

Text and Sentiment Analysis: A study on Prime Minister's Independence Day Speech

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Abstract

This paper is basically based on Secondary data. The source of the data is from the PIB (Press in Bureau) website. The data is a Transcript of speeches of Mr. Narendra Modi's speech on Independence Day in his entire tenure i.e. From 2014 to 2018 which is used. Technique like Text mining, Text Analytics & Sentiment Analysis is used to visualize the graphical representation of the text which is done to easily grasp what data is saying. The study is descriptive in nature which explores the text visualization and helps to analyze the text or words most commonly used in his speech. As a prominent leader of the country, he has a very impactful effect of his speech on the nation which helps to influence the target voters. He strategically uses the words and tries to cover almost every aspects or issues of the country in his speech. The main objective of this study is to analyze the words which Modi frequently used in his speech, what are his sentiments during the speech how Modi influence the voters with his speech? In the realm of promoting there is a typical saying that text is the lord and words is the ruler. Our cherished Prime Minister Mr. Narendra Modi has consummated this workmanship to the flawlessness.

Keywords: *Narendra Modi, Sentiment Analysis, Text Analytics*

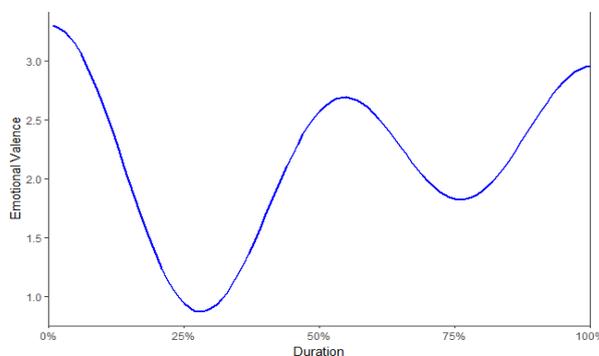
I. INTRODUCTION

In a voter experience setting, text Analytics implies looking at text that was composed by, or about, clients. You discover examples and points of premium, and afterward, make functional move dependent on what you realize. The text examination can be performed physically, yet it is a wasteful procedure. Along these lines, text Analytics programming has been made that utilizes text mining and normal language handling calculations to discover significance in gigantic measures of text. Emails, online audits, tweets, call focus operator notes, review results, and different sorts of composed criticism all hold understanding into your clients. There is likewise an abundance of data in recorded collaborations that can without much of a stretch be transformed into text. Text Analytics is the best approach to open the importance of the majority of this unstructured text. It gives you a chance to reveal examples and topics, so you recognize what clients are considering. It uncovers their needs and needs.

Utilizing text Analytics instruments gives you important data from information that isn't actually evaluated in some other way. It transforms the unstructured considerations of clients into organized information that can be utilized by business. The text examination is tied in with inferring high caliber organized information from unstructured text. Another name for text examination is text mining. A valid justification for utilizing text examination may be to remove extra information about clients from unstructured information sources to advance client ace information, to deliver new client knowledge or to decide conclusion about items and administrations. The text examination can likewise be joined with other progressed Analytics. For instance, it very well may be joined with other information and with machine figuring out how to anticipate the supposition pattern for example, antagonistic estimation anticipated to increment or individuals who are probably going to tweet

