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A Comprehensive Analysis of Social Media Data-Based Election Prediction: Research Obstacles and Future Prospects

M Jeevitha[1], Dr M C Bhanu Prasad[2]

Department Of CSE, Tadipatri Engineering College, Tadipatri

Abstract

The introduction and recognition of modern-day social media (SM) which include Facebook, Twitter, and Instagram have converted the way politicians talk with their citizens and marketing campaign for elections. The inherent talents of SM, together with the potential to manner massive quantities of statistics in actual time, have brought about the emergence of a brand new discipline of research that uses SM information to predict election outcomes. Although many studies were carried out during the last decade, their results are exceptionally arguable and widely debated. In this context, the goal of this article is to explore and summarize how studies on predictive preference based totally on SM facts has developed on the grounds that its inception, thereby reflecting each the state of the artwork, practices, and opportunities for studies in this location. In the context of election research, we have described the primary techniques and features of a hit research, the principle strengths and issues, and as compared our consequences with previous reviews, concerning technique, amount, and satisfactory of guides. We diagnosed and analysed eighty three relevant research, and identified problems in numerous areas, inclusive of process, sampling, layout, choice-making, and medical rigor. Key conclusions encompass the low success rate in the use of the most commonplace methods, Twitter quantity and sentiment analysis, and the better outcomes of more recent strategies, which includes educated regression methods, in traditional studies. Finally, a angle for future research at the coordination of trends in the definition, modelling, and evaluation processes is also mentioned, which, among different things, demonstrates the want to better recognize the software of contemporary system learning methods.

Keywords: Prescriptions, Textual Content Evaluation, Medicinal Drug Effectiveness

I. INTRODUCTION

Social media (SM) has played a chief function in politics and elections for many years. S. M. We have entered a new era of management. In this campaign, politicians campaign continuously, without the limitations of space and time. Much of this will be determined now not most effective via the clicking, but additionally via social media (SMB) profiles inclusive of SM. You can also get it directly from different individuals who percentage and increase their voices approximately it. In this new context, SM is getting used appreciably in election campaigns, and the success of election campaigns also can decide the final results of the election. In fact, current examples of the connection between SM and electoral success are the 2016 US presidential election, where Donald Trump advertised his campaign on

unfastened media [2] and the 2018 Brazilian presidential election, wherein a candidate with excessive SM exposure but low publicity to traditional media become elected [3].

II. RELATED WORK

One of the most important steps in the software development process is the literature review. Determining the time component, cost savings, and commercial business robustness is essential before expanding the gadget. After these are satisfied, the next stage is to identify the language and operating device that can be utilized to expand the device. Programmers require a lot of outside assistance once they begin building a device. This assistance can be obtained via websites, books, or senior programmers. The aforementioned issues are taken into account when constructing the system in order to expand the suggested device.

Examining and reviewing all of the challenge improvement's needs is the core function of the assignment improvement department. Literature evaluation is the most crucial stage in the software development process for any task. Prior to expanding the equipment and associated layout, time considerations, resource requirements, labour, economics, and organizational electricity must be identified and examined. The next phase is to determine the operating system needed for the project, the software program specifications of the particular computer, and any software that needs to be carried on after those factors have been met and thoroughly investigated. A stage similar to expanding the tools and related capabilities.

The reason of this take a look at is to illustrate the use of social media the use of OpenAI era in the 2024 presidential election in Indonesia. The methodology is based on a qualitative research description using number one and secondary analysis strategies. Primary facts changed into acquired thru interviews with political advertising scholars and facts generation scholars. Secondary information changed into received from numerous newspaper courses and authorities web sites associated with the research subject matter. The credibility of the information turned into received from triangulated sources primarily based on interviews with numerous informants and documentary studies to obtain reliable statistics. This observe determined that using AI-based social media equipment is based totally at the advantages of OpenAI's present day era, its speed and time-primarily based facts evaluation capabilities, and the ability to rebrand image content material for visualization [1].

