### UNIVERSITI TEKNOLOGI MARA

## SENTIMENT ANALYSIS REGARDING MARITAL ISSUES USING NAÏVE BAYES ALGORITHM

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#### ABSTRACT

This study explores the application of sentiment analysis using the Naïve Bayes algorithm to understand public perceptions of marital issues, particularly factors contributing to the rising divorce rate. By analyzing data from social media, primarily Twitter, the research identifies key challenges in marriages, including communication breakdowns, financial stress, and infidelity. The Naïve Bayes algorithm was chosen for its efficiency in text classification and ability to handle large volumes of unstructured data. The results indicate that financial instability and poor communication are the most prevalent issues, with the overall sentiment being predominantly negative. The model's performance was evaluated using accuracy, precision, recall, and F1-score, demonstrating its reliability in sentiment classification. Future research can enhance classification accuracy by incorporating advanced machine learning techniques and expanding the dataset to include diverse social media platforms. These insights can assist policymakers, mental health professionals, and marriage counselors in developing targeted interventions to support healthier relationships and strengthen societal well-being.

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