

A Survey on Impact of Social Media on Election System

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Abstract— 2014 Assembly elections in India witnessed the biggest change in Indian politics. The ruling party – Congress which were in power for 10 years was defeated and whole and sole responsible person for it was ‘Mr. Narendra Modi’. Nobody would argue that for the first time in India social media was used so extensively during elections. The study shows that Mr. Narendra Modi is the most active and popular personality on twitter. Twitter including all other popular social networking sites and the news channels’ exit polls became the key ingredient for success of Mr. Modi and his BJP party. The main aim of this paper is to understand the impact of social media on the Indian politics.

Social media is the primary resource for the information retrieval. Using the text mining field; huge amount of unstructured textual data collected by social media can be converted and displayed as user relations in real time. Given its popularity, social media could be used as an influential channel for opinion leading, including agenda-setting and public opinion formation. The present research paper studies the importance of use and rise of social media in the arena of Indian politics and its impact in general and political participation by the general public. First the study is to examine for rise of social media as a medium to reach voters. Secondly impact of people using social media during election campaign on poll results.

Index Terms—Social media, Election campaign, Indian politics, Twitter and Facebook

I. INTRODUCTION

Google is the answer to any question you may have today. The technology revolution which we call it as Internet has changed the world by connecting people across the globe. Today youth is increasingly using numbers of social sites such as Facebook, Twitter, WhatsApp, Blog and LinkedIn as platforms for communicating with friends, family and work colleagues. Social Media’s quick development shows its influence on society and is a crucial part of the advancement of information and communication technologies.

According to Com. Score report India has bypassed Japan to become the world’s third largest Internet user after China and United States. As of June 2014 India has are more than 243 million internet users as per data shared by Internet and Mobile Association of India (IAMAI), which is whooping 28% more compared to that of June 2013. The use of social media is significantly complex. Even though use of social media has several challenges such as security, privacy,

accuracy at the same time it provides the opportunities for sharing, collaboration, and engagement of users which is provided by the medium of social media. It is very crucial to understanding how and why these tools can and should be used in politics committee. Social Media has rapidly grown in importance as a platform for political activities in its different forms. Social media platforms, such as Twitter, Facebook and YouTube provide new ways to encourage citizen get involved in political life, where elections and electoral campaigns have a central role.

‘Social Media is the biggest shift since the industrial revolution’ says Eric Qualman, Socialnomics. It is the top most activity present on the web. Every global brand has its presence on social media. It has become one of the crucial selling point for the marketers and fastest mode of spreading publicity of the product. Andreas Kaplan and Michael Haenlein provides definition for social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content." Let’s see the most popular social media used today.

A. Facebook

Facebook is one of the most popular online social networking sites. It was founded on February 4, 2004, by Mark Zuckerberg with his college roommates.

Facebook has broad impact on the social life of people. Facebook allows users to people to stay in touch with friends, relatives and other connections without time and geographical limits provided they have access to the Internet. Its activity based on interest, hobbies, knowledge brings people together through groups and other pages. Due to its widespread network it connected lots of lost family and friends. Facebook has 900,000,000 - Estimated Unique Monthly Visitors.

B. Twitter

Twitter is one of the trending online social networking site which enables users to communicate using short messages having character limit of 140; which are called as “tweets”. Twitter was created with the idea of is it possible to share your status with your friends so that they know what are you doing or up to in March 2006 by Jack Dorsey an American businessman. Twitter with 340 million tweets per day has gained very high popularity. Twitter is also called as the SMS of the Internet.

C. Instagram

Instagram is an online mobile tool which allows sharing photos and videos on a variety of social networking sites such as Facebook, Twitter, Tumblr and many other sites. Its theme line says take a picture, transform it the way you want and share with your friends and family, life is beautiful.

D. WhatsApp

WhatsApp Messenger is a cross-platform instant messaging service for smartphones. It allows user to send messages without paying for SMS. It requires internet for communication. It is integrated with smartphones which allows user to share photos, audios, videos and their location using integrated Maps present on their smartphones. WhatsApp Inc. was founded in 2009 by Brian Acton and Jan Koum.

