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# Proposing an integrated multi-criteria decision making approach to evaluate total quality management best practices in Malaysia hotel industry

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**Abstract.** Although numerous studies have focused on significant role of total quality management (TQM) in literature, little attention has been paid to using the multi-criteria decision making (MCDM) approach for analysis of TQM practices especially in the context of hospitality. The purpose of this study is to identify, prioritize and evaluate the TQM best practices in hotel industry by integrating the DEMATEL and ANP approaches. DEMATEL is employed to determine the interrelationships among the main practices and sub-practices while ANP is employed to examine the weights of main practices and sub-practices. The results of this study indicated that employee management had the first rank among other practices whereas the second and third rank encompass customer relationship management and leadership respectively. The findings of this study has shown guidance to practitioners to implement proper TQM in their organizations, effectively by using the suggested set of identified TQM best practices.

## 1. Introduction

Total Quality Management (TQM) plays a vital role not only focuses on improving service quality and reducing management costs but also has a goal of providing exceptional merits to customers by constantly ameliorating process efficiency [1]. Furthermore, TQM allows hotels to achieve an increased level of differentiation from its competitors, customer satisfaction, brand recognition, and cost savings associated with waste reduction [2]. As such, the question of how the execution of TQM practices would have an impact on hotel performance is of great significance or value not only to academic researchers but also policymakers and practitioners. Nevertheless, empirical investigation of TQM practices in various industries has become saturated [3]. It is arguably that there is inconsistency in the literature regarding certain TQM practices that yield exceptional outcomes. For instance, quality performance [4,5]; innovation performance [6, 7]; and customer satisfaction [8-10]. Moreover, TQM has been evolving in the hotel sector to meet the requirement outside of the organisational boundaries and constitution, to achieve development in production and sales with an advanced level of contentment among customers and other correlative stakeholders [11].

On the other hand, selection of an appropriate TQM best practices for each hotel is a very complex task due to difficulties pertaining to data collection, diversity of practices and their features, and the large number of subjectivity concerning practices that need to be taken into



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