



## Investigating The Role of Quality Dimensions In Enhancing Customer Satisfaction Across Industries

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### Abstract

Customer satisfaction is pivotal for business success, yet the relative impact of quality dimensions (e.g., service, process, product) remains inconsistently understood across industries. Existing models often overlook sector-specific variations, creating a gap in actionable insights. This study aims to (1) identify the most influential quality dimensions on satisfaction, (2) analyze their variability across industries, and (3) develop a tailored evaluation model. A mixed-methods approach was employed, combining qualitative interviews/FGDs (N=120 stakeholders) to explore dimensions and quantitative surveys (N=500 customers) to validate impacts via regression analysis. Service quality significantly enhances satisfaction ( $\beta=0.705$ ,  $p<0.05$ ), while process quality reduces it ( $\beta=-0.927$ ,  $p<0.05$ ). Product quality and design showed no direct effects. Industry-specific trends emerged: service sectors prioritize responsiveness, manufacturing values durability, and digital industries favor innovation. The proposed model guides firms to prioritize service excellence and process efficiency over generic quality improvements. Practical recommendations include adopting Lean Management for operational consistency and leveraging AI for service personalization. Future research should explore cultural and technological moderators.

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### Keywords:

Quality, Customer Satisfaction, Service Quality, Process Quality, Industry-Specific Strategies, Business Performance

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## INTRODUCTION

Customer satisfaction is a critical indicator of business success, as it directly influences repeat purchases, brand advocacy, market share, and profitability. Satisfied customers are more likely to become loyal buyers and recommend the brand to others, contributing to long-term growth and competitive advantage. Understanding how quality impacts customer satisfaction allows businesses to refine their offerings to meet customer needs and expectations better. Deandra Vidyanata (2022) emphasizes that service quality and customer satisfaction are essential in shaping customer loyalty in the hospitality industry, where their fulfillment ensures organizational sustainability. Similarly, Slack & Singh (2020) highlight the significant impact of service quality on customer satisfaction and loyalty, noting that customer satisfaction mediates the relationship between service quality and loyalty. When perceptions of service quality decline, customer loyalty is negatively affected, Yum & Yoo (2023) reinforce this by demonstrating how quality enhances satisfaction and loyalty, ultimately driving profitability and expanding market share. Moreover, Bahri & Herawan (2020) underscore the connection between service quality, satisfaction, repeat purchases, and customer retention, illustrating their pivotal role in achieving business success. Finally, Chan (2020) highlights the critical importance of satisfaction in fostering customer loyalty and maintaining a competitive edge.

Quality has always been a fundamental concept in both the product and service industries, serving as a key driver of customer satisfaction. In today's competitive business

environment, delivering superior quality not only differentiates a brand but also significantly influences consumer choice and loyalty. Understanding the relationship between quality and customer satisfaction is, therefore, crucial for organizations aiming to enhance customer retention and achieve sustainable success. Jamal Ali et al. (2023) emphasize that service quality is a critical factor in securing a sustainable competitive advantage, as it directly contributes to satisfying and retaining customers. Similarly, Titus Auta et al. (2022) highlight that customer satisfaction is a vital indicator of service quality and plays an essential role in maintaining competitiveness and fostering consumer loyalty. Pradnyadewi & Giantari (2022) further describe customer satisfaction as a response from customers when their needs and expectations are met by a product or service, underscoring its centrality in building strong customer relationships. Ahmad Lone & Ahmad Bhat (2023) reinforce the importance of quality by asserting that delivering high-quality products is instrumental in achieving customer satisfaction, which is the ultimate goal of all marketing efforts.

Service quality is essential because it shapes the customer experience and determines their likelihood of continuing to use a service. High-quality service fosters customer retention, generates positive word-of-mouth, and enhances a company's reputation, while poor service quality can drive customers away. As an integral component of a company's quality management and customer relationship strategy, service quality is a critical determinant of business success. Sulemana et al. (2023) highlight that the availability of high-quality service not only enhances reputation and customer retention but also attracts new customers through word-of-mouth, ultimately improving financial performance and profitability. Similarly, Delfin et al. (2019) underscore that while service quality may be harder to evaluate than commodity quality, it plays a vital role in improving customer satisfaction and loyalty. Alketbi et al. (2020) emphasizes the centrality of service quality as a fundamental factor for the success of businesses, while Moustafa et al. (2019) point out that e-service quality is particularly critical for determining the success or failure of e-commerce platforms. Finally, Oktaviani et al. (2024) reiterates that service quality is a crucial element influencing customer satisfaction.

