

Taste, Talk, and Tidiness: How Product Quality, Communication, and Cleanliness Drive Customer Satisfaction in the Food Industry

Maryam Tariq¹

Anam Mubashir²

How to cite this article:

Tariq, M., & Mubashir, A. (2023). Taste, talk, and tidiness: How product quality, communication, and cleanliness drive customer satisfaction in the food industry. *Journal of Excellence in Business Administration*. 1(2), 01–14

Received: 4 April 2023 / Accepted: 17 May 2023 / Published online: 15 December 2023
© 2023 SMARC Publications.

Abstract

In the food industry, the key to thriving and boosting sales is ensuring that customers are satisfied with their experience and products. This directly impacts the bottom line and overall success of the business. In order for a business to achieve long-term success, it is essential to focus on customer-centered strategies at every stage of product development and distribution. This research delves into the complex interplay between customer happiness and various factors like communication abilities, product accessibility, pricing, product excellence, and cleanliness in the ever-evolving landscape of the hotel sector in Pakistan. Information was carefully gathered from well-known hotels and restaurants located in the culturally rich province of Punjab, Pakistan. Sophisticated rear. The study also emphasizes how a number of variables, including product availability, pricing policies, and culinary excellence, have a significant impact on customer satisfaction. The astounding discovery is how much value Pakistani consumers place on hygienic food preparation practices. The study's scope is strictly limited to Pakistan's southern province of Punjab. Future research should include a variety of samples from different parts of Pakistan in order to increase the applicability of these findings and obtain a thorough understanding of consumer happiness in the larger context of that nation.

Keywords: Communication Skills, Product Availability, Price, Product Quality, Customer Satisfaction, Cleanliness

1 Introduction

Customer satisfaction is a prerequisite for a business's long-term sustainability and profitability. Customer satisfaction and a company's profitability are directly correlated because happy customers are more likely to make repeat purchases and refer the business to their friends. By continuously exceeding customer expectations, a business grows its clientele and reputation. When

¹Institute of banking and finance, Bahauddin Zakariya university Multan
Corresponding author:

²Institute of banking and finance, Bahauddin Zakariya university Multan



a product satisfies their needs and expectations, they are happy (Bittner, [1995](#)). A multitude of factors impact patron satisfaction levels with restaurants. Product accessibility makes it possible for customers to quickly obtain the things they want, and good communication makes it possible to have meaningful and thought-provoking interactions with customers (Baquero et al., [2022](#)). The price of a good or service tells you how much it is worth, but quality has to do with how well it meets the needs of the consumer. When it comes to quality, customers tend to have a more favorable view of a product if it meets or surpasses their expectations (Atligan et al., [2003](#)).

When control a price contrast, it's prime to grip into report several elements, including transport fees, membership interest, and markdown. Membership cards and devotion programs play a key part in the glory of businesses by handout customers important providing and discounts. This helps to promote and build up consumer loyalty (Bertan et al., [2020](#)). Keep up the cleanliness of food making areas is decisive for secure customer contentment. Hotels in Pakistan that stall to follow with hygiene ruling face the possibility of sustain financial retribution or even being forced to shut down. Bring unusual client service is pivotal in every industry, and it is authority by various factors including effective conveying, product at hand, pricing, status, and cleanliness (Brookes et al., [2020](#)). To attain success in highly fierce markets, organizations must thoroughly recognize and maximize these qualities.

The contentment of consumers is closely rope to how well a product or service converge their belief and needs. Happy customers are more likely to mention a company and continue their carry by making frequent purchases. In order to ensure customer satisfaction, businesses must make it a prime concern to deliver top-notch products, promptly respond to market demands, actively seek feedback, and make necessary adapting (Carrol et al., [2000](#)). In addition, the contentment of customers can have a content effect on productivity and income. Satisfied customers are often ready to pay a higher price for the goods and services they accept. The role of pricing in fostering customer loyalty and satisfaction is climacteric, particularly in the food industry. Meeting customers' belief in terms of taste, nutritional value, nearness, safety, cost, and aesthetics is of utmost importance. To ensure customer satisfaction, it is deciding to instrument a range of plans, including delivering agreeing and dependable service, fostering transparent communication channels, and providing superb products (Cheong et al., [2022](#)).

2 Literature Review

When it occur to food, a lot of recent studies have inspect various factors that impact how satisfied customers feel. Wickson and Illés, ([2022](#)) emphasized the importance of continue high levels of hygiene, safety, and freshness in small and medium-sized agricultural and food enterprises. In their recent study, Gibson et al. ([2022](#)) emphasized the importance of maintaining cleanliness in ease stores, specially in the context of digital technology, to ensure customer fulfilment. In their broad study, Colgate et al. ([2000](#)) thoroughly survey multiple aspects of the food service industry, including fair pricing and sanitation practices. In contrast, the study conducted by Goić et al. ([2021](#)) focused on the cleanliness and obtainable of products in grocery stores. According to Chun and Nyam-Ochir (2020), the most important element sway fast food customer satisfaction are pricing, sanitation, meal quality, and service. In addition, Kitsios et al. ([2021](#)) performance a study to assess the influence of digital marketing on the satisfaction of hotel guests, with a specific focus on the levels of room continuity and sleep quality.