One method of analyzing public opinion on an event is sentiment analysis. The US presidential election is a contentious issue that has an impact on unique regions of the globe. Predicting the outcome of the US presidential election and contrasting it with the actual results is the rationale for this analysis. This examination's sentiment analysis evolved into a dictionary-based analysis. Information series, statistics preprocessing, statistics mapping, and sensitivity analysis were the techniques employed in this investigation. Twitter provided the numbers for this analysis each week prior to the US presidential election. VADER sentiment evaluation is the model utilized in this investigation. Using a textual content mining technique, the information cleansing set of guidelines for this analysis first purges the facts of a variety of items that were not taken into account during the evaluation. Additionally, the data that could be used as analysis material is easily readable and re-saved. The study compares and ranks users' tweets according to US states. According to the findings of the Take a Look Act, the Democratic Party was predicted to garner 22 votes, while the Republican Party only received 19 [2].

Predicting US presidential elections has been a subject of research for many years. Currently, there are primary techniques to election forecasting: traditional models that include economic statistics and polls, and fashions that use 10 and different social media that have received reputation in the past decade. However, conventional methods regularly focus on national estimates, while social media-primarily based strategies often spotlight subtle variations between on line discussions and the wider political arena. In this study, we employ a hybrid strategy that combines nation-level sentiment analysis and device learning algorithms with many independent drivers, including survey averages, financial indicators, census data, and a recently defined sentiment rating from X. The results of our forecasts for the 2020 US presidential election were encouraging. The majority of our models used multilayer perceptron algorithms and gradient boosting bushes to effectively predict the Democratic candidate's victory with 96% accuracy. The shortcomings of existing methods for forecasting presidential elections, especially those that solely rely on public opinion, are addressed by this new prediction framework [3].

Social media structures provide a wealth of statistics that can be used to analyze social issues and predict future occasions. But that is a tough project due to the fact the character of the information is so bright and noisy. In this paper, we advocate a technique to predict results thru Twitter. Specifically, we first set up a social media account the use of retweets. Next, we put into effect four strategies of computation for our above problem. In the easy consumer computation (SC) technique, we compute categorized users with none extra steps to lessen the weights. In the metropolis-based weight computation (CBWC) method, we use a weight computation based totally on the wide variety of votes in every metropolis. The urban prediction (CCBP) approach makes use of sociodemographic similarities among cities to predict outcomes for towns with restricted pattern sizes. The use of beyond results (UFERs) compares each country's predictions with past election results, identifies facts biases, and uses them. We compare the proposed techniques using records collected for the Turkish presidential election in 2018 [4].

The advent and popularity of modern-day social media (SM) along with Facebook, Twitter, and Instagram have modified the manner politicians speak with their electorate and marketing campaign for elections. The inherent skills of SM, along with the capability to technique massive quantities of information in actual time, have led to the emergence of a new subject of studies that makes use of SM information to predict election effects. Although many research were performed in the past decade, the results are exceedingly arguable and widely debated. In this context, the purpose of this text is to explore and summarize how studies on predictive desire based totally on SM information has evolved considering that its inception, thereby reflecting each the country of the artwork, practices, and possibilities for studies in this location. In the context of election studies, we describe the main techniques and functions of successful studies, key strengths and issues, and compare our consequences with preceding critiques, regarding method, amount, and high-quality of guides. We diagnosed and analyzed eighty three relevant research, and identified problems in numerous areas, inclusive of technique, sampling, layout, selection-making, and medical rigor. [5].

