

A Community-based Shopping Experience Improvement System with Sinhala Feedback Analyzing

P. Nallaperuma^{1*}, U. Abeythilake², J. Chirantha², and R. Adikari²

¹ *Postgraduate Institute of Science, University of Peradeniya, Peradeniya 20400, Sri Lanka*

² *Faculty of Computing, Sri Lanka Institute of Information Technology, Malabe 10115, Sri Lanka*

**pubudu22malith@gmail.com*

Abstract

With emerging technologies and constantly changing lifestyles, shopping has become an essential factor in society. There are people who frequently do shopping as a major activity in their day-to-day life. They tend to use the internet to find the best sellers. People often browse through many reviews to arrive at an informed decision. As a solution, we propose a community-based software platform that analyses customer reviews to provide tailored recommendations. In the proposed solution, textual feedback is analysed using sentiment analysis, which helps to categorize user responses. An important factor is proposed system can analyse Sinhala and English textual feedback. The analysed data is then stored as negative, positive, or neutral feedback. We found that customers mainly consider four features when they are selecting a seller, the price of the goods, the quality of the goods, customer service, and after-sales services of the seller. A score for each feature and an overall score is calculated based on the feedback to rank the sellers. The overall score is calculated using a weight-allocating mechanism which increases the accuracy of the results. The system acts as a common software platform that helps to improve their shopping and selling experiences.

Keywords: *Customer reviews, Sentiment-analyzing, Recommendation System*