Modifying IPA with fuzzy DEMATEL 李友錚,陳靜宜,李美蘭,Ting-Ho Huan Technology Management Management ycl@chu.edu.tw

Abstract

This study employs Regression analysis to establish the implicit importance of quality attributes and the overall satisfaction, and adopt the fuzzy DEMATEL, which consider the fuzziness of human thinking, to calculate the causal relationship and the influential degree among each quality attribute, and then proposes a new methodology of decision analysis, which modifies the traditional IPA model and obtains the accurate importance and the improvement the quality attributes, in order to make the improvement of quality attributes and resource allocation more relationable.

Keyword: Importance-Performance Analysis, Multiple Regression Analysis, Decision Making Trial and Evaluation Laboratory, Fuzzy Theory