

PROSPECTS AND CHALLENGES OF ALTERNATIVE TRANSPORTATION IN INDONESIA: UNDERSTANDING BASED ON NEWS EXTRACTION ABOUT TECHNOLOGY AND ACCEPTANCE OF ELECTRIC VEHICLES

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ABSTRACT

The global transition to electric vehicles (EVs) presents both opportunities and challenges for emerging markets like Indonesia. This study applies text mining techniques—TextRank and Latent Dirichlet Allocation (LDA)—to analyze news articles and uncover key themes shaping EV adoption in Indonesia. TextRank analysis reveals increasing public awareness of EVs' environmental benefits but highlights affordability concerns and knowledge gaps as major barriers to widespread adoption. LDA results emphasize the central role of battery technology, Indonesia's nickel resources, and government policies in driving the industry forward. However, regulatory uncertainties, cost competitiveness, and environmental risks associated with nickel mining and battery production pose significant challenges. These findings provide a data-driven perspective on Indonesia's EV landscape, offering insights that can inform policymakers, industry stakeholders, and researchers in advancing sustainable transportation solutions.

Keywords: Electric Vehicles; Latent Dirichlet Allocation; TextRank; News; Preferences; Adoption

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