ABSTRACT

Marketing trends have been increasing in recent decades. Products need good branding and proper marketing strategies. Various marketing methods have been done and one of them is by studying neuroscience especially in neuromarketing. Neuromarketing is used to seek the influence of marketing stimulus on consumers and objective data through advances in neurology. By utilizing the human senses such as smell, smell, taste and touch. Measurements of neuromarketing responses to the human brain can use electroencephalography (EEG) signals.Measurement is done with visual stimulus of consumers when making decisions. To analyze consumer interest, the majority still use qualitative methods, but are still considered less effective due to many erratic factors.

In this study, measurement of neuromarketing response to human brain using EEG signal analysis. Data collection was conducted on 11 respondents with stimulus in the form of different product colors and influenced by changes in light intensity. For pre-processing bandpass filter is used to get beta signal without noise. Furthermore, the data will be processed using fast fourier transfrom and energy extraction as an extraction of characteristics and classification of support vector machine (SVM) in the process of signal pattern recognition. The best feature combination parameter test results showed an accuracy value of 72% with a combination of magnitude and phasa features. By using the range of data from the phase feature obtained accuracy of 67% for the recognition of the respondent's signal pattern.

Keywords: electroencephalograph (EEG), support vector machine (SVM), fast fourier transfrom (FFT), Neuromarketing