

IMPLEMENTASI *TEXT MINING* TERHADAP ULASAN PENGGUNA DALAM ANALISIS KUALITAS LAYANAN MASKAPAI PENERBANGAN XYZ

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ABSTRAK

Maskapai XYZ merupakan maskapai penerbangan bertaraf rendah (*low cost carrier*) terbesar di Indonesia dengan pilihan rute penerbangan yang beragam. Berdasarkan pada ulasan yang diberikan oleh pengguna, permasalahan utama yang dihadapi Maskapai XYZ adalah layanan yang buruk. Penelitian ini bertujuan untuk menganalisis kualitas layanan Maskapai XYZ berdasarkan pada sentimen ulasan pengguna, selain itu penelitian ini juga bertujuan untuk mencari faktor-faktor yang menjadi keluhan pengguna dalam ulasannya yang merupakan prioritas perbaikan layanan yang harus dilakukan. Metode *text mining* dipilih untuk mengolah data ulasan yang berbentuk teks, dengan *Naïve Bayes Clasifier* untuk mengklasifikasikan sentimen pada ulasan dan algoritma *association rule* untuk mengetahui hubungan yang terdapat antar kata dalam ulasan. Hasil dari penelitian ini didapatkan sebanyak 34,8% pengguna menganggap layanan yang diberikan oleh maskapai XYZ baik, 32,8% berpendapat netral dan 32,5% menganggap pelayanan yang diberikan buruk. Hasil klasifikasi sentimen diperoleh akurasi sebesar 84,7% dengan kinerja sistem dalam mengklasifikasi kelas positif sebesar 81% dan kelas negatif sebesar 88%. Terdapat 3 faktor yang menjadi keluhan pengguna dalam ulasannya yakni, faktor layanan dengan permasalahan pada *delay*, durasi *check in* yang lama sehingga menimbulkan antrian, antrian menuju boarding gate, kompensasi *delay* yang kurang, bagasi hilang dan rusak serta jatah bagasi kurang. Selanjutnya faktor karyawan dengan permasalahan pada sikap staf yang kurang ramah dan buruk, intonasi suara yang kasar serta sikap abai terhadap penumpang. Terakhir faktor harga dengan permasalahan pada harga bagasi tambahan yang mahal serta harga tiket yang dianggap oleh penumpang tidak sesuai dengan pelayanan yang diberikan.

Kata kunci: Analisis sentimen, *Text mining*, *Association rules*, *Naïve Bayes Clasifier*, *low cost carrie*

IMPLEMENTATION OF TEXT MINING TO USER REVIEWS IN AIRLINE XYZ SERVICE QUALITY ANALYSIS

ABSTRACT

XYZ airline is the largest low-cost carrier in Indonesia with a wide choice of flight routes. Based on the reviews provided by users, the main problem faced by XYZ Airlines is poor service. This study aims to analyze the service quality of XYZ Airlines based on the sentiment of user reviews. Besides that, this study also aims to find factors that become user complaints in their reviews which are the priority of service improvements that must be carried out. The text mining method was chosen to process review data in the form of text, with the Naïve Bayes Classifier to classify sentiment in reviews and an association rule algorithm to determine the relationship between words in the review. This study showed that 34.8% of users considered the service provided by XYZ airline to be good, 32.8% thought it was neutral, and 32.5% considered the service provided terribly. Sentiment classification results obtained an accuracy of 84.7%, with the system's performance in classifying positive classes by 81% and negative classes by 88%. Three factors become user complaints in their reviews, namely, service factors with problems with delays, long check-in durations that cause queues, queues for boarding gates, less compensation for delays, lost and damaged baggage and less baggage allowance. Furthermore, the employee factor with problems in the attitude of the staff who are less friendly and bad, rude voice intonation and neglectful attitude towards passengers. Finally, the price factor with problems with expensive additional baggage prices and ticket prices that passengers consider to be not following the services provided.

Keywords: Sentiment analysis, Text mining, Association rules, Naïve Bayes Classifier, low-cost carrier

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