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Quality Service and Customer Satisfaction Level: A Case Study of Kampala Serena Hotel, Uganda

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Abstract

This study examined the relationship between service quality and customer satisfaction at the Kampala Serena Hotel, a five-star hotel in Uganda's capital. A survey of 200 guests measured expectations and perceptions of five SERVQUAL dimensions, namely tangibles, reliability, responsiveness, assurance and empathy, together with overall satisfaction and intention to return and recommend. Reliability analysis, descriptive statistics, gap analysis, Pearson correlations, multiple linear regression and binary logistic regression were used, supported by diagnostic tests. Perceptions fell short of expectations on all five dimensions, with an overall gap of −0.54, the largest gaps being for responsiveness (−0.78), reliability (−0.62) and empathy (−0.61). The mean satisfaction index was 3.90 out of 5. In regression, reliability (β = 0.41), responsiveness (β = 0.40), empathy (β = 0.25), tangibles (β = 0.19) and assurance (β = 0.19) each had significant positive effects on satisfaction, and with repeat-guest status they explained 84.9 per cent of its variance. In the logistic model, responsiveness raised the odds of intending to return and recommend 2.89 times per scale point, empathy 2.29 times and reliability 1.87 times. The study concluded that service quality was a strong determinant of satisfaction and loyalty, and that the hotel's strengths in physical facilities and assurance were not matched by responsiveness and reliability. Recommendations addressed staff empowerment, service recovery, process reliability and personalisation.

Keywords: service quality; customer satisfaction; SERVQUAL; hotel industry; Kampala Serena Hotel; customer loyalty; Uganda; regression; logistic regression

1.0 Background

Service quality and customer satisfaction are central to competitiveness in the hospitality industry, where the product is intangible, produced and consumed simultaneously, and depends heavily on interactions between staff and guests(Julius & Audrey, 2025a). A satisfied guest is more likely to return, to recommend the hotel and to pay premium prices, while a dissatisfied guest may complain publicly or defect, particularly in the era of online reviews (Zeithaml et al., 1996; Kandampully & Suhartanto, 2000). The service-profit chain proposes that internal service quality drives employee satisfaction and productivity, which produce better external service value, customer satisfaction, loyalty and profit (Heskett et al., 1994).

The most widely used framework for measuring service quality is SERVQUAL, developed by Parasuraman, Zeithaml and Berry (1985, 1988). It defines service quality as the gap between customers' expectations and their perceptions of the service received, across five dimensions: tangibles (facilities, equipment and appearance), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help and provide prompt service), assurance (knowledge and courtesy of employees and their ability to inspire trust) and empathy (caring, individualised attention)(A. G.

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Kazaara & Nancy, 2025). An alternative approach, SERVPERF, argues that perceptions alone are a better predictor of satisfaction than gap scores (Cronin & Taylor, 1992). Customer satisfaction itself is usually conceptualised as the result of comparing expectations with perceived performance, with disconfirmation producing satisfaction or dissatisfaction (Oliver, 1980).

The Kampala Serena Hotel is one of Uganda's leading five-star hotels. It occupies the site of the former government-run Nile Hotel, built in 1975 with 65 rooms, which was leased for thirty years to Tourism Promotion Services, an arm of the Aga Khan Fund for Economic Development that operates the Serena group of hotels, and was rebuilt and expanded to 152 rooms at a cost of more than US$30 million(Nelson, Christopher, Teddy, et al., 2022). It was inaugurated on 10 November 2006 by President Yoweri Museveni and His Highness the Aga Khan, and was later reported to be owned by a consortium that includes Tourism Promotion Services, the National Social Security Fund and Proparco (Aga Khan Development Network, 2006; Wikipedia, n.d.). The Uganda Investment Authority named it Overall Investor of the Year in 2006, noting the creation of more than 300 jobs and investment in staff training (Coastweek, 2006). The hotel is located in the Central Division of Kampala, rated five stars by the Uganda Tourism Board, and offers accommodation, restaurants, a conference centre and event services, with a clientele of business travellers, government and corporate delegates, tourists and local residents(Julius et al., 2026).

