



Discovering the best practices of Total Quality Management influencing performance in the Moroccan hospitality industry

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Abstract

This study aims to investigate the relationship between Total Quality Management and hotel performance, with a particular focus on identifying best practices from the European Foundation for Quality Management that could contribute to enhancing business results within the hospitality sector. A quantitative confirmatory study was conducted using a five-point Likert scale questionnaire, administered to 93 Moroccan hotels, targeting senior managers with a quality management background. The Partial Least Squares Structural Equation Modeling (PLS-SEM) technique was used to analyze the collected data. The findings indicate that Total Quality Management is a driver of both financial and customer performance. Similarly, strategy and processes are the most important enablers in fostering hotel performance. This research offers a distinctive empirical contribution by examining how Moroccan hotels embrace a significant managerial approach to enhance their performance. Furthermore, the study focuses on a widely recognized model for business excellence, providing a targeted and in-depth analysis of how specific practices within this framework can impact hotel performance.

Keywords: Total quality management, performance, EFQM, hotel, PLS

Introduction

Over the past decades, Total Quality Management (TQM) and its impact on hotel performance (HP) have gained the interest of researchers at

both the theoretical and empirical levels. TQM is defined as a positive effort by organizations to improve their structural, infrastructural, attitudinal, behavioral, and methodological approaches to delivering customer value. TQM involves instilling a quality mindset as a concern and responsibility for everyone in the organization (Zairi and Youssef,1995).

By the early 1980s, hotels began to recognize the importance of embracing quality concepts and were subsequently influenced by the American hospitality industry programs. By the late 1980s, they realized that TQM was a more powerful process for improving their institutional image, which was strongly influenced by customers' perceptions of quality. Effective quality management became one of the key enablers for the hotel industry to attract more customers (Camison, 1996).

The Ritz-Carlton chain is a prime example of the positive impact of TQM in the hospitality industry. The Ritz-Carlton has been recognized for its consistent commitment to quality and customer satisfaction, earning the prestigious Malcolm Baldrige National Quality Award in 1991. The chain focuses on delivering exceptional, personalized service while prioritizing customer satisfaction and empowering employees. The leadership structure encourages teamwork and employee participation in the strategic planning process. Despite initial resistance to this approach, Ritz-Carlton refined its methods for fostering effective team dynamics, placing a strong emphasis on building relationships among team members and providing training to ensure collaboration. This transformation has positioned Ritz-Carlton as a leader in the service industry. The internal impact of TQM requires significant changes, supported by senior management, in organizational structures, attitudes, and behaviors of all those involved.

While Ritz-Carlton is a luxury hotel chain with substantial resources, this doesn't necessarily mean that other hotels can't achieve similar results using TQM principles. However, the extent and manner in which TQM is implemented might differ based on resources, teams, and the hotel's context.

According to Sakarya and Çizel (2022), there is limited academic research on TQM impacting performance in the hospitality industry, with studies specifically focusing on the European Foundation for Quality Management (EFQM). The literature review reveals inconclusive results.

Thus, the present study follows this recommendation in the Moroccan context. The purpose is to investigate the impact of TQM practices on HP and identify the best practices from EFQM that improve the performance levels.

The article is organized as follows. After the introduction, the hypotheses are formulated based on a literature review. Then, the methodology used for the analysis is presented and the results are illustrated.

Finally, the last section discusses the conclusions and the main implications for theory and practice.

Literature review and research hypothesis

The role of TQM in improving HP has been widely debated. Some authors firmly believe that TQM leads to superior performance and sustains business growth (Sohal, 2006; Olaleye et al., 2023) by influencing various aspects of hotel performance, including employee satisfaction, customer satisfaction, operational efficiency, and financial results (Claver-Cortés et al., 2008; Benavides Velasco, 2014; Milovanović, 2014; Muslim Amin et al., 2017; Bouranta et al., 2017; Hrgović, 2024). TQM emphasizes the effective coordination of activities across processes, fostering continuous improvement throughout the organization to meet or surpass customer expectations (Anderson et al., 1995). Others (Powell, 1995; Patiar, 2012; Wang, 2012) argue that TQM depends mainly on how practices are implemented within hotels. The impact is positive in departments where managers encourage the use of TQM, in contrast to departments where TQM practices are less encouraged.

