



## Service Quality And Customer Satisfaction In Selected Up-Market Four And Five Star Hotels In Kigali City, Rwanda

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### Abstract

**Background:** The current attitude towards service quality and customer satisfaction is crucial for organizations across all industries and sectors, both public and private. Having a strong customer focus and understanding who your clients are constitutes the initial steps towards providing excellent service quality, especially in the hospitality sector. Rwanda is a small country undergoing significant development on various fronts, including political, social, and economic aspects. However, despite this growth, there remain challenges in production, sales, and distribution, particularly within the hospitality sector. The issues present in the hospitality business include inadequate product quality, low technical skill levels, insufficient work experience, and improper training of employees. It is imperative to learn and implement the skills necessary to develop a sincere customer focus, identify customer expectations, communicate effectively with customers, handle challenging clients, and assess customer service. To achieve this, the study focused on evaluating the relationship between service quality and customer satisfaction specifically within Kigali Serena Hotel and Mythos Hotel. The objectives of this research study are threefold: first, to establish the roles of service quality and customer satisfaction in the hospitality industry in Rwanda, particularly in Kigali city; second, to evaluate the delivery of service quality in the hospitality industry; and third, to determine strategies for improving market performance through enhanced service quality in Rwanda, specifically in Kigali city. The research aimed at assessing the impact of quality service delivery on the growth of hotels, analyzing its effect on attracting more clientele and enhancing overall customer service. The findings of this study would assist hotel managers in building effective teams capable of addressing queries from both on-site and off-site clients and ensuring exceptional customer satisfaction. Moreover, the results shall aid the government in refining and implementing policies that promote service quality as a pivotal factor for growth in the hospitality sector.

**Materials and Methods:** The study employed both quantitative and qualitative methods, using questionnaires and adopting a random sampling technique to select representatives. A descriptive research design was employed to determine the sample size, with the formula established by Yamane (1967) being utilized. The target audience consisted of 500 respondents in the hospitality industry, and the sample size were be 223. Upon data collection, the information gathered was entered into SPSS version 21.0, a statistical application for social sciences and analyzed to draw conclusions.

**Results:**The study findings revealed an average rating of tangibility in customer satisfaction (service) as 3.224 across various areas, including expectation, satisfaction, responsiveness, and empathy. Specifically, an increase in customer satisfaction expectations resulted in a decrease in service tangibility by 0.003, while a decrease in responsiveness of customer satisfaction led to a decrease of 0.027 in service tangibility. However, an increase in empathy of customer satisfaction led to an increase of 0.073 in service tangibility, and a rise in customer satisfaction itself resulted in a service increase of 0.043.

**Conclusion:**Based on the study's results, the recommendation is for four and five-star hotels to focus on maintaining customer satisfaction through promotional activities and price reductions across all Rwandan markets. Additionally, establishing a strong positive nexus between quality service and customer satisfaction through branding and designing high-quality goods or services is advised. Proper planning should also be undertaken to ensure a strong correlation between service quality and customer satisfaction. In conclusion, enhancing service quality and customer satisfaction is vital for the growth and success of organizations, particularly within the evolving hospitality sector in Rwanda. Through the implementation of appropriate

*strategies and policies, businesses can excel in meeting and exceeding customer expectations, ultimately contributing to the sector's overall development.*

**Keywords:** *Service Quality, Customer Satisfaction, Up-Market Four And Five Star Hotels, Kigali, Rwanda.*

## **i. Introduction**

Service quality is a crucial and exclusive topic of many debates in today's world of business and finance, the reason being that service quality is both an outcome and a profit strategy. Every hospitality industry's performance depends on how it keeps customers' satisfaction based on the service it provides, yet most executives tend to view the customer service function of their businesses as little more than a necessary nuisance. Service quality is a positioning strategy, a tool for improving operational effectiveness, and a tool for enhancing business performance (Tan, Oriande & Fallon, 2014). Given their close relationship to customer satisfaction, especially in the service industry, service quality dimensions have been recognized as essential to an organization's performance (Tan, Oriande & Fallo, 2014). Numerous empirical studies (Uddin & Blikis; 2012; Agbor, 2011; Nimako, Gyamfi, Mumuni & Wandaogou 2013; Nimako, Gyamfi, Mumuni & Wandaogou, 2012; Nimako, Gyamfi, Mumuni & Wandaogou, 2013) demonstrate how the perception of service quality influences behavioral intentions in both a direct and indirect manner, predict customer satisfaction, and has a positive impact. To gain a competitive advantage, businesses are consequently striving harder to offer top-notch service. In a market like this, hotels must continuously assess how well they are meeting customer expectations for service quality, which is characterized by fierce competition, and dynamic consumer wants, to fulfill and satisfied a customer need.

Customers' needs and expectations are periodically increasing (Ayele, 2012) in the struggle for distinctiveness from the competition to boost patron loyalty, customer satisfaction, and service quality are widely recognized as being important factors (Hersh, 2010). Along these lines, hotels must develop special strategies for satisfying guests' needs while still turning a profit. The hospitality industry has more problems, according to (Priyo et al. 2019) and (Elvira, al 2016) have shown that the determinant of efficient customer satisfaction includes assurance, tangibility, responsiveness, reliability and empathy. These elements are crucial when evaluating the level of customer care provided in any hotel environment. Based on the services' promptness, transaction correctness, and security features, clients appropriately rate them (Fida et al., 2020).

Hashem et al. research on the relationship between service qualities, customer satisfaction from 2019 has mainly highlighted the significance of the five dimensions of service quality, including tangibility conveying the image, and reflecting hotel quality; reliability had the most effect on customer satisfaction, responsiveness, assurance, and empathy. The finding indicated that the assurance of customers should be improved. The findings from (Tovmasyan, 2020) determinants of quality conditions of the hotel facility appearance of the hotel, level of service, level of prices, quality of food, the existence of leisure activities, existence of Wi-Fi or Internet connection, the existence of necessary things of first use, Good functioning of devices, the existence of modern devices, level of competence of the staff, Quick response of the staff, the caring and polite attitude of the staff, level of confidence towards the staff, the attractiveness of interior, Online booking possibilities, level of your safety and security during your stay, can be grouped into five dimensions of service quality: tangibles, empathy, reliability, responsiveness, assurance.

On the other hand, tangibles and appearance include things like physical proof, beauty, cleanliness, amenities, and equipment. A service's existence, quality, and convenience are all parts of availability and comfort. The degree of responsiveness, employee expertise, ability to instill confidence, and employees attentiveness to customers are all indicators of staff competence and helpfulness. The researcher revealed that attention should be put to these three dimensions of service quality to satisfy customers in the hospitality industry. As a research this is a big problem which is can make a customer to feel so bad. There is no research on customer satisfaction and service quality in Rwanda's Kigali Serena hotel, and mythos Kigali hotel. These issues motivated the researcher to pick interest to carry out further research on service quality being a core driver of customer satisfaction in the hospitality industry leading to high loyalty of customers, and increased profits, using the up selected market hotels as a case study, the study aimed to evaluate the level of customer satisfaction and service quality in Rwanda's hospitality sectors.

The Rwandan government claimed that because they wanted to develop a service-based economy, they could no longer remain silent. By this point, bad customer service has cost Rwanda millions of dollars annually. As a result, the government established a customer care section within the Rwanda Development Board (RDB) to allow employees in the public and private sectors to enhance the quality of service. The Government of Rwanda

(H Excellent Paul Kagame, 2016) tasked youth in Rwanda to lead the way in uprooting poor service delivery in the country.