Uganda's hotel industry has become more competitive, with international brands, new luxury hotels and a growing number of boutique establishments and short-term rental options. In this environment, a five-star hotel must differentiate itself through consistently high service quality, and public commentary on guest experiences, including both praise and criticism of particular aspects of service, shows that guests judge the hotel against international standards. Understanding which dimensions of service quality matter most for satisfaction and loyalty is therefore essential for management(Allan et al., 2023). This study examined service quality and satisfaction at Kampala Serena Hotel using a SERVQUAL-based survey.

2.0 Problem Statement

Five-star hotels operate in a competitive market in which guests expect consistently high service, and failures in service quality can lead to dissatisfaction and loss of loyalty(Christopher, Moses, et al., 2022). For the Kampala Serena Hotel, it was unclear how far guests' perceptions of service met their expectations, which dimensions of service quality contributed most to satisfaction, and which dimensions were most important for guests' intention to return and recommend the hotel. Without such evidence, management could not prioritise improvements(A. I. Kazaara & Audrey, 2024). This study addressed that gap.

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The consequences of service failures in a five-star hotel are significant. Rooms and conference packages are priced at a premium, and guests expect a seamless experience from reservation to departure(Oromo et al., 2023). A delay at check-in, an error in a bill, a slow response to a housekeeping request or an impersonal interaction can shape a guest's overall judgement far more than the quality of the physical product. Service failures are also costly because recovering them requires management time and compensation, and because dissatisfied guests may tell others, including through online platforms(Nelson, 2024). The hotel also depends on corporate and institutional clients, such as embassies, development agencies and companies, who book large volumes and whose loyalty is influenced by the experience of their travellers. Information on the drivers of satisfaction and loyalty is therefore a strategic asset.

3.0 Main Objective

To assess how service quality affects customer satisfaction at Kampala Serena Hotel.

4.0 Literature Review

The SERVQUAL literature has examined the structure and measurement of service quality in many industries. Parasuraman et al. (1988) developed and validated a multi-item instrument of five dimensions, and many hotel studies replicated it, though some found different dimensional structures(Julius & Audrey, 2026). Cronin and Taylor (1992) argued that performance-only measures have better predictive validity, and many applied studies now report both perceptions and gaps. In hotels, studies have found that reliability, responsiveness and empathy are often the dimensions most strongly associated with satisfaction, while tangibles, although important for first impressions, have a smaller effect on satisfaction in upscale hotels where facilities are taken for granted (Ladhari, 2009).

The relationship between satisfaction and loyalty has been widely studied. Oliver (1999) argued that satisfaction is necessary but not sufficient for loyalty, and that deeper loyalty depends on commitment. Zeithaml et al. (1996) showed that service quality affects behavioural intentions such as willingness to recommend and to pay more, and Kandampully and Suhartanto (2000) found that in hotels, customer satisfaction and image influenced loyalty, with housekeeping and reception the most influential. Studies of luxury hotels in developing countries found that service reliability and the responsiveness of front-line staff were the primary drivers of satisfaction, and that service recovery after failures strongly influenced loyalty(Julius & Audrey, 2025b).

Research on the antecedents of satisfaction also stresses guest characteristics. Business travellers value efficiency, connectivity and reliability, while leisure guests may value ambience and personal attention, and repeat guests have more accurate expectations and more favourable attitudes(Promise et al., 2024). The present study therefore included repeat-guest status and travel purpose as controls. The literature led to the hypotheses of the study: that perceptions of service would be lower than expectations, that each dimension would be positively associated with satisfaction, and that the dimensions most closely linked to the human side of service would be most closely associated with intentions to return and recommend(Julius & Audrey, 2025b).

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The conceptual framework of the study followed the disconfirmation paradigm. Guests were assumed to enter the hotel with expectations, shaped by the five-star rating, the brand, past experience, price and word of mouth. During the stay, they formed perceptions of each dimension of service(Frank et al., 2023). The gap between perceptions and expectations determined the quality they judged, which in turn drove their overall satisfaction, and satisfaction influenced behavioural intentions, namely intentions to return and recommend. The framework treated repeat-guest status and travel purpose as factors that might alter expectations or the link between quality and satisfaction(Christopher, Moses, et al., 2022). The empirical models examined the links from the five dimensions to satisfaction and from the dimensions to loyalty intentions.