was seen noted that phrases like **COUNTRY** and **INDIA** marked the maximum emphasis throughout the speech which showed his wit to serve the motherland and its stakeholders. After going through the speech case, Mr. Modi denoted himself to be the **PRIME SERVANT** of the country in place of prime minister speaking of serving the society and motherland. In affection to the word **COUNTRY**, Mr. Modi used various terms and associated problems and schemes to signify the nation's health and mark up his intentions for the nation. Likely, he mentioned or addressed the crowd continuously with countrymen enlightening the sense of patriotism in them all through the program. India, a country of young people, the 65 percent population of the country happens to be under the age of 35 years and India has the largest number of youths in the world. Countries welfare was the prime topic throughout the program with several schemes discussed and given a green flag by the government namely: Clean India, Skill India, Digital India and also Make in India campaigns were discussed and benefits of such schemes were presented before the judging mass. Also, where India sits on the cloud of opportunities to reach new heights Mr. Modi also addressed the crowd of some severe problems that persist in the country likely rape cases, terrorism, corruption, and poverty etc. India has been worst hit by these leeches of the society and the GDP of the nation. He had motivated the country by saying "walk together, move together, think together and resolve to take the country forward together". He glanced upon the countries forward- looking policy and as to how to take the nation back to its previous glory via 'sabka saath sabka vikaas' was a game changer for the country crowd. Infrastructure development was one of the major factors which can see the nation forward par expectations. Looking over the problems saw one of the most important and biggest of 'em being the **POPULATION** itself and addressed the menace to the crowd being 125Cr and counting. Uplifting the nation requires employing each and every stakeholder of the nation especially the youth to be proactive enough and work for the nation equally. The youth of the nation should work for the progress of the nation and must strive for continuous success.

Sentiment graph of 2014



From the above sentiment graph, Prime Minister Modi gave the speech of 65 min the occasion of Independence Day 2014. Glancing over it, in the first quarter of approx. 16 mins Mr. Modi started off addressing the crowd both physically present and broadcasting over television radio as Countryman enlightening the spirit of patriotism as we could see he started off with high emotion and also at the moment he denoted himself as the Prime Servant of the nation he used the words best wishes and auspicious moment for the nation. Moving to the quarter of the speech, Mr. Modi addressed the crowd about the problems the country has been facing alongside and now the emotion variance started to fall as he used the words weaker section of society, deprived and exploited. The problems of population explosion and regional disparity were addressed. Reaching the mid-section of the speech the emotion variance again jumped to a higher level as he (PM) glanced upon the forward-looking policy of the nation and used the words dedicated, enthusiasm to highlight their highlighting tagline "sabka saath sabka vikaas". The crowd got energetic upon hearing the schemes proposed by PM and thus the emotion variance lumped to a higher mark to the end of the speech as the youth of the nation was addressed to work diligently for the growth of the nation. Words like inspiration and brave were used to denote the youth to inspire them and make them work for the nation's continuous growth.

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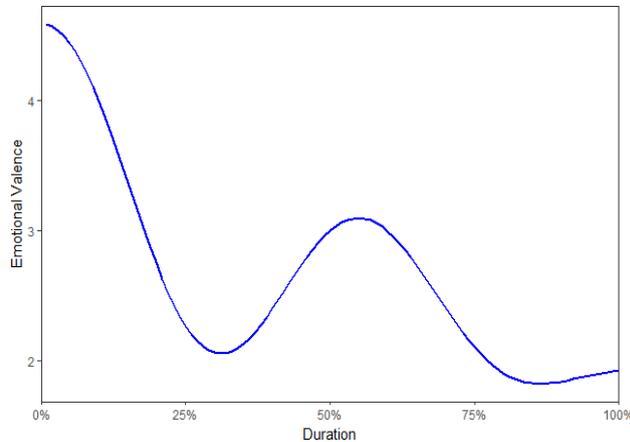
the peace of the country. Our country also faced various hits, which resulted in shattered communal harmony of the country. Meanwhile, the graph starts rising which means the Prime Minister started to discuss and address the various positive aspects of the previous year progress of the country which was denoted by celebrating the successful completion of the first year of the BJP government. He encouraged the youth and distinguished the fairness and transparency of the working of the government as that of the previous government. He expressed his emotions, how privileged he was on being chosen by the country as its Prime Minister. He celebrated the solid success of the government with fellow citizens. He motivated the youth by denoting them as the most valuable asset of the country and expressed his trust over them for the tremendous growth of the nation. In the end, he celebrated the great success of the democracy and the efforts of our forefathers and the freedom fighters for giving us the free and democratic India, which has the great cultural heritage and diversity all over the world.

