Overall and Feature Level Sentiment Analysis of Amazon Product Reviews Using Machine Learning Techniques and Web-Based Chrome Plugin

V. R. Welgamage
Department of Industrial Management
University of Kelaniya, Sri Lanka
vimukthi.welgamage@gmail.com

U. A. C. Senarathne
Department of Industrial Management
University of Kelaniya, Sri Lanka
harithasenarathne@gmail.com

N. H. A. C. Madhubhashani
Department of Industrial Management
University of Kelaniya, Sri Lanka
madhuhangawatta@gmail.com

T. C. Liyanage
Department of Industrial Management
University of Kelaniya, Sri Lanka
thathsara92@gmail.com

P. P. G. Dinesh Asanka*
Department of Industrial Management
University of Kelaniya, Sri Lanka
dineshasanka@gmail.com

Abstract - **One of the critical tasks of Natural Language Processing (NLP) is sentiment analysis or opinion mining. Sentiment analysis has gained much attention in recent years. It collects data on each user's views, feelings, and opinions regarding a particular product to determine whether they have a positive, neutral, or negative attitude toward it. This study aims to address the categorising sentiment polarity, which is one of the essential issues in sentiment analysis and with extensive process descriptions. The key contribution of this study is to introduce feature-wise sentiment analysis for online products considering the customer reviews and star ratings using the modified web-based chrome plugin. Finally, we share some insight into our future sentiment analysis efforts. The research was based on the categorisation of sentiment polarity in online product reviews from Amazon.com**

Keywords - *classification, feature review, Natural Language Processing (NLP), polarity, product review, sentiment analysis, web-based chrome plugin*