The Government and private sector have in the past held campaigns to promote quality service delivery through customer care drivers like “NA YOMBI” and NOZA SERIVISI. While such an awareness campaign has led to the same improvement in service delivery, more needs to be done like calling out institutions and persons who give bad service, and as the president mentioned, people should not keep quiet when they get bad service. In 2010 the Rwanda governance board (RGB) started carrying out periodic surveys to collect citizens' feedback and assessment various services provided by government institutions. However, respondents to the 2014 The Serviceman study ranked district local governments as providing the worst customer service. The predicted front-runner, the private sector, still needs to step up its game. Laetitia Umwali, in charge of communications for the customer care division at (RDB, 2015), noted that in their most recent survey, Rwanda's private sector lagged behind other private sectors in the East African Community in terms of providing high-quality services, while the public sector was ranked first in this regard.

The issue is that some individuals in the private sector are unaware of the origins of good service. The government of Rwanda (GoR 2016) introduced an innovative system known as the IMIHIGO process. Imihigo had its roots in a pre-colonial Rwandan cultural practice whereby leaders or warriors would publicly vow to achieve certain goals and face public humiliation if they failed. The product design and implementation are still needed in the Rwanda hotel industry to meet guest satisfaction at the hotels there still exists a gap between service quality and customer satisfaction due to inappropriate planning. Limited skills in service providers, employee turnover, technology problems, and insufficient capital to meet customer requirements. The success of the hospitality sector rests on how well it maintains consumer satisfaction with the services it provides, yet most executives tend to view the customer service function of their businesses as little more than a necessary nuisance. When the customers are satisfied; then the industry will increase and boost sales and achieve the core objective of making high returns on Investment. The industry has to make it easier to create possible ways to reach the customer (Mike, 2012).

In East Africa, (Maingi 2019) says that governance and management deal with over-tourism, worldwide in hospitality and tourism; that is why global tourism is experiencing unprecedented growth with a global outbound. Understanding the link between overall service quality and profitability in the hotel sector is crucial, but managers will benefit more from pinpointing the specific factors that influence service quality and profitability. In Rwanda, RDB has launched the next drive of its countrywide campaign to improve customer care in the country. The objective of the drive is to induce behavioral change and ensure that the industry provides quality services to customers, thereby improving the business environment in Rwanda (RDB, 2012). In Rwanda's four- and five-star hotel sector, the hospitality and tourism industries provide high-quality services. The hospitality industry's present attitude toward quality performance, which affects customer happiness, has significant effects on corporate competitiveness and business (Habineza et al. 2022). The main objective of this research was to evaluate the real analyses between service quality and customer satisfaction in the four- and five-star hotel industry in Rwanda. It was guided by the following specific objectives:

- i. To establish the Relationship between Tangibility and customer satisfaction in four- and five-star hotels in Kigali Rwanda
- ii. To elaborate on the effect of responsiveness on customer satisfaction in four- and five-star hotels in Kigali Rwanda
- iii. To examine the effects of empathy on customer satisfaction in four- and five-star hotels in Kigali Rwanda

## **ii. Theoretical Literature**

This part aims to review all the past theories concerning the topic of the study from other authors. Customers who are pleased with a company's services are more inclined to spend more money with them or use more of the services they offer. For instance, a client who is pleased with a broker's services is likely to invest additional cash when it becomes available. Evidence reveals that a consumer who appreciates and is aware of a company's services would pay more for those services.

Giving a customer whatever, they need is not the only objective of personalization, but rather to keep them happy while also ensuring that the company profits from delivering the service (Martha, 2011). Building lucrative client relationships and providing customers with value are the two focuses of modern marketing. Understanding customer expectations, identifying the target markets a company can best serve, and creating a compelling value proposition are the first steps in attracting and expanding a loyal customer base. As for Customer Satisfaction and Spending Behavior; Customers who are satisfied with a company's services are more

likely to spend more money and use more of the services offered by that company. Research has shown that satisfied customers tend to invest additional funds when available (Darby et al., 2020). Moreover, evidence reveals that customers who appreciate and are aware of a company's services are willing to pay more for those services (Consumer Reports, 2019). This positive relationship between customer satisfaction and spending behavior emphasizes the importance of delivering high-quality services to retain and attract loyal customers. Personalization of services goes beyond just meeting customer needs; it aims to keep customers happy while also ensuring the company profits from delivering the service (Martha, 2011). Understanding and meeting customer expectations are fundamental steps in attracting and expanding a loyal customer base (Consumer Insights Africa, 2022). If the company excels at executing these, it will benefit from increased market share, profits, and customer equity (Kotler, 2011). We have to put more effort into providing better services at all levels, with particular emphasis on the local level because that is where the population needs it most. Although we may be doing well compared to competitors, we should strive to do better. What we have achieved shows that we have the potential, as said the president of Rwanda, His Excellency Paul KAGAME in his end-year 2013.

### **Value Proposition and Customer Loyalty**

Modern marketing focuses on building lucrative customer relationships and providing customers with value. According to Kotler (2011), a company's success lies in executing strategies to identify target markets, understand customer expectations, and create a compelling value proposition. When companies excel in these aspects, they benefit from increased market share, profits, and customer equity (Tompkins, 2019). A company must comprehend how consumers perceive quality and how service quality is influenced to compete successfully. Managing perceived service quality requires the company to align the perceived and desired levels of service so that consumer satisfaction is achieved.

The author identified three components of service quality, namely: technical quality; functional quality; and image (Ms. Dhanalakshmi). Customer Care and Financial Performance in hotel service is key and play a pivotal role. Customer care is central to identifying and satisfying customer needs and wants, resulting in improved financial performance of a company (World Bank, 2021). Managing Perceived Service Quality is a central theme in hospitality. Aligning perceived service levels with desired levels is crucial for managing perceived service quality effectively. This alignment ensures that consumer satisfaction is achieved, leading to positive customer experiences and loyalty (Boulding et al., 2020). The three components of service quality identified as technical quality, functional quality, and image are essential considerations in delivering and managing quality services (Ms. Dhanalakshmi, 2016). Incorporating these theoretical concepts from various reputable sources enhances the study's theoretical framework and contributes to a more comprehensive understanding of service quality and customer satisfaction in the selected up-market hotels in Kigali, Rwanda. These theories provide a solid foundation for interpreting research findings, drawing meaningful conclusions, and formulating practical recommendations for the hospitality industry.

### **iii. Theoretical Framework**

The theoretical framework of this study draws on various theories that underpin the concepts of customer satisfaction, perception, and loyalty in the hospitality industry. Each theory is aligned with the research questions, objectives, or the conceptual framework, providing a foundation for investigating the impact of service quality on customer satisfaction in the selected up-market hotels in Kigali, Rwanda. The following are theories underpinning this study:

#### **Customer Satisfaction (CSAT) Theory**

Customer satisfaction (CSAT) is a commonly used key performance indicator that tracks how satisfied customers are with your organization's products and/ or services. A psychological state is measured by the customers' expectations. By knowing those expectations are, you can dramatically increase your customers' loyalty to your brand. Customer satisfaction theory (CSAT) is relevant to the objective of establishing the relationship between tangibility and customer satisfaction in four- and five-star hotels in Kigali, Rwanda. According to the University of Southern California (2005), CSAT is a key performance indicator that measures customers' satisfaction with products and services. The study will assess how the tangible aspects of service delivery in the hotels influence customer satisfaction and contribute to brand loyalty.

#### **The Equity Theory**

According to the equity theory, satisfaction exists when consumers perceived their output or input ratio as being fair, Swan et al (1963). Equity models are derived from the equity theory (Adams, 1963) and are based on the notion of input-output ratio, which plays a key role in satisfaction Oliver et al (1963). According to this theory, parties to an exchange will feel equitable (thus satisfied), if in their minds, the ratio of their outcomes to inputs is fair. The equity theory is linked to the objective of examining the effects of empathy on customer satisfaction in four- and five-star hotels in Kigali, Rwanda. Swan et al. (1963) and Adams (1963) proposed the equity theory, which posits that satisfaction occurs when consumers perceive a fair ratio of outcomes to inputs in an

exchange. In the hotel context, the study will investigate how the hotel's display of empathy towards customers affects their perception of a fair exchange, leading to satisfaction.

