A Mixed-Method Study on the Perceptions of Quality Management and Sustainability in Malaysian Hotel Industry

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ABSTRACT

Rising trend of sustainability within tourism especially hotel industries remain ambiguous in many different areas of academic research and business. Nonetheless, contemporary relevance of quality practices and sustainability in the hotel industries has increased lately. This paper examined hotel quality managers (HQMs) perceptions of quality management and sustainability via the sequential-mixed methods approach, to bridge the gaps in the existing literature on the connection between pertinent variables. Therefore, in Phase 1 ten HQMs were deliberately selected and interviewed to perceive their views on quality management and the relationship between various quality management constructs towards sustainable performance. Phase 1 revealed that business ethics emerged as a new dimension, which needed to be emphasised. Subsequently, the qualitative results were utilised to design the hypotheses for 300 HQMs' quantitative surveys in Phase 2. The obtained survey data was analysed via the Partial Least Square-Structural Equation Models (PLS-SEM) to determine a list of hypotheses related to the impacts of key constructs. The present study depicted a significant and positive mediating connection between the HQMs perspective of quality management, business principles, and sustainable performance.

Keywords: quality management, sustainable performance, business ethics, hotel industries, mixed-methods design, Partial Least Square-Structural Equation Models (PLS-SEM)

JEL Classification: C1, L2

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1. Introduction

Sustainability has progressively attracted the attentions of academicians and practitioners in various economic sectors around the world, particularly hotel industries for the past decades (Hussain, Al-Aomar & Melhem, 2019). That is predominantly due to the fact that hotel industry is among the most environmentally detrimental industries, produces vast amounts of non-durable goods and waste water, consumes a lot of energy, and contributes to carbon emission (World Travel & Tourism Council, 2019). All these activities leave a significant impact not only on the worldwide environment but also affect the economic and social dimensions extensively.

The concept of sustainability in Malaysia became a prominent post-economic crisis (Ashfaq & Qureshi, 2020). Since the economic catastrophe, multiple organisations and the government have become highly aware of the importance of sustainability in Malaysia (Hassan, Noor & Ramayah, 2020). Therefore, under the Eleventh Malaysian Plan (2016–2020), the nation's environmental agenda, specifically the tourism industry focused on protecting the environment to harness economic and social values from the process (Cohen et al., 2015b).

The Malaysian government supported hotel investment and granted the Investment Tax Allowance and Pioneer Status for newly-developed hotels with four or five-star ratings. (Malaysian Investment Development Authority, 2018). Despite the rapid expansion of 4-star and 5-star hotels in the country, reports proved that these hotels were not ready to exploit the global expertise to move Malaysia and Asia forward towards sustainable development and safeguard the planet as a result of the high implementation cost of green initiatives (Malaysian Investment Development Authority, 2018).

On the other hand, the rapid and revolutionary change within the hotel environment resulted in a challenging period for the management to comply with sustainable development (Sannassee et al., 2015). Furthermore, the external changes for instance economic evolution, worldwide market competition, and the existence of new technologies and information systems that are unperceivable had demotivated the participation of the hotel industries in the execution of sustainability (Kapera, 2018). These external changes brought about internal changes such as the transformation of management strategy and practises within the hotel entities (Kapera & Wszendybyl-Skulska, 2017). As a result, the management had to implement multiple approaches, which included a significant implementation of Quality Management.

2. Quality Management in Hotel Industries

Quality Management emphasises on the improvement of service quality and the reduction of management costs (Changi et al., 2015). Besides, it also aims to offer clients outstanding merits through a continuous process of efficient restructuring (Changi et al., 2015). Furthermore, quality management helped hotels to attain a wide range of variations from its contenders, consumer satisfaction, brand acknowledgement, and cost savings that were linked to the cutback on waste (Junior, Lucado & VanAllen, & Jahoda, 2014). Therefore, quality management would be a viable approach to the contribution of sustainable performance (Junior et al., 2014).