The use of big data analytics in elections in Indonesia started with the DKI-Jakarta gubernatorial election in 2012 and continued till the presidential election in 2019. However, its use has been confined to sentiment analytics to describe social media customers' assist and are expecting outcomes. We see a outstanding opportunity to use big statistics to elections in widespread, in order to assist meet the information and analytical desires of elections in any respect stages. However, aside from the analysis

and visualization problems, the principle task in using big statistics is to combine huge quantities of facts from special assets in one of a kind formats and in large quantities. Therefore, in this paper, we recommend a big statistics integration task to fulfill the needs of elections in Indonesia. This massive statistics integration assignment turned into advanced primarily based at the Indonesian electoral law, huge statistics technological know-how, and using NoSQL databases to provide facts information. [6].

Today, it cannot be denied that social media is found in many regions of people's lives, especially in sports, business, and education. Ordinary humans, along with politicians, frequently use social systems including Facebook, Instagram, and TikTok to connect with their audiences. One of the maximum broadly used structures is Twitter, additionally referred to as X. It is a platform in which people can share their evaluations thru short messages. Since it's miles an alphanumeric wide variety, humans can ship and get hold of messages fast. It is a outstanding platform for updating real-time situations including elections, accidents, natural screw ups, and many others. Depending on its homes, it is able to be used as a supply of data for social media evaluation, which entails accumulating and reading statistics for selection-making. [7].

The development of the Internet has led to the lively use of recent methods of communique. In trendy generation, social media has come to be a major conversation device. Political parties are an increasing number of the usage of social media to collect and win votes. An large literature assessment has identified numerous blessings of the usage of social media, consisting of gaining visibility, spreading the message, and organizing electorate, the want to monitor publicly published content material, and, in addition, the effect of this content at the vote casting behavior of capability electorate. This article examines the effect of political social media activities at the election outcomes of applicants. Using the decision tree approach, a predictive model of election effects changed into created based on a set of data containing records about the applicants' profiles and the candidates' sports at the Facebook social community. The predictive version is based totally on records from nearby elections in essential Croatian cities in 2017. This examine identifies the primary drivers of political communique at the social network Facebook all through elections and recommends extra powerful use of Facebook in political campaigning [8].

Modern social media which includes Facebook, Twitter, and Instagram have changed the manner politicians vote and marketing campaign. Scientists and the public have long recognized the energy of social media in elections and its capacity use in predicting election effects. Modern techniques consciousness on the volume of Twitter posts wherein humans are speak me about applicants and use machine mastering to extract that means from the ones messages. However, differences in facts series, the conduct of social media campaigners, and the presence of cars without difficulty explain the consequences. In this paper, we advocate a brand new schooling method for ML models to expect voter turnout. The method is based on modeling and the use of social media information accumulated from legit candidate profiles together with conventional insights. We then use artificial neural networks for prediction. We then behavior experiments in exceptional scenarios: the 2018 Brazilian presidential election and the 2016 US presidential election [9].

This take a look at specializes in recognition as a powerful device for growing sales capital on social media. The important goal of this have a look at is to discover the function of popular rhetoric in digital conversation, following the standards of E. Laclau's theory of reputation and N. Carpentier's

theory of opposed discourse, the usage of competition and competition fee as indicators to measure the extent of person engagement with the arguments of social community leaders [10].

III. EXISTINGSYSTEM

Kalambogis et al. Provided a scientific evaluate to understand the predictive strength of SM, no longer simplest within the electoral context. After analyzing eleven research on preference structures, they discovered that the principle methods had been based on the usage of length, opinion, and profiling. In addition, predictive analysis using linear regression has been used, however not in research associated with the political surroundings. Furthermore, 40% of studies using attitude-related variables wondered the predictive strength of SM that is, showed that it changed into now not properly established, and this variety improved to sixty five% with dictionary-primarily based strategies. Finally, they highlighted the shortage of predictive evaluation and the unique consequences of the studies at the predictive strength choice. We agree with that the Cayo-Avello look at become the first evaluation performed earlier than the election, as SM became published on Twitter. After reviewing ten previous research from 2010 to 2013, he concluded that "estimates of the predictive electricity of elections are rather overstated." Bilal et al. taken into consideration the issues of reading opinion in languages other than English. Despite this new argument, latest studies have did not become aware of new methods and strategies that SM uses beyond Twitter and Facebook.