Further research by Mehta and Tariq, ([2020](#)) highlighted the influence of perceived value and quality on consumer loyalty, while Mahsyar and Surapati, ([2020](#)) found restaurant cleanliness significantly affecting customer satisfaction. Daher et al. ([2011](#)) studied fast-food service quality, and Kara Mustafa & Ülker, ([2020](#)) emphasized hygiene and staff communication in restaurants. Studies by Madeira et al. ([2020](#)) and Ghufuran et al. ([2022](#)) examined pandemic effects on eateries and food brand loyalty due to COVID-19, respectively. Cheong and Law ([2022](#)) underscored

professionalism and hygiene in Macau restaurants during the pandemic, and Pillai et al. (2021) analyzed pandemic-induced shifts in hospitality operations, focusing on cleanliness and customer service. Karagiannis and Andrinou, (2021) explored eco-friendly practices in restaurants, and Brandtner et al. (2021) examined COVID-19's impact on customer satisfaction, considering product availability and opinions. The study by Kar et al. (2021) emphasized hygiene in customer service interactions, while Baquero (2022) explored the Net Promoter Score's link to customer satisfaction, focusing on cleaning standards' clarity.

Moreover, various studies have highlighted how factors like product quality, availability, pricing, communication, and cleanliness influence consumer perceptions and loyalty. Service quality is crucial across industries like banking, healthcare, and retail. However, Derhan et al. (2019) cautioned against solely judging product quality from websites, emphasizing the importance of meeting customer needs and expectations for satisfaction. The primary goal of this work is to analyze and enhance Aramyan et al. (2006) model using data from a German and Dutch tomato supply chain. It explores various aspects of food quality, considering marketing challenges, environmental concerns, and sensory qualities crucial for customer satisfaction. The findings suggest an interdependent relationship between food product quality categories and the supply chain, with each indicator playing a vital role. Information technology emerges as a significant driver behind these factors, facilitating changes in product types, communication methods, and services (East et al., 2012).

2.1 Theoretical Framework

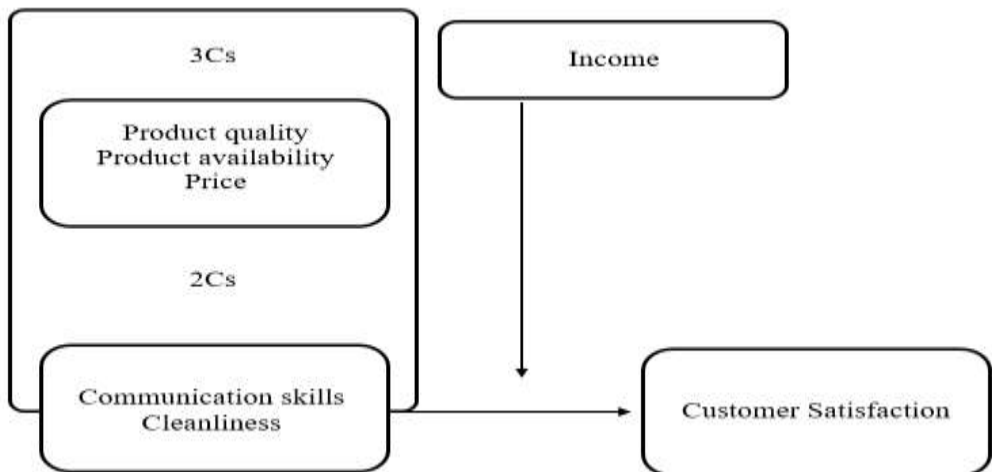


Figure 1: Theoretical framework

2.2 Hypothesis Development

H1:3Ps have a significant impact on customer satisfaction.

- a) Product availability has a significant impact on customer satisfaction.
- b) Price has significant impact on customer satisfaction.
- c) Product quality has a significant impact on customer satisfaction.

H2:2Cs have a significant impact on customer satisfaction.

- a) Communication skills have a significant impact on customer satisfaction.

- b) *Cleanliness has a significant impact on customer satisfaction.*

H3: Income level moderates the relationship between 3Ps and 2Cs.

- a) *Income level moderates the relationship between product availability and customer satisfaction.*
- b) *(b) Income level moderates the relationship between price of product and customer satisfaction.*
- c) *Income level moderates the relationship between product quality and customer satisfaction.*

H4: Income level moderates the relationship between 2Cs and customer satisfaction.

- a) *Income level moderates the relationship between communication skills and customer satisfaction.*
- b) *Income level moderates the relationship between cleanliness and customer satisfaction.*

3 Methodology

To ensure the credibility and relevance of the gathered data, a rigorous methodology was employed to investigate customer discontent within the food industry. Data collection was conducted via a cross-sectional study approach, encompassing hotels of various sizes across the sample population. Inclusivity was prioritized by engaging respondents from diverse socioeconomic backgrounds to ensure a holistic perspective. The questionnaire was meticulously designed with clear and straightforward questions, aiming to serve as key indicators of customer satisfaction and dissatisfaction across essential domains such as communication proficiency, product availability, pricing, quality, and cleanliness (Ghurfan et al., [2022](#)).

