouds are most useful and has been used in various big data research (Liyanage et al., 2014; Tsou et al., 2013). To visualize a large number of text data collected for this study, word clouds were generated for both high-frequency words and hashtags used in retrieved tweets.

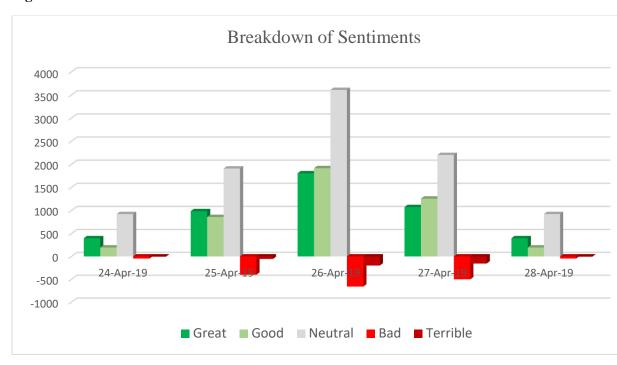
However, there were some limitations while collecting and analyzing Twitter data. As the Belt and Road Forum was organized by China in Beijing but there was major focus on promotion in English language due to its global significance. Though media groups majorly focused on creating and promoting English content, local language content was also generated, and tweets were also found in many other languages such as Turkish, Russian, Urdu, Hindi and Chinese. In this study we analyzed English tweets as primary focus was on English content and majority of tweets were in English language. English tweets were not further analyzed based on location due to the limitation of Twitter API. This, geographic location data was not gathered, and we did not use location information of tweets in our analysis.

Another challenge was with language expertise to understand tweets and develop lexicons for sentiment analysis. We don't have resource with expertise in Chinese, Turkish, Russian or Hindi language. So, tweets in other languages were considered out of scope for current sentimental analysis.

Results

For the sentiment analysis, we grouped sentiment scores into categories of Great, Good, Neutral, Bad and Terrible. To conduct sentiment analysis, we used R programing and the RSentiment package which contains the English sentiment lexicon to give a sentiment score. Our tweet dataset includes 20,727 tweets that contain both #BeltandRoad & #BRF2019, and by using Rsentiment, we generated an overall sentiment score. Then we labeled these tweets with sentiment score and grouped them into sentiment categories. With a total of 20,727 tweets, 23% of them were categorized as great, 21% as good, 46% as neutral, 8% as bad, and only 2% tweets were classified as terrible. To classify them into positive, negative, and neutral, 44% of tweets were positive, 46% were neutral and only 10% of tweets were classified as negative. Figure 2 shows the breakdown of sentiment analysis results of the tweet dataset and figure 3 visualizes the percentage of sentiment analysis.

Figure: 1



Analysis shows that neutral tweets were top ranking in sentiment classification. Positive tweets were dominating compared with negative tweets and only 10% tweets were negative. These results demonstrate that people talking about Belt and Road forum on twitter posted tweets which were mostly either positive or neutral. Comparatively, ratio of bad and terrible sentiment categories was only 10% which shows overall positive discourse about belt and road forum on twitter.

Figure: 2

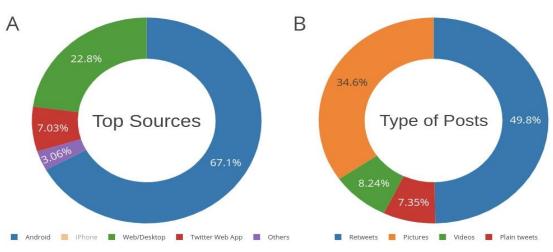
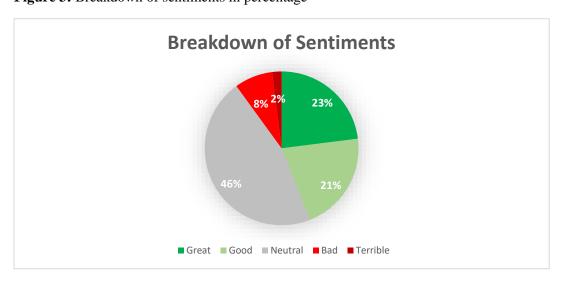


Figure 2 also visualizes the sentiment score distribution by date, a day before the start of conference twitter communication started but there were less tweets. However, on the day of conference "Belt and Road" tweets started trending on twitter and tweets rapidly increased. On April 26, there was an opening speech of President Xi Jinping and also a banquet hosted by him in honor of guests attending the conference. We believe that the increase in number of tweets on April 26 was due to these important meetings.