### **The Dissonance Theory**

The dissonance theory suggests that a person who expected a high-value product and received a low-value product would recognize the disparity and experience cognitive dissonance (Cardozzo, 1965) that is, the disconfirmed expectations create a state of dissonance or psychological discomfort (Yi, 1990) according to this theory, the existence of dissonance produces pressures for its reduction which could be achieved by adjusting the perceived disparity. This theory holds that' post-exposure rating is primarily a function of expectation level because the task of recognizing disconfirmation is believed to be psychologically uncomfortable.

The dissonance theory relates to the research question of determining the relationship between tangibility and customer satisfaction in the selected hotels. Yi (1990) introduced the dissonance theory, which suggests that disconfirmed expectations create cognitive dissonance in customers. The study will explore how tangible aspects of service delivery that deviate from customer expectations impact their satisfaction and post-experience ratings.

### **Contrast Theory**

The contrast theory is another well-theory of customer satisfaction. Contrast theory suggests the opposite of dissonance theory. According to this theory, when actual product performance falls short of the consumer's expectations about the products the contrast between the expectation and outcome will Cause the consumer to exaggerate the disparity. It implies that the negative impact of actual product performance on customer satisfaction is greater than the positive impact of high performance over low performance. The contrast theory aligns with the research question of assessing the effects of empathy on customer satisfaction in the hotel industry. The theory suggests that when actual product performance falls short of customer expectations, the negative impact on satisfaction is greater than the positive impact of high performance over low performance. The study will investigate how the empathetic behaviors of hotel staff can influence customer perceptions and satisfaction.

### **Theory of Customer Service**

Attracting and retaining customers is the focus of customer service theories and models. (2018, Nicole Lamarco) In this situation, loyalty is the main goal. Although this is known as the customer theory, that is more grounded in reality than the majority of other theories you will come across. If you do not fully understand the principle of customer service, your business will be not able to exist. No one wants to do business with a company nowadays that does not seem to care about its clients, their problems, or their comfort.

The theory of customer service is relevant to the objective of examining the effect of responsiveness on customer satisfaction in four- and five-star hotels in Kigali, Rwanda. Nicole Lamarco (2018) emphasizes the importance of attracting and retaining customers through customer service to achieve loyalty. The study will explore how responsive service delivery by hotel staff contributes to customer satisfaction and loyalty. By incorporating these relevant theoretical frameworks, the study gains a robust theoretical basis to explore the relationships between service quality dimensions (tangibility, empathy, and responsiveness) and customer satisfaction in the hospitality industry. The theoretical literature enhances the understanding of key concepts and provides a framework for interpreting the research findings.

## **v. Research Materials and Methods**

During this study, a research design is a framework or plan for carrying out the research endeavor; it outlines the steps required to collect the data needed to formulate or address research questions (Malhotra, 2010). The study used quantitative and qualitative methods with a descriptive research approach. The goal of descriptive research is to characterize the traits of different aspects, for instance, the market potential for a product or the features and attitudes of customers who purchase the product. In this study, the researcher collected the data using a questionnaire designed for the customer of selected hotels in Kigali to assess the service quality, and customer satisfaction.

### **Target Population**

The target population of this research is covered by customers, the management team, and the service providers of Kigali Serena hotel and mythos boutique hotel-Rwanda, the target population was 500 individuals from which the sample size was calculated using the Yamane simplified formula (1967) to determine the sample size as follow.

$$n = \frac{N}{1 + N(e)^2}$$

n: Sample size

N: Target population

(e)<sup>2</sup>: Margin of error

$$n = \frac{500}{1 + 500(0.05)^2}$$

**n=222.22**

These three categories of population were clearly shown in the table below.

**Table 1: Target Population**

Category of population	Number
Customers of four and five-star ranked hotels (2021,2023)	123
The Management team of four and five-star ranked Hotels	10
The service provider (employees) at four and five-star ranked Hotels	90
<b>Total</b>	<b>223</b>

**Source: Primary data (2022)**

However, the managers and executives were are been purposively selected due to their perceived important contribution to the research.

**Sampling Technique**

In this study, the Researcher used a purposive sampling technique and randomly (procedure) to achieve research objectives. It is namely quota sampling and convenience sampling which was used. For quota sampling the research chose the few members (managers) of the hotels with a category to apply to the population in this case.

About randomly, the researcher used only the customer who was are occupied in the rooms at the hotels. They were usually asked to complete the questionnaire when they were taking a break from the swimming pool. However same questionnaires were placed in the hotel restaurant to give the guests, who so to desired, enough time to complete them. the Sampling technique (randomly, purposively) remained an added advantage and a chance to achieve the research objectives. The concerned sample as represented above gives research tools for testing service quality and customer satisfaction in four- and five-star hotels.as a researcher was prefer to distribute the questionnaire randomly, or purposively because was in summer period and customer were in freedom time. And it is better also to respect the rules and regulation of the organization.

**Data Collection Methods and instruments**

In this study, data were collected using different research tools to achieve research objectives. These tools included a questionnaire, documents The use of all these tools provided efficiency, effectiveness, and consistency of research.

**vi. Results presentation and discussion**

The research findings reveal the marital status of the respondents in four and five-star hotels. The majority of the respondents, accounting for 30.6% (64 people), are single. Additionally, 49.8% (104 people) of the customers were found to be married, making it the second most common marital status among the respondents. A smaller proportion, 7.2% (15 people), indicated that they were separated. Lastly, 12.4% (26 people) of the respondents reported being divorced. The total sample size for the study was 223, but 14 customers did not return the questionnaire, resulting in a total of 209 respondents. The information gathered from this table provided insight into the demographic distribution of marital statuses among customers in the selected four and five-star hotels.

This data helped understanding how marital status might influence service quality expectations, customer satisfaction, and their overall experience in the hospitality industry.

### Education Level Of Respondents

In this study, the education level of respondents was important to assess categories of customers in four- and five-star hotels and their level of education. It is clear that the respondents's education background was diverse whereby the research findings indicate the education levels of the respondents in four and five-star hotels. The data shows that 40.7% (85 people) of the respondents had an undergraduate level of education, making it the highest percentage among the different education levels. Following this, 24.9% (52 people) of the respondents fell into the "others" category of education, which likely includes individuals with various educational backgrounds not covered by the other specific categories. Moreover, 19.1% (40 people) of the respondents had a postgraduate level of education, indicating a considerable number of highly educated individuals among the customers. Lastly, 15.3% (32 people) of the respondents had a certificate level of education. This information helped in understand the educational diversity of customers in the selected hotels. The education level of respondents influences their expectations, preferences, and perceptions regarding service quality in the hospitality industry. By examining the education levels of the respondents, the study gained valuable insights into the relationship between education and customer satisfaction, which can aid hotel management in catering to the specific needs and preferences of different customer segments.

### Tangibility and Customer Satisfaction at Four and Five Star Selected Hotel

The findings revealed the evaluation of tangibility and its impact on customer satisfaction at the selected four and five-star hotels. The responses are measured on a five-point Likert scale, ranging from "Strongly Agree" (SA) to "Strongly Disagree" (SD). The average mean for the tangibility dimension was 3.723, indicating that, on average, customers have a positive perception of the tangibility aspects in the hotels. Specifically, the highest-rated statement is "The hotel rooms are well arranged," with a mean score of 4.80, indicating that the majority of respondents strongly agreed with this statement. Moreover, statements such as "The hotel is unique and visually appealing" and "The hotel is in a good location" received high mean scores of 4.72, suggesting that customers appreciate the aesthetics and location of the hotels. On the other hand, the statement with the lowest mean score is "The hotel rooms are spacious," with a mean score of 4.30, which still reflects a favorable opinion among respondents. Overall, the study demonstrates that the tangibility factors, including the cleanliness, visual appeal, equipment, and arrangement of the hotel, significantly influence customer satisfaction. The positive perception of these tangibility aspects contributes to customers' overall satisfaction with the hotels, which is essential for attracting repeat business and fostering customer loyalty.

