Abstract

The diverse tourist needs of tourist destinations make the need for a recommendation system to accommodate those needs. In this research, a knowledge based recommendation system is made using Degree of Interest (DOI) as input to accommodate the needs of tourists. The category of tourist destination is the knowledge of the recommendation system made in the form of ontology. To get the best recommendations there are several methods that can be used, one of which is Multi-Attribute Utility Theory (MAUT) that is used to rank the destination based on some attributes owned. To find out if the recommendation system works well, it is done user-study with 30 respondents with an age range of 16-33 years. In the survey there were 22 questions consisting of 5 factors, namely perceived usefulness (PU), perceived ease of use (EOU), perceived trust (TR), perceived enjoyment (PE) and behavioral intention (BI). If the survey results are more than 60% of users agree and express their interest in this recommendation system then this recommendation system is considered good to use.

The results obtained from the survey on the use of the recommendation system were 88% of the respondents agreed that the recommendation system provides a good solution to the user's ignorance in determining the appropriate tourist destinations (PU), 70% of the respondents agreed that the recommendation system was easy to Used (EOU), 90% of the respondents agreed that the recommendations according to user needs (TR), 86% of the respondents agreed that the recommendation system was interesting for use (PE) and 81% of the respondents agreed that would use this recommendation system in the future (BI). From the survey results show that users agree and are interested in using the recommendation system. Therefore, the use of the method of Degree of Interest (DOI) and Multi-Attribute Utility Theory is proven to be used to recommend tourist destinations to suit the needs of users.

Keywords: tourism, recommendation system, ontology, MAUT, DOI.