Figure 3: Breakdown of sentiments in percentage



We also analyzed the word and hashtag frequencies for tweets collected about belt and road forum as shown in figure 4. "belt" and "road" were the most common words used in tweets that appeared as boldest word in the word cloud figure. This was followed by words such as "president", "prime", "2019" and "forum" as the most used words in tweets. It can be noticed that topic of Belt and Road was discussed and prominently mentioned by the head of states. Thus, discussions on twitter involved words which represent names of some of head of states such as "Imran", "Khan", "Mahathir", "Xi", "Jinping" and also contain names of countries and regions such as "China", "Pakistan", "Tajikistan etc.

Figure 4:



As hashtags usually represent the tweet topic, we also analyzed hashtags frequencies in the tweets. The boldest hashtag appearing in the word cloud (figure 4) is "#brf2019" and it clearly shows that most of the tweets were related to Belt and Road Forum. It is also important to mention here that there can be more than one hashtag in single tweet. This can be noticed in following hashtags such as "#beltadnroad", "#beijing", "#bri" that appear with almost similar frequencies and can be said that multiple hashtags were used while tweeting about Belt and Road forum. Hashtag cloud data shows that those tweeting about belt and road forum mentioned about the involvement and presence of their representatives in this event.

Media groups, governments and head of states posted updates about belt and road forum which were followed by large user base and appeared as influencers in promoting the event. We analyzed the data and identified top influencers in promoting BRF as shown in table 2. Traditional media actively participated in promotion of BRF 2019 and made full use of new media. These influencers were selected on the basis of frequency of tweets, retweets, reach and engagement. Influential Twitter accounts frequently posted tweets and gained high reach and retweets as visualized in figure 5 as circle

packing. These nested circles represent hierarchies based on frequencies and show the proportion of tweets by different influencers.

Table 2: Top influential users by engagement and frequency for #brf2019 & #BeltandRoad

Measure of Influence	User	Followers	Description
	@XHNews	12.5 Million	Xinhua News Agency is the biggest and
			most influential official state-run press
			agency of China
	<pre>@CGTNOfficial</pre>	13.7 Million	CGTN is a nationally owned multilingual
			TV channel in China
	@pid_gov	722 K	The Official twitter account of Pakistan
			Government
Engagement & Frequency:	@ChinaDaily	4.02 Million	China Daily is an English-language daily
Based on number of tweets,			newspaper of China
likes, retweets and	@CRI_Turkish	83K	CRI Turkish is international radio
impressions			broadcaster of China broadcasted in
			Turkish Language
	@Avucic	296K	Official account of the President of Serbia
			& Serbian Progressive Party
	@globaltimesnews	1.34 Million	China's national English language
			newspaper, under the People's Daily
	@PTIofficial	4.35 Million	Official twitter account of Pakistan
			Tehreek-e-Insaf, a political party

The highest number of tweets and retweets related to BRF were by Xinhua news agency's Twitter account (@XHNews) with 12.5 million followers. Xinhua is the biggest and most influential state-run press agency of China and their tweets reached the highest number of users during this event. China Global Television Network (CGTN) has the largest number of followers, 13.7 million, among the identified influencers. There was a special focus on new media promotion by CGTN and it provided full coverage of this event on its website and social media especially on its Twitter account (@CGTNOfficial).

Along with television, an English daily newspaper "China Daily" (@ChinaDaily) and Global Times news (@globaltimesnews) also participated in online promotion by launching a special website for BRF 2019 and tweeted frequently about the event updates.

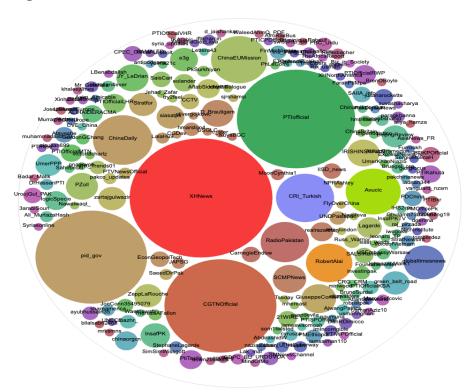
China Radio International (CRI) also participated in online promotion on Twitter and actively tweeted about BRF 2019 on their Twitter account "@CRI_Turkish". CRI Turkish service was highly involved in providing information to Turkish users about BRF 2019 and helped in creating a trending topic.