Word cloud of 2016



On the basis of analyzing the above word cloud formed, it was noted that the speech given by the prime minister of India Mr. Narendra Modi at the auspicious occasion of 69th anniversary of India's independence was revolving around making India a superpower in the world, he addressed the nation by reciting the historical journey of the nation and its martyrs because of whom they were standing there. Spirit of patriotism was filled in the packed show. Denoting the country, he gave the slogan of "ONE INDIA GREAT INDIA". He talked about the dream of the great martyrs of the nation who strived to revolve against the Britishers. Use of the word INDIA has been done significantly as the increase in tax collection was addressed along with the ease of issuing passports done by issuing the services to TCS upon which the no. of passport holders increased drastically in the country. National schemes were announced in the program likely Beti Bachao Beti Pado, Mudra Yojna, Sukanya samridhi yojna, Indradhanush Tikakaran Yojana and so on which on the contrary motivated the national youth and start-up entrepreneurs of the country. Addressing the infrastructure improvement, Mr. Modi discussed about the increased Indian GDP and decreased Inflation rate as per last session. Inclusion of updated foreign policy was mentioned in the speech and along with increased trade with member nations. Addressing the pros also needs to be glanced at are the cons as well, like the pathankot attack of January'16 and south Indian floods of late 2015s. The slogan of ONE INDIA GREAT INDIA was one of the main attractions of the event.

Sentiment graph of 2016



As per the graph depicted, as a decree the awaited speech started off with a high emotion variance where PM Modi addressed the nation as brother and sisters and fellow country-men, while he talked about the dream of the martyrs of the country and how they fought against the opponents to free off the nation. Words like auspicious and extending a heartfelt greetings for the occasion saw the emotion variance to go high on the scale. Reaching the quarter of the speech, it was seen that the emotion variance fell down as they talked about the sacrifices made by the martyrs of the country and struggle faced by the people at that time. Further reaching the half of the speech various schemes were announced which saw the emotion variance move to a higher position. Although, the overall emotion variance was seen at a lower phase because the nation had to see many of the worst calamities lately be it from South Indian floods to the Pathankot attack in January the same year. Words like bravery, discipline and fortunate saw the emotion variance to go high a bit but still the overall status of the graph projected a slump response.

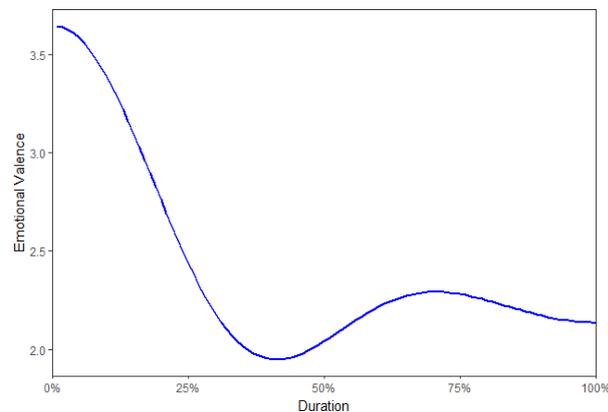
Word cloud of 2017



On the basis of analyzing the above word cloud formed, it was found that the speech delivered by Mr. Narender Modi on the sacred festival of independence of the Indian country, it was noted that the most awaited speech from the nations **PRIME MINISTER** was all concentrated and devoted to the previous year and the ups and downs faced by our nation. After going through the speech case, Mr. Modi denoted the strength of the country by addressing the great success of the surgical strike against the terrorism in the country. He also shared some evident data related to the project Digital India that focused on making the paper less India. He tried to take back all the black money through the step of Demonetization, this was his huge strategic move, and he discussed the outcomes of the above in his speech. The major part of his speech covered the working and progress of the various schemes launched by the government such as railway project “Bharat Jodo” to link the whole nation to

facilitate the smooth flow of the internal trade of the country. He announced various schemes such as UdayYogana and various Smart City Projects to build the infrastructure of the country at a good pace. Denoted the biggest strength of the country to be its unity and democracy. He also addressed the nation of the huge reservoir of black money stored in abroad and promised to bring back the money giving the crowd a sigh and a round of cheer and also addressed the crowd of the advantages and ways of digital payments post demonetization and how to fulfil their transaction easily.

