

ABSTRAK

Pertumbuhan transaksi produk elektronik kategori gadget di platform E-Commerce menghasilkan data ulasan konsumen yang melimpah dan tidak terstruktur, namun belum dimanfaatkan secara optimal sebagai sumber identifikasi atribut kualitas produk. Penelitian ini bertujuan mengidentifikasi atribut kualitas produk gadget yang paling dominan dipersepsikan konsumen sekaligus merumuskan rekomendasi penyusunan deskripsi katalog produk berdasarkan ulasan pada platform Tokopedia, Lazada, dan Shopee. Sebanyak 127.310 ulasan dari 21 kategori produk dianalisis menggunakan pendekatan text mining, yaitu TF-IDF untuk pembobotan kata, Latent Dirichlet Allocation (LDA) sebagai model utama pembentukan topik, dan BERTopic sebagai triangulasi semantik. Sembilan topik yang terbentuk dipecah menjadi lima belas atribut kualitas yang kemudian dipetakan ke dalam kerangka *perceived quality*, yaitu *intrinsic cues*, *extrinsic cues*, *experience attributes*, dan *credence attributes*, serta diperingkat berdasarkan skor dominansi. Hasil penelitian menunjukkan bahwa Kepuasan Produk, Layanan Pengiriman, Performa, Kualitas Audio, dan Durabilitas merupakan lima atribut yang paling dominan dipersepsikan konsumen. Temuan tersebut menjadi dasar rekomendasi penyusunan deskripsi katalog dan perbaikan teknis produk bagi penjual di E-Commerce guna meningkatkan daya saing.

Kata Kunci: atribut kualitas, BERTopic, e-commerce, Latent Dirichlet Allocation, *perceived quality*, text mining

ABSTRACT

The rapid growth of electronic gadget transactions on E-Commerce platforms generates an abundance of unstructured consumer review data that has not been optimally utilized as a source for identifying product quality attributes. This study aims to identify the most dominant gadget product quality attributes perceived by consumers and to formulate recommendations for composing product catalog descriptions based on reviews from Tokopedia, Lazada, and Shopee. A total of 127.310 reviews from 21 product categories were analyzed using a text mining approach, namely TF-IDF for term weighting, Latent Dirichlet Allocation (LDA) as the main topic modeling method, and BERTopic as semantic triangulation. The nine resulting topics were decomposed into fifteen quality attributes, which were then mapped onto the *perceived quality* framework, namely *intrinsic cues*, *extrinsic cues*, *experience attributes*, and *credence attributes*, and ranked by dominance score. The results show that Product Satisfaction, Delivery Service, Performance, Audio Quality, and Durability are the five most dominant attributes perceived by consumers. These findings serve as the basis for recommendations on catalog description composition and technical product improvement for E-Commerce sellers to enhance competitiveness.

Keywords: BERTopic, e-commerce, Latent Dirichlet Allocation, *perceived quality*, quality attributes, text mining