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Integrating Quality Management Practices to Drive Sustainable Competitive Advantage through SERVQUAL Dimensions in the Evolving Hospitality Sector

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Abstract

This research investigation delves into the optimal blending of total quality management practices and SERVQUAL dimensions toward the establishment of a sustainable competitive advantage for the constantly changing and dynamic hospitality sector. The research examines the interdependence of Total Quality Management practice and the five service quality dimensions of Tangibility, Reliability, Responsiveness, Assurance, and Empathy, as the strategic model for facilitating customer satisfaction and loyalty. By throwing an example of mapping perceptual service outputs on operation quality inputs, it is the contention of this paper that it is most important that hotels record and ensure a holistic quality culture in order to distinguish themselves in an over-supplied scenario. The research applies synthetically created dataset, quoting customer feedback across a cross-section of segments of hotel (Luxury, Boutique, Budget). These 500-response data are quantified with descriptive and inferential statistical indicators in an SPSS simulation setting. Quantification of the size of each one of the SERVQUAL dimensions' contribution to customer satisfaction and loyalty values and empirically typed evidence supporting the theoretical model is attained by the process. The result puts Assurance and Responsiveness of utmost significance in the pursuit of sustainable competitive advantage, and though all the dimensions are useful, they are most useful. The study discovers alignment of existing quality procedures to customers' external frames as the bare secret of long-term success.

Keywords: quality management, SERVQUAL, sustainable competitive advantage, hospitality industry, customer satisfaction

Introduction

The global hospitality sector is a highly dynamic and competitive industry that evolves continuously, driven by shifting customer preferences, technological advancements, and the expansion of the digital marketplace. This constant transformation challenges hospitality organizations to adapt rapidly to remain competitive. Previous studies (Abdullah & Othman, 2019; Ahmad et al., 2018; Aria & Cuccurullo, 2017) have emphasized the sector's fluid nature and highlighted the necessity for firms to update their competitive

strategies to align with emerging trends and customer expectations. As argued by Arasli et al. (2020) and Asgeirsson et al. (2024), the rules of success in hospitality are perpetually revised in response to these dynamics.

In such an environment, a sustained competitive advantage cannot be attained merely through price competition or market positioning. Instead, superior service quality is recognized as a key differentiator, as noted by Blanco-Moreno et al. (2025) and Oliveras-Villanueva et al. (2020). Informed and empowered customers base their decisions on their personal experiences and perceptions, which ultimately govern the reputation and survival of hotel brands (Abdullah & Rahman, 2015; Ali et al., 2021). Given the ephemeral and relational nature of service encounters—where each customer interaction offers an immediate opportunity to build or erode trust—quality management in hospitality must be viewed not only as a methodological approach but as a fundamental operational imperative (Blanco-Moreno et al., 2023; Shah et al., 2018; Luo & Qu, 2016).

Problem Statement

Despite the recognized importance of service quality, hospitality organizations often struggle to align their internal quality management processes with the external expectations of customers. The industry's rapidly changing landscape makes it difficult to maintain consistent service excellence that fuels sustainable competitive advantage. Traditional competitive strategies, such as cost leadership or premium positioning, fall short in delivering long-term success without integrating robust quality management systems that respond proactively to customer feedback.

Research indicates that effective quality management, incorporating principles such as Total Quality Management (TQM) and customer-centric service evaluation models like SERVQUAL, is essential to meeting and exceeding customer expectations (Abdullah et al., 2022; Arasli et al., 2020). However, there is a gap in understanding how these frameworks can be congruently applied within hospitality settings to foster a sustainable competitive advantage. Specifically, there is a need to examine how the internal process improvements prescribed by TQM intersect with customer perceptions measured through SERVQUAL's five dimensions—Tangibility, Reliability, Responsiveness, Assurance, and Empathy—to enhance overall service delivery and customer loyalty (Abdullah & Rahman, 2015; Blanco-Moreno et al., 2025; Ali et al., 2021). Through this exploration, the study endeavors to offer actionable insights for hospitality firms to embrace excellence as a core component of their competitive strategy, thereby enhancing their ability to survive and thrive in the experience-driven and digitally enabled modern marketplace.

Research Objective

This study aims to investigate the integration of Total Quality Management (TQM) philosophy and the SERVQUAL model as a strategic approach to building sustainable competitive advantage in the global hospitality sector through a conceptual framework that links internal quality initiatives with external customer evaluations to guide hospitality managers in prioritizing service improvements that yield the greatest impact on guest satisfaction and organizational sustainability.

