**SSentiment Analysis of COVID-19 Tweets – Visualization Dashboard**

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* **ABSTRACT:**

When it comes to decision making, internet is playing a signiﬁcant role, all around the world. Many people use the blogs, social media and other online platforms to share their thoughts and views via internet. This results in the internet being ﬁlled, with full of relevant and irrelevant information. So it creates a great challenge of fetching the

desired information over the internet by analyzing each and every document. **Sentiment analysis** paves the way on handling this problem at ease. This greatly helps customers in decision making on selection of best ﬁt US Airlines on analyzing the other customer’s opinion in online review sites like skytrax and other micro-blogging sites like Twitter

which provides the Aspect level sentiment analysis. The proposed research

methodology introduces new improved IBM watson approach for sentiment analysis. Various machine learning algorithms has been employed for identifying the appropriate algorithm for the system.

**K eywords**: Sentiment Analysis, Machine Learning, ANN, Twitter, Covid-19 tweet set,IBM Cloud,Node Red.

* **INTRODUCTION:**
* **OVERVIEW**

An American online news and social networking service called Twitter is used by users for the purpose of posting of messages and interaction with other people known as

“tweets”. Twitter was created in March 2006 by Jack Dorsey, Noah Glass, Bis Stone and Evan Williams and launched in July of that year. The process of determining whether a Twitter mention conveys positive or negative attitude is called as Twitter sentiment

Analysis. It is the process of analyzing it a piece of online writing expresses positive, negative or neutral attitude.

Covid-19 is the epidemic that had spread in our world today. Millions of people are effected by it and are lot more are being suffered due to its effects.

The situation became very devastetic and its had been not in control yet.

* **PURPOSE**

In world, corona virus is spreading like anything and its unable to control its transfer from one to another. Not much more results have been found on the research on covid-19 virus based on aspect of sentiment analysis. This research greatly focuses on to bridging the gaps between the people views and covid-19 carriers as a great

milestone. Further the implementation of the proposed research occurs in other domains such as entertainment, education, automobiles, etc .

* **LITERATURE SURVEY:**
* **EXISTING PROBLEM**

Sentimental Analysis in covid-19 is methodically done with the help of feedback forms or online questionnaires, in their respective websites. The procedure is quite simple on an overview but demands much of a complex nature when one tries breaking it down. Collecting feedback forms from a mass public and then analysing each and every form is a diﬃcult task, requiring manpower as well as cost. In case of online pooling maintaining site regulations and keeping a database while performing computations on the database is also a complex way of approach. As for existing algorithms for sentimental analysis one such being Maximum Entropy

(MaxEnt) Classiﬁer coverts labelled feature.

The problem faced with this type of approach is that it works best with dependant features, meaning one event is related with another. But, doing sentimental analysis two events must be uniquely identiﬁed so as, we can

differentiate between the mass tweets.

* **PROPOSED SOLUTION**

In the proposed system we are using Deep Learning Concept for the sentimental analysis for the airlines system, namely being Artiﬁcial Neural Networks. We concluded to use this because it’s works best with independent features, which was our prime requirement for this analysis.

* **THEORITICAL ANALYSIS:**
* **BLOCK DIAGRAM**



F ig.1 Showing Block Diagram of Model

* **HARDWARE/SOFTWARE DESIGNING**
* **S trategy**: matching the problem with the solution.
* **Dataset preparation and preprocessing:**
* Data collection
* Data visualization
* Labeling
* Data selection
* **Data preprocessing**
* **Data transformation**
* **Dataset splitting into train data and test data.**
* **Modeling**:
* Model training
* Model evaluation and testing
* Improving predictions with ensemble methods
* **Model deployment.**
* **EXPERIMENTAL INVESTIGATIONS :**

During our investigation, we got to know all the required parameters to predict the seniment analysis of airline data.

* **FLOW CHART:**



F ig 2.Flow Of the Model



* **RESULT:**

F ig 3.Detailed Explanation Of the FlowChart

Based on the tweet entered by the public, the model predicts the review and display the emotion of the public.

* **ADVANTAGES & DISADVANTAGES:**

**Advantages**:

☆ Perfect prediction of the tweet reviews.

☆ Very accurate sentiment analysis.

☆ Extremely easy interface.

☆ Straight forward results.

**Disadvantages**:

☆ User should have the idea on all the parameters and units of each parameter.

* **APPLICATIONS:**

It can be used to know the emotion of public given by the user.



* **CONCLUSION:**

An Aspect- based sentiment analysis has been implemented in the research by employing IBM Watson studio and NodeRed.The main categories of the reviews were identiﬁed ﬁrst. Next, the sentiment analysis has been performed for the aspects or categories detected from reviews.

* **FUTURE SCOPE :**

In the evolving population,the transmission of virus is not reducing.So,our application collects all the tweet reviews from the customers.

* **BIBILOGRAPHY APPENDIX :**

**Model Building**

**Applicaton Building**

* IBM Watson
* Node Red