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Rhetorical Strategies in Web3 Twitter Discourse: Emojis, Jargon, and Sentiment in Memecoin vs. SocialFi

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Methodology

- **Dual Analytical Framework**

This research employs a two-pronged approach to analyze rhetorical strategies: sentiment-based analysis of emotional and rational appeals, and interactional analysis via language mirroring.

- **Sentiment Analysis Model with Domain-Specific Features**

A customized sentiment model based on TextBlob is developed, treating emojis and Web3-specific jargon as rhetorical devices to capture pathos (emotional) and logos (rational) appeals in project tweets.

- **Language Mirroring Analysis**

Language repetition patterns are examined by comparing lexical overlaps between official project tweets and user replies, aiming to assess community alignment and rhetorical resonance.

- **Dataset Construction and Comparative Analysis**

Tweets from memecoin and SocialFi projects were collected and cleaned to form sector-specific corpora. Comparative metrics were then applied to identify differences in rhetorical features and their correlation with user engagement.

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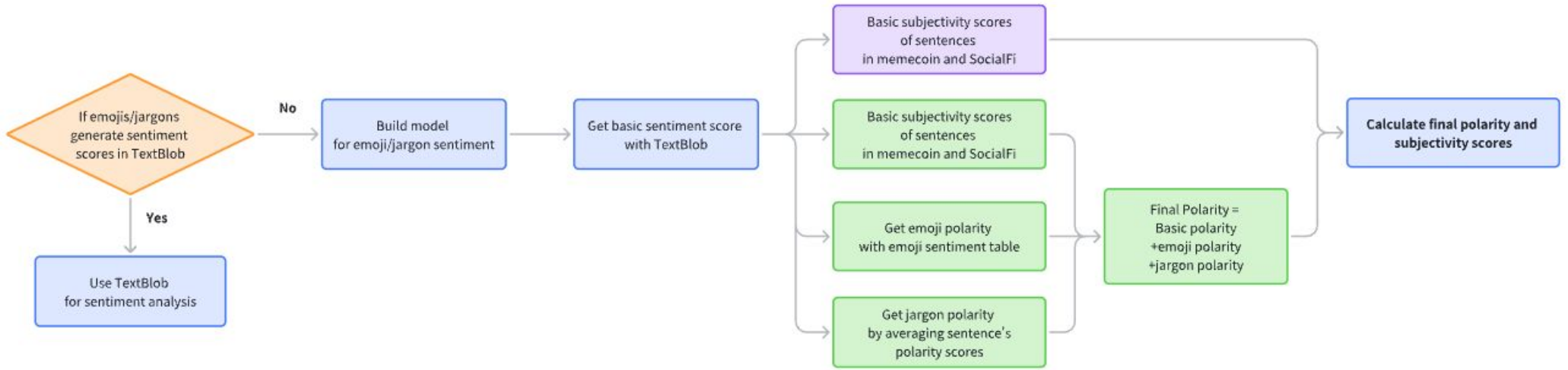
Sentiment Analysis Model Design



- **A custom sentiment analysis model** was built on TextBlob, extended with polarity scores for emojis and Web3-specific jargon to capture domain-specific emotional cues.
- **Polarity score assignment**: Emoji sentiment was quantified using Novak et al.'s (2015) polarity rankings, while jargon polarity was approximated by averaging the polarity of sentences containing each term.
- **The final polarity score** is the unweighted sum of text, emoji, and jargon polarities—prioritizing interpretability over statistical normalization to emphasize rhetorical intensity.