As a result, issues on the implementation of quality management practices' impact on sustainable performance in the hotel sector are imperative to academic scholars, policymakers, and experts. Operations management requires finite academic work between operations management systems and the idea of sustainability in developing countries (Hallencreutz & Turner, 2011). Besides, the evolution of quality management in the hotel industry had been thriving to meet the necessities of the exterior organisational frontiers and establishments, to generate production and sales growth and achieve consumer and stakeholders' satisfaction (Tasleem, Khan & Masood, 2015). Therefore, it is necessary to conduct a comprehensive inquiry on the relationship between quality management and sustainable performance in the Malaysian hotel industry.

Nonetheless, limited research have been coordinated using a mixed methods approach to diffusely probe the quality management and sustainability phenomenon within hospitality context specifically hotel industry, which limits insightful interpretation on implementation of quality and sustainability

practices from hotel industries' perspectives (Abbas, 2020; Stefano, Matteo, Francesco & Giacomo, 2020; Hussain, et al., 2019). From a methodological viewpoint, this study makes an effort to fill in the research gaps by employing mixed methods approach, which can bring forth explicit and comprehensive answers with respect to degree and extent of quality management and sustainability phenomena within Malaysia's hotel industry. The focus of this study lies on the process for determining the new emerging dimensions that should be approached and implemented in such issue because of their direct and indirect relationship with sustainable performance using a mixed method research approach, specifically an exploratory sequential design, which will be discussed further in subsequent section.

3. Research Method

The sequential-mixed method was utilised to achieve an impactful and equalised analysis of the information as well as to validate the specific information via cross-verification of the qualitative and quantitative sources. (Creswell, 2014; Creswell & Plano-Clark, 2011) posited that the mixed-methods offer practical knowledge, which is a useful tool in the process of decision-making and situation management.

First, this study focused on a qualitative investigation on 4 and 5-star hotel quality managers (HQMs) such as hotel quality executives or hotel operation managers' views of quality management and the relationship between constructs of quality and sustainable performance. HQMs currently or had once been responsible for the hotel's overall quality management programmes were selected to ensure that they could provide detailed information regarding their experiences and involvement in implementing quality programmes. Therefore, the responses were recorded word-for-word based on a semi-structured interview. Next, the data was analysed via the coding and interpretive assay stated below: The second phase utilised the survey research techniques, measurement, and Partial Least Square-Structural Equation Modelling (PLS-SEM). In the beginning, qualitative outcomes were employed to design a questionnaire, which was directed towards a large sample, and resulted in the expansion of quantitative construct measures and a theoretical paradigm. The hypotheses in the present study were designed based on the outcomes of the qualitative study and the literature review, which assessed the perceptions of HQMs on quality management. Besides, this study also examined the extent to which the confirmatory study supported the paradigm of structural relations, quality management constructs, and sustainable performance.

3.1 Phase 1: An exploratory study of HQMs' perceptions of quality management and relationships among various quality management constructs towards sustainable performance

3.1.1. Issues explored

The exploratory study was conducted to better understand HQMs' perceptions of quality management and how quality management influences sustainable performance. The following specific issues were explored:

- the relationship between quality management and sustainable performance
- additional important dimensions that were inherent in Malaysia's 4 and 5-star hotels

3.1.2. Data Collection

The present study invited several HQMs from the MAH Directory. These HQMs were hotel quality managers or hotel operation executives from 4 and 5-star hotels in the country. They were invited to join in the experimental study to support the relevance and viability of the obtained information (Lim *et al.* 2013). Finally, a total of 10 respondents were deliberately selected and interviewed. These respondents had the opportunity to involve in similar quality management practices, were well-versed in the subject matter, and were responsible for the execution of the hotel quality management plan. This study conducted an in-depth one-to-one semi-interview HQMs. Although a one-to-one interview

is lengthy, pricey, and labour-intensive in comparison to focus group interviews (Creswell, 2012, p. 226), this method has few merits. First, it would have been arduous to gather all the sampled participants for a focus group interview because most of them were important figures in their organisation and were, therefore, often busy. Second, participants would have hesitated to share information openly during a focus group interview as a result of the competitive nature of the hotel industry (Creswell, 2012, p. 226).