The survey instrument was structured into two sections, with the initial part laying out the groundwork for subsequent Likert scale-based assessments. A total of 100 accurately completed questionnaires were secured through in-person interviews to uphold data integrity and consistency, underscoring the significance of interpersonal engagement. By strategically selecting sampling locations to ensure respondent diversity, a total of 370 questionnaires were gathered (Gibson et al., [2022](#)). Efforts were made to foster candid disclosure of respondents' annual incomes, alongside acknowledgment of potential limitations. Enhancing data analysis, attempts were made to infer financial status through voicemails and conversational cues. The reliability of the questionnaire was assessed using Cronbach's alpha coefficient, yielding a commendable result of 0.656 (Lu et al., [2012](#)).

Furthermore, the study explored relationships between independent variables through correlation analysis, while regression analysis using SmartPLS software elucidated the intricate associations between these variables and customer satisfaction. Rigorous tests were conducted to validate the regression analysis, including assessments for heteroscedasticity, multicollinearity, normality, and linearity (Maderia et al., [2020](#)). A moderation study examined the nexus between revenue and customer satisfaction, identifying potential moderating factors. The structured questionnaire encompassed seven sections meticulously designed to evaluate various facets of customer discontent within the Pakistani hotel industry. Demographic data, particularly income levels, provided crucial background insights for subsequent analysis. The diverse participant cohort, comprising individuals with varied backgrounds and experiences within the hotel industry, ensured a comprehensive dataset for thorough and insightful analysis (Naser et al., [2013](#)).

4 Results and Discussion

4.1 Measurement model

Table 1: Descriptive statistics

| Na me | M ea n | Me dia n | Scale min | Scale max | Observ ed min | Observ ed max | Standard deviation | Excess kurtosis | Skewn ess | Cramér-von Mises p value |
|----------|--------------|----------------|--------------|--------------|------------------|------------------|-----------------------|--------------------|--------------|-----------------------------|
| C1 | 3.4 35 | 4 | 1 | 5 | 1 | 5 | 1.126 | -0.236 | -0.654 | 0 |
| C2 | 3.7 46 | 4 | 1 | 5 | 1 | 5 | 0.959 | 0.889 | -0.932 | 0 |
| C3 | 3.6 89 | 4 | 1 | 5 | 1 | 5 | 1.012 | 0.262 | -0.806 | 0 |
| C4 | 3.4 81 | 4 | 1 | 5 | 1 | 5 | 0.992 | -0.192 | -0.431 | 0 |
| C5 | 3.6 16 | 4 | 1 | 5 | 1 | 5 | 1.105 | -0.396 | -0.538 | 0 |
| C6 | 3.6 46 | 4 | 1 | 5 | 1 | 5 | 1.046 | -0.178 | -0.647 | 0 |
| C7 | 3.7 59 | 4 | 1 | 5 | 1 | 5 | 1.009 | 0.306 | -0.838 | 0 |
| PQ 1 | 3.5 95 | 4 | 1 | 5 | 1 | 5 | 1.041 | -0.129 | -0.643 | 0 |
| PQ 2 | 3.5 22 | 4 | 1 | 5 | 1 | 5 | 1.027 | -0.08 | -0.607 | 0 |
| PQ 3 | 3.5 57 | 4 | 1 | 5 | 1 | 5 | 1.031 | -0.087 | -0.621 | 0 |
| CL 1 | 2.9 3 | 3 | 1 | 5 | 1 | 5 | 1.33 | -1.207 | -0.009 | 0 |
| CL 2 | 3.0 51 | 3 | 1 | 5 | 1 | 5 | 1.105 | -0.575 | -0.005 | 0 |
| CL 3 | 3.3 35 | 3 | 1 | 5 | 1 | 5 | 1.074 | -0.306 | -0.396 | 0 |
| CL 4 | 3.5 3 | 4 | 1 | 5 | 1 | 5 | 1.12 | -0.394 | -0.527 | 0 |
| PA 1 | 3.6 92 | 4 | 1 | 5 | 1 | 5 | 0.977 | 0.306 | -0.714 | 0 |
| PA 2 | 3.5 92 | 4 | 1 | 5 | 1 | 5 | 1.141 | -0.444 | -0.557 | 0 |
| PA 3 | 3.3 59 | 3 | 1 | 5 | 1 | 5 | 1.124 | -0.509 | -0.363 | 0 |
| P1 | 3.2 46 | 3 | 1 | 5 | 1 | 5 | 1.184 | -0.752 | -0.29 | 0 |
| P2 | 3.1 05 | 3 | 1 | 5 | 1 | 5 | 1.135 | -0.654 | -0.23 | 0 |
| P3 | 3.5 41 | 4 | 1 | 5 | 1 | 5 | 1.162 | -0.175 | -0.731 | 0 |
| P4 | 3.2 95 | 3 | 1 | 5 | 1 | 5 | 1.131 | -0.475 | -0.485 | 0 |
| P5 | 2.6 54 | 3 | 1 | 5 | 1 | 5 | 1.333 | -1.202 | 0.144 | 0 |
| CS 1 | 3.4 65 | 4 | 1 | 5 | 1 | 5 | 1.06 | -0.197 | -0.467 | 0 |
| CS 2 | 3.4 38 | 4 | 1 | 5 | 1 | 5 | 1.007 | 0.094 | -0.627 | 0 |
| CS 3 | 3.4 78 | 4 | 1 | 5 | 1 | 5 | 1.014 | -0.209 | -0.488 | 0 |
| CS 4 | 2.8 86 | 3 | 1 | 5 | 1 | 5 | 1.185 | -0.889 | 0.113 | 0 |

The table 1 above shows the descriptive statistics of the individual items of the scales. It provides feel for data. Upon analysis of the table, we found that all values are within the range and data is well suited for further analysis.