Sentiment graph of 2017



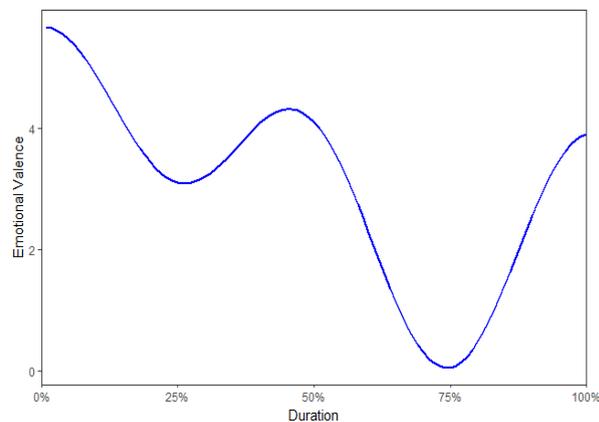
On screening the sentiment graph of the speech 2017, it was let off with a great emotion variance which also remained for a while as PM Modi cheered the crowd as their brother and sisters and greeted them of such auspicious occasion. He talked about the glory of the nation and gave certain stats about nation's growth. Speaking of glory also featured the surgical strike executed by the army men on terrorism post URI attack which began a mass cheer for "Vandey Matram", waves of patriotism could be seen in the atmosphere with Mr. Modi lighting up the show. As we reached the mid of the speech, the variance dropped as he addressed the crowd of the demonetization move and its implications, using the words like calamities, loss, sacrificed, masoom and challenge also to address the martyrs of URI attack the graph dipped to the lowest point. Reaching about 3/4th of the speech, found the graph to leap a bit high as PM announced some schemes of national eminence like "bharat jodo" for connecting the remote areas via railways and issuing war against black money stored in abroad. Words like determination, build the nation, prosperous and spirit showed such results.

Word cloud of 2018



Based on analyses of the above word cloud formed, it was found that the speech delivered by Mr. Narender Modi on the sacred festival of independence of the Indian country was centered to the domains of the country and India (**highlighted**) the speech revolved around the countries beauty aspects and started off remembering how great personalities struggled to get our country free off the bonds of slavery and injustice. He also dignified the eminence of the tri color in the flag of the nation. Reading the speech, he talked about his dream as a superpower in the world and how can it be far-fetched. He further elaborated the conditions of the villages in the country and announced various schemes and amenities required in the country for rural development. He further discussed the skill India campaign launched and its success story via stats. Various information like construction of toilets and establishment of IIT's and IIM's along with AIMS's were announced in many states for cross development of the nation. He addressed the nation of the modern agriculture techs and strengthen the defense system and issue of POK. Furthermore, he addressed the nation of the budding investment opportunities in the country. He announced further schemes, like Aayushman Yojana and further Indian space mission etc.

Sentiment graph of 2018



From analyzing the sentiment graph, it can be seen that the emotions showed a comparative very less variance and remained on high constantly with a dip at around the 3/4th part of the speech. At the initial stages, as per the cordial greeting from the PM on the occasion of countries independence and addressing everyone as brother and sisters.

Words used as beloved, greetings; freedom and democracy showed a hype in the emotion level of the speech and as he addressed the crowd of nations struggle to attain freedom proved such level. Moving towards the mid of the speech, it was found that the graph slacked a bit but regained its hype again as words like inspiration, capability and self-sufficiency were used as PM talked about seeing India as the superpower of the world and slotting the rural development in the country. Reaching the 3/4th part of the speech it was seen, that the emotion variance went down as he mentioned the issues of POK. Post session, he mentioned the schemes and other incentives for the nation hence used words like intention, gratitude and consensus which showed the graph give a hype.

III. CONCLUSION

- From the above data analysis, the researcher concluded that speeches of the Prime Minister Mr. Narender Modi on the most prestigious platform on the occasion of independence day from the last 5 years is completed focused on the country as well as the fellow countrymen.
- Prime Minister Modi always highlighted the country's strength and weaknesses to achieve the goal of New

India. He presented the progress report and facts of the various schemes launched by the BJP government for the welfare of the country and countrymen.

