## **ABSTRACT**

## Development of Community Sentiment Analysis Application Technology and Subsidy Policy for Electric Vehicles with the LSTM Algorithm

Muhamad Imam Firmansyah<sup>1</sup>)

Technological growth and awareness of environmental impacts have driven increased interest in adopting electric vehicles as an eco-friendly alternative. Government subsidy policies also influence the adoption of electric vehicles by the public. Analysis of public sentiment towards electric vehicle technology and subsidy policies can provide valuable insights into the acceptance and adoption of this technology. This study aims to develop a sentiment analysis application that allows for understanding public views and opinions regarding electric vehicle technology and existing subsidy policies. This application uses the Long Short-Term Memory (LSTM) algorithm in natural language processing to identify positive, negative, and neutral sentiments in the text being analyzed. This research method involves collecting data from various sources including social media platforms and online forums that discuss electric vehic<mark>les and subsid</mark>y policies. Text data were analyzed and sentiment assessed using the LSTM model that had been previously trained. The results of the sentiment analysis will provide insight into public views and responses to certain aspects of electric vehicle technology and subsidy policies. It is hoped that the results of this research will provide a deeper understanding of the public's view of electric vehicle technology and the impact of subsidy policies. In addition, the development of this sentiment analysis application has the potential to be applied in decision making and policy formulation related to technology and sustainable mobility.

**Keywords**: Sentiment Analysis, Applications, Technology, Policy, Electric Vehicle Subsidies, LSTM Algorithm

<sup>&</sup>lt;sup>1)</sup>Student of Informatics study program, Universitas Pembangunan Jaya