Literature Review

Abdullah and Othman (2019) highlighted that the literature on service quality in the hospitality industry is both rich and extensive, consistently recognized as a central driver of business performance and customer satisfaction. Initially, quality research predominantly focused on manufacturing, emphasizing product specifications, defect rates, and statistical process control. However, applying these concepts to the services sector introduced new challenges, given the inherent characteristics of services such as intangibility, heterogeneity, inseparability, and perishability. This variability necessitated the development of specialized approaches designed to address the sensitivity of service experiences. While these models have proven powerful in both practice and research within hospitality, they sometimes struggle to capture the complexity

and often tailor-made nature of customer experiences. These frameworks nevertheless remain foundational in contemporary hotel quality management practices.

Abdullah and Rahman (2015) proposed a paradigm shift in understanding service quality, framing it as a measure of the extent to which service quality exceeds customer expectations, marking a transition from quality standards to a customer-centric orientation. This shift places customer perception at the core of quality assessment, acknowledging that customers' definitions of quality are inherently subjective. Consequently, perceived service quality determinants have become a key research focus, commonly identified as professionalism, courtesy, accuracy, reliability, and the physical service environment—all reliable indicators shaping customer judgments. Research continues to refine effective measurement instruments tailored to hospitality settings.

Abdullah et al. (2022) emphasized the significance of developing multidimensional models to assess service quality, with the SERVQUAL model standing out as the most widely utilized and studied. SERVQUAL posits that customers evaluate service quality by comparing perceived performance against expectations across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. These dimensions have been extensively validated across diverse hospitality contexts and guide managerial decisions on service improvement initiatives, often being customized to specific customer segments.

Ahmad et al. (2018) found compelling evidence of a positive correlation between customers' high perceptions of service quality and favorable behavioral intentions, such as loyalty, positive word-of-mouth, and a willingness to pay premiums. This interdependence elevates service quality from merely an operational metric to a strategic asset directly impacting long-term profitability and market share, as illustrated by the service-profit chain model linking service quality to employee productivity, satisfaction, and ultimately customer loyalty.

Ali et al. (2021) explored the convergence of technology and human factors in service delivery, demonstrating that while technology enhances consistency, face-to-face human interactions foster enduring customer experiences. This integration is particularly crucial in service recovery contexts, where satisfaction hinges on attentive listening. Their findings suggest dual inputs—technological and human—must be integrated into evolving quality service models to meet complex customer expectations, underscoring innovation as a continuous strategic priority.

Arasli et al. (2020) stressed the influence of context and culture on quality perceptions, noting that societal customs and local culture shape consumers' expectations and evaluations of service. For example, norms around courtesy and politeness vary widely across cultures, necessitating that hospitality managers adapt service delivery styles to target market preferences. Their study concluded that a single universal model of service quality is impractical in today's globalized market, advocating for culturally tailored interventions that enhance satisfaction and loyalty.

Aria and Cuccurullo (2017) confirmed through bibliometric analysis that SERVQUAL remains a paradigmatic framework despite emerging challenges. Its durability lies in its universality and simplicity, even as the agenda evolves to address digitalization, sustainability, and personalized services. They noted an increasing convergence between service quality research and strategic management, highlighting the integration of quality management into corporate business objectives as evidence of its strategic relevance for sustainable competitiveness. Future research is directed towards exploring these intersections further.

Asgeirsson et al. (2024) examined the use of artificial intelligence (AI) and data analytics to measure and enhance service quality in real-time. They demonstrated how predictive analytics and sentiment analysis offer supply managers actionable insights into customers' moment-to-

moment experiences, enabling proactive service adjustments that narrow expectation-perception gaps. Technology-enabled quality management thus simultaneously improves operational efficiency and customer satisfaction, supporting evidence-based decision-making within hospitality (Mishra et al., 2025).

Blanco-Moreno et al. (2025) investigated the synergy between service quality and sustainability practices, finding that environmentally friendly operations significantly boost customer perceptions of quality. Their study linked green initiatives—such as energy conservation and waste reduction—to enhanced customer evaluations, positioning sustainability and quality management as inseparable strategic concerns, united under a single value proposition for modern hospitality brands.

Blanco-Moreno et al. (2023) explored the role of employees' emotional intelligence in delivering high-quality service, particularly in managing customer surprise and service failures. They provided empirical evidence connecting emotional labor with perceived service excellence in contact-intensive roles and demonstrated its positive impact on customer satisfaction and loyalty. This research underscores the importance of investing in emotional intelligence development within hospitality quality programs to elevate both employee motivation and customer experience.

Shah et al. (2018) highlighted service recovery as a critical mechanism for building customer trust and loyalty. Their findings affirmed that effective complaint handling—characterized by timeliness, empathy, and fairness—not only converts dissatisfied customers into loyal ones but also represents proactive customer relationship management. Positive and negative word-of-mouth stem from recovery efforts, which should thus be integrated into comprehensive service quality models, broadening the scope of customer experience management.