**Table 1: Regression analysis Model Summary**

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.221 <sup>a</sup>	.049	.001	.206285692662831

**Source:** Primary Data ( 2023 )

Predictors: ( constant ) tangibility of service, responsiveness of customer satisfaction and empathy of customer satisfaction

The findings in Table 5 revealed that service quality as measured by customer satisfaction in four and five- star hotel in Kigali city. Therefore, the regression analysis ( R) of .206, means that the findings show strong linear, positive, statistically important and customer satisfaction because the regression analysis model summary are not strong because R is very low, is not less than 0.05.

The findings from Table 8 present the results of the regression analysis model summary, which aims to assess the relationship between service quality and customer satisfaction in four and five-star hotels in Kigali city. The model's R (correlation coefficient) is 0.206, indicating a weak positive linear relationship between service quality and customer satisfaction.

The R-squared value (R<sup>2</sup>) of 0.049 suggests that only 4.9% of the variation in customer satisfaction can be explained by the variation in service quality variables (tangibility, responsiveness, and empathy) included in the model. The low R-squared value indicates that there might be other factors influencing customer satisfaction that are not accounted for in this particular regression model.

Additionally, the adjusted R-squared value is also quite low at 0.001, suggesting that the model may not be the best fit for explaining the relationship between service quality and customer satisfaction. The standard error of the estimate, 0.206285692662831, represents the average distance between the observed values of customer

satisfaction and the predicted values by the regression model. Overall, the regression analysis results indicate that while there is a positive relationship between service quality and customer satisfaction, the model's predictive power is limited, and there may be other factors contributing to customer satisfaction beyond the variables included in this study. Further research and analysis may be needed to identify and understand these additional factors that influence customer satisfaction in the hospitality industry.

**Table 2: ANOVA “ Tangibility Of Customer Satisfaction**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1					
Regression	.432	10	.043	1.015	.432 <sup>b</sup>
Residual	8.426	198	.043		
Total	8.857	208			

Source: Primary Data ( 2023 )

- a. Depending Variable :CSAVER
- b. Predictors: (Constant), tangability of service, responsiveness of customer satisfaction, and empathy of customer satisfaction





According to the research findings, the significant are very low not strong because R is very low .221 the relationship its not strong even if R is low but there is significant. Based on the findings from Table 9, the ANOVA results show the analysis of variance for the variable "tangibility of customer satisfaction" in the regression model. The regression model explains the relationship between the predictors (tangibility, responsiveness, and empathy of customer satisfaction) and the dependent variable (CSAVER).

The total sum of squares is 8.857, which represents the total variation in the dependent variable CSAVER. The regression sum of squares is 0.432, indicating the variation in CSAVER that can be explained by the predictors in the model. The degrees of freedom (df) for the regression are 10, and the mean square is 0.043. The F-statistic is 1.015, and the significance level (Sig.) is 0.432. The F-statistic and significance level test the overall significance of the regression model. In this case, the significance level is higher than the conventional threshold of 0.05, indicating that the model's overall significance is not statistically significant. The low value of R (0.221) indicates a weak relationship between the predictors and the dependent variable. While the relationship is weak, there is still some level of significance, but it is not strong enough to make robust predictions based on the model.

In conclusion, the ANOVA results suggest that the predictors (tangibility, responsiveness, and empathy) in the model do have some influence on customer satisfaction (CSAVER), but the overall relationship is weak and not statistically significant at the conventional level. This finding highlights the need for further investigation and consideration of other factors that may affect customer satisfaction in four and five-star hotels in Kigali city.

**Table 3: Regression of Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	4.429	.544		8.145	.000
Tangibility of service hotel is clean	-.046	.036	-.112	-1.271	.205
Tangibility of Service hotel appearing	-.004	.039	-.008	-.093	.926
Tangibility of Service and cusmer satisfaction hotelrooms	-.013	.028	-.037	-.453	.651
Tangibility of customer Satisfaction hotelroomswell	.019	.026	.056	.746	.457
Tangibility of service in the hotels equipement	.037	.033	.095	1.141	.255
Tangibility of service in the hotels	-.043	.030	-.133	-1.406	.161
Tangibility Service the service providedreess uniforms	-.009	.065	-.009	-.134	.894
Tangibility Service customer get guidance	.073	.031	.176	2.329	.021
Tangibility of Service hotel location are preferable	.027	.035	.059	.765	.445
Tangibility of Service the hotel are physical clean	.003	.029	.008	.118	.906

**Source:** Primary Data ( 2023 )

a. Depending Variable ; CSAVER ( customer satisfaction average)

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where Y=customer satisfaction

X1 tangibility of customer satisfaction

X2 responsiveness of service

X3 service with empathy

X4 customer satisfaction

ε= Error term

Tangibility of service check of the hotel are clean+(0.004) tangibility of customer satisfaction the hotel appearing (0.013) tangibility of service or customer satisfaction provide (0.019) as tangibility of customer satisfaction or service determined that (0.037) as a tangibility of customer satisfaction the hotel rooms are well, tangibility of customer satisfaction also (0.043)determined the tangibility of customer satisfaction the service provide are dress uniforms,+(0.009) tangibility of customer satisfaction or service customer get guidance +(0.027) tangibility of customer satisfaction the service the hotel are physically clean +(0.003).error of the estimate are 0.206. negativity coefficient affect customer satisfaction negativity, and when the coefficient are positive , affect also the customer satisfaction positively

Based on the findings from Table 7, the multiple regression analysis was conducted to assess the relationship between the independent variables (tangibility of service) and the dependent variable (customer satisfaction average, CSAVER). The regression coefficients (B) represent the effect of each independent variable on the dependent variable. The standardized coefficients (Beta) show the strength and direction of the relationship, and the t-values test the significance of each coefficient. The constant term ( $\beta_0$ ) is 4.429, indicating the average customer satisfaction when all independent variables are zero. The findings show that the tangibility of service variables, including "hotel is clean," "hotel appearing," "hotel rooms," "hotel rooms well," "hotels equipment," "service in the hotels," "service provider dress uniforms," "customer get guidance," and "hotel location," have different effects on customer satisfaction.

However, it's important to note that most of the standardized coefficients (Beta) are relatively small, indicating weak relationships between the tangibility of service variables and customer satisfaction. Additionally, some of the t-values are not statistically significant, as indicated by their p-values (Sig.), which are higher than 0.05. The tangibility of service variables that show a statistically significant impact on customer satisfaction are "customer get guidance" (Beta = 0.176) and "hotel location are preferable" (Beta = 0.059). This means that providing guidance to customers and having a preferable hotel location positively influence customer satisfaction. In conclusion, the regression analysis reveals that while some tangibility of service variables may have a small impact on customer satisfaction, the overall relationship is relatively weak. For a more comprehensive understanding of customer satisfaction in four and five-star hotels in Kigali, it is essential to consider other factors beyond tangibility of service, such as responsiveness and empathy.

### The Effect Of Responsiveness On Customer Satisfaction

The research findings showed that the employees helped inform customers when service will occur as strong agreed by 64.1% and agreed by 35.9%.in this regard, research was interested in assessing whether customer problems are solved immediately, and this was strongly confirmed by 42.1%and 56.0% who also agreed. The research findings showed that customer order delivery on time was strongly agreed by 69. % and 30.6% also agreed. Therefore, the research's interest was also to assess whether customers get help when needed strongly agreed by 53.1% and 44.5% also agreed. The study findings also showed that customer who is informed of important information strongly agreed with 58.9% and agreed with 37.3%.in this regard, research findings showed that hotels apologize in advance for any inconveniences as strongly agreed by 76.6% and agreed by 19.6%. the study findings also showed that employees assist customers and provide prompt as strongly agreed by 63.2% and agreed by 36.8% as well.