Apart from media groups, national governments of the participating countries also actively promoted this event and published news and other content on Twitter. One of the influencers identified was "@pid_gov"—the official Twitter account of the Government of Pakistan. They published news about the belt and road forum and also promoted the participation of the Prime Minister of Pakistan in the event.

Another influential account by the head of state was "@Avucic"—an Official account of the President of Serbia & Serbian Progressive Party with over 296k followers. Similarly, Twitter account of a political party of Pakistan (@PTIofficial) also participated in promoting BRF 2019.

Media across all participating countries played a significant role in promoting BRF 2019. It is evident from Table 2 that most of the influencers were media groups, especially from China's media.

Figure 5



During BRF 2019, China's media used new media tools effectively and produced good results from their social media and their web platforms. As visualized in figure 5, the majority of large circle packing belongs to popular media groups who actively

tweeted during BRF 2019. Similarly, the highest engagement and impressions on tweets were noticed on posts by media organizations and different government accounts. Among all media influencers on Twitter, CGTN has the highest number of followers and also posted the highest number of tweets which resulted in the highest reach and impression on Twitter during BRF 2019.

Being first to report BRF2019 on television and web portals, China's media such as CGTN, China Daily, and Global Times News frequently posted plan tweets, images, videos and links of their news content. A large number of tweets posted carried two hashtags as #BRF2019 and #BeltandRoad and this led to trending of both hashtags in different countries.

China media acted as a leader in information circulation and propagating the belt and road forum. Twitter users retweeted information provided by the media. Diplomats, head of states and government official accounts of different countries on Twitter also retweeted the information provided by China's media on Twitter.

Keynote speech by President Xi at the opening stage as well as his speech during the Banquet with world leaders was broadcasted by China's media and was published in newspapers. As first-hand information, both speeches were published by China's media at first and web links were posted on Twitter which got high engagement globally and resulted into a higher number of retweets.

In addition to China's media role in BRF 2019, media of the participating countries also published news about this event and posted news links as tweets on Twitter. This collective effort by media organizations successfully created BRI as a trending topic online and discussed the associated opportunities in various perspectives.

Contrary to positive propaganda, international media discussed this event at large with both opportunities and challenges involved. Some opposite narratives appeared from some countries that are apparently opposing the belt and road initiative directly or indirectly. Indian media discussed the issues and challenges involved in the Belt and Road Initiative based on regional disputes and politics. Based on these negative propaganda articles, tweets related to issues and challenges also appeared on Twitter which created a negative sentiment on Twitter. However, the ratio of positive and negative sentiments was significantly different as shown in figure 3.

Discussion

This study analysed the content of 20,727 tweets about the 2019 Belt and Road Forum to understand the dominant sources, influencers and sentiments of the tweets. Results show that China's media sources were highly influential in generating discourse online. Most tweets were from China's media and got high engagement. China's media was the main source of information for the Belt and Road Forum that posted live updates of

the event and generated discussion online. Frequency and engagement of tweets from China Daily, CGTN, CRI, and Xinhua news appeared top ranking.

Another source for tweets was diplomats and head of states of different countries as delegations from more than 150 countries participated in this event. Twitter accounts of some of the delegates had millions of followers and their live Twitter updates on this event gained high engagement. Media of different countries also reported these updates on their media Twitter accounts and news websites. Official accounts of government organizations and representatives of different countries produced high-engaging tweets. Twitter accounts of Press Information Department of Pakistan (PID), Mission of the People's Republic of China to the EU, Aleksandar Vučić President of Serbia and Imran Khan, Prime Minister of Pakistan, were highly engaging during the event.

Besides China, the government of Pakistan and Pakistani media majorly contributed to the promotion of this event. As Prime Minister of Pakistan attended this event, Twitter accounts of his political party and press information department of Pakistan put a major focus on BRF and published a large number of tweets. As visualized in figure5, @PTIofficial and @pidgov accounts contributed nearly the same as China's media. Similarly, Pakistani media also participated well in promotion and Twitter accounts of Radio Pakistan, Pakistan Television (PTV) and Nawa-e-Waqt appeared influential and engaging about the BRF 2019. Most of the tweets also mentioned China Pakistan Economic Corridor (CPEC) as the flagship project between China and Pakistan. In most of tweets, both BRI and CPEC are mentioned together as plain text and hashtags to show CPEC importance in BRI.

