

## ABSTRAK

Perkembangan teknologi otomotif saat ini semakin pesat, terutama kendaraan ramah lingkungan yaitu mobil *hybrid*. Di sisi lain, media sosial menjadi wadah utama bagi masyarakat untuk berbagi opini terkait mobil *hybrid* khususnya di X. Data yang digunakan dalam penelitian ini berjumlah 2237 komentar terkait mobil *hybrid* di media sosial X. Pemodelan topik dilakukan dengan beberapa eksperimen jumlah topik (10, 15, dan 20) untuk menentukan jumlah topik optimal berdasarkan *coherence score* dan menghasilkan nilai terbaik pada 15 topik yaitu 0.6136. Analisis mendetail menghasilkan topik-topik seperti harga dan pasar mobil *hybrid*, keunggulan teknologi ramah lingkungan, variasi model, insentif pemerintah, hingga tren popularitas. Topik yang dihasilkan memberikan wawasan berharga bagi industri otomotif untuk memahami opini publik terhadap mobil *hybrid*. Secara keseluruhan, metode LDA terbukti efektif dalam menganalisis persepsi masyarakat mengenai mobil *hybrid* di platform media sosial X.

**Kata Kunci :** Mobil *hybrid*, Media Sosial X, Pemodelan Topik, *Latent Dirichlet Allocation*

## ABSTRACT

The development of automotive technology is currently growing rapidly, especially environmentally friendly vehicles, namely hybrid cars. On the other hand, social media has become the main platform for people to share opinions regarding hybrid cars, especially in X. The data used in this study amounted to 2237 comments related to hybrid cars on social media X. Topic modeling was carried out with several experiments on the number of topics (10, 15, and 20) to determine the optimal number of topics based on the coherence score and produced the best value of 15 topics, namely 0.6136. Detailed analysis resulted in topics such as prices and markets for hybrid cars, advantages of environmentally friendly technology, model variations, government incentives, and popularity trends. The resulting topics provide valuable insights for the automotive industry to understand public opinion towards hybrid cars. Overall, the LDA method proved effective in analyzing public perceptions of hybrid cars on the social media platform X.

**Keyword** : Hybrid Car, Social Media X, Topic Modeling, Latent Dirichlet Allocation