

APPLYING TOPSIS METHOD TO IDENTIFY OPTIMAL AUTOMOBILE RANKING BASED ON USER PREFERENCES

Khin Lynn Yee, Lwin Lwin Maw (Lecturer)

University of Computer Studies (Yangon)

Khinlynnjee89@gmail.com

Abstract

As the car market becomes more competitive, there is greater demand for innovation that provides better customer service and strategic competition. It is very important to support the decision process for people in selecting suitable car using system analysis and mathematical methods. Decision Support Systems are interactive, computer-based systems that aid users in judgment and choosing alternative solutions. Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) is multi-criteria decision support technique used to ranked alternatives based on 'the relative similarity to the ideal solution', which avoids from the situation of having same similarity to both ideal and negative ideal solutions [10]. This system is implemented to evaluate and identify the alternatives based on hierarchically structured criteria of qualitative character by multiple experts to intellectually support decisions made in automobile selection problem. The system evaluates and ranks the automobile according to criteria using TOPSIS method. This system is intended to help the people in making decision to find the eligible and suitable car to buy according to prefer criteria's.