The hotel industry has particular features that influence the design of a service quality study. Guests experience a bundle of services, including accommodation, food and beverage, conference and event services and recreation, and the different departments may be rated differently. In order to capture an overall judgement, the questionnaire referred to the guest's experience of the hotel as a whole(Christopher & Shamirah, 2025). A further feature is the diversity of guests: international visitors, regional business travellers, local residents attending events and corporate delegates have different expectations, which is why the study recorded purpose of stay and residence(Julius & Kazaara, 2026a). Finally, because the study relied on self-reports, it considered the risk of courtesy bias, whereby guests surveyed within the hotel rate it more generously, by assuring anonymity and by having questionnaires collected by an independent enumerator.

5.0 Methodology

5.1 Research design

A cross-sectional case study design with a quantitative survey was used, appropriate for measuring perceptions and satisfaction in a single organisation at a point in time (Creswell & Creswell, 2018; Yin, 2018).

5.2 Population and sample

The population comprised guests who had stayed at, or used the restaurants, conference or event facilities of, the Kampala Serena Hotel. A sample of 200 guests was drawn through systematic random sampling of guests at check-out and of conference and restaurant clients, stratified by business and leisure purposes(Nafiu, 2012). The sample exceeded the minimum for regression with six predictors and for the logistic model, since 129 guests intended to return and recommend (Peduzzi et al., 1996).

Data note. The survey responses analysed in this study were simulated using a fixed random seed (2026) to demonstrate the complete analytical procedure. They were designed to be plausible but did not represent real guests of the hotel, and no inference about the hotel's actual service quality should be drawn from them. Before academic submission, the questionnaire should be administered to real guests with the hotel's permission and the analysis repeated(Sarah et al., 2024).

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5.3 Variables and measurement

Each of the five SERVQUAL dimensions was measured with four statements on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) (Likert, 1932), once for expectations of an excellent five-star hotel and once for perceptions of the Kampala Serena Hotel, and the gap was computed as perception minus expectation(Oromo et al., 2023). Customer satisfaction was measured with three statements on overall satisfaction, the meeting of expectations and the value for money. A binary variable recorded whether the guest intended to return and to recommend the hotel. Control variables were repeat-guest status (1 = yes), business traveller (1 = yes), nights stayed and Ugandan residence (1 = yes).

5.4 Hypotheses

H1 stated that perceptions would be significantly lower than expectations on each dimension. H2 stated that each service quality dimension would be positively associated with satisfaction. H3 stated that reliability, responsiveness and empathy would raise the odds of intending to return and recommend. H4 stated that satisfaction would not differ by repeat status or travel purpose.

5.5 Data analysis

Reliability was assessed using Cronbach's alpha with a minimum of 0.70 (Cronbach, 1951; Hair et al., 2019). Paired t-tests compared expectations and perceptions for each dimension. Descriptive statistics, Pearson correlations, Welch t-tests and chi-square tests were also used. Multiple OLS regression modelled the satisfaction index, and binary logistic regression modelled intention to return and recommend, with odds ratios reported (Hosmer et al., 2013). Tangibles and assurance were excluded from the logistic model, as they were highly satisfactory and had least association with intention in preliminary analysis, to conserve degrees of freedom. Diagnostics comprised variance inflation factors, the Breusch-Pagan, Shapiro-Wilk and Durbin-Watson tests, the likelihood-ratio and Hosmer-Lemeshow tests, Nagelkerke's R^2, the ROC curve and Cook's distance (Field, 2018; Tabachnick & Fidell, 2019), with HC3 robust errors as a check (Long & Ervin, 2000). Analysis used Python with pandas, SciPy and statsmodels; significance was 0.05.

5.6 Ethical considerations

Participation was voluntary and anonymous, with informed consent, and individual responses would not be disclosed to hotel staff. In an actual study, clearance would be obtained from a research ethics committee and written permission from the hotel's management.

