

SENTIMENT ANALYSIS

Data Collection:

The data for this sentiment will be collected on various sources such as online reviews, social media comments, surveys and emails from the employees themselves to hear their opinions and views on how they feel about how they spend their savings and how are they planning to use their savings wisely and also advise others on how they can improve in their savings methods.

Text Preprocessing:

Stopword removal - There was also a removal of words such as “and” “or” because they do not carry any meaning, and that is called.

Tokenization- This is when text was broken down into individuals for better analyzation.

Text was prepared in such a way that the machines can understand it, and by that I mean converting text into numerical format because that is the only way machines can understand it.

Modeling:

Data was trained using labeled training data, the feedback was categorized as positive, negative or neutral based on the results. The algorithms were DecisionTree Classifier, RandomForest Classifier and Logistic Regression. After training, the model can classify new feedback based on learned patterns.

Deep learning approach was done by Facebook Prophet to help us forecast the savings of the employees in time to come.

Feedback analyzation:

- Positive feedback : “This survey helped me so much, I was able to track my losses.”
- Negative feedback : “There is no use for the survey because we cannot stop doing some things that help us for living just for money.”
- Neutral feedback : “This does not bother me but I am okay with it.”

Visualization:

Graphs were plotted to show the trends of the feedbacks and how it has a positive or negative impact on the employees.

Identifications:

- Improve the way I spend my savings on bills.
- I shouldn't change anything, I am right on track

Conclusion:

By applying sentiment analysis, you can gain valuable insights into employees opinions and improve their spending limits. It helps identify areas for improvement, enhance employees well spending ways, and foster better way of spending.