In the present study, every interview was carried out for about 60-80 minutes. The respondents gave their consent and were permitted to walk out of the study anytime they wished to do so. The respondents were also well-informed about the confidential policy of the research. Therefore, their information and personal details would remain anonymous throughout the research.

3.1.3 Analysis

The interpretive method was utilised to examine the data and therefore, the reality was viewed as a collective construct. Individual responses were constantly constructed and decoded to provide an insightful elucidation of the mannerisms within a specific environment. The definitions were considered 'conceptualised, temporary knowledge' (Greene, 2000). Hence, the knowledge of the interpreter is debatable because it is context-based, complex, and signifies the interlinks between evidence and principles. Next, the interviews were transcribed and grouped according to the respective categories. The process of transliterating was arduous and therefore, these interviews were completed via Radnor's (2002) process of topic order. This method encouraged an inductive system of transcription. As a result, primary topics and new dimensions existed in the data. Finally, the present study analysed relationships as part and parcel of the listed categories.

4. Results and Findings

4.1 Phase 1: Findings of the exploratory study

A set of data was obtained from 10 HQMs and classified based on their views on quality management. More than half of the respondents reported that the majority of the groups were theme-based. About 4 groups were utilised to develop the hypotheses for the research prototype examined in the assented study of PLS-SEM.

Quality Management and Sustainable Performance

The respondents were conscious and could sufficiently explicate their comprehension of quality management. This could convalesce the implementation of sustainability. Based on this segment, different perspectives of quality management had facilitated respondents to contribute to sustainable performance in terms of economy, environment, and social.

Respondent 6:

"By adopting the quality management approach, we are very capable of sustaining economic and environmental aspects. We have gained tremendous brand image and become renowned in the public eye via quality inspections, waste minimalisation, and the implementation of strategies that meet standard requirement specifications."

Respondents 9 and 10:

"Quality management has made a significant contribution to the competitive advantage of promoting the company's environmental sustainability. Quality management also empowered us to minimise potential global warming gas (GWP) emissions, refrigerant emissions, to aid in the minimalisation of waste and pollution. In the future, these initiatives will contribute to the social, economic, and environmental sustainability."

The respondents delineated that quality management, which resulted in sustainable performance comprised of its outlook on the economic, environmental, and social aspects. These assertions were similar to the findings recorded by Abbas (2020), Hussain *et al.* (2019) and Stefano *et al.* (2020) in which

practicing quality management supported the undertakings of the company sustainability. Based on the findings, the present study ascertained the impact between HQMs' views on quality management and their general perspective on sustainable performance. Next, the confirmatory study analysed the findings via the hypothesis below:

H₁: The quality management practices and sustainable performance depict a positive and significant relationship.

Quality Management, Business Ethics, and Sustainable Performance

Although respondents recommended the company to take initiatives related to daily quality management, the management should also pay more attention to ethics to ensure the organisation can sustain in the long-run. Nonetheless, each respondent had his or her perspective of balanced quality management and business principles and how these business principles can help intensify the relationship between quality management and sustainable performance in the hotel industry:

Respondent 2:

"Quality management can serve as a foundation and a catalyst to develop an ethics-based strategy, and analyse how strategies based on these two directions can contribute to the organisation's sustainable performance while improving the lives of the local community, labour intensives, and particularly society, as a whole."

Respondents 4 and 5:

"We have realised its significance (ethics) on time, both for business and for the community in which it operates. Consequently, the largest international hotel-chains have become advocates of ethical awareness in this industry. Bearing in mind its economic and environmental influence, the hotel sector is one of the most evident potential users of the application of ethical policies."

Respondent 8:

"Hoteliers like us must make sure that the ethical basis of quality is not neglected and that quality management takes a leading role in supporting ethical business practices. Therefore, these ethical principles are the core of quality management, which can influence and lead the formation of organisational values, and ultimately affect the vision and mission of corporate."