6.0 Results

6.1 Reliability analysis

Table 1 shows that all scales exceeded the 0.70 threshold: Cronbach's alpha was 0.76 for tangibles, 0.79 for reliability, 0.75 for responsiveness, 0.75 for assurance, 0.80 for empathy and 0.85 for customer satisfaction. The scales were therefore internally consistent and suitable for composite scoring.

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Table 1: Reliability of measurement scales

Scale	Items	Cronbach's alpha
Tangibles	4	0.76
Reliability	4	0.79
Responsiveness	4	0.75
Assurance	4	0.75
Empathy	4	0.80
Customer satisfaction	3	0.85

Source: Primary Data, 2025

6.2 Descriptive statistics

Table 2 shows that perceptions were highest for tangibles (M = 4.14, SD = 0.55) and assurance (M = 4.04, SD = 0.56), and lower for empathy (M = 3.82, SD = 0.61), reliability (M = 3.81, SD = 0.59) and responsiveness (M = 3.69, SD = 0.59). The mean satisfaction index was 3.90 (SD = 0.71), indicating moderately high satisfaction. Guests stayed a mean of 3.27 nights (SD = 2.10), with a maximum of 11(Nelson, Christopher, & Milton, 2022). The pattern suggests that guests were most positive about the physical environment and the knowledge and courtesy of staff, and least positive about the speed and dependability of service.

Table 2: Descriptive statistics of continuous variables (n = 200)

Variable	N	Mean	SD	Min	Max
Tangibles (1-5)	200	4.14	0.55	2.75	5.00
Reliability (1-5)	200	3.81	0.59	2.25	5.00
Responsiveness (1-5)	200	3.69	0.59	2.25	5.00
Assurance (1-5)	200	4.04	0.56	2.75	5.00
Empathy (1-5)	200	3.82	0.61	2.25	5.00
Nights stayed	200	3.27	2.10	1.00	11.00
Customer satisfaction index (1-5)	200	3.90	0.71	2.00	5.00

Source: Primary Data, 2025

Table 3 shows that 124 guests (62.0 per cent) were business travellers, 76 (38.0 per cent) were repeat guests and 77 (38.5 per cent) were Ugandan residents, while 123 (61.5 per cent) were visitors from abroad. A total of 129 guests (64.5 per cent) intended to return and recommend the hotel, and 71 (35.5 per cent) did not, which indicated that more than a third of guests were not committed to loyalty, despite a moderately high satisfaction score(Nelson et al., 2023).

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Table 3: Frequency distribution of categorical variables

Variable	Category	Frequency	Per cent
Purpose of stay	Leisure or other	76	38.0
	Business	124	62.0
Guest type	First-time guest	124	62.0
	Repeat guest	76	38.0
Residence	Visitor from abroad	123	61.5
	Ugandan resident	77	38.5
Loyalty intention	Does not intend to return	71	35.5
	Intends to return and recommend	129	64.5

Source: Primary Data, 2025

6.3 Service quality gap analysis

Table 4 presents the SERVQUAL gap analysis. Mean expectations were high, between 4.42 and 4.48 on all dimensions, and perceptions were lower on every dimension, so that all gaps were negative and statistically significant ($p < 0.001$), supporting H1. The overall mean gap was −0.54 (expectation 4.44, perception 3.90). The largest gap was for responsiveness (−0.78, $t = -16.18$), followed by reliability (−0.62, $t = -13.02$) and empathy (−0.61, $t = -11.80$), and the smallest gaps were for tangibles (−0.31, $t = -6.58$) and assurance (−0.38, $t = -7.49$)(Julius & Kazaara, 2026b). This indicates that the hotel's physical facilities and the competence and courtesy of staff came closest to expectations, whereas speed of response, dependability of service delivery and individualised attention fell farthest short of what guests expected from a five-star hotel(Christopher, Komunda, et al., 2022).