Table 2: Construct reliability and validity

| Scale | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|----------------|------------------|-------------------------------|-------------------------------|----------------------------------|
| CL | 0.579 | 0.580 | 0.826 | 0.704 |
| CS | 0.633 | 0.635 | 0.803 | 0.576 |
| Custome | | | | |
| r s | 0.629 | 0.635 | 0.800 | 0.571 |
| PA | 0.498 | 0.509 | 0.798 | 0.664 |
| PQ | 0.589 | 0.635 | 0.825 | 0.704 |
| Pr | 0.509 | 0.509 | 0.803 | 0.671 |

Note: CL= Cleanliness, CS= Communication skills, PR= Price, PQ Product Quality, PA= Product Availability.

Table 2 displays the findings. The validity and reliability of several dimensions were assessed using a measuring approach in order to determine the level of satisfaction among customers in the food sector. Some of the factors that were considered include CL, CS, PR, PA, PQ, and customer satisfaction. The table presents three important metrics for each notion.

First, the internal consistency and dependability of each concept were assessed by calculating Cronbach's alpha. The results indicate a moderate level of reliability in terms of cleanliness and communication skills, with scores of 0.633 and 0.579, respectively. The reliability of the internal consistency is higher compared to the availability and price of the product, which have lower reliability scores of 0.498 and 0.509, respectively.

We proceeded to examine composite dependability, evaluating it using rho_a and rho_c. When evaluating reliable structures, it is considered strong if the composite dependability exceeds 0.7. The cleanliness level and customer satisfaction level both demonstrate a strong composite reliability score of over 0.8. The reliability of reporting Skills is the lowest among the four, with a score of 0.635, while Product convenient, Product Quality, Price, and Product Quality all reveal acceptable levels. Finally, the table provides an rating of coexisting logic by exhibit the Average Variance Extracted (AVE) for each research concept. When the AVE exceeds 0.5, converging logic is considered adequate. The AVE values of more than 0.7 indicate that there is a strong level of convergent validity in the areas of communication ability, product availability capability, and product quality skill. The concurrent of cleanliness, customer satisfaction, and pricing licidity is evident from the moderate AVEs, which range from 0.57 to 0.67. In conclusion, the findings of the calculation model show that the tested build reveal varying levels of reliability and convergent validity. The reliability and convergent validity of cleanliness and customer satisfaction are significantly higher compared to product accessible and price, which evince lower levels. It is important to take into account the influence of the food industry when inspection the relationship between these composition and customer satisfaction.

Table 3: Outer loadings Matrix

| Items | CL | CS | Customer s | PA | PQ | Pr |
|-------|-------|-------|------------|----|----|----|
| C1 | | 0.791 | | | | |
| C2 | | 0.752 | | | | |
| C3 | | 0.733 | | | | |
| CL3 | 0.829 | | | | | |

| | | | | | | |
|-----|-------|-------|-------|--|-------|--|
| CL4 | 0.849 | | | | | |
| CS1 | | 0.768 | | | | |
| CS2 | | 0.722 | | | | |
| CS3 | | 0.776 | | | | |
| P3 | | | | | 0.816 | |
| P4 | | | | | 0.822 | |
| PA2 | | | 0.852 | | | |
| PA3 | | | 0.777 | | | |
| PQ2 | | | | | 0.895 | |
| PQ3 | | | | | 0.778 | |

Note: CL= Cleanliness, CS= Communication skills, PR= Price, PQ Product Quality, PA= Product Availability.

Table 3 is shows an example of The "Outer Loadings Matrix" illustrates the connections between the evaluated items or indicators and the underlying constructs (CL, CS, Customer S, PA, PQ, and PR). These factor loadings, denoted by numeric values, offer insights into the strength of these associations. For instance, strong positive correlations are observed between the underlying construct of Communication Skills (CL) and the evaluated items CL3 and CL4, indicated by values of 0.829 and 0.849 in the "CL" column, respectively. Similarly, the scores in the "CS" column (0.768, 0.722, and 0.776) signify robust correlations between the underlying concept of Cleanliness (CS) and the assessed items CS1, CS2, and CS3.

Construct on the data in the "PQ" column, it shows that there is a strong positive link between the evaluated item PQ2 and the overall concept of Product Quality (PQ). When inspect data from other sources, a different stance emerges. Similarly, the "PR" column value of 0.822 show a strong positive link between the examined item P4 and the latent construct Price (PR). Construct on these loadings, one can deduce the extent to which each assess item take the associated concept. When the numerical values of the test items are higher, it submit that they can be considered as dependable indicators of the variables under inquiry. Therefore, it is important to consider these loadings when rate the reliability and validity of the measurement model, as well as when making conclusions about the relationships between the issues investigated in this research.