Business ethics exhibited newly emerging dimensions, which showed higher recurrences in the interview transcripts. Responses proved that the superior international is important to the industry and therefore, it is essential for hoteliers to conduct the right strategies for the business, to generate earnings only within the legal framework and keep in mind the rule: 'never deceive customers.' Hotel entities are not only expected to satiate the economic needs but are also required to pay more attention to environmental and social responsibilities related to stakeholders such as clients, employees, etc to reboot. Quality management alone is not enough to develop companies' sustainability. Therefore, respondents stated that business ethics is a necessary principle for the foundation of successful business establishing to attain entrepreneurial advancement.

The ethical practice focuses on the universal welfare of all stakeholders and it is considered equally fair. Therefore, the existence and practice of quality management will ultimately enhance these ethical behaviours to increase the importance of the associated outcomes and benefits. Additionally, empirical studies revealed that business ethics create external positive impacts on the financial and non-financial perspectives of business performances such as improved status and positive business reputation (Malik & Kanwal, 2018), improved client allegiance (Huang & Li, 2017) and develop viable benefits (Sarvaiya, Eweje & Arrowsmith, 2018). Moreover, several studies highlighted the importance of business ethics between quality management and performance without an empirical test on their assertions (Shahzad, Ying, Ur Rehman, Zafar, Ding & Abbas, 2019). Therefore, evidence proved that that business ethics can strengthen the quality management-based organisation to establish an ethically sensitive business culture that can gyrate towards sustainable hotel performance. Hence, a new dimension had been incorporated into the quantitative study to determine its effect on

sustainability. As such, the following hypotheses were delineated from the findings in the present study:

H₂: Quality management and business ethics depict a positive and significant relationship.

H₃: Business ethics and sustainable performance depict a positive and significant relationship.

H₄: There is a positive mediating effect by business ethics in the relationship between quality management and sustainable performance.

4.2 Phase 2: Research Model for the Confirmatory Study

Figure 1 (Phase 2) depicts the theoretical framework extracted from Phase 1. The framework consisted of indicators such as quality management, business ethics, and sustainable performance that were used to examine the hypotheses.

Figure 1 Research model

4.2.1 Construct Measures

The present research employed several survey tools to examine the variables of the research paradigm. These tools were predominantly extracted from the literature review and a qualitative study. Hence, the present study had listed the following constructs: Quality Management depicts the management-based modus operandi, which encourages the involvement of the entire team of the hotel industry to enhance procedures, products, services, and the culture, to achieve greater customer and stakeholders' satisfaction (Yusoff *et al.*, 2016). Business ethics refers to the rules and principles that specify how individuals within the hotel entity should behave, despite the values that enhance and safeguard the welfare of the organisation, community, and society (ElGammal, El-Kassar & Messarra, 2018). Sustainable performance refers to the enhanced perspectives of the hotel corporates to take into account issues such as environmental, social, and economy that are discussed in today's generation without negotiating the opportunity and capability for future generations (Abdul-Rashid *et al.*, 2017).

The items of the dependent variable (sustainable performance), independent variables (quality management), and mediator (business ethics) were extracted from previous studies and was adapted based on the objectives of the current study. The present study utilised a 7-point Likert scale for all constructs that were measured between 1 = strongly agree to 7 = strongly agree (Joshi & Rahman, 2015) or 1 = very low to 7 = very high (Yamaguchi, 1994). A 7-point Likert scale is an appropriate tool because it minimises the discrimination between the stimulus objects (Zikmund, Babin, Carr & Griffin, 2010).

4.2.2 Data Collection

The hotel was used as the unit of analysis and all 4- and 5-star hotels operating in all the states in Malaysia were the sample population. According to MAH directory, in total, there were 275 4- and 5-star hotels throughout Malaysia registered under them, in which 172 were 4-star hotels while 103 were 5-star hotels. Probability sampling - two stage stratified clustering sampling is adopted as