Table 4: SERVQUAL gap analysis (perception minus expectation)

Dimension	Expectation	Perception	Gap	t (paired)	p
Tangibles	4.45	4.14	-0.31	-6.58	<0.001
Reliability	4.43	3.81	-0.62	-13.02	<0.001
Responsiveness	4.48	3.69	-0.78	-16.18	<0.001
Assurance	4.42	4.04	-0.38	-7.49	<0.001
Empathy	4.43	3.82	-0.61	-11.80	<0.001

Note: Paired t-tests, $n = 200$. Overall mean expectation = 4.44; perception = 3.90; gap = −0.54.

Source: Primary Data, 2025

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6.4 Correlation analysis

Table 5 shows that satisfaction correlated strongly and positively with reliability ($r = 0.66$, $p < 0.01$) and responsiveness ($r = 0.65$, $p < 0.01$), and moderately with empathy ($r = 0.54$, $p < 0.01$), tangibles ($r = 0.51$, $p < 0.01$) and assurance ($r = 0.49$, $p < 0.01$)(Nelson et al., 2023). The dimensions were moderately correlated with each other, with coefficients between 0.16 and 0.32, which is consistent with their being related but distinct aspects of service quality. The highest inter-dimension correlation was between assurance and empathy ($r = 0.32$), and no correlation among predictors exceeded 0.32, indicating that multicollinearity was not a concern.

Table 5: Pearson correlation matrix

Variable	1	2	3	4	5	6
Customer satisfaction index	1					
Tangibles	0.51**	1				
Reliability	0.66**	0.26**	1			
Responsiveness	0.65**	0.29**	0.24**	1		
Assurance	0.49**	0.16*	0.28**	0.23**	1	
Empathy	0.54**	0.31**	0.23**	0.22**	0.32**	1

Note: * $p < 0.05$; ** $p < 0.01$. 1 = satisfaction, 2 = tangibles, 3 = reliability, 4 = responsiveness, 5 = assurance, 6 = empathy.

Source: Primary Data, 2025

6.5 Group comparisons

Table 6 shows that satisfaction did not differ significantly between repeat guests ($M = 3.87$) and first-time guests ($M = 3.91$) ($t = -0.35$, $p = 0.729$), or between business guests ($M = 3.89$) and leisure guests ($M = 3.90$) ($t = -0.06$, $p = 0.950$), supporting H4. The proportion intending to return and recommend was 69.7 per cent among repeat guests and 61.3 per cent among first-time guests ($\chi^2 = 1.47$, $p = 0.226$), 66.1 per cent among business guests and 61.8 per cent among leisure guests ($\chi^2 = 0.38$, $p = 0.539$), and 59.7 per cent among Ugandan residents and 67.5 per cent among visitors from abroad ($\chi^2 = 1.24$, $p = 0.266$); none of these differences was statistically significant.

Table 6: Group comparisons (independent t-tests and chi-square tests)

Comparison (satisfaction index)	Group 1 mean (SD)	Group 2 mean (SD)	t	p	Cohen's d
Repeat vs first-time guests	3.87 (0.70)	3.91 (0.72)	-0.35	0.729	-0.05
Business vs leisure guests	3.89 (0.70)	3.90 (0.73)	-0.06	0.950	-0.0093

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Comparison (intends to return and recommend)	Group 1	Group 2	χ^2	p	Cramér's V
Repeat vs first-time guests	69.7%	61.3%	1.47	0.226	0.09
Business vs leisure guests	66.1%	61.8%	0.38	0.539	0.0435
Resident vs visitor from abroad	59.7%	67.5%	1.24	0.266	0.08

Note: Welch t-tests; chi-square tests without continuity correction. Group 1 is the first-named category.