Interestingly, media of both China and Pakistan retweeted each other's tweets for higher reach and engagement. It also seems that Twitter accounts from Pakistan were directly following China media accounts and were engaging with their tweets considering them as original and first-hand information.

Apart from major influencing Twitter accounts, a large number of Twitter accounts with less followers also contributed to this promotion. Collectively, they created a high impact while tweeting about BRF 2019 from around the world. Among those Twitter accounts with a small follower base, there were also local influencers such as local politicians, diplomats, celebrities, research scholars, media representatives and news editors from different countries.

Conclusion

Belt and Road Forum 2019 in Beijing was of significant importance in view of the participation of 37 countries. It was essential to communicate with the foreign audience to update them about the event and signed projects. China is focused on making the BRI as a brand project for economic development of the participating countries. While

leaders from many countries were gathering at the BRF, China made efforts to disseminate message to masses about the objectives and scope of the BRI. Similarly, leaders from different countries also made substantial contributions in the promotion of this initiative.

China's focus on new media promotion was not only limited to Chinese audience but it also targeted foreign audience with multilingual content through multiple platforms. They used news media and social media to promote BRF 2019 and reach masses across the globe and not limited to only participating countries.

The Twitter platform was widely used by news media, diplomats, and international leaders to publish their views about BRI and BRF 2019. It started a debate about BRI across the globe about the prospects and challenges involved in this initiative. Tweets related to this event were posted from around the world that helped its online trending in many countries. A large number of Twitter users from various parts of the world mentioned related hashtags in their tweets and discussed BRF and BRI.

Media from different countries played a significant role in the promotion of BRI and the BRF 2019 event by reporting news and updates on their news platforms as well as on Twitter. This trend of posting tweets by media groups got high engagement from Twitter users across the globe. Media groups also helped in branding the image of BRI on Twitter with images videos, and news links related to the event.

Both positive and negative sentiments were generated on Twitter but due to large number of support for BRI on Twitter from foreign audience, negative comments were low enough to ignore. Some countries expressed their reservations and problems associated with BRI which generated somewhat negative sentiment on Twitter. Overall, a large number of diverse audiences on Twitter posted their views and showed confidence in the project.

Analysis shows the successful execution of the new media strategy for the BRF 2019 event, which created by and large positive sentiment among Twitter users who engaged with BRI-related topics during the event in Beijing. Therefore, it is concluded that new media tools are significantly helpful in new public diplomacy for the policy, event and cultural promotion. It has also proved that despite being blocked in China, Twitter is valuable to reach and influence the foreign audience.

References

- Bakliwal, A., Foster, J., van der Puil, J., O'Brien, R., Tounsi, L., & Hughes, M. (2013). Sentiment analysis of political tweets: Towards an accurate classifier. Association for Computational Linguistics.
- Borondo, J., Morales, A. J., Losada, J. C., & Benito, R. M. (2012). Characterizing and modeling an electoral campaign in the context of Twitter: 2011 Spanish Presidential election as a case study. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 22(2), 23138.
- Congjun, L. (2013). Tightly seize the offensive of public opinion work. Retrieved from People's Daily website: http://opinion.people.com.cn/n/2013/0904/c1003-22797334.html
- Ekman, M., & Widholm, A. (2015). Politicians as Media Producers: Current trajectories in the relation between journalists and politicians in the age of social media. *Journalism Practice*, *9*(1), 78–91.
- Gottfried, J., & Shearer, E. (2016). News use across social media platforms 2016.
- Guo, L., Mays, K., & Wang, J. (2019). Whose Story Wins on Twitter? Visualizing the South China Sea dispute. *Journalism Studies*, 20(4), 563–584.
- Gupta, B., Negi, M., Vishwakarma, K., Rawat, G., Badhani, P., & Tech, B. (2017). Study of Twitter sentiment analysis using machine learning algorithms on Python. *International Journal of Computer Applications*, *165*(9), 29–34.
- Harris, B. (2013). Diplomacy 2.0: the future of social media in nation branding. *Exchange: The Journal of Public Diplomacy*, 4(1), 3.
- Hongxiu, L. (n.d.). Public Diplomacy in the Belt and Road Initiative within the New Media: Theories and Practices.
- Hwang, S. (2013). The effect of Twitter use on politicians' credibility and attitudes toward politicians. *Journal of Public Relations Research*, 25(3), 246–258.
- Ji, D., & Hu, Z. (2017). The Belt and Road Initiative: New Media for a Dialogue of Civilizations. Retrieved from https://doc-research.org/2017/11/belt-road-initiative-new-media-dialogue-civilisations/
- Kampf, R., Manor, I., & Segev, E. (2015). Digital diplomacy 2.0? A cross-national comparison of public engagement in Facebook and Twitter. *The Hague Journal of Diplomacy*, 10(4), 331–362.
- Katz, E., & Lazarsfeld, P. F. (2017). *Personal influence: The part played by people in the flow of mass communications*. Routledge.