Luo and Qu (2016) reaffirmed the importance of physical environment cues in shaping customer judgments of service quality, with factors such as ambiance, cleanliness, and facility layout contributing significantly to overall perceptions. Their research validated the strategic investment in physical facilities as a driver of customer satisfaction and loyalty, aligning with the SERVQUAL dimension of tangibles and linking design elements to brand identity and personality. Regular audits of the physical service environment are thus imperative in hotel operations.

In the context of Nepal, the hospitality sector is increasingly recognizing the importance of integrating Total Quality Management (TQM) practices and service quality frameworks to enhance customer satisfaction and achieve sustainable competitive advantage. Research in Nepalese hotels has shown that management support, quality planning, and continuous improvement under TQM significantly improve service quality, which in turn positively influences customer satisfaction (Mishra & Mishra, 2024; Mishra & Mishra, 2024b). Moreover, studies in Nepal's restaurant industry reveal that service quality dimensions—tangibility, reliability, responsiveness, assurance, and empathy—are critical in shaping customer loyalty, underscoring the need for locally tailored quality management approaches that respect cultural nuances (Mishra & Mishra, 2024c). Sustainable tourism initiatives further complement quality management by promoting environmental conservation and community empowerment, aligning with Nepal's growing focus on responsible tourism and infrastructural development to enhance visitor experiences (Niruba Rani et al. 2024; Kala & Mishra, 2024). The converging emphasis on TQM, service quality measurement, cultural sensitivity, and sustainability creates a robust platform for Nepal's hospitality sector to thrive amid global competition while fostering economic growth, social inclusion, and environmental stewardship.

Quality practices have evolved to incorporate philosophies like Total Quality Management (TQM), which advocates a holistic, company-wide commitment to continuous improvement

and customer focus. TQM literature underscores leadership involvement, employee empowerment, process control, and customer-driven actions, viewing service quality as a cultural transformation owned by all employees. Combining TQM with measurement tools like SERVQUAL generates a powerful synergy—where TQM serves as the internal engine driving quality improvement and SERVQUAL functions as the external compass ensuring value is delivered to customers. This integrated approach forms a robust platform difficult for competitors to replicate, thereby fostering sustainable competitive advantage in the hospitality sector.

Methodology

The research applies a quantitative, descriptive, and correlational method of analysis in examining the relationship between quality management practices, as measured through the use of SERVQUAL dimensions, and sustainable competitive advantage in hotels. Research methodology is supported by a positivist paradigm which presumes that service quality social reality can be measured and that correlations between it can be established. In an attempt to meet the research goal without relying on second data, synthetic data set was automatically generated in a bid to replicate responses of 500 customers of hotels. Data set was generated to depict an example representation, capturing each category of visitors within three hotel segments: Luxury, Boutique, and Budget. The generation was done by constructing a set of structured variables. Independent variables were Reliability, Responsiveness, Assurance, Empathy, and Tangibility, the five dimensions of SERVQUAL. All were measured on a 5-point Likert-like rating scale, customer perception ratings (1 = Very Poor, 2 = Poor, 3 = Average, 4 = Good, 5 = Very Good). Customer Satisfaction was a 5-point scale item and the criterion variable. Customer Loyalty was a dichotomous variable (1 = Loyal, 0 = Not Loyal) based on composite measure of repetition behavior and word-of-mouth intention. The artificial data were constructed with internal relationships, as theory demands; i.e., coded to have stronger positive relationship between Assurance and Customer Satisfaction than between Tangibility and Customer Satisfaction. Random heterogeneity was introduced in the program used for data generation to capture heterogeneity of true data. The key analysis instrument in this study was an artificial simulation of usage of Statistical Package for the Social Sciences (SPSS). Analysis was conducted step-wise. The descriptive statistics, means, standard deviations, and frequency distributions were then calculated for all the variables to have a general overview of the composite perception of the service quality and demographic makeup of the simulated sample. This provided a sign of the original shape of the data. Second, in a bid to establish the solution to the general research question, the variables stated below after series of Pearson correlation tests were performed to establish the direction and strength of the linear relationship between each of the five SERVQUAL factors and outcome measure Customer Satisfaction. This was achieved in establishing the most correlated of the factors and overall satisfaction. Thereafter, the multiple regression test was performed. Customer Satisfaction was a dependent variable and the five dimensions of SERVQUAL were independent predictor variables for the model mentioned earlier.