Disadvantages:

- Most existing systems studies is basically facts-pushed and rather speculative.
- Moreover, in place of predicting the destiny, these studies have centered on the present or the beyond, and feature commonly no longer examined the validity of their predictions towards reliable records resources consisting of surveys and government censuses.
- However, in comparison to standard strategies, social community analysis promises to offer a whole new level of knowledge of social phenomena, giving researchers unheard of access to humans' normal interactions and their friendships and networks throughout time and geographical limitations.

REQUIREMENT ANALYSIS

Evaluation of the Rationale and Feasibility of the Proposed System

The intention of this systematic review is to discover the improvement of studies on predictive preference the use of social media (SM) records, to research the present day state of each the artwork and exercise in this field, and to identify potential research opportunities. It makes a speciality of the amount and first-rate of publications, the context of the selected research, the primary strategies used inside the decided on studies, their strengths and questions, and a contrast of the results with preceding critiques.

IV. PROPOSED SYSTEM

In this proposed gadget, the aforementioned power of social media is explored, specializing in distinctive information sources and forecasting methods, particularly sentiment evaluation. Our consequences received from numerous published studies show a large development in forecast accuracy, which on common reduces the chance of a traditional research survey. Regarding the methods used, the observe shows that system studying-based totally critiques normally perform better than reviews derived

from an existing dictionary, and that the combination of structural functions and opinion evaluation gives greater correct forecasts. In addition, our examine indicates some variations inside the predictive electricity of social media records across one-of-a-kind ranges of political democracy and exclusive electoral structures. We additionally be aware that the accuracy of elections and opinion polls varies depending at the statistical estimates used, so the clinical network ought to strive for a greater standardized approach for studying and offering predictions derived from social media in the future.

Advantages:

- Methodological proposals are often primarily based on artificial intelligence. Fortunately, huge progress has been made on this region in the ultimate decade, together with the development of fashions and algorithms, and the supply of with no trouble to be had gear for education models and predictions, along with GPUs, distributed structures, grid computing, and cloud computing. So calculations that took weeks some years ago can now be completed in minutes.
- With the significant quantities of data to be had, this facts can be gathered and processed in actual time. This capability opens up new opportunities in political campaigns, as this information can help fast adjustments in campaigns, rules, or rhetoric, for instance in real time in the course of debates.
- Due to the automatic facts collection and analysis, these strategies may be considered less expensive than traditional offline verification, which normally calls for organized paintings with a huge range of interviews.

SELECTED METHODOLOGIES

Methods for predicting elections on social media (SM) are various and constantly evolving. Sentiment evaluation is a typically used method for assessing public sentiment with the aid of extracting information from text using data mining techniques to evaluate voter opinions about candidates and issues. Machine studying models which include help vector machines (SVM) and random forests are often used to version and predict records based totally on ancient trends. Natural language processing (NLP) enables to analyse social media content material extensive, identifying key themes and changes in sentiment. Network analysis helps researchers to pick out influential individuals and tendencies, mainly thru hashtags or follower networks, to understand the shape of SM interactions. Time series analysis studies stock conduct over time and predicts changes within the lengthy-time period overall performance of shares. Multimodal records fusion, combining textual content, images, and videos, offers a whole image of public opinion. Deep gaining knowledge of methods such as neural networks have further stepped forward the accuracy of predictions by way of managing unstructured facts. Furthermore, integrating conventional survey information with SM insights will enhance the robustness of the models. Geographic analysis allows us to study nearby patterns in SM activity, which permits us to predict beyond local behaviour. Finally, hybrid techniques that integrate more than one strategies inclusive of machine gaining knowledge of and gadget gaining knowledge of offer a more robust predictive version, which improves the accuracy of preference prediction fashions.

