Abstract

Skincare has recently become one of the fastest growing product categories. In the past, consumers often chose skincare products based on best-selling products or recommendations from stores. To assist potential consumers in choosing the most suitable product, an effective recommendation system is essential. This study proposes a system that provides skincare product recommendations based on products that have been used by consumers. The method used is content-based filtering, which compares product characteristics to produce more relevant recommendations. The results show an F1-measure of 0.87, and an accuracy of 78.78%. In addition, the system reach precision@50 of 0.98, recall@50 of 0.7656, and mean absolute error (MAE) of 0.21. These results reflect the system's strong performance in aligning recommendations with user preferences. The recommendation system can improve the consumer experience by simplifying the decision-making process and offering suggestions tailored to individual skincare needs.

Index Term: skincare; recommender system, content-based filtering, cosine similarity, tf-idf.