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SENTIMENT ANALYSIS IN ENVIRONMENTAL SUSTAINABILITY FIELD BY MACHINE LEARNING

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Abstract – Environmental sustainability is one of the influential topics of the last decade. Most people have become more environmentally aware and educated environmentally conscious. Sustainability concerns the sustainability of natural resources and environmental protection. The four pillars of sustainability include human, social, economic and environmental. Twitter is a popular social media platform that keeps us updated on the latest news, events and trends from around the world. In 2022, the number of Twitter users in Thailand reached around 11.45 million, accounting for 16.4 % of all Thai people. Also, the fastest growing conversation in Twitter is related to the environment and sustainability. Nowadays, customers pay attention to the environmental and social impact of products they buy. Sentiment Analysis is the process of analyzing emotions or feelings by using machine learning techniques. The main objective of this exploratory study is to conduct social media opinion mining in case of the environmental sustainability field of Thai people. The paper presents the linguistic analysis of the collected data and explains discovered phenomena, including data preprocessing steps, feature extraction, and model construction to determine positive, negative and neutral sentiments. The result reveals that sentiment analysis takes place around the sustainability context mostly in positive terms to make a better understanding of the dynamics and changes in environmental sustainability society.

Keywords – Awareness; environmental sustainability; environmental protection; machine learning; sentiment analysis

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