Table 4: Discriminant validity Heterotrait-monotrait ratio (HTMT) - Matrix

| Items | CL | CS | Customer s | PA | PQ | Pr |
|-----------------------|-------|-------|------------|-------|-------|----|
| CL | | | | | | |
| CS | 0.577 | | | | | |
| Customer satisfaction | 0.733 | 0.579 | | | | |
| PA | 0.608 | 0.613 | 0.725 | | | |
| PQ | 0.552 | 0.565 | 0.555 | 0.702 | | |
| Pr | 0.514 | 0.474 | 0.510 | 0.543 | 0.514 | |

Note: CL= Cleanliness, CS= Communication skills, PR= Price, PQ Product Quality, PA= Product Availability.

The HTMT matrix provides valuable insights into the distinguish validity of the constructs outlined in Table 4. Discriminant validity is crucial to ensure that each construct effectively measures a marked aspect of the fact under inquiry. Within this matrix, diagonal cells, representing the relationship of each construct with itself, contain zeros as await, reflecting the perfect link of a

construct with itself (HTMT = 1). Upon examination of the off-diagonal cells, which render relationships between different constructs, all HTMT values fall below the critical threshold of 1. This reassuringly suggests strong discriminant validity, indicating that the constructs are indeed distinguishable from one another. The HTMT values observed in the study range from 0.474 to 0.733, with the highest value noted between "communication skills (CL)" and "cleanliness (CS)." Despite this relatively higher correlation, it remains below the threshold of 1, reinforcing acceptable discriminant validity. In summary, the HTMT matrix demonstrates that the constructs examined in the study, such as communication skills, cleanliness, customer satisfaction, product availability, product quality, and price, are adequately distinct from one another. This underscores the validity of the measurement model, ensuring that each construct captures a unique and separate aspect of customer satisfaction in the food industry, thereby enhancing the overall robustness of the study.

Table 5: Collinearity statistics (VIF)

Outer model – List

| <u>Items</u> | <u>VIF</u> |
|--------------|------------|
| C1 | 1.320 |
| C2 | 1.328 |
| C3 | 1.161 |
| CL3 | 1.199 |
| CL4 | 1.199 |
| CS1 | 1.196 |
| CS2 | 1.283 |
| CS3 | 1.253 |
| P3 | 1.132 |
| P4 | 1.132 |
| PA2 | 1.124 |
| PA3 | 1.124 |
| PQ2 | 1.211 |
| PQ3 | 1.211 |

The table 5 presents Variance Inflation Factor (VIF) values for various variables in a statistical model. VIF measures the extent to which multicollinearity (high correlation between predictor variables) affects the model's reliability. In this case, all the VIF values are below 1.328, well below the commonly accepted threshold of 5, indicating low to moderate multicollinearity. This suggests that the variables in the analysis do not significantly impact each other's predictive power, which is a positive result for the model's validity.

Table 6: Model fit

Fit summary

| | Saturated model | Estimated model |
|------------|-----------------|-----------------|
| SRMR | 0.088 | 0.088 |
| d_ ULS | 0.809 | 0.809 |
| d_ G | 0.319 | 0.319 |
| Chi-square | 1589.653 | 1589.653 |
| NFI | 0.250 | 0.250 |

Table 6 provides an overview of various model fit statistics for both a saturated model (indicating perfect fit) and an estimated model (the actual model under examination). These statistics are crucial for assessing how well the estimated model corresponds to the observed data. The Standardized Root Mean Square Residual (SRMR) values for both the saturated and estimated

models are 0.088, indicating a favorable fit as lower values indicate better alignment between observed and predicted values. Similarly, the Unweighted Least Squares (d_ULS) and Greatest Lower Bound (d_G) statistics, both registering 0.809 and 0.319 for both models, respectively, suggest a strong agreement between the estimated covariance structure and the perfect fit of the saturated model. However, the Chi-square value is identical at 1589.653 for both models, indicating significant deviation from a perfectly fitting model. It's important to note that Chi-square is just one indicator and should be considered alongside other fit indices. Lastly, the Normed Fit Index (NFI) is 0.250 for both models, which is relatively low. While this suggests room for potential improvement or the need to explore additional fit indices, overall, the findings indicate that the estimated model exhibits reasonably good alignment with the data, particularly in terms of SRMR, d_ULS, and d_G.

Table 7: Path coefficients

Mean, STDEV, T values, p values

| Path | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|------------------|---------------------|-----------------|----------------------------|------------------------|----------|
| CL -> Customer s | 0.280 | 0.280 | 0.052 | 5.351 | 0.000 |
| CS -> Customer s | 0.135 | 0.138 | 0.062 | 2.183 | 0.029 |
| PA -> Customer s | 0.208 | 0.209 | 0.052 | 4.009 | 0.000 |
| PQ -> Customer s | 0.110 | 0.112 | 0.054 | 2.051 | 0.040 |
| PR -> Customer s | 0.087 | 0.091 | 0.054 | 1.630 | 0.103 |

Note: CL= Cleanliness, CS= Communication skills, PR= Price, PQ Product Quality, PA= Product Availability.

The table provides seven data points for route coefficients and their corresponding values, which offer essential insights into the contrast detect in customer satisfaction within Pakistan's restaurant industry. Pakistan offers a wide range of culinary options, encircle both traditional and modern dishes. In a field where providing outstanding customer service is crucial, it is essential for businesses to acknowledge how to warranty complete customer satisfaction. The coefficients shown in the table give us a deeper look into the key factors that affect customer satisfaction in Pakistan's food industry. Factors like price, cleanliness, communication skills, and product availability stand out as reliable indicators of satisfaction. When these factors improve, customer satisfaction increases, leading to better overall dining experiences. Price is particularly important in this context, aligning with the preferences of Pakistani customers who value politeness and enjoyable dining atmospheres.