E. Hike

Hike Messenger is made in India, specially designed for cross platform smartphone communication using internet. Along with messages, audio, video sharing it also provides stickers for effective communication. Hike was created by Atul Singh and was taken over by Bharti Softbank in April 2013. It has crossed more than 35 million users in India.

II. ELECTION SYSTEM IN INDIA

India, a largest democracy in the world, is secular and socialist country. Here, election of representatives of people involves management of the mega event in the world. During 2014 general elections, there were around 0.9 million polling stations across the country. The electoral roll is a list of all people in the constituency who are registered to vote. Only those people with their names on the voting list are allowed to vote. There are total 543 Parliamentary constituencies in India and this mega event of elections was held in 9 phases. The first phase was held on 07th April 2014 and the last one was on 12th May 2014[2].

The number of parties registered with the Election Commission of India is 1,616. This number consists of 6 national parties, 47 state parties and others as registered unrecognized parties. The elections of 2014 had a battle between few major national parties, namely the Indian National Congress (INC) or commonly known as Congress, the Bhartiya Janta Party (BJP), the Aam Aadmi Party (AAP) and some other national parties like the Samajwadi Party (SP), the Bahujan Samaj Party (BSP) etc. forming the third front.

The amount of money spent by the parties in these elections was around 30,500 crores which is second highest in the world after the US Presidential elections for year 2012 and it was around \$7 billion.

III IMPACT OF SOCIAL MEDIA ON INDIAN POLITICS

India's 16th National general election which was held in nine phases during April and May, 2014 was probably one of the most awaited elections in the recent times with the

changing Politics of India. According to observers, social media would play a vital role in deciding which party wins the most seats. A report published in April 2013 by the Internet and Mobile Association of India (IAMAI) and the Mumbai-based Iris Knowledge Foundation, Facebook users will have a tremendous impact over the results of the polls in 160 of India's 543 constituencies and the reason for this is the youth of India. As per indiaonlinepages site 2014 50% of population is below 25 age group and 65 % is below 35 % age group[8]. This population is either studying in college or working in various companies such as IT companies, BPO's, research centres and various other sectors or are either entrepreneur. Their busy schedule has created a virtual distance between television and radio specially in case of acquiring or sharing information. The youth is tech savvy and love being connected with updated trends and topics which is possible by using laptops, desktops or the most favourite a network connected mobiles.[5]

Even though politicians for their campaign still use posters, cut-outs, fliers, graffiti and personal rally's to reach and win over voters but with the social media changing the picture of urban India, political parties are becoming tech savvy and realizing that social media is the only way to reach out to the this young youth. For 2009 general election social media usage in India was little. Today, however, Facebook has 93 million users and Twitter has an estimated 33 million accounts in the country.

As per the LAMAI report 2013 this change for presence of social media could be observed as every political party participating in 2014 general election has set an 2-5% of its election budget for spending on social media.[2] The report says that the leading parties Bharatiya Janata Party (BJP) and Nation congress party has set this at 500 crores and 400 crores respectively.

From very beginning the Bharatiya Janata Party (BJP) has the biggest presence in social media. The BJP started using the social medium even before the 2009 general election. Mr. Narendra modi who was the Prime Minister candidate of BJP and all other members of BJP had very high popularity and a reach to general public using social media is as compared to any other parties. Narendra Modi have highest follower on twitter and Facebook. Aam Aadmi Party or AAP which is a newly formed political party has quite high popularity as compared to the two old major parties – Congress and BJP. AAP is very active on social media channels. It was observed that even though AAP and BJP were fighting against each other on social media but the Congress party realised its importance quite late.

