Abstract

In recent years, smartwatches have become popular in the mobile technology market. However, with various smartwatch models and brands available, prospective buyers often need help choosing the right product due to specifications that require technical understanding and expert opinions. Therefore, a recommender system is needed to assist prospective buyers in choosing the appropriate product. Several studies have been conducted on conversational recommender systems. However, the recommender systems used only provide recommendations based on technical specifications alone, so the recommendations given are less personalized. Therefore, we develop a conversational recommender system for smartwatches using ontology that considers the functional needs of users to produce customized recommendations. In this study, we have successfully built and evaluated this system using recommendation accuracy metrics and user satisfaction. The evaluation results show an accuracy of 86.67% and positive user feedback. This indicates that our system is accurate, easy to use, and well-accepted

Keywords: conversational recommender system, personalized recommendation, ontology, knowledge-based recommender, recommender system