Examining the average and range of these factors helps us understand the diversity and distribution of these attributes across the Pakistani food scene. The strong correlation between the sample means and the original data suggests that the sample accurately represents the entire industry. Additionally, the low standard deviations indicate consistent levels of satisfaction and service quality among different types of restaurants in Pakistan.

Analyzing the T statistics and P values reveals the significance of these associations. Higher T values indicate statistically significant connections between factors like market availability, cleanliness, communication, and customer satisfaction. Similarly, significant P values underscore the importance of these factors in influencing consumer satisfaction in Pakistan's food industry.

The insights provided by the table are valuable for all stakeholders in the industry, offering

opportunities for growth and development. By focusing on improving factors such as pricing, cleanliness, communication, and product availability, businesses in Pakistan's food industry can gain a competitive edge and foster customer loyalty.

Quality criteria

Table 8: R-square Overview

| | R-square | R-square adjusted |
|------------|-----------------|--------------------------|
| Customer s | 0.327 | 0.323 |

In the discussed table, the R-square values offer insights into the extent to which the predictors (cleanliness, communication skills, product availability, product quality, and price) collectively elucidate the variation in customer satisfaction within the Pakistani food industry. R-square, or the coefficient of determination, denotes the proportion of the variance in the dependent variable (here, customer satisfaction) explained by the independent variables (the predictors). The provided table reveals an R-square value of 0.327 for customer satisfaction, indicating that approximately 32.7% of the variability in customer satisfaction can be attributed to the combined influence of cleanliness, communication skills, product availability, product quality, and price.

Moreover, the adjusted R-square value, standing at 0.323, adjusts the R-square for model complexity by considering the number of predictors in the model. It provides a more conservative estimate of how well the predictors account for the variance in customer satisfaction, considering the model's variables. In the Pakistani food industry context, these R-square values imply that while cleanliness, communication skills, product availability, product quality, and price collectively wield a significant impact on customer satisfaction, there exist other unaccounted factors contributing to customer satisfaction. Hence, there might be additional variables or aspects of the dining experience influencing customer satisfaction in this particular setting.

For businesses operating in the Pakistani food industry, it is imperative to interpret these findings alongside other relevant factors to optimize their services and bolster customer satisfaction. Understanding the multifaceted nature of customer satisfaction and considering a comprehensive range of factors can aid businesses in refining their strategies to meet and exceed customer expectations in this dynamic and competitive industry.

5 Conclusion

The study offers valuable insights into the factors driving customer satisfaction within Pakistan's food industry. Businesses seeking success in this varied culinary landscape must prioritize providing exceptional customer service and satisfaction. Analysis reveals that factors such as cleanliness, communication skills, product availability, quality, and pricing have a significant impact on customer satisfaction levels. The coefficients in the analysis demonstrate a clear link between enhancements in these areas and increased satisfaction among customers.

Moreover, statistical analysis of the sample mean and standard deviation indicates that the sample accurately represents the industry. The strong correlation between sample means and original values suggests a high level of accuracy in reflecting the sector's characteristics. These findings resonate with the preferences of Pakistani diners, who value warm and excellent service. Additionally, the consistent quality of service across different eateries is evident from the low standard deviations, indicating minimal variation in these areas across surveyed restaurants.

The importance of the relationships between cleanliness, communication skills, product availability, quality, pricing, and customer satisfaction is highlighted by T statistics and P values.

High T values indicate statistically significant relationships, while low P values emphasize their significance. These attributes are crucial in determining customer satisfaction in Pakistan's food industry, underscoring their importance for business success. Insights gleaned from the coefficients and associated data are invaluable for all stakeholders in the food industry. Prioritizing cleanliness, effective communication, product availability, quality, and pricing is essential for ensuring customer satisfaction. In a fiercely competitive industry where customer loyalty and positive feedback are essential, addressing these factors can greatly enhance the success of companies operating in Pakistan's diverse and thriving food sector.

5.1 Implications:

This study validates the findings regarding consumer satisfaction within the food sector, emphasizing the significance of product quality, availability, pricing, communication skills, and cleanliness in ensuring consumer contentment. Factors such as public relations, product availability, quality, cleanliness, and communication skills were identified as influential in shaping consumer satisfaction in the Pakistani food industry, supported by previous studies conducted by Wicaksono, Illés, Gibson, Mehta, Tariq, Mahsyar, and Surapati. While this research focuses specifically on the food industry in Pakistan, existing literature also underscores the importance of excellent service across various domains.

The study highlights the pivotal role of effective communication and hygiene in enhancing customer satisfaction, backed by robust evidence. Employing path coefficients and statistical significance analysis aligns with common quantitative techniques used to assess these parameters and gauge customer satisfaction. Moreover, both the research and literature acknowledge the significant impact of technology, particularly information technology, on consumer satisfaction variables, as noted by Brookes et al.

The analysis of how environmental variables influence supply chains resonates with foregoing research indicate the effect of these factors on regulatory changes, showcasing the food industry's adaptability to evolving customer presentation. This study also underscores the importance of models and frameworks aimed at enhancing customer understanding and satisfaction, consistent with previous research advocating for accurate methods to assess and improve customer satisfaction.