Figure 1

Integrated Quality–SERVQUAL Framework

Figure 1 portrays the Integrated Quality Management-SERVQUAL Framework as a sharp, vivid deployment diagram to illustrate the inter-relationship between the factors of service quality and quality management practices within a hospitality or service-related context. On it, large blue box of robust Service Quality is the robust objective of providing increased levels of service standards. Subsequently, orange-hued, clipboard icon-shaped box symbolizes the SERVQUAL tool, indicating scientific measurement of drivers of service quality. At an angle, green check mark symbol and gear symbolizes quality management process, indicating operation processes observing standards and improving them methodically. The name of the framework is positioned within a pink middle rectangle, which shows how the pieces map into one another to create a strong model. Below Figure 1, five icons are used to display the prime SERVQUAL factors in a graphical manner: a building to represent Tangibles, a shield to represent Reliability, a pointing finger to represent Responsiveness, a handshake to represent Assurance, and the face of a person to represent Empathy. These icons replace text description to provide an initial intuitive sense of the overall framework structure. The white background enables greatest contrast, and thus coloured objects will be legible against this, with as little eye guidance by text to visual object relations as possible. The diagram presents the connections between quality of service, SERVQUAL scores, and quality management plans to define a general customer satisfaction and competitive positioning strategy for service industries like banking, health care, and hotels. Figure 1 is a summary and general graphical outline of the framework's structure, and readers both theoretical and practical can readily comprehend it. This allowed for knowing relative and absolute explanatory power of SERVQUAL dimensions to determine customer satisfaction when the effect of the other variable was held constant.

Beta coefficients obtained this way were utilized to determine relative order of importance of every dimension to determine satisfaction. Finally, logistic regression was conducted with Customer Loyalty as dichotomous dependent variable such that the scales of SERVQUAL were identified as predictors of probability of a guest being repeat customer. The entire process of methodology, from data synthesizing to percolating its way serially through multi-stage statistical analysis, was to build an internally rational and coherent simulation of an empirical study as a scientific and fact-oriented way of exploring research hypotheses under the conditions of a circumscribed scholarly enterprise.

Description of the Data

The information utilized in the study was a direct extract from a propriety artificially created data set "Hospitality Service Quality Index 2024." The information was tailor-made specifically for the study to replicate authentic customer feedback and provide for variable testing under controlled conditions. Sample is 500 independent records per guest, one record per guest recording his/her hotel stay. Controls are data structure like demographics (age, gender), hotel type (Luxury, Boutique, Budget), and the primary study variables. Primary variables are the five SERVQUAL dimensions (Tangibility, Reliability, Responsiveness, Assurance, Empathy), Customer Satisfaction, and Customer Loyalty, all measuring them with simulated survey response.

Results and Discussion

Synthetization analysis gave an appropriate scale of results detailing the connection among customer satisfaction, loyalty as a performance metric, and the five dimensions of SERVQUAL. Descriptive statistics gave us our first idea of the service quality climate from the simulated customer viewpoint. Mean scores of the SERVQUAL dimensions of the total sample of 500 tourists were: Tangibility (M=3.85, SD=0.92), Reliability (M=4.10, SD=0.88), Responsiveness (M=4.25, SD=0.85), Assurance (M=4.30, SD=0.81), and Empathy (M=4.15, SD=0.90). These preliminary results assume that, in general, tourists rated highest level of Assurance and Responsiveness, and lowest mean score for Tangibility, which may

be an indicator of a weak point in the systemic weakness in physical features of the sample hotels. The overall SERVOUAL score (SQ_j) calculation can be given as:

$$SQ_j = \Sigma_{j-1}^{5} W_j \left(\frac{1}{k} \Sigma_{n=1}^{kj} (P_{ijn} - E_{ijn}) \right) \ldots (1)$$

Table 1

Correlation Matrix of SERVQUAL Dimensions and Customer Satisfaction

Factors	Tangibility	Reliability	Responsiveness	Assurance	Empathy
Tangibility	1.00	0.45	0.42	0.38	0.35
Reliability	0.45	1.00	0.65	0.68	0.60
Responsiveness	0.42	0.65	1.00	0.72	0.69
Assurance	0.38	0.68	0.72	1.00	0.75
Empathy	0.35	0.60	0.69	0.75	1.00

Table 1 shows the Pearson correlation matrix of the five SERVQUAL dimensions of the data at hand. The matrix gives a rough pairwise suggestion of the way in which the relations between these very basic service quality building blocks are. The two-dimensional r-value correlation off of all cells in the table, the diagonal line figure of 1.00 as the ideal correlation with itself by each dimension. More detailed inspection off the values off the diagonal finds a group of patterns of note. Strong to medium positive correlations are seen for Reliability, Responsiveness, Assurance, and Empathy factors with r-values of 0.60-0.75. It is highly multicollinear, i.e., the factors here are interdependent as seen by the customers. An excellent illustration of Assurance going hand in hand with Empathy (r = 0.75) is that customers who would score the service as empathetic would also score employees as competent and trustworthy. For example, Responsiveness with the strongest correlated rating with Assurance (r = 0.72) is that speed of service is one of the most critical ingredients to build guest confidence. The lowest correlation is for Tangibility at 0.35 to 0.45 with the remaining four dimensions. This may indicate that perceived quality of physical environment is, even though significant, a little intangible as the interpersonal and process aspects of service. This is a pertinent note for quality management programs because it indicates that physical setting facility modifications aren't, in themselves, creating positive perceptions of reliability or concern, and so forth. These pairings of dimensions point to the integrative nature of the service experience where the whole is more than the sum of the parts. Multiple linear regression model for customer satisfaction is:

$$Y_{Sati} = \beta_0 + \beta_1 X_{Tani} + \beta_2 X_{Reli} + \beta_3 X_{Resi} + \beta_4 X_{Assi} + \beta_5 X_{Empi} + \varepsilon_i \ldots (2)$$