However, other researchers have questioned the effectiveness of TQM. Cortés (2008) argued that TQM has an insignificant impact on financial performance, suggesting that these practices are better known among managers than customers. Moreover, TQM has a negative impact on HP, as demonstrated by Fatchur and Solimun's (2014) study, due to intense competition, occupancy rates are low, affecting financial performance. Chaher (2024) found that TQM has no direct effect on financial performance, while it positively impacts non-financial performance. Beer (2003) argued that the failure of TQM to improve performance is often attributed to poor implementation rather than flaws in the theory itself. Rougan (2015) explained the reasons for TQM failure, including a lack of consensus on goals, insufficient employee accountability, inadequate planning, and, most importantly, poor communication.

Based on this, the following hypothesis is posited:

H₁: TQM impacts positively HP both the financial and the customer.

Best practice of EFQM impacting performance

The study focuses on EFQM to evaluate how TQM impacts HP. A literature review has been conducted to identify the most important EFQM criteria for improving HP. Politis et al. (2022) stated that hotels perform well in the processes criterion, reflecting well-defined procedures for service quality. Unlike the criterion of Partnerships and Resources, which has been found to show low-performance impact due to minimal involvement in strategic decisions, lack of supplier selection procedures, and poor human

resources management, resulting from low staff participation in decisions, inadequate training, and poor inter-departmental communication. They added that leadership is a competitive advantage for hotels, particularly in setting and improving the hotels' mission, vision, and values towards quality (Claver-Cortés, 2008; Amin et al., 2017; Al Shourah and Al Shourah, 2020). Sozuer (2011) found that the leadership, strategy, and people criteria can lead to competitive advantages. Proper investment in people is crucial for enhancing performance in the service industry, a conclusion supported by previous studies. In the same vein, Constantinidou (2014) advanced that the leadership and people criteria emerged as the most significant for the five hotel general managers. Additionally, more important criteria identified are the definition and promotion of change in the organization, the policy and strategy based on the current and future needs and expectations of stakeholder groups, the planning management, and improvement of human resources, the management of buildings, equipment, and materials, and the design and development of processes.

Other researchers firmly stated that effective leadership requires not only setting a vision and direction but also actively engaging employees in the process of achieving organizational goals. The importance of linking leadership, employees, and customers in improving business results is highlighted by Cheung and Wong (2011). They confirmed that management commitment to service quality does not produce positive organizational outcomes unless it is linked with effective employee involvement in serving customers. Rani and Supinit (2015) demonstrated that when employees are involved, rewarded, and empowered, their satisfaction increases, leading to more effective TQM operations. Similarly, Hussain and Khan (2020) discussed the role of employee and organizational commitment, stressing that employee engagement is essential for delivering high-quality service and maintaining competitiveness. The study by Thuy (2023) concluded that employee involvement has the strongest impact on hotel business performance among the soft TQM practices. Similarly, Santos-Vijande and Alvarez-Gonzalez (2009) consider employees as recipients of benefits from TQM implementation. These improvements can, in turn, positively influence customer satisfaction and overall performance. Consequently, the second hypothesis is proposed:

H₂: Leadership and people criteria have a stronger impact on hotel performance than other EFQM practices.

Methods

The purpose of this study is to explore the impact of TQM on HP and identify the most relevant practices to enhance business results. This section

deals with research design, especially related to sampling and the data collection method.

Sampling and data collection

The study focuses on 4-star, 5-star, and luxury hotels affiliated with national and international chains located in Morocco. The sample was collected using a purposive sampling technique. Hotel organizations were selected to ensure familiarity with the TQM approach. An online questionnaire was distributed to senior management representatives of these hotels. To ensure the clarity of the questionnaire, the absence of bias, and an appropriate completion time, a pre-test was conducted with five managers. Through a multi-stage data collection process, a total of 93 completed questionnaires were received and accurately analyzed. The questionnaire consists of three sections: Section 1 provides the demographic details of the hotel respondents. Section 2 presents the EFQM model used to evaluate TQM, with an emphasis on the five enablers: Leadership, Strategy, People, Partnerships and Resources, and Processes, Products and Services. Participants provided their responses to this section using a five-point Likert scale, where a score of one indicates disagreement (TQM practice is not represented), and a score of five indicates agreement (TQM practice is represented). Section 3 presents HP, evaluated through indicators such as occupancy rate, turnover, market share, customer satisfaction, loyalty, and requirements compliance. Participants were asked to indicate their level of agreement or disagreement regarding the status of these indicators.