**Table 4: ANOVA” Responsiveness Of Customer Satisfaction**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.973	7	.139	3.545	.001 <sup>b</sup>
	Residual	7.884	201	.039		
	Total	8.857	208			

**Source:** Primary Data (2023)

Dependent Variable customer satisfaction (CSAVER)

- a. Predictors: (Constant), Responsiveness of service through tangible satisfaction, Responsiveness of customer, empathy of customer, and customer satisfaction RS Employees helped inform the customer when service will occur, RS Customers problems are solved immediately, RS Customers orders are delivered on time, RS Customers get help when needed, RS Customers are informed of important information, and RS We apologize in advance for any inconveniences, RS also Employees assist quests and provide prompt service.

The findings presented in Table 10 aimed to assess the impact of responsiveness of customer satisfaction on overall customer satisfaction (CSAVER) in four- and five-star hotels in Kigali. The table provides an ANOVA summary, which evaluates the significance of the regression model in explaining the variance in customer satisfaction.

The ANOVA results show that the regression model is statistically significant with an F-value of 3.545 and a p-value of 0.001. This indicates that the combination of predictors (responsiveness of service through tangible satisfaction, responsiveness of customer, empathy of customer, and overall customer satisfaction) has a significant effect on customer satisfaction in the selected hotels. The Regression Sum of Squares is 0.973, which represents the variation in customer satisfaction explained by the predictors in the model. The Residual Sum of Squares is 7.884, indicating the unexplained variation in customer satisfaction not accounted for by the model. The Mean Square value of the Regression (0.139) and the Residual (0.039) helps to evaluate the contribution of each variable to the overall variation in customer satisfaction.

**Table 5: Coefficients” Responsiveness Of Customer Satisfaction**

Model	Unstandardized Coefficients		Standardize d Coefficients Beta	Sig.	95.0% Confidence Interval for B		
	B	Std. Error			Lower Bound	Upper Bound	
(Constant)	3.435	.312		11.013	.000	2.820	4.050
RS customer information	.012	.033	.028	.367	.714	-.053	.078
RS problem solved	-.010	.028	-.025	-.348	.728	-.064	.045
RS delivered on time	.040	.031	.090	1.294	.197	-.021	.101
RS customer help	.053	.028	.140	1.884	.061	-.002	.108
RS customer informed	.018	.030	.050	.598	.551	-.042	.078
RS apologize to customer	.071	.027	.182	2.675	.008	.019	.124
RS employees assist guests	.075	.030	.175	2.458	.015	.015	.135

Source: Primary Data ( 2023 )

- a. Dependent Variable ; CSAVER ( customer satisfaction average )  
 b. RS (Responsiveness of customer satisfaction

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where Y=customer satisfaction

X1 tangibility of customer satisfaction

X2 responsiveness of service

X3 service with empathy

X4 customer satisfaction

ε= Error term

$$Y = 3.435 + (0.012)$$

Responsiveness customer satisfaction customer get information on time +(0.010) responsiveness of customer satisfaction customer problem solving +(0.040) responsiveness of customer satisfaction are delivered on time+ (0.053) responsiveness of customer satisfaction customer informed before +( 0.018) responsiveness of customer satisfaction customer get apologize +(0.075) responsiveness of customer satisfaction employees assist quests,error

of the estimate are 0.198.negative coefficient affect customer satisfaction negatively and when coefficient are positive affect customer satisfaction positively

The findings from Table 11 present the coefficients resulting from the regression analysis to assess the impact of responsiveness of customer satisfaction (RS) on overall customer satisfaction (CSAVER) in the context of four- and five-star hotels in Kigali. The coefficients indicate the relationship between each predictor variable and the dependent variable (customer satisfaction). The Constant ( $\beta_0$ ) is 3.435, which represents the expected customer satisfaction score when all predictor variables are zero.The standardized coefficients (Beta) demonstrate the relative importance of each predictor in explaining customer satisfaction. Among the responsiveness factors, "apologizing to customers" (Beta = 0.182) and "employees assisting guests" (Beta = 0.175) have the most significant positive impact on customer satisfaction. This suggests that these two aspects of responsiveness have a stronger association with higher customer satisfaction scores. On the other hand, "problem solved immediately" (Beta = -0.025) and "customer information" (Beta = 0.028) have relatively weaker impacts on customer satisfaction and are closer to zero.

However, it is important to note that all the standardized coefficients are small, indicating that the responsiveness factors collectively have a moderate impact on customer satisfaction. The t-values and associated p-values assess the statistical significance of each predictor variable. The results indicate that "apologizing to customers" (p = 0.008) and "employees assisting guests" (p = 0.015) are statistically significant predictors of customer satisfaction.In conclusion, the findings from Table 13 suggest that responsiveness of customer satisfaction, particularly aspects like apologizing to customers and employees assisting guests, play a meaningful role in influencing overall customer satisfaction in the selected four- and five-star hotels in Kigali. However, the overall impact of responsiveness on customer satisfaction is moderate, and other factors beyond responsiveness may also contribute to customer satisfaction in this context.

**Table 6:Empathy on Customer Satisfaction in Four- and Five-Star Hotel**

Statement	SA		A		N		D		SD		Mean	St D
	Free	(%)	Free	(%)	Free	(%)	Free	(%)	Free	(%)		
The Staff listens to customers' issues and/ or requests carefully	133	63.6	76	36.4	-	-	-	-	--	-	4.64	.482
The staff is interested in what the guest has to say	123	58.9	85	40.7	1	.5	-	-	-	-	4.58	.504
Employeesgive individualized attention to the customer is addressing them	137	65.6	71	34.0	1	.5	-	-	-	-	4.65	.488
The Customer feels that employees adequately listened to their issues	97	46.4	110	52.6	2	1.0	-	-	-	-	4.45	.518
Employees act toward the benefit of the customers	126	60.3	81	38.8	-	-	-	-	-	-	4.61	.489
Opening times of the company are suitable	160	76.6	42	20.1	7	3.3	-	-	-	-	4.73	.514
<b>Overall average</b>											1.659	0.179

**Source:** primary data (2023)

As to whether there were the effects of empathy on customer satisfaction in Rwanda, there search findings showed that the equal to 63.6% responded strongly agree, and 36.4% responded agree that staff listens to customers' issues and or requests carefully. when assessing whether staff is interested in what the quest has to say this was strongly agreed by 58.9% and agreed by 40.7%. Therefore, research findings showed that 65.6% strongly agreed that employees give individualized attention to customers addressing them 34.0%. in four- and five-star hotels in Kigali, 46.4% strongly agreed that customers feel that employees adequately listened to their issues as agreed by 52.6%. however, 60.3% of surveyed respondents strongly agreed that the employees' act towed the benefit of the customer

and 38.8% agreed. Finally, the research findings showed that 76.6% strongly agreed that the opening time of the company is suitable by 20.1% agreed.

The findings from Table 5 indicated the impact of empathy on customer satisfaction in the context of four- and five-star hotels in Kigali. The table presents the frequency of responses for various statements related to empathy, as well as the mean and standard deviation of customer satisfaction scores. The respondents' perception of empathy in the hotel staff significantly affects their overall satisfaction. The overall average customer satisfaction score is 4.73, suggesting a generally high level of satisfaction in the assessed hotels. Among the empathy-related statements, "Opening times of the company are suitable" received the highest customer satisfaction score (76.6% strongly agree), indicating that the hotel's operating hours are convenient for most customers.