Machine Learning

Machine learning (ML) is a branch of artificial intelligence (AI) and laptop generation that focuses on the usage of facts and algorithms to permit AI to imitate the manner human beings perform searches, progressively increasing its accuracy. A choice-making approach, commonly a way of

analysing a gadget, is used to make predictions or classifications. Given a number of input statistics, labelled or unlabelled, your algorithm estimates a sample within the information. An error characteristic classifies mistakes and evaluates the model's prediction. Using examples, blunders characterization may be used to make comparisons to assess the accuracy of the model. If the model suits the information given in the dataset well, adjusting the weights to decrease the difference between the regarded instance and the predicted version is a method for enhancing the version. The algorithm repeats this "estimate and optimize" manner, continuously updating the weights until it reaches a limit of accuracy.

A subset of synthetic intelligence (AI) called machine getting to know lets in computer systems to analyse from facts and enhance over the years without being explicitly programmed. A form of artificial intelligence (AI) called machine mastering lets in computers to research from statistics and predict results without being explicitly programmed. If you are new to the sector, this education will provide you with an in-depth knowledge of machine learning, which includes its sorts, techniques, gear, and real-global applications. Data is the lifeblood of machine mastering, supplying the premise for both checking out and education fashions. Input statistics (features) and output data (labels) shape the statistics. To investigate the performance and generalization of a model, it's far examined on unknown statistics after learning the styles all through schooling. In device studying, every set of rules learns in a different way. Labelled datasets, regularly known as supervised mastering, can be used to tell a deep machine learning set of rules, however they're not necessarily categorized datasets. After taking unstructured statistics inclusive of text or pics in its uncooked form, a deep mastering approach can robotically identify a hard and fast of features that distinguish one of a kind kinds of records from each other. This permits for using big quantities of statistics and reduces the quantity of human intervention required.

SYSTEM ARCHITECTURE

The description of the overall traits of the software is linked to the definition of the requirements and the established order of a high degree of the gadget. During architectural design, numerous web pages and their relationships are described and designed. Key software components are defined and decomposed into processing modules and conceptual records systems, and relationships between modules are described. The proposed system defines the following modules.

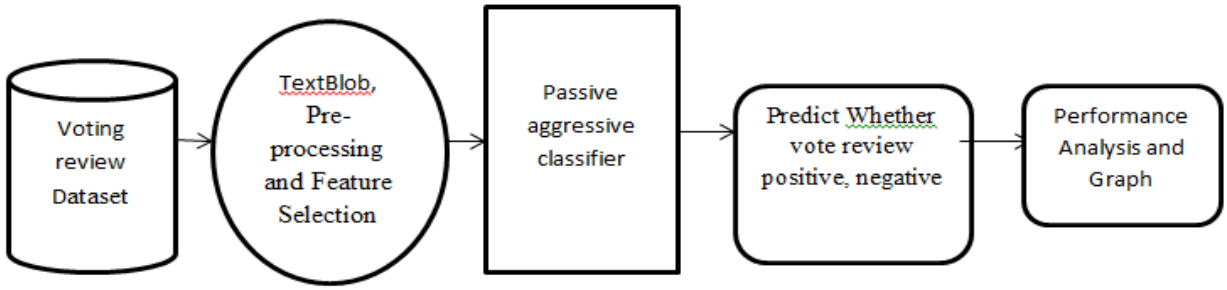

Fig 1: System Architecture.

V. SYSTEM MODULES

- Data Collection
- Dataset
- Sentiment Analysis in Python with Text Blob
- Data Preparation
- Model Selection
- Analyse and Prediction
- Accuracy on test set
- Saving the Trained Model
- Database connecting using MySQL.

Modules Description

Data Collection:

This is the first real step in the direction of the real improvement of device studying fashions, data collection. This step is very vital, the better the version, the better the statistics points received, the higher our version will carry out.There are many facts series methods including textual content scraping and guide intervention. Voter turnout quotes were taken from Kaggle.