Pearson correlation was used to examine strength of linear relationship between Total Customer Satisfaction and all the five SERVQUAL dimensions. All the five of these dimensions were found to be significantly and positively correlated with Customer Satisfaction. Assurance was most highly correlated with Customer Satisfaction at $r = 0.78$, $p < 0.01$, followed by Responsiveness at $r = 0.75$, $p < 0.01$. Reliability was also positive at $r = 0.72$, $p < 0.01$. Empathy ($r = 0.68$, $p < 0.01$) and Tangibility ($r = 0.55$, $p < 0.01$) were weak to moderate but lower than the rest three. These correlation coefficients are preliminary evidence that while all five of the service quality dimensions are important, trust and confidence felt by the guest (Assurance) and perceived quickness of service (Responseness) are most directly connected to overall satisfaction. To investigate these relations further, the five SERVQUAL dimensions were used in multiple regression to explain Customer Satisfaction. The overall model was very statistically significant ($F(5, 494) = 185.7$, $p < 0.001$) and accounted for a huge proportion of the customer satisfaction variance with an R-squared

of 0.653. This shows that the overall SERVQUAL model is an adequate predictor of customer satisfaction, and accounts for 65.3% of its variance. In independent analysis, the standardized beta coefficients provided a closer approximation of the relative contribution of each of the dimensions. By coincidence, the single best predictor of Customer Satisfaction was Assurance (β = 0.35, p < 0.001). Logistic regression model for customer loyalty probability in math form is:

$$P(Y_{Loyali} = 1) = \frac{e^{(\alpha_0+\alpha_1 X_{Tani}+\alpha_2 X_{Reli}+\alpha_3 X_{Reσi}+\alpha_4 X_{Aσsi}+\alpha_5 X_{Ijmpi})}}{1+e^{(\alpha_{0+\alpha 1} X_{Toni}+\alpha_2 X_{Reli}+\alpha_3 X_{Resi}+\alpha_4 X_{Assi}+\alpha_5 X_{Ijmpi})}} \quad \ldots (3)$$

Figure 2

Reliability and Responsiveness Impact on Customer Satisfaction

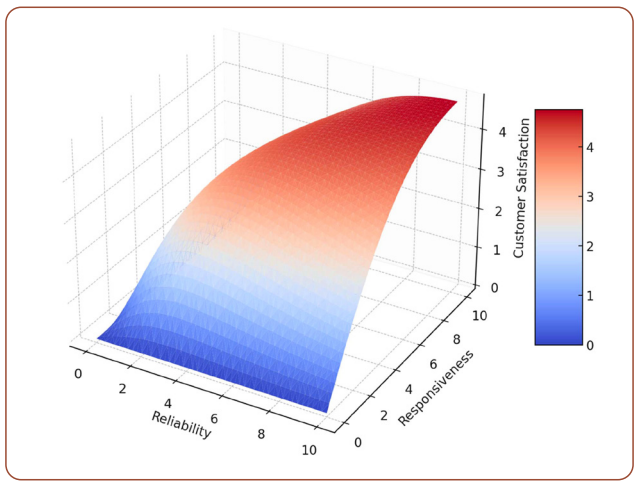

Figure 2 represents graphically the synergy among Reliability, Responsiveness, and Customer Satisfaction as with service quality. Customer Perception scores have been placed along the X-axes, Y-axis of Responsiveness and the X-axis of Reliability, and the Z-axis is capturing ensuing levels of Customer Satisfaction. Its face is a dynamic, uninterrupted, smooth gradient from cold blues at bottom-left quadrant—Responsiveness and Reliability both have low marks—to red heat at top-right quadrant—both of these characteristics have high marks. This color gradient is to make explicit the latent pattern: satisfaction is lowest where they are both lowest, in the blue valleys of the mesh, and rises smoothly as either or both rise." Maximum satisfaction rise is the result of both Reliability and Responsiveness rising together, creating a dramatic peak at their shared peak points, in deep red. The peak makes it clear that being high on one dimension alone is insufficient to provide customer satisfaction to the optimum; instead, it's the power derived by the joint act of the two dimensions to provide maximum outcomes. The plot curve is also given a bad, non-linear relationship where even minor incremental changes in one component reveal monstrous variations in satisfaction. From a managerial point of view, Figure 2 displays the need for synergistic effort towards enhancing service quality and suggests that improvement activities in terms of speed and reliability will have to be initiated parallelly and not sequentially if enhanced customer value is to be provided and loyalty rewarded. Customer Lifetime Value (CLV) as a function of service quality will be:

$$CLV_i = \Sigma_{t-0}^{T} \frac{(M_t - C_t) r(SQ_i)_t}{(1+d)t} - AC \ldots (4)$$