Other empathy-related aspects, such as "The staff listens to customers' issues and/or requests carefully" (63.6% strongly agree) and "Employees give individualized attention to the customer is addressing them" (65.6% strongly agree), also received positive responses from the majority of customers. The mean scores for all empathy-related statements are relatively high, ranging from 4.45 to 4.73, which suggests that the hotel staff's empathy has a positive impact on customer satisfaction. The standard deviation values (ranging from 0.179 to 0.518) indicate that the responses are relatively consistent and clustered around the mean, reflecting a relatively narrow spread of scores.

In conclusion, the findings from Table 13 suggest that empathy plays a significant role in influencing customer satisfaction in four- and five-star hotels in Kigali. Customers value attentive and empathetic staff who actively listen to their concerns and prioritize their needs. The positive impact of empathy on customer satisfaction highlights the importance of cultivating a customer-centric culture within the hospitality industry to enhance guest experiences and foster customer loyalty.

**Table 7: Regression Analysis Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.315 <sup>a</sup>	.099	.068	.194442631494172	2.017

a. Predictors: (Constant), SE staff listens to customers' issues and Requests carefully staff is interested in what quest has to say, SE employees give individualized attention to the customer is addressing them, SE feels that employees adequately listened to their issues and requests, SE employees act toward the benefit of the customers, SE also though by the opening time of the company are suitable. ( SE) means Service of empathy

b. Dependent Variable: Customer Satisfaction (CSAVER)

The findings from Table 6 present the regression analysis model summary, which examines the relationship between various empathy-related predictors and customer satisfaction (CSAVER) in four- and five-star hotels in Kigali. The table provides important statistical measures to assess the strength and significance of the model. The coefficient of determination (R Square) is 0.099, indicating that approximately 9.9% of the variance in customer satisfaction can be explained by the empathy-related predictors included in the model. This suggests a weak to moderate relationship between empathy and customer satisfaction in the studied hotels.

The adjusted R Square, at 0.068, takes into account the number of predictors in the model and provides a more accurate measure of the percentage of variance explained. It shows that the predictors collectively account for 6.8% of the variance in customer satisfaction, after adjusting for the number of predictors. This value is slightly lower than the R Square, suggesting that the addition of more predictors might not significantly improve the model's explanatory power.

The standard error of the estimate is 0.194, which represents the average deviation of actual customer satisfaction scores from the predicted scores by the regression model.

A lower value indicates a better fit of the model to the data. The Durbin-Watson statistic tests for the presence of autocorrelation in the residuals (error terms) of the model. A value close to 2 indicates no autocorrelation. In this case, the Durbin-Watson value is 2.017, which suggests no significant autocorrelation in the model's residuals. Overall, the regression analysis suggests that the empathy-related predictors, including the staff's attentiveness to customers, individualized attention, and acting in the customers' benefit, have a modest impact on customer satisfaction in the studied hotels. However, other unaccounted factors might also influence customer satisfaction, as indicated by the relatively low R Square and adjusted R Square values. In conclusion, while empathy-related factors

play a role in customer satisfaction, there are likely other variables not included in the model that also influence guests' satisfaction levels. It is essential for hotels to continue focusing on empathy and other service-related aspects to enhance overall customer experiences and foster guest loyalty. Further research and consideration of additional variables may provide a more comprehensive understanding of the factors affecting customer satisfaction in the hospitality industry.

The regression analysis reveals that the overall model is statistically significant ( $F = 3.141$ ,  $p = 0.004$ ), indicating that the combined empathy-related predictors have a significant impact on customer satisfaction. However, the R-squared value of 0.119 suggests that only approximately 11.9% of the variance in customer satisfaction can be explained by the empathy-related predictors, leaving a substantial portion of the variance unexplained. Analyzing the standardized coefficients (Beta values) of individual predictors, we find that the customer benefit (SE customer benefit) has the largest impact on customer satisfaction (Beta = 0.122).

This suggests that when employees act in a way that benefits the customers, it positively affects their satisfaction levels. Moreover, the guest expectation (SE guest expectation) also has a notable impact on customer satisfaction (Beta = 0.148). Meeting and exceeding customers' expectations can lead to higher satisfaction levels. On the other hand, the staff's interest in listening to the customers (SE staff is interested in what guest has to say) has a negative impact on customer satisfaction (Beta = -0.147). This indicates that when employees show disinterest in what customers have to say, it can negatively affect their satisfaction.

The other empathy-related predictors, including listening to customers' issues and requests carefully, employee guidance, listening to customer issues, and the hotel's opening times, do not have statistically significant impacts on customer satisfaction in the studied hotels. In conclusion, the regression analysis suggests that empathy-related factors do play a role in influencing customer satisfaction in four- and five-star hotels in Kigali. However, the impact is relatively modest, and there might be other unaccounted variables that also contribute to customer satisfaction. Hotel management should focus on promoting customer benefits and meeting guest expectations to enhance customer satisfaction levels.

Additionally, addressing any issues related to staff interest in customer concerns can further improve overall guest experiences. Further research and consideration of additional variables may provide a more comprehensive understanding of the factors affecting customer satisfaction in the context of empathy in the hospitality industry.

### **Customer Satisfaction**

The objective of this analysis was to assess the relationship between service quality and customer satisfaction. The results indicate that the overall average customer satisfaction level is 4.71, with a standard deviation of 0.232. This suggests that, on average, customers are generally satisfied with the services provided by the hotels. Regarding specific statements, the majority of respondents (87.1%) strongly agree (SA) that they will recommend the hotel to their loved ones and friends. Additionally, a significant proportion of participants (68.4%) express their intention to return to the hotel the next time they travel. These findings indicate a high level of customer loyalty and positive word-of-mouth potential. In terms of the hotel's brand and advertised image, 60.3% of respondents agree that it was consistent with their experience. This alignment between marketing efforts and actual experiences is crucial for building trust and meeting customer expectations. On the other hand, the statement "I would like to receive information on the hotel's new service or service discounts" garnered agreement from 60.3% of participants. This indicates that customers appreciate being informed about special offers and promotions, which can contribute to repeat business and increased customer engagement.

Overall, the findings suggest that the hotels surveyed have a satisfactory level of customer satisfaction. However, to further improve customer experiences and overall satisfaction, the hotels should continue to focus on meeting and exceeding customer expectations, maintaining consistent brand experiences, and keeping customers informed about new services and offers. It is important to note that while these findings provide valuable insights into customer satisfaction, further research and analysis may be needed to explore other factors that could influence satisfaction levels in the hospitality industry. Additionally, continuous monitoring and feedback from customers can help hotels identify areas for improvement and tailor their services to better meet customer needs and preferences.

**Service Quality and Customer Satisfaction**

**Table 8: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.283 <sup>a</sup>	.080	.067	.199351883208320	2.042

**Source:** Primary Data ( 2023 )

- a. Predictors: Constant) SEAVE, TSAVE, RSAVE
- b. Dependent Variable: CSAVER

The Table 8 presents the results of the regression analysis aimed at exploring the relationship between service quality and customer satisfaction. The objective of this analysis was to assess how service quality factors, represented by the predictors SEAVE (Service Experience), TSAVE (Tangible Satisfaction), and RSAVE (Responsiveness of Customer Service), impact customer satisfaction (CSAVER). The results indicate that the model's overall performance is moderate, with an R-value of 0.283. This implies that approximately 8.0% of the variation in customer satisfaction can be explained by the combined influence of the three service quality factors. The R-square value of 0.080 indicates that the predictors account for 8.0% of the variance in customer satisfaction scores. However, it also means that a significant portion of the variance remains unexplained, suggesting that there might be other factors influencing customer satisfaction that are not captured in this model.

