

ABSTRAK

Perkembangan platform digital mendorong masyarakat menyampaikan pengalaman terhadap pelayanan rumah sakit melalui ulasan daring, salah satunya *Google Maps*. RSUD (Rumah Sakit Umum Daerah) Syarifah Ambami Rato Ebu Bangkalan menerima banyak ulasan yang berpotensi menjadi sumber informasi penting, namun bersifat tidak terstruktur sehingga sulit dianalisis secara manual. Penelitian ini bertujuan untuk mengetahui nilai *topic coherence* dan mengidentifikasi topik-topik yang muncul dari ulasan pelayanan rumah sakit menggunakan metode *BERTopic*. Data diperoleh melalui web *scraping* menggunakan *SerpApi* dari *Google Maps* sebanyak 2.518 ulasan, yang setelah filtering menghasilkan 2.466 ulasan valid. Data diproses melalui enam tahapan *preprocessing*, kemudian dimodelkan menggunakan *sentence embedding paraphrase-multilingual-MiniLM-L12-v2*, reduksi dimensi UMAP (*Uniform Manifold Approximation and Projection*), klasterisasi HDBSCAN (*Hierarchical Density-Based Spatial Clustering of Applications with Noise*), dan representasi topik berbasis c-TF-IDF. Pengujian dilakukan melalui dua skenario, di mana skenario pertama menghasilkan 14 topik dan skenario kedua dengan parameter *nr_topics* = 12 menghasilkan 11 topik dengan nilai *coherence* tertinggi 0,6997, terendah 0,4266, dan rata-rata 0,5603. Topik yang dihasilkan mencerminkan apresiasi terhadap pelayanan tenaga medis, keluhan terkait administrasi dan kebersihan fasilitas, serta saran perbaikan layanan. Penelitian ini dapat menjadi sumber data tambahan pada evaluasi berbasis data bagi manajemen rumah sakit dalam meningkatkan kualitas pelayanan secara berkelanjutan.

Kata Kunci: *Topic Modeling, BERTopic, Ulasan Pelayanan Rumah Sakit, Text Mining, Google Maps.*

ABSTRACT

The growth of digital platforms has encouraged people to share their experiences with hospital services through online reviews, including Google Maps. RSUD Syarifah Ambami Rato Ebu Bangkalan receives numerous reviews that serve as valuable information sources, yet remain unstructured and difficult to analyze manually. This study aims to determine the topic coherence value and identify key topics from hospital service reviews using the BERTopic method. Data were collected via web scraping using SerpApi from Google Maps, yielding 2,518 reviews, which after filtering resulted in 2,466 valid entries. The data were processed through six preprocessing stages, then modeled using paraphrase-multilingual-MiniLM-L12-v2 sentence embeddings, UMAP dimensionality reduction, HDBSCAN clustering, and c-TF-IDF topic representation. Two scenarios were tested, where the first produced 14 topics and the second, with nr_topics = 12, produced 11 topics with a highest coherence of 0.6997, lowest of 0.4266, and an average of 0.5603. The resulting topics reflect appreciation for medical staff, complaints about administration and facility cleanliness, and service improvement suggestions. This research is expected to serve as data-driven evaluation material for hospital management in continuously improving service quality.

Keywords: *Topic Modeling, BERTopic, Hospital Service Reviews, Text Mining, Google Maps.*