Overall, findings from the food industry reinforce the importance of customer satisfaction, with various studies and statistical analyses highlighting the role of factors such as product availability, quality, pricing, environmental sustainability, and customer loyalty in shaping consumer accordant. Continued research, particularly within Pakistan's food industry, further enriches and validates these insights.

References:

- Angriawan, F., & Mudiantono, M. (2011). *Pengaruh Brand Image, Service Quality, Dan Perceived Value Terhadap Brand Loyalty Kartu Prabayar Gsm Pt. Indosat Di Semarang* [PhD Thesis, Universitas Diponegoro]. <http://eprints.undip.ac.id/33529/>
- Aramyan, L. H., Lansink, A. G. O., Van Der Vorst, J. G., & Van Kooten, O. (2007). Performance measurement in agri-food supply chains: A case study. *Supply Chain Management: An International Journal*, 12(4), 304–315.
- Aramyan, L., Ondersteijn, C. J., Van Kooten, O., & Lansink, A. O. (2006). Performance indicators in agri-food production chains. *Frontis*, 47–64.
- Atilgan, E., Akinci, S., & Aksoy, S. (2003). Mapping service quality in the tourism industry. *Managing Service Quality: An International Journal*, 13(5), 412–422.
- Baquero, A. (2022). Net promoter score (NPS) and customer satisfaction: Relationship and efficient management. *Sustainability*, 14(4), 2011.
- Bertan, S. (2020). Impact of restaurants in the development of gastronomic tourism. *International*

- Journal of Gastronomy and Food Science*, 21, 100232.
- Bitner, M. J., & Hubbert, A. R. (1994). Encounter satisfaction versus overall satisfaction versus quality: The customer's voice. *Service Quality: New Directions in Theory and Practice*, 72–94.
- Brandtner, P., Darbanian, F., Falatouri, T., & Udokwu, C. (2021). Impact of COVID-19 on the customer end of retail supply chains: A big data analysis of consumer satisfaction. *Sustainability*, 13(3), 1464.
- Brookes, R., Brodie, R., Lindgreen, A., Gummesson, E., Liljegren, G., & Feurst, O. (2000). Relationship marketing practice: Understanding the implications of an increased focus on financial accountability, loyalty and value management. *8th International Colloquium in Relationship Marketing*. Stockholm, Sweden.
- Carroll, G. R., & Swaminathan, A. (2000). Why the Microbrewery Movement? Organizational Dynamics of Resource Partitioning in the U.S. Brewing Industry. *American Journal of Sociology*, 106(3), 715–762. <https://doi.org/10.1086/318962>
- Cheong, F., & Law, R. (2022). Will Macau's restaurants survive or thrive after entering the O2O food delivery platform in the COVID-19 pandemic? *International Journal of Environmental Research and Public Health*, 19(9), 5100.
- Cho, Y. C. (2011). Analyzing online customer dissatisfaction toward perishable goods. *Journal of Business Research*, 64(11), 1245–1250.
- Chun, S.-H., & Nyam-Ochir, A. (2020). The effects of fast food restaurant attributes on customer satisfaction, revisit intention, and recommendation using DINESERV scale. *Sustainability*, 12(18), 7435.
- Colgate, M., & Hedge, R. (2001). An investigation into the switching process in retail banking services. *International Journal of Bank Marketing*, 19(5), 201–212.
- Daher, E. (2011). *The impact of brand awareness on consumer purchase intention: The mediating effect of perceived quality and brand loyalty*. <https://digitalgate.usek.edu.lb/xmlui/handle/1050/1259>
- East, R., Grandcolas, U., Riley, F. D., & Lomax, W. (2012). Reasons for Switching Service Providers. *Australasian Marketing Journal*, 20(2), 164–170. <https://doi.org/10.1016/j.ausmj.2011.12.001>
- Ghufran, M., Ali, S., Ariyesti, F. R., Nawaz, M. A., Aldieri, L., & Xiaobao, P. (2022). Impact of COVID-19 to customers switching intention in the food segments: The push, pull and mooring effects in consumer migration towards organic food. *Food Quality and Preference*, 99, 104561.
- Gibson, S., Hsu, M. K., & Zhou, X. (2022). Convenience stores in the digital age: A focus on the customer experience and revisit intentions. *Journal of Retailing and Consumer Services*, 68, 103014.
- Goić, M., Levenier, C., & Montoya, R. (2021). Drivers of customer satisfaction in the grocery retail industry: A longitudinal analysis across store formats. *Journal of Retailing and Consumer Services*, 60, 102505.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). Emotional contagion: Cambridge studies in emotion and social interaction. Cambridge, UK: Cambridge University Press. *Errors-in-Variables Regression Model When the Variances of the Measurement Errors Vary between the Observations*. *Statistics in Medicine*, 21, 1089–1101.
- Herrmann, A., Xia, L., Monroe, K. B., & Huber, F. (2007a). The influence of price fairness on customer satisfaction: An empirical test in the context of automobile purchases. *Journal of Product & Brand Management*, 16(1), 49–58.
- Herrmann, A., Xia, L., Monroe, K. B., & Huber, F. (2007b). The influence of price fairness on customer satisfaction: An empirical test in the context of automobile purchases. *Journal of Product & Brand Management*, 16(1), 49–58.
- Kar, A. K., Kumar, S., & Ilavarasan, P. V. (2021). Modelling the Service Experience Encounters