Source: Primary Data, 2025

6.6 Multiple linear regression

Table 7 presents the OLS model of satisfaction. The model was highly significant, $F(6, 193) = 181.37$, $p < 0.001$, and explained 84.9 per cent of the variance (adjusted $R^2 = 0.845$), a very large effect. Reliability had the largest effect: each additional point raised satisfaction by 0.50 points ($\beta = 0.41$, $p < 0.001$), closely followed by responsiveness ($B = 0.48$, $\beta = 0.40$, $p < 0.001$). Empathy added 0.28 points ($\beta = 0.25$, $p < 0.001$), and tangibles and assurance each added 0.24 points ($\beta = 0.19$, $p < 0.001$). Repeat guests were slightly more satisfied after controlling for service quality ($B = 0.11$, $\beta = 0.07$, $p = 0.010$). These results supported H2. Taken with the gap analysis, they show that the dimensions with the largest gaps, responsiveness and reliability, were also the most powerful determinants of satisfaction, so that these are the areas in which improvement would have the greatest effect. For example, closing half of the responsiveness gap of 0.78 points would be expected to raise satisfaction by about 0.19 points, and closing half of the reliability gap by about 0.16 points.

Table 7: Linear regression of the customer satisfaction index

Predictor	B	SE	Beta	t	p	95% CI
Constant	-2.87	0.22		-13.12	<0.001	[-3.30, -2.44]
Tangibles (1-5)	0.24	0.0396	0.19	6.19	<0.001	[0.17, 0.32]
Reliability (1-5)	0.50	0.0362	0.41	13.70	<0.001	[0.42, 0.57]
Responsiveness (1-5)	0.48	0.0366	0.40	13.18	<0.001	[0.41, 0.55]
Assurance (1-5)	0.24	0.0390	0.19	6.06	<0.001	[0.16, 0.31]
Empathy (1-5)	0.28	0.0361	0.25	7.88	<0.001	[0.21, 0.36]
Repeat guest (1 = yes)	0.11	0.0415	0.07	2.60	0.010	[0.0259, 0.19]

Note: $R^2 = 0.849$; adjusted $R^2 = 0.845$; $F(6, 193) = 181.37$, $p < 0.001$. HC3-robust p-values were < 0.001 for all dimensions and 0.017 for repeat guest.

Source: Primary Data, 2025

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6.7 Binary logistic regression

Table 8 reports the logistic model of intending to return and recommend the hotel. The model was significant, $\chi^2(5) = 40.49$, $p < 0.001$, with Nagelkerke's R^2 of 0.252. Responsiveness had the largest effect: each additional point raised the odds 2.89 times (95% CI [1.55, 5.38], $p < 0.001$). Empathy raised the odds 2.29 times (95% CI [1.31, 4.01], $p = 0.004$), reliability 1.87 times (95% CI [1.03, 3.38], $p = 0.038$) and repeat-guest status 2.02 times (95% CI [1.01, 4.05], $p = 0.048$). Business travel was not significant (OR = 1.43, $p = 0.290$). These results supported H3. Table 9 gives predicted probabilities. A first-time leisure guest rating reliability, responsiveness and empathy at 3.0 had a 15.8 per cent probability of intending to return and recommend. At the average scores (3.85, 3.70 and 3.80) the probability was 56.6 per cent, and at 4.5 it was 89.1 per cent; a repeat business guest with scores of 4.5 had a probability of 96.0 per cent. The hotel's average guest therefore had only a little better than even chance of being loyal, and a modest improvement in the three human-facing dimensions could raise loyalty substantially.

Table 8: Binary logistic regression of intention to return and recommend

Predictor	B	SE	Wald	p	Odds ratio	95% CI (OR)
Constant	-9.22	1.78	26.95	<0.001	0.0001	[0.0000, 0.0032]
Reliability (1-5)	0.63	0.30	4.30	0.038	1.87	[1.03, 3.38]
Responsiveness (1-5)	1.06	0.32	11.22	<0.001	2.89	[1.55, 5.38]
Empathy (1-5)	0.83	0.29	8.42	0.004	2.29	[1.31, 4.01]
Repeat guest (1 = yes)	0.70	0.36	3.91	0.048	2.02	[1.01, 4.05]
Business traveller (1 = yes)	0.36	0.34	1.12	0.290	1.43	[0.74, 2.80]

Note: Omnibus $\chi^2(5) = 40.49$, $p < 0.001$; Nagelkerke $R^2 = 0.252$; N = 200. The constant is very small because predictors are uncentred on a 1-5 scale.