Data Analysis

The collected data were coded in SPSS 20 for statistical analysis before performing the PLS-SEM analysis. PLS was preferred due to the limited data size, its suitability for Likert-type scale data, and its primary purpose in testing structural associations in this research. PLS SEM method can simultaneously depict relationships among all latent variables (Figure 1) while addressing measurement errors in the structural model. The analysis consists of two steps: first, evaluating the measurement model to ensure the precise identification of constructs; second, examining the structural model for hypothesis testing. The analysis will be conducted using SmartPLS 4 software, which ensures comprehensive and reliable results. This choice allows the study to effectively manage and analyze the relationships between variables, providing significant insights into the model's structure.

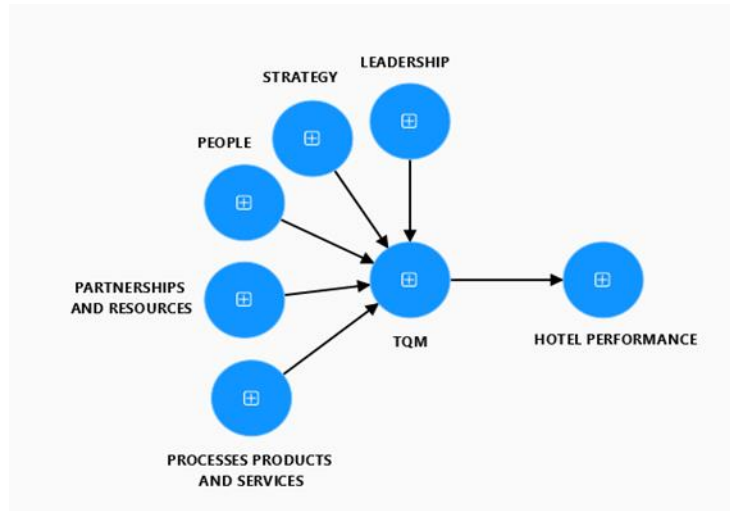


Figure 1: Research model

Main results

Measurement model assessment

Following the guidelines for PLS-SEM application by Hair et al. (2023), the first step in evaluating the measurement model is to assess indicator reliability by examining the indicator loadings. These loadings represent the correlation between each indicator and its corresponding construct, and their squared values indicate the proportion of variance explained by the construct. All loadings exceeded the recommended threshold of 0.708 (Figure 2), indicating that each indicator’s variance is explained by more than 50% of the construct, suggesting acceptable reliability.

We then explored the internal consistency reliability and convergent validity of the measurement model. To evaluate internal consistency reliability, both Cronbach's alpha and composite reliability (CR) were used. Table 1 shows that Cronbach's alpha values ranged from 0.71 to 0.94, and the CR values for each construct were greater than 0.7, suggesting that the scales are internally consistent and reliable.

Table 1. Internal consistency reliability and convergent validity

Condition	Cronbach's alpha ≥ 0.7 and ≤ 0.95	CR > 0.7	AVE ≥ 0.5
HP	0.868	0.904	0.654
Leadership	0.869	0.921	0.796
Partnerships and resources	0.627	0.842	0.727
People	0.692	0.829	0.617
Processes, Products, and services	0.944	0.964	0.899
Strategy	0.896	0.927	0.762

The third step is to assess the convergent validity of each construct. The average variance extracted (AVE) for each measure ranged from 0.42 to 0.89, supporting convergent validity, as the values exceed the recommended threshold of 0.50. This suggests that the constructs explain a substantial proportion of the variance in their respective items, indicating good convergent validity.