- Using User-Generated Content: A Text Mining Approach. *Global Journal of Flexible Systems Management*, 22(4), 267–288. <https://doi.org/10.1007/s40171-021-00279-5>
- Karagiannis, D., & Andrinou, M. (2021). The role of sustainable restaurant practices in city branding: The case of Athens. *Sustainability*, 13(4), 2271.
- Karamustafa, K., & Ülker, P. (2020). Impact of Tangible and Intangible Restaurant Attributes on Overall Experience: A Consumer Oriented Approach. *Journal of Hospitality Marketing & Management*, 29(4), 404–427. <https://doi.org/10.1080/19368623.2019.1653806>
- Kitsios, F., Kamariotou, M., Karanikolas, P., & Grigoroudis, E. (2021). Digital marketing platforms and customer satisfaction: Identifying eWOM using big data and text mining. *Applied Sciences*, 11(17), 8032.
- Kotler, P., & Armstrong, G. (2010). *Principles of marketing*. Pearson education.
- Lu, Y., Lu, Y., & Wang, B. (2012). Effects of dissatisfaction on customer repurchase decisions in e-commerce—an emotion-based perspective. *Journal of Electronic Commerce Research*, 13(3), 224.
- Luning, P. A., & Marcelis, W. J. (2006). A techno-managerial approach in food quality management research. *Trends in Food Science & Technology*, 17(7), 378–385.
- Madeira, A., Palrão, T., & Mendes, A. S. (2020). The impact of pandemic crisis on the restaurant business. *Sustainability*, 13(1), 40.
- Mahsyar, S., & Surapati, U. (2020). Effect of service quality and product quality on customer satisfaction and loyalty. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 4(01). <https://jurnal.stie-aas.ac.id/index.php/IJEBAR/article/view/950>
- Mehta, A. M., & Tariq, M. (2020). How brand image and perceived service quality affect customer loyalty through customer satisfaction. *Academy of Marketing Studies Journal*, 24(1), 1–10.
- Naser, K., Al Salem, A., & Nuseibeh, R. (2013). Customers awareness and satisfaction of Islamic banking products and services: Evidence from the kuwait finance house (note 1). *International Journal of Marketing Studies*, 5(6), 185.
- Pillai, S. G., Haldorai, K., Seo, W. S., & Kim, W. G. (2021). COVID-19 and hospitality 5.0: Redefining hospitality operations. *International Journal of Hospitality Management*, 94, 102869.
- Robinson, P. (2012). *Tourism: The key concepts*. Routledge. <https://www.taylorfrancis.com/books/mono/10.4324/9780203104910/tourism-key-concepts-peter-robinson>
- Román, S., & Ruiz, S. (2005). Relationship outcomes of perceived ethical sales behavior: The customer's perspective. *Journal of Business Research*, 58(4), 439–445.
- Serhan, M., & Serhan, C. (2019). The impact of food service attributes on customer satisfaction in a rural university campus environment. *International Journal of Food Science*, 2019. <https://downloads.hindawi.com/journals/ijfs/2019/2154548.pdf?>
- Song, N. H., Wuryaningrat, N. F., Kee, D. M. H., San San, A. L., & Kawung, R. (2022). Manpower and Service Quality of Fast-Food Restaurant: KFC Restaurant. *Journal of The Community Development in Asia*, 5(1), 54–66.
- Taylor, S. A., & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70(2), 163–178.
- Van der Spiegel, M. (2004). *Measuring effectiveness of food quality management*. Wageningen University and Research. <https://search.proquest.com/openview/ffbfb906729304222ace97ebd2ce09f4/1?pq-origsite=gscholar&cbl=2026366&diss=y>
- Van der Vorst, J., Beulens, A., & van Beek, P. (2005). Innovations in logistics and ICT in food supply chain networks. In *Innovation in agri-food systems* (pp. 245–292). Wageningen

- Academic. <https://brill.com/downloadpdf/book/9789086866663/BP000011.pdf>
- Van der Vorst, J. G., Beulens, A. J., & van Beek, P. (2000). Modelling and simulating multi-echelon food systems. *European Journal of Operational Research*, *122*(2), 354–366.
- Van Kleef, E., Van Trijp, H. C., Luning, P., & Jongen, W. M. (2002). Consumer-oriented functional food development: How well do functional disciplines reflect the ‘voice of the consumer’? *Trends in Food Science & Technology*, *13*(3), 93–101.
- Wicaksono, T., & Illés, C. B. (2022). From resilience to satisfaction: Defining supply chain solutions for agri-food SMEs through quality approach. *PLoS One*, *17*(2), e0263393.
- Yang, F. X., Li, X., Lau, V. M.-C., & Zhu, V. Z. (2021). To survive or to thrive? China’s luxury hotel restaurants entering O2O food delivery platforms amid the COVID-19 crisis. *International Journal of Hospitality Management*, *94*, 102855.
- Yu, C. J., Wu, L., Chiao, Y., & Tai, H. (2005). Perceived quality, customer satisfaction, and customer loyalty: The case of Lexus in Taiwan. *Total Quality Management & Business Excellence*, *16*(6), 707–719. <https://doi.org/10.1080/14783360500077393>