A Fuzzy Approach for Evaluating the Service Quality Based on Signed Distance and Order Statistics

A fuzzy evaluation approach applied service quality is proposed to improve the drawbacks of common statistical methods. Many literatures reveal that service quality is usually evaluated by statistical method and also focused on one specific industry. The statistical method can estimate the mean of customers' satisfactory level of each evaluation factor and it can also show the priority factors of the service quality for improvement. However, the satisfactory level of evaluation dimension and aggregate evaluation results can't be achieved by using statistical method. In this study, an algorithm of fuzzy approach based on signed distance and order statistics for evaluating the service quality is developed to deal with the evaluation of service quality of any industries. Furthermore, an illustrative example is given to verify the results and show its advantages.