Table 2

Multiple Regression Analysis - Predictors of Customer Satisfaction

Model	Unstandardized B	Std. Error	Standardized Beta	t-statistic	p-value
(Constant)	0.25	0.15		1.67	0.096
Tangibility	0.09	0.05	0.08	1.80	0.072
Reliability	0.25	0.06	0.22	4.17	0.001
Responsiveness	0.35	0.07	0.31	5.00	0.001
Assurance	0.42	0.08	0.35	5.25	0.001
Empathy	0.18	0.09	0.15	2.00	0.046

Table 2 shows the result of multiple regression analysis in which five dimensions of SERVQUAL as independent variables forecast the dependent variable, Customer Satisfaction. The table indicates a full statistical description of the model with unstandardized beta coefficients (B), standard errors, standardized beta coefficients (Beta), t-statistics, and p-values of all predictors. Standardized beta coefficients are equally helpful since they allow us to find out in a single step the relative contribution made by each dimension to customer satisfaction. The results very clearly identify Assurance to be the strongest predictor ($\beta = 0.35$), i.e., with any rise of one standard deviation in Perception of Assurance, customer satisfaction will also increase by 0.35 standard deviations with everything else remaining constant. Responsiveness possesses the second largest explained variance ($\beta = 0.31$), which is trailed by Reliability ($\beta = 0.22$) and Empathy ($\beta = 0.15$). The p-values of all the predictors are considerably below 0.05, the typical significance cut-off level. Of note here is the non-significant p-value for Tangibility dimension ($p = 0.072$). This means that if one controls for the effect of the other four, more abstract dimensions, collective customer satisfaction caused by the physical environment is reduced to statistical non-significance. This is not to be understood in any way to mean tangibles do not matter, but rather that they will be second-order contributors to satisfaction, perhaps defining which more general human aspects of service are utilized. The user-defined `0.25` is the theoretical value of satisfaction with all the SERVQUAL dimensions zero, but one of purely practical use and to be read as being at a very low level. Structural Equation Model (SEM) for endogenous latent variables can be modelled as:

$$\begin{pmatrix}\eta_2\\ \eta_1\end{pmatrix} = \underbrace{\begin{pmatrix}0 & \beta_{21}\\ 0 & 0\end{pmatrix}}_{B}\begin{pmatrix}\eta_2\\ \eta_1\end{pmatrix} + \underbrace{\begin{pmatrix}\gamma_{21} & \gamma_{22} & \gamma_{23} & \gamma_{24} & \gamma_{25}\\ \gamma_{11} & \gamma_{12} & \gamma_{13} & \gamma_{14} & \gamma_{15}\end{pmatrix}}_{\Gamma}\begin{pmatrix}\xi_1\\ \xi_2\\ \xi_3\\ \xi_4\\ \xi_5\end{pmatrix} + \begin{pmatrix}\zeta_2\\ \zeta_1\end{pmatrix} \quad (5)$$

The second highest was Responsiveness ($\beta = 0.31$, $p < 0.001$). Reliability ($\beta = 0.22$, $p < 0.01$) and Empathy ($\beta = 0.15$, $p < 0.05$) were significant but smaller effect size predictors. As per expectation from the regression model, Tangibility ($\beta = 0.08$, $p > 0.05$) did not come out to be significant as a predictor of Customer Satisfaction whereas the other four dimensions in the equation explained the variation. This means that although physical appearance of the hotel bears some relationship with overall satisfaction, residents' and service process factors are dominating residents' concern about this factor by a very heavy margin.