A. Facebook

Indian Election a major Event for not only India but for whole world. With the changing trends it is estimated that now the youth following social sites will decide the future of candidates. The urban development rate is growing day by day; which increases the number of Facebook followers. It is said that Facebook will provide a new voter bank for politician. Candidate and a Party which could leave its impression on Facebook have definitely seen the positive results. This explains need for well-defined strategy specially designed for social media to make their campaigns more effective.[5]

B. Twitter

Twitter had its own ‘Tweeter Election’ for election 2014. 56 million election-related Tweets were gathered till when election ended. Each of the poll days saw between 5.4 lakh and 8.2 lakh election-related Tweets. The tweeter results shows that the most popular parties and candidates were AamAadmiParty’s Arvind Kejriwal, BJP4India’s Narendra Modi, and Rahul Gandhi from INCIndia and the most conversation about them[2].

Mr. Narendra Modi has reached 3.97 million followers growing his follower base by 28% percent since Jan 1. Not to be outdone, where as Mr. Arvind Kejriwal has raced to 1.79 million, an amazing 79% growth from the start of the year. The AamAadmiParty has grown to 682K followers registering a 119% increase since the beginning of the year where as a very active BJP4India has reached 491K followers, growing at 70% and INCIndia who entered lately on twitter had 178K followers has grown at an incredible 376% starting with just 37,357 followers on Jan 1[6].

SOCIAL MEDIA STRATEGY TO WIN ELECTIONS 2014 OF POLITICAL PARTY
MAINLY BJP, CONGRESS AND AAP[6]

Party Strategy	BJP	CONGRESS	AAP
Facebook Pages	Ek hi Viklap Modi -vote for change -I Support Narendra Modi -Narendra Modi for PM -Mission 272+	Congress party - Indian youth congress -Indian National congress -Congress India -Youth for Congress -NSUI	- AAM Aadmi Party -AAP for Hope -India against corruption -Arvind Kejriwal for Hope -IITian AAP
Twitter	#abkibaarmodisarkar #mission272+ #Imodi #BJP2014 #Bharatiyajantaparty #voteformano	#voteforRG #VoteforRahulGandhi #voteforcongress #indiancongressparty #congress2014 #congressagainstcorruption	#Vote for AAP #Arvindkejriwal4change #AAPpopularity #Thunderclap #Aapforhope #Indiaagainstcorruption
Blogging	bjporg.blogspot.com	www.aiccblogspot.com	www.aamaadmiarty.org/blog
Google 3D	Yes	No	No
Google Hangout	Yes	Yes	Yes
Door to Door	Yes	Yes	Yes
YouTube	www.youtube.com/user/BJP4India	www.youtube.com/user/congresspartyindia	www.youtube.com/AAP
Websites	www.bjp.org www.bjpdelhi.org www.narendramodi.in	www.inc.in allindiacongress.com	www.aamaadmiarty.org arvindkejriwal.co.in
Others	Pamphlets , fliers, Billboards ,paper ads, TV ads, Chai pe Charcha, Road show, Missed Call	Pamphlets, fliers, paper ads, TV ads, Billboards or Hoardings ad, Road show	Pamphlets, Fliers, Road Show, Give a missed call and join AAP,

FACTS OF POLITICAL PARTIES IN SOCIAL MEDIA TO WOO VOTERS

Social Media Followers	BJP Party	Congress Party	Aam Aadmi Party
Facebook likes	3,400,000	1,800,000	2,500,000
Twitter followers	417,000	1,063,00	5,1700,000
YouTube subscribers	4450 0	5117	40845
Google+	7,398+	3,125+	1,41,366+

FACTS OF POLITICAL LEADERS FOLLOWERS ON SOCIAL MEDIA

Social Media Followers	Narendra Modi	Rahul Gandhi	Arvind Kejriwal
Facebook Likes	12,399,400	3,51000	5,005,786
Twitter Followers	3,690,000	N/A	1,60,000
YouTube Subscribers	1,32,803	2,221	N/A
Google+	12,68,320+	2,118+	579+

Social media has become this significant part of modern civilization. Social media is changing existing information behaviour by giving users access to real-time online information channels without the constraints of time and space. This gives scientist an enormous scope for data analysis challenge. Most previous studies have adopted broad-brush approaches that typically result in limited analysis possibilities.