The Adjusted R-square, which considers the number of predictors and sample size, is 0.067. This adjusted value indicates that the model's explanatory power decreases slightly when considering these factors, further reinforcing the idea that there might be additional variables impacting customer satisfaction. The standard error of the estimate (SEE) is 0.199, which represents the average discrepancy between the actual customer satisfaction scores and the predicted scores by the model. Lower values of the SEE indicate better accuracy in predicting customer satisfaction based on the service quality factors. The Durbin-Watson statistic is 2.042, which checks for the presence of autocorrelation in the model's residuals. A value close to 2 suggests that there is no significant autocorrelation present, indicating that the model's assumptions are met. In conclusion, the regression analysis reveals that the combined effects of service experience, tangible satisfaction, and responsiveness of customer service explain a moderate portion (8.0%) of the variance in customer satisfaction. However, there are likely other factors not accounted for in this model that also contribute to customer satisfaction. Further research and exploration of additional variables are necessary to obtain a more comprehensive understanding of the factors influencing customer satisfaction in this context.

**Table 9: ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.710	3	.237	5.959	.001 <sup>b</sup>
1 Residual	8.147	205	.040		
Total	8.857	208			

**Source:** Primary Data (2023)

- a. Dependent Variable : CSAVER
- b. Predictors: (Constant), SEAVE, TSAVE, RSAVE

The ANOVA table presents the results of the analysis of variance, which aims to assess the significance of the regression model in predicting customer satisfaction (CSAVER) based on the predictors SEAVE (Service

Experience), TSAVE (Tangible Satisfaction), and RSAVE (Responsiveness of Customer Service). The regression model is statistically significant, as indicated by the F-statistic of 5.959 and a p-value of .001. This indicates that the model's performance in explaining customer satisfaction is better than what would be expected by chance alone. In other words, there is a meaningful relationship between the service quality factors (SEAVE, TSAVE, and RSAVE) and customer satisfaction. The regression model accounts for 23.7% of the variance in customer satisfaction, as indicated by the mean square value of .237 for the regression. This value represents the average variance explained by the predictors, indicating a moderate effect size. The residual sum of squares (8.147) represents the unexplained variance or the discrepancy between the actual customer satisfaction scores and the predicted scores by the model. The total sum of squares (8.857) includes both the explained variance (sum of squares due to regression) and the unexplained variance (residual sum of squares). In conclusion, the ANOVA results confirm that the regression model, which includes the service quality factors SEAVE, TSAVE, and RSAVE, is statistically significant and has a moderate effect in predicting customer satisfaction. These predictors collectively account for approximately 23.7% of the variance in customer satisfaction scores. However, there is still a substantial portion of the variance that remains unexplained, suggesting the presence of other factors influencing customer satisfaction beyond those considered in this model. Further research and exploration of additional variables may enhance the understanding of customer satisfaction in the context of service quality.

**Table 10: Regression Of Dependent Variable And Independent Variables Coefficients**

Model	Coefficients						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.224	.559		5.762	.000	2.121	4.327
Tangability of service average	.018	.091	.013	.198	.844	-.161	.196
Responsiveness of customer satisfaction average	.237	.062	.267	3.804	.000	.114	.360
Empathy of service average	.053	.094	.040	.569	.570	-.132	.238

Source: primary Data (2023)

- a. Dependent Variable: customer satisfaction (CSAVER)
- b. **TSAVE**: Tangibility of Service Average

The three indicators or tables are there as regression and linear equivalency to modifying the model summary, nova and coefficient. The regression analysis was performed to examine the relationship between the dependent variable, customer satisfaction (CSAVER), and the independent variables: Tangibility of Service Average (TSAVE), Responsiveness of Customer Satisfaction Average, and Empathy of Service Average. The results of the analysis are presented in the table below. The regression model includes a constant term (intercept) with a value of 3.224. The intercept represents the predicted value of customer satisfaction when all independent variables are zero. The t-value of 5.762 and a p-value of .000 indicate that the intercept is statistically significant. Among the independent variables, only Responsiveness of Customer Satisfaction Average shows a statistically significant relationship with customer satisfaction. The standardized coefficient (Beta) for Responsiveness of Customer Satisfaction Average is 0.267, with a t-value of 3.804 and a p-value of .000. This suggests that for each one-unit increase in Responsiveness of Customer Satisfaction Average, customer satisfaction is predicted to increase by 0.267 units.

In other words, higher levels of responsiveness are associated with higher levels of customer satisfaction. On the other hand, Tangibility of Service Average and Empathy of Service Average do not show statistically significant relationships with customer satisfaction. Their standardized coefficients (Beta) are 0.013 and 0.040, respectively,



and their p-values are greater than the commonly used significance level of 0.05. The confidence intervals for the coefficients provide a range of plausible values for each predictor's effect on customer satisfaction. For all three variables, the confidence intervals include both positive and negative values, indicating the uncertainty in their impact. In summary, the results suggest that Responsiveness of Customer Satisfaction has a statistically significant positive impact on customer satisfaction in the context of this study. However, Tangibility of Service and Empathy of Service do not show significant relationships with customer satisfaction. Further investigation and consideration of other variables may be necessary to gain a comprehensive understanding of the factors influencing customer satisfaction in this setting.

### Multiple Regression Results

To ascertain the nature of the relationship between the independent and dependent variables of the study and establish the statistical significance of the hypothesized relationships, multiple regression analysis was used. This was performed using the field data and tested at a 5% level of significance. The Findings of the multiple regression are summarized in the table below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where Y=customer satisfaction

X1 tangibility of customer satisfaction

X2 responsiveness of service

X3 service with empathy

X4 customer satisfaction

$\epsilon$ = Error term

As per the SPSS result generated, the equation translates to Y= 4.429-0.003 as tangibility of service -0.027 responsiveness of customer satisfaction -0.073 empathy on customer satisfaction -0.043 and customer satisfaction the hotel rooms are well arranged and attractive, the equipment in the hotel rooms is up to date by -0.037, the hotel rooms are well ventilated by -0.019, and the hotel rooms also are spacious by -0.013, there is a unique feature that differentiates the hotel and is visually appealing by -0.004, while an increase in the unit of the hotel premises is always clean by -0.046. The multiple regression analysis was conducted to examine the relationship between customer satisfaction (Y) and the independent variables: Tangibility of Customer Satisfaction (X1), Responsiveness of Service (X2), Service with Empathy (X3), and Customer Satisfaction (X4). The regression equation obtained from the SPSS results is as follows:

$$Y = 4.429 - 0.003(\text{Tangibility of Service}) - 0.027(\text{Responsiveness of Customer Satisfaction}) - 0.073(\text{Empathy on Customer Satisfaction}) - 0.043(\text{Customer Satisfaction}).$$

The coefficients in the equation represent the impact of each independent variable on the customer satisfaction (Y) score. The negative signs for some coefficients indicate that an increase in those factors is associated with a decrease in customer satisfaction, while positive signs would indicate a positive relationship. The results show that Tangibility of Service has a very small negative effect (coefficient = -0.003) on customer satisfaction. Responsiveness of Customer Satisfaction has a slightly larger negative effect (coefficient = -0.027), implying that higher responsiveness is associated with slightly lower customer satisfaction. Similarly, Service with Empathy has a more substantial negative effect (coefficient = -0.073), indicating that higher empathy in service provision is associated with lower customer satisfaction.

Interestingly, the coefficient for Customer Satisfaction (X4) itself is negative (-0.043), suggesting that higher levels of customer satisfaction with the hotel's services are associated with slightly lower overall customer satisfaction. It is essential to interpret this finding with caution, as it might be an artifact of the statistical analysis or potential multicollinearity among the independent variables. Furthermore, the coefficients for the specific aspects of the hotel, such as the cleanliness of premises, the uniqueness of features, the arrangement and attractiveness of rooms, ventilation, and spaciousness, all have negative values. This indicates that improvements in these aspects are associated with decreased customer satisfaction. Overall, the multiple regression analysis suggests that the selected independent variables collectively do not have a strong positive impact on customer satisfaction. The negative coefficients highlight potential areas of concern that the hotel management should address to improve overall customer satisfaction. Further analysis and examination of other variables may be required to gain a comprehensive understanding of the factors influencing customer satisfaction in the context of this study.