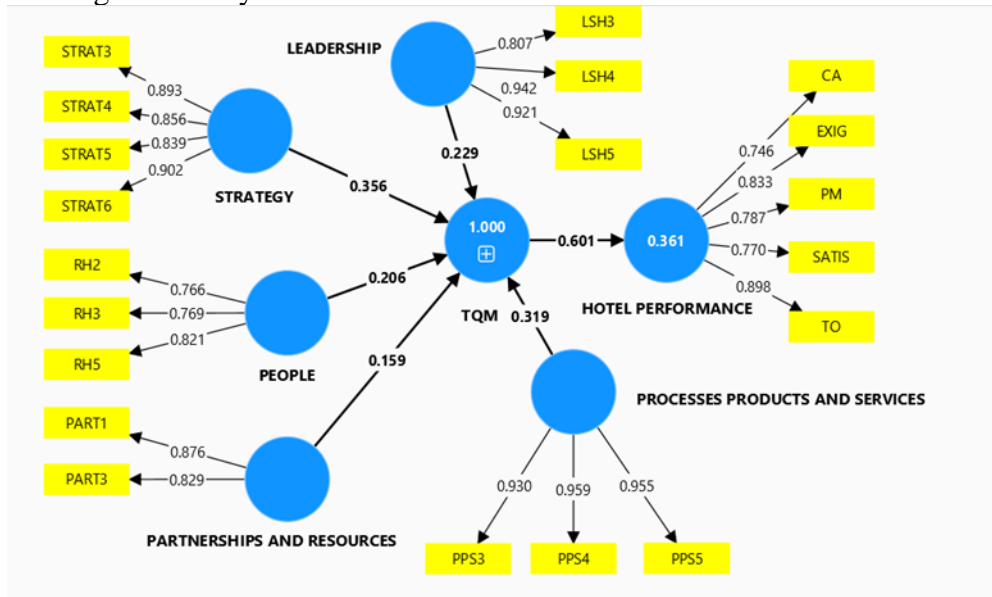


Figure 2: Research model on Smart PLS 4

Table 2. Discriminant validity

Condition	(1)	(2)	(3)	(4)	(5)	(6)
(1) Hotel Performance	0.809					
(2) Leadership	0.392	0.892				
(3) Partnerships and resources	0.413	0.494	0.853			
(4) People	0.501	0.378	0.465	0.786		
(5) Processes	0.535	0.523	0.664	0.452	0.948	
(6) Strategy	0.479	0.425	0.563	0.701	0.484	0.873

Table 2 presents the discriminant validity matrix. Fornell and Larcker (1981) introduced a traditional metric indicating that the AVE (average variance extracted) of each construct should be compared to the squared inter-construct correlations (which measure shared variance) with all other constructs in the structural model. Specifically, the shared variance among the constructs should not exceed their respective AVEs.

Structural model assessment

After assessing the measurement model, the next step is to evaluate the structural model, focusing on the path coefficients (relationships between

the study constructs) and their statistical significance. To do this, a resampling technique called bootstrapping generates multiple samples from the original dataset. In this case, 5,000 samples were used to estimate the significance of the correlations between constructs within the structural model (Henseler et al., 2009). By evaluating both the significance and relevance of the path coefficients, The examination of the t-values and p-values (see Table 3) enabled us to validate Hypothesis 1 and reject Hypothesis 2.

Table 3. Validation of hypotheses

Condition	95%CI			Validity
	Original sample (O) > 0	t-statistics > 2.3	p-values < 0.05	
H ₁ : TQM =>HP	0.601	8.414	0.000	confirmed
H _{1,1} Leadership =>HP	0.137	4.994	0.000	confirmed
H _{1,2} Strategy => HP	0.214	7.299	0.000	confirmed
H _{1,3} People => HP	0.124	7.870	0.000	confirmed
H _{1,4} PR=> HP	0.096	6.764	0.000	confirmed
H _{1,5} Processes => HP	0.192	7.379	0.000	confirmed

Discussion

The direct effect of TQM on HP is significant in Moroccan hospitality context, with a coefficient of 0.601, indicating a strong positive relationship. The t-value of 8.414 and the p-value of 0.000 confirm that this relationship is statistically significant, meaning that improvements in TQM practices are likely to enhance hotel performance at both the financial and customer levels, ultimately contributing to the pursuit of business excellence (Cortes et al., 2008; Bouranta et al., 2017; Shourah and Shourah, 2020; Sin et al., 2022). Hypothesis 1 is confirmed. Hotels with higher levels of implemented TQM practices tend to have higher occupancy rates, revenue, market share, guest satisfaction, and adherence to standards.