Data set:

The dataset has (969)812 character facts points.

Sentiment Analysis in Python with Text Blob:

The approach that Text Blob takes to research is extraordinary because it's far rule-based and consequently calls for specifying a predefined order of words. For example, those phrases can be acquired from the NLTK database. Sentences are also determined through semantic relationships and the frequency of every phrase within the input sentence, which gives more correct outcomes inside the output. The first step is entire, and a Python example is supplied with the desired inputs, which may be used to derive the emotions of disgrace inside the form of polarization and individuality, which can be discussed within the previous segment.

Data Preparation:

We restructure the data by eliminating missing information and delaying some columns. We start by compiling a list of column names that we wish to shop for or maintain. After that, we remove or cast off every column except the ones we wish to keep. Lastly, we remove or discard rows in the dataset that have missing values.

Model Selection:

We have used the PassiveAggressive Classifier set of rules. Passive-competitive algorithms are an own family of gadget gaining knowledge of algorithms that are famous to novices and intermediate system mastering fanatics. However, they can be useful and beneficial for positive programs.

Analyze and Prediction:

In the actual dataset, we chose only 2 features:

1. Text: comment
2. Labels : Labels
    i. positive
    ii. negative

Accuracy on test set:

We got an accuracy of 90.02% on test set.

Saving the Trained Model:

The initial step is to save your version to a.H5 or.Pkl file using a library like Pickle whenever you are certain it has been adequately tested and skilled to be prepared for a production setting. Ensure that Pickle is a fixture in your surroundings. Later on, we can import the example.Pkl file and provide the module instance.

VI. RESULT & DISCUSSION

The evaluate suggests that using S. M. Data for predictive choice has evolved appreciably, from early studies based totally on primary sentiment evaluation to greater latest studies the use of superior system studying techniques. Successful studies frequently contain real-time SM records, community sensing, and evaluation, but face challenges which includes representativeness, study design, and ethical problems. Although sentiment analysis and machine getting to know fashions are the most famous methods, problems which includes statistics privacy and algorithm transparency stay a prime situation. Future research have to explore hybrid models that combine traditional and SM concepts, deal with moral troubles, and consider cross-cultural contexts to offer more correct predictions. In addition, the aggregate of actual-time records and obvious algorithms can enhance prediction accuracy.

OUTPUTS


voting review
Home
Login
register
Register


Register
nithya
nithya@gmail.com
submit


voting review
Home
Login
register
Login


Login
Username :
nithya
Password :
Login


voting review
Home
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prediction
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Logout
review details


profile
profile details
Your full name:
nithya
Your email:
nithya@gmail.com
Password:
Sandy@123


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Tweet
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Democratic(Joe Biden)
@realDonaldTrump What the hell are you talking about sir?
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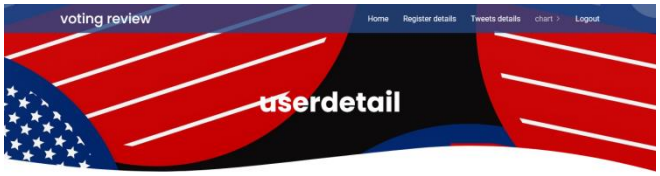


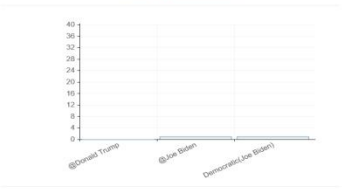
userdetail

user_id	user_name	Email
1	vidhya	santhosh@gmail.com
2	santhosh	sandy@gmail.com
3	nithya	nithya@gmail.com