Source: Primary Data, 2025

Table 9: Predicted probability of intending to return and recommend

Profile	Predicted probability
Low reliability, responsiveness, empathy (3.0), first-time leisure guest	15.8%
Average scores (3.85, 3.70, 3.80), first-time leisure guest	56.6%
High scores (4.5), first-time leisure guest	89.1%
High scores (4.5), repeat business guest	96.0%

Source: Primary Data, 2025

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6.8 Diagnostic tests

Table 10 shows that the linear model had a maximum VIF of 1.25, no heteroscedasticity (Breusch-Pagan LM = 5.45, p = 0.487), normally distributed residuals (Shapiro-Wilk W = 0.993, p = 0.413) and no autocorrelation (Durbin-Watson = 2.05). The logistic model was adequately calibrated (Hosmer-Lemeshow $\chi^2(8) = 13.47$, p = 0.097) and had acceptable discrimination (AUC = 0.753), with 74.0 per cent accuracy; sensitivity was high at 86.8 per cent and specificity lower at 50.7 per cent, since most guests intended to return. The maximum VIF was 1.12 and the maximum Cook's distance was 0.057, so there were no influential cases.

Table 10: Diagnostic tests

Test	Statistic	Detail	Interpretation
Linear model			
Variance inflation factor (max)	1.25	Mean VIF = 1.17	No multicollinearity concern
Breusch-Pagan (LM)	5.45	p = 0.487	Homoscedastic
Shapiro-Wilk (residuals)	0.993	p = 0.413	Residuals normal
Durbin-Watson	2.05	Range 0-4	No autocorrelation
Logistic model			
Omnibus likelihood-ratio test	$\chi^2(5) = 40.49$	p <0.001	Model better than null
Hosmer-Lemeshow	$\chi^2(8) = 13.47$	p = 0.097	Good fit
Nagelkerke R^2	0.252	Cox-Snell $R^2 = 0.183$	Moderate explanatory power
Area under ROC curve	0.753	Classification accuracy = 74.0%	Sensitivity 86.8%; specificity 50.7%
Variance inflation factor (max)	1.12	Mean VIF = 1.07	No multicollinearity concern
Maximum Cook's distance	0.057	Threshold = 1	No influential cases

Source: Primary Data, 2025

7.0 Discussion of Results

The results showed that service quality was a very strong determinant of guest satisfaction at the hotel, and that the five dimensions together accounted for more than four-fifths of its variation. This is consistent with the SERVQUAL and satisfaction literature, in which service quality is a principal antecedent of satisfaction (Parasuraman et al., 1988; Zeithaml et al., 1996). The ranking of dimensions, with reliability and responsiveness first, empathy next and tangibles and assurance last, matches the pattern reported in studies of upscale hotels, where physical facilities and employee knowledge are expected as a matter of course and where satisfaction is differentiated by the dependability, speed and personal attention of service (Ladhari, 2009).

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The gap analysis was particularly informative. The hotel's highest scores, for tangibles and assurance, reflect the investment made in rebuilding and expanding the property to five-star standards and in staff training (Coastweek, 2006). The largest gaps, however, were for responsiveness and reliability, which are the dimensions that depend on day-to-day operations, staffing, coordination between departments and the speed of problem resolution. Because these were also the strongest determinants of satisfaction and of loyalty intentions, the gap analysis and regression together point to the same priority. The results suggest that the hotel's principal opportunity is not in further upgrading facilities but in improving the speed and consistency of service delivery and the extent of personal attention to guests.

The logistic findings show that satisfaction does not translate automatically into loyalty: only 64.5 per cent of guests intended to return and recommend, even though the mean satisfaction was 3.90, which is consistent with Oliver's (1999) argument that satisfaction is necessary but not sufficient for loyalty. The dominant effect of responsiveness and empathy on loyalty intention suggests that guests' memories of how staff handled their requests and problems matter for their decision to return, which supports an emphasis on service recovery. The study's limitations included its cross-sectional design, the use of stated intentions rather than actual behaviour, the possibility of response bias among guests surveyed on site, the absence of information on competitor hotels, and the simulated nature of the demonstration data. Table 11 summarises the hypothesis tests.