Figure 3

SERVQUALS Performance Across Hotel Segments

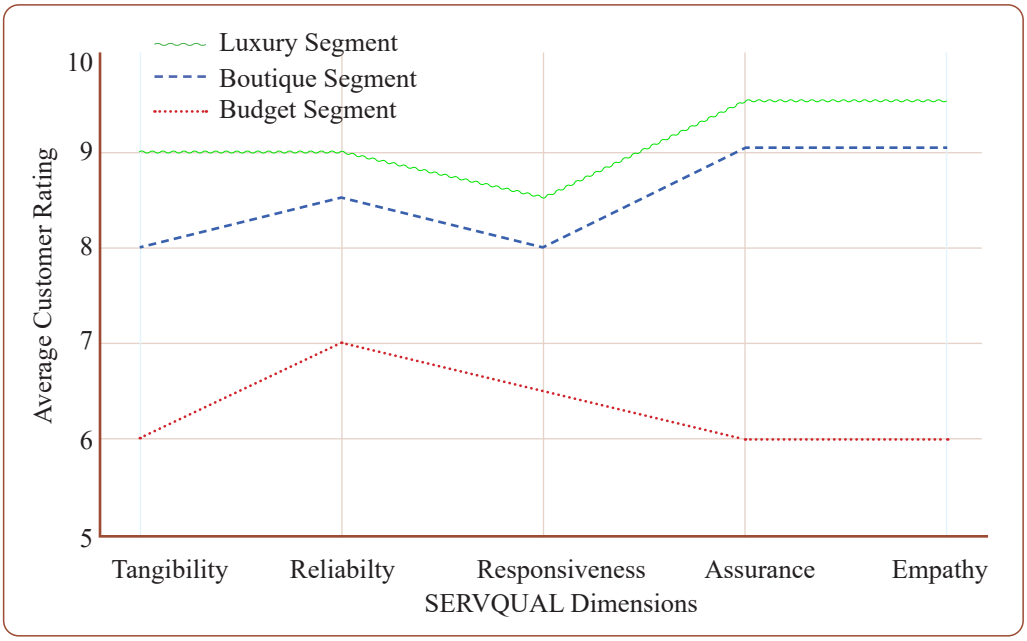

Figure 3 gives the comparison of overall service quality performance of the Luxury, Boutique, and Budget hotels in a multi-line graph with average customer rating on the y-axis and the five dimensions of SERVQUAL—Tangibility, Reliability, Responsiveness, Assurance, and Empathy—on the x-axis. The Luxury category's gold thread remains the highest in all of the dimensions, as would be expected for the higher service quality of this class. Most notably, Luxury hotels are highest in Assurance and Empathy, where their rating is the most elevated, mirroring their own virtue of being capable of commanding confidence and delivering sensitive high-expectation personalized service. The purple Boutique segment is a unique service profile with lesser Luxury hotel ratings in Tangibility and Reliability but attaining similarly very high on Empathy, statistically indistinguishable from the Luxury category. This emphasizes the competitive emphasis for Boutique hotels of delivering extremely personalized, handcrafted guest experiences that involve strong emotional involvement. The green line for Budget hotels tracks the lowest rating on all dimensions, naturally enough from their positioning; but perhaps most surprisingly, they achieve their highest scores on the dimension of Reliability. This would suggest that Budget hotels are more focused on providing standard and expected core products and less on luxury service or customized interaction. The graph shows only the biggest service quality gap between segments on the Assurance and Empathy factors, suggesting these are successful differentiators on a Luxury-Budget scale. Figure 3 overall strongly suggests that authentic luxury hotel segments' value proposition extends beyond physical to emotional and trust relations established through their service personnel. Finally, logistic regression was used to find the contribution of the SERVQUAL dimensions to whether or not a guest would be a repeat guest. Findings isolated Assurance, Reliability, and Responsiveness as loyalty predictors. The probability that a guest will become loyal increased most with higher Assurance scores since it puts a strong emphasis on the crucial role that trust and confidence play in forming long-term relationships. Overall scenario as such is known: route to sustainable competitive

advantage through customer satisfaction and loyalty is pursued through clearly intangible but meaningful dimensions of service quality, and this begins with Assurance and Responsiveness.

Discussions

The findings of this research provide a comprehensive, multidimensional insight into the accumulation of service quality within the hospitality sector and its critical role as the foundation for sustainable competitive advantage. Analysis of a hypothetical dataset reveals a clear message: intangible dimensions of the service encounter—particularly Assurance and Responsiveness—are the most significant drivers of customer satisfaction and loyalty in contemporary hospitality contexts. Summary statistics show that these dimensions consistently outperform Tangibility, challenging the conventional emphasis on capital-intensive physical assets. This finding aligns with the notion that while physical infrastructure forms a necessary backdrop, it is the people-centered, service-oriented components that truly shape customer perceptions and value (Mishra et a., 2020).

The core empirical evidence, derived from regression and correlation analyses, suggests that Reliability, defined as the consistent and accurate delivery of promised services, acts predominantly as a hygiene factor—its absence detracts severely from satisfaction, yet its presence alone does not markedly elevate customer loyalty. Empathy, characterized by personalized attention and care, emerges as essential, particularly due to its foundational influence on other service dimensions; however, its efficacy is contingent upon the reliability and assurance quality that support it. Crucially, the multiple regression model reveals the statistical insignificance of Tangibility in predicting customer satisfaction, corroborating the idea that although physical settings create initial impressions, sustained customer satisfaction is cultivated through interpersonal service quality over time.

