

Analyzing key factors of bicycle purchasing using hybrid MCDM methods

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ABSTRACT

Due to the changes in consumer lifestyles and the improvement in quality of leisure life of consumers in the country, bicycle products have become, from the tradition role as means of transportation, to a synonym for prevalence, luxury goods, taste, entertainment, and sport. The variety of additional equipments and functions of bicycle products has continued to introduce new innovations in response to the diversity and variability of the demand in the market. Moreover, as trends in consumer demands are headed towards personalization and diversification, the understanding of different consumer groups in consuming behaviors, product preferences and perceptions are important factors before product development within the enterprises. New products could therefore be pinpointed properly in the market to meet market demands from different consumer groups. This research aims to investigate factors consumers take into considerations upon purchasing bicycles while identifying bicycle preferences of variety of users. The research incorporates four assessment dimensions, marketing factor, psychological factors, social factors and situational factors, and ten assessment criteria to determine the four influencing factors that users have when purchasing bicycles. The research also applies ISM to identify the association between each dimension in criterion structures. Additionally, ANP is employed to determine weighing relations between the criteria. ANP approach is also utilized to identify measure of “closeness” to “ideal” solution of current consumers in purchasing different bicycles.

Keywords : Purchase evaluation factors、ISM、ANP

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