A study using fuzzy mode to classify the theme park quality elements by Kano's model

李友錚, Sheng-Yen Huang, Wen-Liang Wang, Hsiao-Lin Teng Industrial Engineering and System Management Management ycl@chu.edu.tw

## Abstract

In recent years, it is proven that the two-dimensional quality model addressed by Dr. Kano is an effective instrument to analyze the requirement of customer. However, the 5x5 questionnaires and classification evaluation table conducted by Kano in his model are criticized by certain experts. They consider these applications are lack in accordance with theory. Furthermore, the affective perception level of one's evaluation towards each item in questionnaires can not be effectively reflected with singular scale or numeric. It is due to the complicity of mentality and difference of preference in the answering process.

Therefore, this study will apply an approach of fuzzy questionnaires to modify Kano's two-dimensional

questionnaires which considered as subjective. Furthermore, this study will also develop a mathematical calculation performance according to the quality classification of Kano's two-dimensional fuzzy mode. In the end, the service quality of a theme amusement park will be studied as an example.

Keyword: Kano's model, Fuzzy theory, Fuzzy mode, Fuzzy questionnaires.