sampling strategy, in which the stratum (4- and 5-star hotels) was divided into different clusters (states). Four states were selected at random, Klang Valley (Kuala Lumpur, Selangor, and Putrajaya), Johor, Melaka, and Penang, and sample was drawn from 4- and 5-star hotels within those states, as shown in Table 1. In line with Mohamed and Yusof (2009), the four states mentioned are the most prevalent choice for business, transitory, and vacation tourists; most local tourists will opt for Klang valley, Johor, Melaka, and Penang as their travel destinations. Since Klang valley, Johor, Melaka, and Penang comprise an adequate amount of 4- and 5-star rated hotels, this study selected these four places to distribute the questionnaire so that sufficient target respondents can be obtained. Based on Krejcie and Morgan's (1970) table, a total sample size of 162 HQMs were needed to represent Malaysian 4- and 5-star hotels. To ensure that the most reliable and valid number of respondents was obtained with no violations in sample size or normality, the researcher decided to apply more than the lowest required sample size recommended by statisticians. As such, 300 online questionnaires were sent out via electronic mail (email) to HQMs, using details obtained from each chosen hotel's human resource department.

Table 1 Two-stage Stratified Cluster Sampling Data

States	Number of 4* and 5* hotels	Calculation	Sample (%)	Sample Size
Klang valley	94	$94/165 \times 162$	57	92
Penang	35	$35/165 \times 162$	21	34
Johor	21	$21/165 \times 162$	13	21
Melaka	15	$15/165 \times 162$	9	15
Others	110	-	-	-
Total	275		100	162

4.3 Phase 2: Results of the Confirmatory Study

4.3.1 Assessment of Measurement Model

The examination of the measurement paradigm is made up of internal consistency reliability, convergent validity, and discriminant validity (Hair, Hult, Ringle & Sarstedt, 2017). Hair, Black, Babin, & Andersn (2010) defined internal consistency reliability as the extent to which objects assess the dormant constructs. However, composite reliability (CR) computes internal consistency better than the Cronbach's alpha (Hair et al., 2017). Although the CR value of "0.6 is acceptable in exploratory research values above 0.95 indicate redundancy" (Avkiran & Ringle, 2018, p. 4). The CR scores for all the constructs- Quality Management (0.889), Business Ethics (0.709) and Sustainable Performance (0.830) in the present study ranged between 0.709 to 0.889 (Appendix 1), which indicated the presence of the instrument's internal consistency reliability (Hair et al., 2014; Nunnally & Bernstein, 1994).

Hair et al. (2017) defined convergent validity as the "extent to which a measure correlates positively with alternative measures of the same construct" (p.112). Therefore, the CV could be ascertained based on an examination of the exterior loading of the pointers' differences and the obtained average variance extracted (AVE) (Hair et al., 2014; Hair, Ringle, & Sarstedt, 2011). The presence of an increased exterior loading depicted a highly illustrative indicator of the construct. In general, the rule states that at least 50% of each signifier's modification should be elucidated based on dormant variances. Subsequently, an indicator's exterior loading should surpass 0.078 because the digit when squared (0.078) should sum up to 0.50. Nonetheless, overall, 0.7 is viewed as a suitable value for practical reasons (Hulland, 1999). Appendix 1 shows that the CV is confirmed when the outer loading of all constructs- Quality Management (0.79), Business Ethics (0.503) and Sustainable Performance (0.689) is adequate and the AVE of all constructs are equalised or have surpassed 0.50 (Hair et al., 2010).

The present study examined discriminant validity (DV) via the Heterotrait-Monotrait ratio of correlations (HTMT). Henseler, Ringle, and Sarstedt (2015) recommended the use of HTMT to evaluate DVs. Based on the predicted factor of correlation, the HTMPT should be lesser than one (preferably < 0.850) to differentiate between the two aspects (Henseler, Hubona, & Ray, 2016). The outcomes of

HTMT in the present study depicted that the constructs were between 0.440 and 0.816. These digits were dramatically below the point of 1.0 and were established at HTMT_{.85}. Therefore, Appendix 2 proved that all constructs were directly interdependent, which fulfilled the selection standards of DV.

Besides, the HTMT inferred results also indicate that the confidence interval (CI) does not show a value of 1 in any of the constructs (Henseler et al., 2015), which confirms DV as well. The results of the overall measurement model demonstrate adequate internal consistency reliability, CV, and DV.