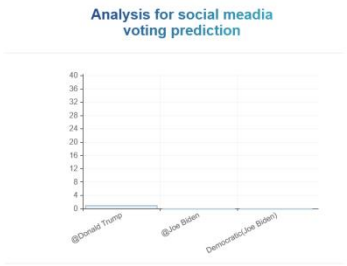
Full detail

user_id	user_name	Email	tweet	parties_name	pred
1	vidhya	santhosh@gmail.com	@Joe Biden will win usa election	@Joe Biden	Positive
1	vidhya	santhosh@gmail.com	@Donald Trump Young black predators roaming the streets belong in jail	@Donald Trump	Negative
3	nithya	nithya@gmail.com	@realDonaldTrump What the hell are you talking about sir?	Democratic(Joe Biden)	Positive

Analysis for social meadia voting prediction




Home
Register details
Tweets details
chart
Logout
A Systematic Review of Predicting Elections


Analysis for social meadia voting prediction
@Donald Trump
@Joe Biden
Democratic(Joe Biden)


voting review
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RT @itsJeffTiedrich: @realDonaldTrump imagine a Republican incumbent having to waste time and resources in deeply-red Georgia two weeks befi


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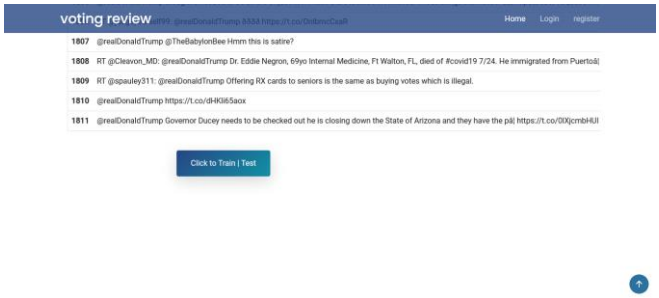
0 RT @itsJeffTiedrich: @realDonaldTrump imagine a Republican incumbent having to waste time and resources in deeply-red Georgia two weeks befi
1 @realDonaldTrump https://t.co/qsPfJUGc6d
2 @realDonaldTrump What the hell are you talking about sir?
3 @realDonaldTrump @cspan Joe Bidenás town hall-style forum on Thursday night had 15.1 million viewers, while Presidenâ https://t.co/i1ztLfGHcB
4 @realDonaldTrump only follows 50 people on Twitter and they are all of the same mindset or his staff, with very littâ https://t.co/I7mQHimWz
5 @realDonaldTrump Is running out of Rednecks. Thatâs the tweet. #AdiosMF
6 @realDonaldTrump You have packing to do!!!! Cannot wait until you are out!!!
7 @realDonaldTrump @POTUS 45 lies again! 45 & his sorry ass Republican supporters in their seats they hold give 2 shiâ https://t.co/fiEve2joxA



VII. CONCLUSION

Looking at the primary models used, we discover that most studies on Twitter-based totally extent/sentiment analysis undertake extraordinary records series strategies. We additionally find that many social networks use it, in addition to a few helping methods consisting of regression and time evaluation, profile or submit interaction, and topic evaluation. We locate that, in spite of being the maximum used method blended with survey functions and achievement, quantity/speed of movement did not show substantial success that is consistent with the findings of previous research. Therefore, strategies including regression or profile/site visitors log-primarily based methods may be more suitable for research and improvement; it's also feasible to check completely new methods based at the statistical physics of complicated networks. Finally, studies primarily based on Twitter have accomplished notably much less achievement as compared to studies based totally on other social media which includes Facebook. Surprisingly, no research were observed about Instagram. In addition, we identified problems in four regions as key problems. Regarding the procedure, we spotlight the lack of a sincerely defined, repeatable and generalizable technique, and the shortage of predictive strength in the campaign. In terms of sampling, the issues specially lie inside the fact that the SN and Twitter facts did no longer constitute representative samples, and the studies have been conducted with many uncertain variables within the statistics series. In phrases of modelling, we found difficulties in extracting more than one facts from the grid, high sensitivity to plotting, loss of use of modern ML methods, and technical mistakes within the modelling. In addition, considering the experimental layout and medical rigor of the look at, the shortage of statistical analysis of the consequences and significant assessment with related work are also troubles. Finally, they have a look at affords the authors' opinions on predicting destiny elections the usage of SM statistics alongside three axes: technique definition, pattern definition, and studies issues and samples. As key regions, they highlight the want for a repeatable technique in light of strategies referred to as CRISP-DM or SEMMA; Current equipment that use regression-based getting to know strategies that may mixture facts from multiple SNs, together with ANNs; and use statistical exams to assess the effects, which include the Wilcoxon-rank test and others.