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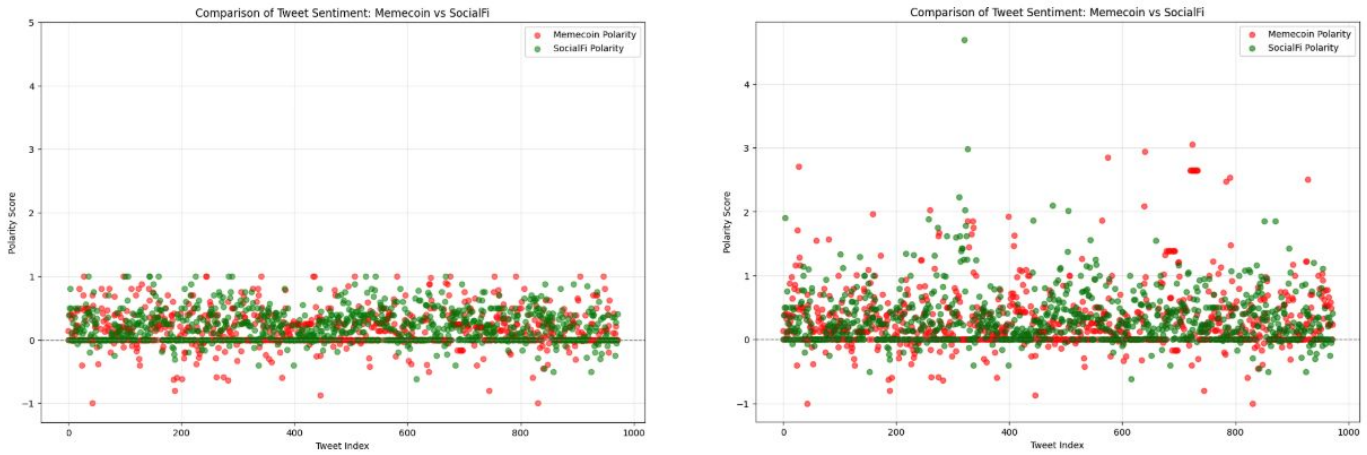
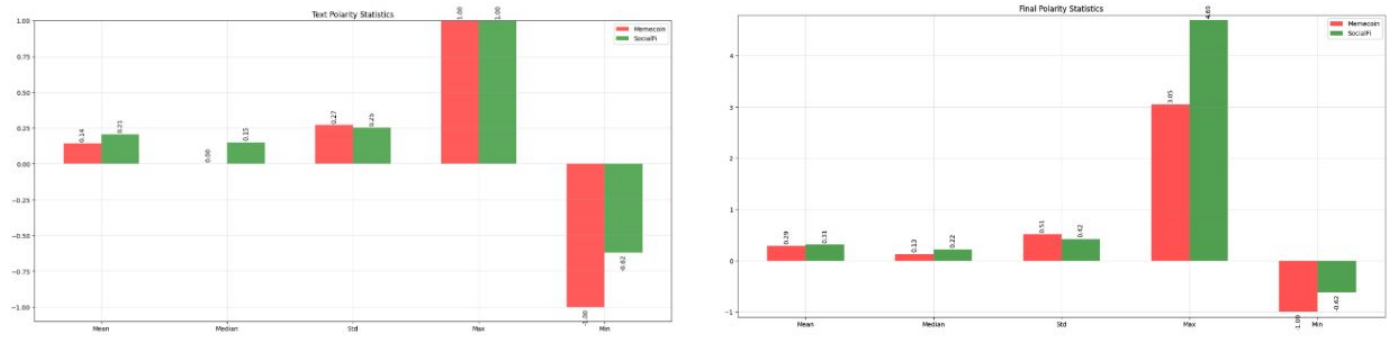
Key Results



Scatter Chart of TextBlob(left) and New Model(right)



Bar Chart of TestBob(left) and New Model(right)

- Memecoin Tweets Exhibit Greater Emotional Variability with a difference in standard deviation in polarity score: 0.52 vs 0.42.
- Memecoin Tweets Contain More Rhetorical Devices of emojis and jargons.
- Distinction in Rhetorical Strategies: Memecoin Projects adopt Pathos-driven strategy VS SocialFi projects Rely on Logos-driven expressions
- Higher language Mirroring in Memecoin Communities when evaluating tweets replies.

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Discussion

Limitations

- **High-Context Semantics Are Underrepresented:** the model fails to capture deeper semantic meanings and contextual nuances.
- **Jargon Scoring Relies on Subjective Assumptions:** the polarity scores assigned to jargons are based on average sentence polarity, introducing ambiguity and limits.

Contribution

- **Applying Sentiment Analysis to Rhetorical Strategy Analysis**: identifying and evaluate rhetorical strategies in emerging digital spaces.
- **Practical Guidance for Web3 Community Management**: revealing how different rhetorical approaches align with specific project types and community goals.

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