4.3.2 Hypotheses Outcomes

Results proved that the four hypotheses in the present study were reinforced based on the following data: quality management (H_1 : $\beta = 0.908$, $t = 9.750$, $p < 0.01$, LL: 0.749, UL: 0.912), had a positive connection with sustainable performance. Additionally, quality management (H_2 : $\beta = 0.856$, $t = 21.187$, $p < 0.01$, LL: 0.780, UL: 0.984) was imperatively related to business ethics. Besides, the outcomes for the coefficients of PLS depicted that business ethics (H_3 : $\beta = 0.895$, $t = 8.394$, $p < 0.01$, LL: 0.675, UL: 0.796) had a positive impact on sustainable performance. Subsequently, Preacher and Hayes (2004, 2008) suggested an indirect method, which was applied to determine the mediating effect of business ethics between quality management and sustainable performance (H_4). The analysis portrayed the implicit impact, $\beta = 0.424$ was imperative with a t -value of 2.975. The secondary impact of the 95% Corrected Boot CI Bias: [LL = 0.078, UL = 0.237] did not overlap at 0 and indicated the presence of a mediation (Preacher & Hayes, 2004, 2008). Therefore, the influence of mediation was statistically important, and business ethics (H_4 : $\beta = 0.424$, $t = 2.975$, $p < 0.01$, LL: 0.078, UL: 0.237) facilitated the connection between quality management and sustainable performance. Hence, Appendix 3 proved that the obtained results supported H_1 , H_2 , H_3 , and H_4 , respectively.

5. Discussion

The findings in this study revealed that the respondents believed that quality management has a positive influence on sustainability. These findings coincided with Ershadi, Najafi, and Soleimani's study (2019) whereby quality management helped minimise and sustain resources to achieve organisational sustainability. On the other hand, Alharbi, Al-Matari and Yusoff (2016) discovered that quality management was advantageous and achieved effective sustainability via processes, continuous improvement, customer satisfaction, and organisational commitment. In general, the study outcomes concurred with prior works of literature on quality management and its ability to predict sustainable performance. Therefore, the hypothesis revealed that there was a positive connection between quality management and sustainability in the Malaysian hotel industries (H_1).

Besides, study outcomes indicated that quality management was a significant predictor of business ethics (H_2). Therefore, efforts taken by the corporate world to enhance quality management would eventually improve ethical behaviours and increase the weight of the associated benefits because ethical practices impact the general welfare of the stakeholders (Phan *et al.*, 2011). The results indicated that business ethics and quality management established a mutually beneficial relationship since quality cannot be successfully administered without taking into consideration ethics and moral principles. Therefore, the present finding is similar to previous research in which hoteliers who were genuinely committed towards quality management, established behavioural norms that were above their self-interests to safeguard the business without seeking any formal compensations or acknowledgement (Sadikoglu & Olcay, 2014).

This study revealed that business ethics has a significant direct effect on sustainable performance (H_3). Previous studies reported a strong relationship between business ethics and sustainable performance (Bajaj, Thomas & Mukherjee, 2014; Romar, 2014; Treviño & Nelson, 2011), and the present study also identified similar relationship. Besides, previous studies claimed that ethics developed positive external influence such as investor loyalty and accountability, which assured durable positive economic outcomes (Malik *et al.*, 2018), elevated image and positive business status

(Huang *et al.*, 2017), larger groups of committed clients (Sarvaiya *et al.*, 2018), and building viable benefits (Romar, 2014).

Hence, good business ethics is a distinguishing quality that can bring unmeasured success to a commercial organization. In a similar vein, Du Mont (2015) affirmed that the culture of ethics had reduced misbehaviour and the stress of ethical standard negotiation, enhanced the act of reporting to the top authority and responded to misbehaviours. These actions had resulted in increased cooperation and teamwork within the organisation. Furthermore, Vujić, Ivaniš, and Bojić (2012) depicted that organisations with significant ethical commitments achieved intense stakeholder satisfaction, which had directly influenced the organisation's long-term prospects. Lastly, the results also confirmed the role of business ethics as the mediator between quality management and sustainable performance (H₄). This proved that business ethics is an important mechanism to convey the outcomes of quality management on sustainability in the hotel industry.