- He considered youth as the most valuable asset of the country to set India ahead of other countries.
- Beside this, Prime Minister Modi talked about some of the major loopholes and the blackspots on the country, which weakened the roots of the mother nation. In order to strengthen the country, he considered himself as the nation's servant.
- The biggest element of his speech is to target the audience by emotional element. He always tries to connect with the audience by using the elements of patriotism. So that they participate more and more in the growth and development of the country.
- Prime Minister Modi tries to create a sense of affinity with the nation may it be by physically present or broadcasting at home by addressing everyone with words like brothers and sisters.
- On analyzing the word clouds, it was seen that every time he was concentrated over the 'nation' and its 'welfare' and 'dignity of its countrymen'.
- Post analyzing the sentimental graph of the study, it was found that each speech started off with a high emotion value as the prime minister greeted the nation on the occasion of the auspicious day.
- Moving further in the sentimental analysis the sentiments showed variance in the emotion level as the prime minister addressed the nation of certain setbacks (Uri and Pathankot attacks and south Indian floods) and also the opportunities and success stories of the nation in the global economy.
- PM Modi also always address the hard work and perseverance of the great Martyrs of the nation who strived and struggled to attain achieve the independence for the country.
- Mr. Modi also addressed the nation of his dream "One India Great India " as well as scheme of BHARAT JODO to connect even the most remote areas of the country.

IV. RECOMMENDATION

From BJP's perspective:

- The Prime Minister has dismissed almost all the areas in his speech but never touched the Education Sector, He has redeemed the nation from the Red Fort in the last 5 years, he has given the status of Team India to the youth of the country, but he has no education policy for those youths.
- India's present Prime Minister Narendra Modi just as well as the NDA-led government is proactive in embracing new advancement in technology. It has been showcased by their marked preference in taking proactive steps towards helping the private sector, as well as updating the public sector and government entities with new technologies.
- Through a series of events and speeches from the last few years, he has been deliberately showcasing India as well as his government as technologically forward. Modi repeatedly discusses the corruption in his speech but his government at ground level could not complete this problem within 5 years.
- Sometimes Modi response late on burning issues of the nation like Dadri incident and Rohit Vemula incident has happened in the country.
- Nation voted NDA government in 2014 because they were frustrated from Congress party and their leaders and still Modi cabinet blames Congress everywhere, still he behaves like party campaigners rather than PM.
- Opposition always blame Modi to take credits in his speech of almost every good happen under his tenure. He has done various commitments in his speech to attract or influence the nation but his team would not be able to manage very high percentage of achievements. Sometimes prime minister tries to squelch the weaknesses through his sentiments and connect them emotionally and make them away from the failure of

his government. He always in campaign mode and always do frontal attack.

- Prime Minister should use the words like employment, jobs, education etc. to attract the youth of the nation and should do the announcements for their career rather than the other promises.

From Opposition's perspective:

- In current scenario, oppositions do not have any vision and policy for country they always blame Modi led government for any failure and mishappening takes place. They generally use negative words in their speech to just break the vote share of BJP government.
- Their sentiments always goes down because they use negative words against prime minister. Not even a single opposition doesn't have any good speaker like Modi who can influence the market and emotionally attract the people.
- People perceives opposition as the corrupt party and they rely on what Modi talks about. They usually use abusive words for the Modi which is the weakness of the all opposition party and they forgot that Modi is our prime minister.
- Opposition must choose the words wisely and try to reveals the burning issues with the facts because there are various issue in different region. They appears raw and inexperienced in their public speeches. They always encircle the Modi and BJP government on single issue everywhere, every time like through Rafale scam, bank frauds etc. The party went into a huddle but internal dissensions and lack of visionary strategies failed to revive its electoral fortunes.
- They don't have capability to influence the market or attract the nation as they can't deliver their message or attract through their speech. They have hatred sentiment for the Modi government which is not always benefitted to win the election or vote share.