According to the SEM results, all the effects are statistically significant, larger, and have greater explanatory power. However, Strategy is the most important variable in the TQM implementation process impacting hotel performance, with a coefficient of 0.214. In other words, managers prioritize strategic alignment as a cornerstone of their TQM efforts. Strategy facilitates better decision-making and resource allocation, as it emphasizes key performance indicators that align with organizational goals. The second most important criterion of the EFQM is processes, products, and services (0.192). Continuous improvement helps identify inefficiencies and implement proactive changes to optimize operations. This ensures consistent quality in the services offered and enables them to dynamically meet customer expectations. Continuous improvement also fosters a culture of innovation, where employees are encouraged to share ideas and propose

solutions. Hotels can adapt to market changes and customer feedback, which is essential in such a competitive industry. Consequently, Hypothesis 2, which states that leadership and people have a stronger impact on hotel performance than other practices, is rejected.

The study suggests that Leadership (0.137) and People (0.124) play a supportive role rather than being primary drivers of performance. This can be explained by several factors. First, leadership practices may be deeply fixed within Moroccan hotels, potentially limiting the perceived scope for a significant impact on direct performance metrics. While leadership is crucial for setting the vision and driving culture, its effects on performance may manifest indirectly through other factors like strategy and processes. Leaders guide the strategic direction of the organization by making informed decisions that ensure the appropriate allocation of resources for the achievement of desired results. They foster a culture of continuous improvement and motivate employees to innovate and improve products and services. They demonstrate a strong commitment to quality, inspiring their teams to adopt best practices in their day-to-day work and dramatically improving overall service delivery.

Employees play a critical role in supporting the strategy and improving products, processes, and services by fostering engagement and aligning their efforts with the hotel's goals. Effective collaboration among employees encourages sharing innovative ideas, leading to the best guest experience. Employees are empowered to optimize service delivery and adapt to evolving customer needs through continuous training and skill development. Valuable feedback helps employees identify areas for improvement in processes and offerings. A customer-centric mindset ensures that services exceed guest expectations, and when associates take ownership of their roles, they become key contributors to the hotel's overall effectiveness and success in executing its strategic initiatives.

Finally, the Partnerships and Resources criterion (0.096) has positive effects, but comparatively lower (Politis et al., 2022). Partnerships with suppliers and access to resources can directly enhance service delivery, provide innovative solutions, and improve the customer experience, all of which, in turn, indirectly impact performance. Moreover, effective resource management—including financial, human, and technological resources—is vital for optimizing operations and ensuring sustainability. In this way, strong partnerships and efficient resource management complement strategy, people, and processes to drive overall performance.

Conclusions

Managerial implications

The current study aims to assess a coherent link between TQM and financial and customer hotel performance and to identify best practices that generate these results. From a practical viewpoint, this link can be exploited to propose further applications of the model. The study confirms two categories of TQM enablers: those that have a direct effect on performance, namely strategy and processes; supportive enablers, such as leadership and people; and, lastly, partnerships and resources. Hotels are invited to take a balanced approach that prioritizes direct enablers while supporting leadership, employee involvement, and effective resource management, managers can drive improved hotel performance and create a competitive advantage in the hospitality industry.

Limitations and future research directions

The limitations of this study are related to several factors. Firstly, the study uses a cross-sectional design, meaning it observes the causal relationships between TQM practices and HP data at a single point in time. Longitudinal studies would be necessary to observe the long-term effects to track changes in performance over time and observe the enduring impact of TQM practices. Future studies could also adopt the new EFQM model.

With the emergence of artificial intelligence (AI) tools, future studies could explore the impact of technology on TQM in hotels, including the investigation of how digital tools and systems, such as customer relationship management (CRM) software, AI-driven automated service processes, and machine learning algorithms, contribute to the implementation of TQM practices to enhance hotel performance.

Conflict of Interest: The author reported no conflict of interest.

Data Availability: All data are included in the content of the paper.

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