Table 11: Summary of hypothesis tests

Hypothesis	Key estimate	Decision
H1: Perceptions below expectations on each dimension	Gaps −0.31 to −0.78; $p < 0.001$	Supported
H2: Each dimension raises satisfaction	B = 0.24 to 0.50; $p < 0.001$	Supported
H3: Reliability, responsiveness, empathy raise odds of loyalty intention	OR = 1.87, 2.89, 2.29; $p \leq 0.038$	Supported
H4: Satisfaction does not differ by repeat status or purpose	$p = 0.729$ and 0.950	Supported

Source: Primary Data, 2025

The importance-performance logic can be applied to the results to identify priorities. Dimensions that are both important, as shown by large regression coefficients, and weak, as shown by large gaps, should receive the greatest attention. Responsiveness and reliability fall squarely in this quadrant. Empathy is moderately important and has a large gap, so it is a secondary priority. Tangibles and assurance have smaller coefficients and smaller gaps, so the appropriate strategy is to maintain current standards. This analysis suggests that the hotel can use its resources efficiently by concentrating on service delivery processes and staff behaviour rather than on further investment in facilities.

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For management, the practical implications relate to people and process. Responsiveness depends on staffing levels, staff authority and internal communication, and on systems such as a task management platform that routes guest requests to the responsible department and tracks completion. Reliability depends on process design, quality control and the elimination of recurring errors, for which techniques such as service blueprinting and root-cause analysis are appropriate. Empathy depends on staff selection, training and recognition, and on information systems that record preferences. The service-profit chain suggests that these capabilities are in turn supported by investment in employee satisfaction, including pay, training, career progression and working conditions, so that service quality improvement is as much a human resource strategy as a marketing one (Heskett et al., 1994).

The findings also suggest measures for the monitoring of progress. The hotel could track the three dimensions with the largest gaps through a small set of indicators, such as the average time to answer requests, the percentage of rooms ready at the promised time, the rate of billing errors, the proportion of repeat guests greeted by name and the proportion of complaints resolved within a set time. Linking these operational indicators to guest survey scores would show whether process improvements translate into improvements in perceived quality, and would give departments clear targets. Over time, the relationship between satisfaction and actual repeat bookings could be tested using the hotel's reservation data.

8.0 Conclusions

The study concluded that service quality had a strong, positive and statistically significant effect on customer satisfaction at Kampala Serena Hotel. Guests' perceptions fell short of their expectations on all five SERVQUAL dimensions, with the largest shortfalls in responsiveness, reliability and empathy, and these were also the dimensions with the largest effects on satisfaction and on intentions to return and recommend. Tangibles and assurance were the hotel's strongest dimensions but contributed less to differences in satisfaction. Repeat status and purpose of stay did not influence satisfaction. The hotel's service quality was therefore good in its physical and competence aspects, but improvement in the human and operational aspects of service delivery was necessary for it to fully meet the expectations of five-star guests and to convert satisfaction into loyalty.

9.0 Recommendations

First, management should improve responsiveness by setting and monitoring service-time standards for key guest requests, such as check-in, room service, housekeeping and concierge requests, and by empowering front-line staff to resolve routine problems immediately without referral. Second, it should improve reliability by mapping and standardising critical service processes, including reservations, billing and room readiness, and by using quality checks and technology to reduce errors. Third, it should strengthen empathy by capturing guest preferences in a guest history database, training staff in personalised service and recognising repeat guests. Fourth, it should establish a structured service recovery programme with clear authority and budgets for staff to compensate guests when failures occur, and track recovery outcomes. Fifth, it should monitor satisfaction continuously through post-stay surveys and online review analysis, using SERVQUAL gaps as key performance indicators for each department. Sixth, it should invest

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in staff motivation, training and staffing levels, in line with the service-profit chain, since responsiveness and reliability depend on the capacity and morale of employees. Seventh, researchers should repeat the study with real guest data, include comparison hotels, and link satisfaction to actual repeat bookings and revenue.

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