Applying Mahalanobis distance into SERVQUAL analysis-a case study of hospital outpatient 李政宗,賀力行 Technology Management Management ho@chu.edu.tw

Abstract

SERVQUAL has been widely applied in service industries since proposed, but there are also several arguments raised. This study focus on calculation of gap score, proposes a conceptual model to apply Mahalanobis distance to the measurement of the gap score of each dimension, the method is to regard each dimension as a Mahalanobis space, and to regard each element as its multiple variables. The result showed several differences between conventional gap analysis and Mahalanobis distance analysis. The advantage of this method is the variances and relativity can be included in measurement, which may provide more accurate result for correct decision making.

Keyword: SERVQUAL; Service quality; Gap analysis; Mahalanobis distance; Multiple variables