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Ramzan Talib et al. (2016) Presents a concise review of text mining methods that assistance to improve the text mining process. Explicit examples and groupings are connected all together to separate valuable data by wiping out immaterial subtleties for prescient Analytics. Determination and utilization of right procedures furthermore, instruments as indicated by the space help to make the text mining process simple and productive. Space information mix, fluctuating ideas granularity, multilingual text refinement, and common language handling equivocalness are serious issues and challenges that emerge amid text mining process. In a future look into work, he will center to structure calculations which will help to determine issues displayed in this work[1].

Ansolabehere and Iyengar (1995) Suggested that there are wide similarities between political and commercial advertising. Hence, advertising in political marketing as we are advertising brand marketing can be widely used to change the current belief of both the audiences and to make sure that they do not deviate from the loyalty path because the values and beliefs associated with the brand are similar[2].

W.He (2013) Examines the online inquiries and talk messages consequently recorded by a live video streaming (LVS) framework utilizing information mining and text mining methods. We apply information mining and text mining methods to break down two distinctive datasets and after that directed a top to bottom connection examination for two instructive courses with the most online inquiries and visit messages individually. The examination found the disparities just as likenesses in the understudies' examples and subjects of cooperation between online inquiries (student–teacher collaboration) and online chat messages (student– understudy's connection or companion communication)[3].

R. Rajendra (2013) Proposed adjusted apriori approach when connected to a corpus of web records created similar bunches which is the thing that a conventional apriori approach can deliver. However, hypothetically and tentatively it has been demonstrated that it is more productive and quicker than conventional apriori. This is so in light of the fact that at each progression the data (i.e records) from the corpus (i.e from the exchanges) has been expelled which is never again required and thusly it decreases the pointless correlations. Likewise, the extra pruning of successive itemset diminishes the quantity of competitor itemset for the tallying step and the quantity of database examines is decreased to one, since once the vertical information design as a 2D-cluster is made then no more database checks are required and every above control are done on that 2Darray. Consequently, it spares a ton of time. After the underlying bunches shaped by the changed apriori approach, at that point, FCM, K-Means, and VSM systems have been connected on it independently[4].

Marland (2003) Stated a related point by mentioning that political marketing will be more related to the real estate industry, because of the heavy human relationships within the service market in contrast with maximum other commercial sectors. The researcher did not compare how respondents view political or commercial refereed messages, but in broad they conclude that voters, as well as consumers, will have more changes than similarities[5].

Fabrizio sebastiani (2002) Stated that one reason why from the early '90s the viability of text classifiers has significantly improved is the landing in the TC field of ML techniques that are upheld by solid hypothetical inspirations. Instances of these are multiplicative weight refreshing (e.g., the WINNOW family, WIDROW-HOFF, and so forth.), versatile resampling (e.g., boosting), and bolster vector machines, which furnish a sharp stand out from generally unsophisticated and frail strategies, for example, Rocchio. In TC, ML analysts have discovered a testing application, since datasets comprising of a huge number of archives furthermore, portrayed by a huge number of terms are generally accessible. This implies that TC is a decent benchmark for checking regardless of whether a given learning system can scale up to considerable sizes. Thus, this most likely implies that the dynamic inclusion of the ML people group in TC is bound to develop[7].

Y. Zhao (2013) Presents preliminary research on breaking down DIAC Twitter information in methodologies of text mining and interpersonal organization Analytics. With text mining of tweets, points and their varieties after some time have been recognized. Twitter supporters have been dissected, what's more, the spread of tweets over Twitter arrange has been examined. With some underlying intriguing outcomes distinguished, this examination will be additionally considered in future research ventures. The instruments utilized are open-source programming, and the information utilized in this work is freely accessible on Twitter. Hence, peruses can without much of a stretch reproduce the examination and apply it to Twitter accounts that they are intrigued in. This exploration can be stretched out by examining the text from more Twitter accounts, examining informal community among them and their devotees, and building up a compelling technique to discover the connection between points/occasions and varieties in time arrangement, e.g., a number of visa candidates, endorsements, landings, flights and visa handling time[6].

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