REFERENCES

[1] I. G. A. A. D. S. Pinatih, N. P. B. W. Antari, K. Marijan and G. Sakarkar, "Artificial Intelligence and Digital Media Industry Through Social Media Based on OpenAI Technology in the Indonesian Presidential Election 2024," 2024 10th International Conference on Smart Computing and Communication (ICSCC), Bali, Indonesia, 2024, pp. 434-437, doi: 10.1109/ICSCC62041.2024.10690662.

[2] D. K. Nugroho, "US presidential election 2020 prediction based on Twitter data using lexicon-based sentiment analysis," 2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence), Noida, India, 2021, pp. 136-141, doi: 10.1109/Confluence51648.2021.9377201.

[3] G. Feng, K. Chen, H. Cai and Z. Li, "A Hybrid Method of Sentiment Analysis and Machine Learning Algorithm for the U.S. Presidential Election Forecasting," 2023 IEEE International Conference on Big Data (BigData), Sorrento, Italy, 2023, pp. 1495-1500, doi: 10.1109/BigData59044.2023.10386950.

[4] C. Bayrak and M. Kutlu, "Predicting Election Results Via Social Media: A Case Study for 2018 Turkish Presidential Election," in IEEE Transactions on Computational Social Systems, vol. 10, no. 5, pp. 2362-2373, Oct. 2023, doi: 10.1109/TCSS.2022.3178052.

[5] K. D. S. Brito, R. L. C. S. Filho and P. J. L. Adeodato, "A Systematic Review of Predicting Elections Based on Social Media Data: Research Challenges and Future Directions," in IEEE Transactions on Computational Social Systems, vol. 8, no. 4, pp. 819-843, Aug. 2021,doi: 10.1109/TCSS.2021.3063660.

[6] G. Karya, W. D. Sunindyo, B. Sitohang, S. Akbar and A. Mulyanto, "Big Data Integration Design for General Election in Indonesia," 2020 Fifth International Conference on Informatics and Computing (ICIC), Gorontalo, Indonesia, 2020, pp. 1-7, doi: 10.1109/ICIC50835.2020.9288657.

[7] W. Sarapugdi and S. Namkhun, "A Social Analysis of Thailand's 2023 Election Through Twitter Feeds," 2023 15th International Conference on Information Technology and Electrical Engineering (ICITEE), Chiang Mai, Thailand, 2023, pp. 208-212, doi: 10.1109/ICITEE59582.2023.10317682.

[8] A. Kišić and B. Kliček, "Machine Learning Based Prediction of Croatian 2017 Local Elections," 2021 44th International Convention on Information, Communication and Electronic Technology (MIPRO), Opatija, Croatia, 2021, pp. 1382-1386, doi: 10.23919/MIPRO52101.2021.9596667.

[9] K. d. S. Brito and P. J. L. Adeodato, "Predicting Brazilian and U.S. Elections with Machine Learning and Social Media Data," 2020 International Joint Conference on Neural Networks (IJCNN), Glasgow, UK, 2020, pp. 1-8, doi: 10.1109/IJCNN48605.2020.9207147.

[10] D. K. Zarubin and V. A. Achkasova, "Digital Populism in Social Media," 2024 Communication Strategies in Digital Society Seminar (ComSDS), Saint Petersburg, Russian Federation, 2024, pp. 150-152, doi: 10.1109/ComSDS61892.2024.10502097.