Author Min Song , Meen Chul Kim and Yoo Kyung Jeong [1] has studied specially a twitter dataset by collecting real time tweets for 2012 Korean election. They employed temporal Latent Dirichlet Allocation (LDA) to analyse and validate the relationship between topics extracted from tweets and related events then using the term co-occurrence retrieval technique traced chronologically co-occurring terms and then identified the thematic coherence among the users mentions. It successfully mines the test extracted form tweets and filter out the co-occurring terms and then form user based network by applying various clustering algorithm.

Voting advice applications (VAAs)[3] are online tools have become increasingly popular and purportedly aid users in deciding which party/candidate to vote for during an election Level. VAAs provide community-based recommendations, comparison of users’ political opinions, and a channel of user communication. VAAS proposed a number of approaches that could be used for community-based vote recommendation. The approaches provided by VAAS were evaluated in terms of predictive accuracy on five real VAA datasets.

Author Abhilash bhola also used tweeter for studying user’s orientation towards parties and candidates for the year 2014 general election of India[2]. He analysed 17.60 million tweets and justified them based on time or peak activities of parties. They also did a sentiment analysis to find out pro-category and anti-category users. They followed various classification techniques to analyse the tweets and the provided a live portal to actually interact with end user to show a live tweets and users orientation.

Lars Kaczmirek and his team from GESIS[4] have gathered various aspects of the communication structures in online media and how such data can add new insights in comparison to existing data from surveys and (traditional) media analyses. By collecting data from both Twitter and Facebook they added new dimensions to current studies on social media use during elections. They gave the broader

framework of the German Longitudinal Election Study (GLES), a long term research project that examines the German federal elections in 2009, 2013, and 2017 with the aim to track the German electoral process over an extended period of time ; by collecting Twitter and Facebook data about the German Bundestag elections.

Author Aibek makazhanov and Davood rafiei studied the problem of predicting the political preference of users on the twitter network using the user interaction with political parties. They have built a prediction model based on training database which consist of study of a user behaviour and a language model for each party based on party candidates tweets. Their study shows that the generated content and the behaviour of users during the campaign contain useful knowledge that can be used for predicting the political preference of users.

V PROPOSED SYSTEM

In proposed system, real time twitter messages will be collected using twitter streaming APIs. As unstructured data will be gathered need to find out the actual relevant data by using topic modelling techniques and using term co-occurrence Data will be filtered. These messages will be further semantically analyzed using state-of-the-art approaches. These messages will be classified to an appropriate topic. Twitter messages also provide geolocation of user, which can be useful to find trending topics as per location. Current trend analysis of tweets from hash tags (e.g. #BJP, #CleanIndia etc.) will be useful for classification of tweets. Major topics can be also analyzed by clustering of all messages using methods like KNN algorithm.

CONCLUSION

With the increased use of social media the current paper focused mainly on use of social media as a tool for election campaign. India which is known to be one of the wired countries in the world with having more than 65 % of its youth below age-group of 35; Social media plays vital role in the life of this young youth. The paper mainly covers the brief details of most popular social media among the Indian youth and the various existing system used for studying the impact of social media on worldwide politics. The paper also discuss how the various social networking sites are actually used by general user and what influence the scientist to actually study this vast amount of unstructured data generated by the comments of user to be mined (data mining) and then classify this mined data to actually find out the real time relationship between the user comments and the existing parties.

The Maharashtra state assembly election can be used for to study the impact of social media on Maharashtra politics. There is scope for verifying the changed sentiments of the user before and after election. The study can be enhanced to actually classify the gender of the user and to match it with actual demographics it can include the scope for verifying whether the user is human or a bot. The study can also include A machine learning approach to train a system to automatically classify the tweets and do a sentiment analysis of the tweets.

ACKNOWLEDGMENT

We are glad to express our sentiments of gratitude to all who rendered their valuable guidance to us. We would like to express our appreciation and thanks to Prof. Dr. P. C. Kulkarni, Principal, G. E. S. R. H. Sapat College of Engg., Nashik. We are also thankful to Prof. N. V. Alone, Head of Department, Computer Engg., G. E. S. R. H. Sapat College of Engg., Nashik. We thank the anonymous reviewers for their comments.

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