Revised Planning Matrix of Quality Function Deployment 鄧維兆, Ying-Feng Kuo Leisure and Recreation Management Tourism simond@chu.edu.tw

Abstract

Quality function deployment (QFD) has been adopted to improve product quality and development in

many fields. Numerous studies have demonstrated that attribute importance and attribute performance

have a causal relationship and the customer self-stated raw importance is not the actual importance of

a customer attribute. These findings generate questions regarding the applicability of the conventional

planning matrix (PM) of QFD. This study presents a revised PM that integrates a back-propagation

neural network and three-factor theory to assist practitioners in determining the actual importance of

customer attributes. An illustrative case demonstrates the effectiveness of the revised PM and identifies

the shortcomings generated when applying the conventional PM.

Keyword: Quality function deployment; voice of the customer; planning matrix; back-propagation

neural network; three-factor theory; customer attribute importance