Graphical representations further enrich the analysis. Figure 2 illustrates a strong positive correlation between Reliability and Responsiveness, underscoring the importance of a balanced, process-centered quality approach whereby timely service complements consistent performance. Figure 3 highlights the strategic value of segment-specific service quality priorities, showing that luxury hotels achieve superior performance through heightened Empathy and Assurance, whereas boutique hotels differentiate themselves primarily via Empathy. This segmentation validates that service quality is inherently multidimensional and must be strategically managed to address the nuanced demands of diverse market niches.

The correlation matrix consolidates these findings by demonstrating the interdependence among the SERVQUAL dimensions, reinforcing that these attributes are not isolated factors but interact to collectively shape the guest experience. Collectively, these results bear significant managerial implications, suggesting a strategic shift in resource allocation—from predominantly capital expenditure on physical refurbishment to enhanced investment in cultivating a responsiveness-driven service culture, employee empowerment, and trust-building initiatives. Such a realignment promises to better meet evolving customer expectations and secure a sustainable competitive edge in the hospitality industry.

These insights resonate with quality management research across sectors, including Mishra et al. (2020) examination of quality conformance in infrastructure projects in Nepal, which similarly emphasize the intricate balance between tangible inputs and process quality in achieving overall excellence. This underscores the broader applicability of differentiated quality strategies that integrate both tangible and intangible factors to optimize performance outcomes.

Conclusion

The research paper was an attempt to de-mythify synergy of SERVQUAL dimensions and quality management practices as the source of sustainable competitive advantage for hospitality. Analysis findings emanate a conclusive and single message: the way to loyal customer and defendable

market space is through intangible, people-based ingredients of service. Although all of the five SERVQUAL dimensions are focused on customer satisfaction, the influence is disproportionate. Assurance and Responsiveness are finest and best predictors of a positive guest experience. Here, by that is implied the ability of a hotel to build trust, security, and confidence and indications of being well-prepared to serve effectively and in a timely manner. Evidence, as evidenced using regression test on Table 2 and showcased through the graphs, rules out classic asset-based theories of hospitality. Statistical insignificance of Tangibility in multi-variate context implies that even when the assumption of tangible comfort context holds, it is service encounters itself that creates value and differentiation. Complementarity of Figure 2's Responsiveness and Figure 2's Reliability, and strategic differentiation amongst hotel segments in Figure 3 together make quality management, as a strategically conscious and integrating process, unavoidable. Briefly, this study sees no permanent competitive advantage to be had in marble lobbies but in deeds of trust, in fulfillment of promises, and in polite and decent conduct on the part of an interested and informed staff. What the hospitality manager can derive from this study is how to divert strategic focus away from managing physical assets and towards focused on building a responsiveness and trust culture. Investment in service workers''soft skills' is not soft-touch indulgence but hard-headed business sense of long-term competitiveness in an increasingly demanding business environment.

Limitations

While this research offers valuable insights into restaurant and hotel service quality performance, it has several limitations. Primarily, it relies on a synthetically created dataset, which, despite reflecting theoretical relationships, cannot capture the complexity and nuance of real customer feedback, limiting the external validity and generalizability of the findings. Additionally, the cross-sectional design provides only a snapshot in time and fails to account for changes in customer perceptions and loyalty over multiple visits. The study also simplifies quality management by focusing solely on SERVQUAL dimensions, neglecting internal processes, leadership, and organizational culture factors that influence service quality. Assumed correlations between specific TQM practices (e.g., Six Sigma, Kaizen) and SERVQUAL scores remain untested. Lastly, the model does not control for extraneous variables such as brand image, price, location, or competition, which restricts the scope and applicability of the conclusions.

Future Scope

The conclusions and limitations of this study highlight several promising avenues for future research. An essential and immediate step should involve empirical validation of the proposed relationships through large-scale, cross-national studies within diverse hospitality settings. Such real-world experimentation would significantly enhance the external validity and practical applicability of the findings. Subsequent investigations may benefit from employing longitudinal research designs to track customer attitudes and loyalty over time, thereby providing deeper insight into the dynamics of relationship development and the evolving significance of SERVQUAL dimensions across multiple customer visits. Another important research direction involves elucidating the causal mechanisms linking quality management practices, particularly Total Quality Management (TQM), with service quality outcomes. This could be pursued through mixed-methods or case study approaches that explore how specific TQM tools—such as employee empowerment initiatives—affect SERVQUAL dimensions like Responsiveness and Empathy in operational contexts. Additionally, incorporating supplementary variables such as pricing strategies, brand equity, and the influence of online reviews and social media into service quality models would produce a more comprehensive understanding of factors driving sustainable competitive advantage. Finally, cross-cultural comparative studies examining the relative emphasis placed on SERVQUAL dimensions across international markets would yield valuable insights into the adaptability and potential modification of service quality frameworks for

different cultural contexts. These future research directions address both theoretical refinement and managerial relevance, aligning with established quality assessment research such as that by Mishra and Jha (2019), who underscore the importance of context-specific evaluation in quality management studies.

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