6. Conclusion

The findings of this study provide insight on the relationship between quality management practices, business ethics and sustainable performance specifically hotel industries in developing country, which may be different from that in developed countries. The current study will not only bridge the empirical gaps on the relationship between quality management practices, business ethics and sustainable performance but will also provide valuable insights to the academicians proper procedures to explore new phenomena through sequential mixed method research design. The research framework developed in this study can be used as a guideline by hoteliers in developing countries to implement a new approach which incorporates quality management and business ethics into their strategic prioritization with full confidence based on their current conditions to achieve sustainable development goals. The new approach can be in any form of commendation, implementation and modification to assure that the sustainability strategies and key sustainability related to economic, environment and social aspects within hotel entities are addressed. This is to assure high standards of governance throughout the hotel operations to enhance responsible business practices, manage environmental impacts as well as to fulfill the social needs of communities and business operation.

The present study had surveyed 300 HQMs to examine their views on quality management and the relationship between business principles and sustainable performance that were executed in Malaysia, recently. Data were obtained from 4 and 5-star hotels that were located in four distinctive states in Malaysia. Additionally, the HQMs samples collection exceeded the required sample size reckoned by Krejcie and Morgan (1970) for survey-based research considering a set of substantial quantitative data on construct procedures depicted assailable levels of relevance and legitimacy. Future research should conduct surveys on HQMs based on the different kinds of hotel proprietorship (domestic or foreign) or the specific categories of hotels such as business, resorts, and suites so that it can be explored that does hotel proprietorship or hotel categories matters to achieve sustainable performance objectives. Additionally, future research could focus on the characteristics of the personnel or organisation and their role as moderators (i.e., government support, technological advancement) in future work to estimate the ability of the suggested model.

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Appendix 1 The Results of the Internal Consistency Reliability and CV of Measurement Model						
Construct	Items	Factor Loading	Composite Reliability	Average Variance Extracted (AVE)	Variance	Extracted
Quality Management	QM1	0.673	0.889	0.790		
	QM2	0.810				
	QM3	0.821				
	QM4	0.846				
	QM5	0.762				
	QM6	0.684				
	QM7	0.7701				
	QM8	0.803				
	QM9	0.669				
	QM10	0.772				
	QM11	0.805				
	QM12	0.792				
Business Ethics	BE1	0.737	0.709	0.503		
	BE2	0.818				
	BE3	0.703				
	BE4	0.794				
	BE5	0.738				
	BE6	0.800				
	BE7	0.716				
	BE8	0.876				
	BE9	0.852				
	BE10	0.751				
	BE11	0.742				
Sustainable Performance	SPERF1	0.733	0.830	0.689		
	SPERF2	0.625				
	SPERF3	0.653				
	SPERF4	0.821				
	SPERF5	0.785				
	SPERF6	0.759				
	SPERF7	0.678				
	SPERF8	0.745				
	SPERF9	0.746				
	SPERF10	0.781				
	SPERF11	0.719				
	SPERF12	0.725				

Appendix 2 HTMT Criterion			
	Quality Management	Business Ethics	Sustainable Performance
Quality Management	0.755		
Business Ethics	CI.90 (0.512,0.773)		
Sustainable Performance	0.606 CI.90 (0.382,0.791)	0.613 CI.90 (0.479,0.726)	

Appendix 3 Results of Structural Model

Hypotheses	β	SE	t value	Confidence Level		Decision
				LL	UL	
H ₁ :Quality Management→Sustainable Performance	0.908	0.093	9.750**	0.749	0.912	Supported
H ₂ :Quality Management→Business Ethics	0.856	0.039	21.187**	0.780	0.984	Supported
H ₃ :Business Ethics→Sustainable Performance	0.895	0.077	8.394**	0.675	0.796	Supported
H ₄ :Quality Management→Business Ethics→Sustainable Performance	0.424	0.068	2.975**	0.078	0.237	Supported