- Kozłowski, K. (2018). BRI and its digital dimension: twists and turns. *Journal of Science and Technology Policy Management*.
- Lee, E.-J., & Shin, S. Y. (2012). Are they talking to me? Cognitive and affective effects of interactivity in politicians' Twitter communication. *Cyberpsychology, Behavior, and Social Networking*, 15(10), 515–520.
- Liu, Y., & Shrum, L. J. (2002). What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity on advertising effectiveness. *Journal of Advertising*, 31(4), 53–64.
- Liyanage, H., De Lusignan, S., Liaw, S. T., Kuziemsky, C., Mold, F., Krause, P., ... Jones, S. (2014). Big data usage patterns in the health care domain: A use case driven approach applied to the assessment of vaccination benefits and risks. *Yearbook of Medical Informatics*, 23(01), 27–35.
- Newman, N., Fletcher, R., Levy, D. A. L., & Kleis Nielsen, R. (2016). *REUTERS INSTITUTE DIGITAL NEWS REPORT 2016*.
- Nye Jr, J. S. (2008). Public diplomacy and soft power. *The Annals of the American Academy of Political and Social Science*, 616(1), 94–109.
- Ohashi, H. (2018). The Belt and Road Initiative (BRI) in the context of China's opening-up policy. *Journal of Contemporary East Asia Studies*, 7(2), 85–103.
- Portal, B. and R. (2019). China's goods trade with B&R countries reaches over 6 trln dollars. Retrieved May 21, 2019, from https://eng.yidaiyilu.gov.cn/qwyw/rdxw/86301.htm
- Ruihong, F. (2016). The Interactive Development Analysis of The Belt and Road Initiative and Public Diplomacy in Southeast Asia. *Guangxi Social Sciences*, 9, 44–49.
- Saffer, A. J., Sommerfeldt, E. J., & Taylor, M. (2013). The effects of organizational Twitter interactivity on organization–public relationships. *Public Relations Review*, 39(3), 213–215.
- Sobaci, M. Z., & Karkin, N. (2013). The use of twitter by mayors in Turkey: Tweets for better public services? *Government Information Quarterly*, 30(4), 417–425.
- Su, S., & Xu, M. (2015). Twitplomacy: Social media as a new platform for development of public diplomacy. *International Journal of E-Politics (IJEP)*, 6(1), 16–29.
- Thelwall, M., Buckley, K., Paltoglou, G., Cai, D., & Kappas, A. (2010). Sentiment strength detection in short informal text. *Journal of the American Society for Information Science and Technology*, 61(12), 2544–2558.
- Tsou, M.-H., Yang, J.-A., Lusher, D., Han, S., Spitzberg, B., Gawron, J. M., ... An, L.

- (2013). Mapping social activities and concepts with social media (Twitter) and web search engines (Yahoo and Bing): a case study in 2012 US Presidential Election. *Cartography and Geographic Information Science*, 40(4), 337–348.
- Watersa, R. D., Burnett, E., Lammb, A., & Lucas, J. (2009). Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. *Public Relations Review*, 35(2).
- Xiguang, L., & Jing, W. (2010). Web-based public diplomacy: The role of social media in the Iranian and Xinjiang riots. *Journal of International Communication*, 16(1), 7–22.
- Yimin, J. (2013). New Media and American Government's Public Diplomacy in the Middle East: A Case Study of the Controversy over Mohamed's Real Life. *Public Diplomacy Quarterly*, 1, 88–95.
- Zhang, J. (2013). A strategic issue management (SIM) approach to social media use in public diplomacy. *American Behavioral Scientist*, 57(9), 1312–1331.
- Zhang, L., Ghosh, R., Dekhil, M., Hsu, M., & Liu, B. (2011). Combining lexicon-based and learning-based methods for Twitter sentiment analysis. *HP Laboratories, Technical Report HPL-2011*, 89.