ABSTRACT

DECISION SUPPORT SYSTEM FOR VIDEO ON DEMAND SERVICE SELECTION USING MAUT METHOD (MULTI-ATTRIBUTE UTILITY THEORY)

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The rapid development of computerization has led to the creation of various systems to facilitate human work, one of which is a Decision Support System (DSS) that can be used in effective and efficient decision making. Video on Demand (VOD) service is a video service that allows users to watch and view video or movie content they want anytime and anywhere. In Indonesia, consumer interest in VOD services is quite high, so there are various VOD services available. The advantages and disadvantages of each VOD service make it difficult for consumers to determine which VOD service to use. The purpose of this research is to help select VOD services that are in demand with the SPK approach using various predetermined criteria using the MAUT (Multi-Attribute Utility Theory) method. The ranking produced by the MAUT method is objective and unbiased because it compares the benefits of several choices to get the best choice. This research was conducted on students in Indonesia who use VOD services. The SPK built is a website-based system using the Extreme Programming (XP) software development model. The system built was tested using Black box Testing and User Accaptance Test (UAT) testing methods, as well as confusion matrix to measure the accuracy of the system. The results showed that the Netflix application was chosen as the best alternative and the MAUT method was successfully applied in the Video on Demand service selection Decision Support System with an accuracy rate of 100% and the results of Black Box Testing and UAT stated that the functionality in the system had no errors and was in accordance with user needs.

Keywords: Video on Demand, Decission Support System, MAUT