## vii. Discussion of Research Findings

The research findings from this study provide valuable insights into the factors influencing customer satisfaction in four and five-star hotels in Kigali. It is evident that customers generally perceive the service quality at these hotels to be satisfactory, as indicated by the high agreement rates (53.6% strongly agreed and 46.4% agreed). These results are in line with previous research conducted by Mathews (2008), which also emphasized the importance of meeting customer expectations for service quality in the hospitality industry. Moreover, the study identified responsiveness to customer satisfaction as a crucial factor in increasing demand for service. This is evident from the significant agreement rates (64.1% strongly agreed and 35.9% agreed) among the respondents. These findings align with the research by Mike (2012), which emphasized the need for the hospitality industry to create convenient ways for customers, thereby enhancing their satisfaction and loyalty. Another key finding is the role of empathy in facilitating customer satisfaction.

A considerable proportion of respondents (63.6% strongly agreed and 36.4% agreed) recognized the importance of proper planning of services based on customer needs and expectations. This is consistent with the study by H Excellent Paul Kagame (2016), which emphasized the importance of addressing customer needs to improve service delivery in Rwanda. In the competitive environment of the European hospitality industry, customer satisfaction and service quality are closely linked, as highlighted by Kumar-al (2008). It is crucial for companies to focus on total service quality (SQ) to ensure customer contentment and loyalty. The use of SERVQUAL as a tool to measure service quality is also mentioned, and it has proven effective in driving quality improvements and enhancing employee motivation. Overall, the research findings underscore the importance of customer satisfaction in the success of four and five-star hotels. Improving service quality, responsiveness, and empathy are vital aspects that hotel management should consider to enhance customer experiences and build lasting relationships. By addressing these areas of concern, hotels can maintain their competitive edge and foster customer loyalty, which ultimately contributes to their long-term growth and success in the hospitality industry. Further research and continued efforts to improve service quality can lead to a more comprehensive understanding of customer needs and preferences, ultimately benefiting both customers and hotel businesses.

## viii. Conclusion

Ranking of study independent variables significance for applicability in Kigali 4 and 5 Star Hotel in Rwanda. Ranking independent variable significance from the study is shown:

- i. Responsiveness of Service Highly Significant
- ii. Tangibility of Service Moderately Significant
- iii. Empathy of Service Relatively Significant

The study aimed to investigate the relationship between service quality and customer satisfaction in four and five-star hotels in Kigali. The findings have shed light on the applicability of various independent variables in influencing customer satisfaction levels. From the results, it is evident that responsiveness of service holds the highest significance in influencing customer satisfaction, indicating that prompt problem solving, helpfulness, and effective communication play a crucial role in enhancing guest experiences. The tangibility of service was found to have a moderate significance, suggesting that factors such as cleanliness, visual appeal, and well-equipped rooms contribute positively to customer satisfaction, but to a lesser extent compared to responsiveness. Empathy of service was ranked third in significance, implying that providing individualized attention, understanding customer needs, and acting in their best interest can also impact customer satisfaction, albeit to a relatively lesser degree.

These findings have practical implications for managers and stakeholders in the hospitality industry in Kigali. To achieve high levels of customer satisfaction, it is essential for hotel management to prioritize responsiveness to customer needs and address any issues promptly. Additionally, maintaining tangible aspects such as clean and visually appealing premises and well-equipped rooms can enhance guest satisfaction. Incorporating empathetic behaviors in customer interactions can further contribute to positive guest experiences. Overall, the study emphasizes the importance of service quality in four and five-star hotels and highlights specific areas that can be targeted for improvement. By focusing on these significant variables, hoteliers can create an environment that fosters customer loyalty, positive word-of-mouth, and sustainable success in the highly competitive hospitality market in Kigali. The study also underscores the need for continuous research and evaluation of service quality to adapt to changing customer preferences and expectations, ultimately leading to enhanced customer satisfaction and loyalty.

## ix. References

- Agbor, J.M. (2011). The relationship between Customer Satisfaction and Service Quality. A Study of three service sectors in Umea. Published thesis; Umea School of Business, Umea University; www. Usbe.umu.se
- Al-Azzam, A. F.M. (2015). The Impact of Service Quality Dimensions on Customer Satisfaction: A Field Study of Arab Bank in Irbid City, Jordan. *European Journal of Business and Management*, 7(15), 45.
- Aliata, V.L. (2016) Relationship between Service Quality and Customer Satisfaction of Commercial Bank Customers, Nairobi Kenya. *International Journal of Management & Corporate Affairs*, 2(5), 27-47
- Alsaqre, O.Z.E. (2011). Investigating the Effects of Tangible and Intangible Factors on Customers' Perceived Service Quality and Loyalty in Hotel Industry in AlLadhiqiyah, Syria. Unpublished Thesis.
- Ananth, A., Ramesh, R. & Prabakaran, B. (2011) Service Quality GAP Analysis in Private Sector Banks A Customer Perspective, *Internationally Indexed Journal*, 2(1), 245-252.
- Anderson, E. W. & Fornell, C. (2001). The Customer Satisfaction Index as a leading indicator, in *Handbook of Services Marketing and Management*, Thousand Oaks: Sage.
- Auka, D.O., Bosire, J.N., & Matern, V. (2013). Perceived service quality and customer loyalty in retail banking in Kenya", *British Journal of Marketing Studies*, 1(3), 32-61.
- Aulia, S.A., Sukati, I., & Sulaiman, Z., (2016). A Review: Customer Perceived Value and its Dimension. *Asian Journal of Social Sciences and Management Studies*, 3(2), 150-162
- Awara, N... & Anyadighibe, J.A. (2014). The Relationship Between Customer Satisfaction and Loyalty: A Study of selected eateries in Calabar, *Cross Interdisciplinary Journal of Contemporary Research in Business*, 5, 110-125.
- Ayele, G. A. (2012). Positioning strategies adopted by five-star hotels in Nairobi, Kenya. Unpublished Thesis, University of Nairobi.
- Babbie, E. (2009). *The Practice of Social Research*. 13th ed. Belmont, CA: Wadsworth, 66.
- Bahadur, W., Aziz, S. & Zulfiqar, S. (2018) Effect of employee empathy on customer satisfaction and loyalty during employee–customer interactions: The mediating role of customer affective commitment and perceived service quality, *Cogent Business & Management*, 5(1).
- Bentley, T. G., Effros, R. M., Palar, K., & Keeler, E. B. (2008). Waste in the US health care system: a conceptual framework. *The Milbank Quarterly*, 86(4), 629-659.
- Berry, L., Parasuraman, A. & Zeithaml, V., (1994). Improving service quality in America: lessons learned. *Academy of Management Executive*, 8, 32–45
- Bitner, M.J., & Hubert, A.R. (2014). Encounter satisfaction versus overall satisfaction versus quality in Rust, R.T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage, Thousand Oaks,
- Bojanic, D. & Rosen, P. (2014). Quality measurement in professional service firms, *Journal of Professional Services Marketing*, 7, 27-30.
- Bolton, R. N. & J. H. Drew. (1991). A Multistage Model of Customers' Assessment of Service Quality and Value. *Journal of Consumer Research*, 54, 69-82.
- Boulding, W; Karla, A; Staelin, R., & Zeithaml, V.A. (1993) A Dynamic Process Model of service quality, From Expectations to Behavioural Intentions. *Journal of Marketing Research* 30, 7-27
- Burns, N., & Grove, S. (2013). *Understanding Nursing Research: Building an Evidence-based Practice –Philippine Edition* by Teresita I. Barcelo, Singapore: Elsevier Inc.
- Chu, S. & Choi, S. (2011). Electronic word-of-mouth in social networking sites. *Journal of Global Marketing*, 24, 263-81.
- Cooper, D., & Schindler, P. (2008). *Business research methods* (10th ed.). New York, McGraw-Hill/Irwi