Welcome in my project Brand Monitoring,

Well, I'll start off with a brief introduction about that brand monitoring is:

Brand monitoring is the process of tracking different channels to identify where your brand is mentioned. Knowing where and how people are talking about your brand will help you better understand how people perceive it, and lets you collect valuable feedback from your audience.

Another benefit is to be able to Address consumer reaction to your competitor’s brand including crisis management,

And ultimately to understand the audience discussing both your brand and category to plan marketing and communication strategies.

Just to get an idea about the importance of brand monitoring :

According to Harris Poll 2020, surveyed more than 1000 us consumer and 250 business executive:

78% of consumers are more willing to buy from a brand and 77% will choose a brand over a competitor after a positive experience with a brand on social media.

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**Problem Statement**

First up is to provide a statistical analysis to track consumer sentiment towards building more effective and meaningful strategies.

and lastly create a classification model capable to gain insights into consumers preferences and brand sentiment.

Essentially our goal is to provide a brand monitoring tool utilizing Natural Language Processing (NLP) to derive meaningful insights, and identify your target audience.

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**The Business Value of our project is:**

* Learn about customer sentiment to better understand your audience and what they’re saying on Twitter
* Evaluate Overall Public Perception of Your Brand
* Reputation management and online brand monitoring
* Avoid negative practice of spreading

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**Methodology**

the methodology we've used in the project is divided in 3 steps:

as first we start by data management where we collect and scrub our data as well as feature engineering,

then we go through Exploratory Data Analysis

and lastly modeling

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Conclusion

What we've worked on here are 2 models:

the first model is TF-IDF Vectorizer which results 87% of AUC accuracy but didn't able to predict more than 2 classes.

The 2nd is GloVe Embedding model constructed with Recurrent Neural Networks, again we're able to predict only 2 classes with an accuracy of 82%.

the overall result aren't so much bad, as expected dealing with a highly imbalanced dataset both models wouldn't be able to learn and improve.

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**Recommendation**

Gather more data covering different social platforms from various sources like Facebook, Twitter, Instagram, YouTube etc..

Monitor live feedback

Monitor specific demographics

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