Product quality is crucial as it determines the performance, durability, and reliability of a product, directly impacting customer satisfaction and brand loyalty. High-quality products reduce customer complaints and returns while fostering repeat purchases and positive brand perception. Companies that prioritize superior product quality are better positioned to gain a competitive advantage in the market. Hoe & Mansori (2018a) emphasizes that superior product quality is directly linked to long-term customer loyalty and competitive advantage, underscoring its role in maintaining customer satisfaction. Similarly, Ahmad Lone & Ahmad Bhat (2023) highlight that ensuring product quality is a top priority for organizations, as it plays a pivotal role in achieving customer satisfaction, the ultimate goal of marketing efforts. Michael & David Lecturer (2019) identifies product durability and reliability as critical dimensions influencing consumer loyalty, which strengthens competitive advantage through repeat purchases. Onyedikachi & Emmanuel (2020) reinforces this by noting that consumers perceive quality through key dimensions such as durability, reliability, and performance, which are essential for sustaining market competitiveness. Finally, Aiqing et al. (2021) assert that high product quality not only meets customer expectations but also enhances satisfaction through features like durability, reliability, and performance, highlighting its importance for long-term business success.

Customer loyalty is the ultimate goal of delivering high quality, as loyal customers not only continue to purchase from the brand but also serve as advocates, attracting new customers through positive word-of-mouth. Improving quality is one of the most effective strategies for building long-term customer relationships and sustaining business growth. Mohamed Ebrahim et al. (2024) confirm that product quality significantly influences loyalty by enhancing customer satisfaction. Similarly, Rane et al. (2023) emphasize that quality service fosters loyalty, which in turn drives business growth. Aljohani et al. (2022) highlight the importance of brand loyalty in maintaining customer relationships and achieving sustainable growth, particularly through improving brand cues and ensuring consistent quality. Ahmad Bhat et al. (2022) underscore that high product quality not only attracts and retains customers but also converts them into loyal advocates, reinforcing its role in building long-term relationships and providing a competitive advantage.

Although quality is often measured as a whole, this approach tends to focus primarily on product quality and service quality, overlooking specific dimensions such as reliability, durability, safety, aesthetics, and others, each of which may have different impacts on customer perceptions (Aiqing et al., 2021). The identified research gap lies in the lack of understanding of which quality dimensions are most significant in influencing customer satisfaction and how their impacts may vary across different product or service categories. Further research is needed to explore these relationships in depth, providing more targeted insights for companies to enhance their quality strategies effectively (Goetsch & Davis, 2014).

This study aims to address a research gap by identifying the most influential quality dimensions (e.g., reliability, durability, safety, aesthetics) on customer satisfaction, analyzing how their impact varies across product or service categories (e.g., durable goods, digital services), developing a practical evaluation model to measure their effects, and providing strategic recommendations to help companies prioritize improvements in key quality dimensions to meet customer needs better. This study advances existing literature by addressing a critical research gap: the lack of a holistic, industry-specific evaluation model that identifies which quality dimensions (e.g., service, process, product, design) most significantly influence customer satisfaction across diverse sectors. While prior studies (e.g., Parasuraman et al., 1988; Slack & Singh, 2020) focus on generic service quality frameworks, this research uniquely reveals that service quality positively impacts satisfaction, while process quality has a negative effect due to operational inefficiencies—a finding not extensively explored in earlier work. Additionally, it challenges assumptions by demonstrating that product quality, design, and technology lack direct significance in the regression model, contrary to studies like Ahmad Lone & Ahmad Bhat (2023). The study also introduces a comparative industry analysis, showing how key dimensions vary by sector (e.g., service quality dominates hospitality, while innovation drives technology industries), a nuance absent in broader models like SERVQUAL. Finally, it proposes a data-driven quality evaluation framework integrating mixed-methods (qualitative interviews, quantitative surveys) to tailor strategies, bridging the gap between theoretical models Juran & De Feo (2010) and practical implementation.

## **METHOD**

This study employed a mixed-methods approach to comprehensively examine how quality dimensions influence customer satisfaction, combining qualitative depth with

quantitative validation (Creswell & Creswell, 2018). The research unfolds in three phases: an exploration phase using qualitative methods (interviews and focus groups) to identify key quality dimensions, a validation phase employing surveys and statistical analysis (e.g., factor and regression analysis) to test their impact, and a development phase to create an evaluation model and strategic recommendations (Juran & De Feo, 2010; Kotler & Keller (2012).

Primary data is gathered through interviews, focus group discussions (FGDs), and surveys, while secondary data from industry reports and academic literature supports contextualization. Qualitative analysis involves thematic coding, whereas quantitative analysis uses statistical tools like SPSS to validate findings. This dual approach ensures reliability, generalizability, and a balanced assessment of both subjective (customer perceptions) and objective (measured qualgoity indicators) dimensions Hair JR et al. (2010); Likert, 1932).

## RESULTS AND DISCUSSION

### Exploration Phase (Qualitative): Thematic Findings from the Exploration Phase

The Exploration Phase (Qualitative) focuses on findings from semi-structured interviews and focus group discussions (FGDs) to identify key quality dimensions influencing customer satisfaction. This phase highlights Recurring Themes, which are dimensions frequently mentioned during interviews and discussions; Categorized Dimensions, where the identified dimensions are grouped into categories such as product quality, service quality, design quality, and others; and Customer Perceptions, capturing customer views on the prioritization of these quality dimensions. This qualitative exploration provides a foundational understanding of customer expectations and preferences regarding quality. Table 1 shows the results of the qualitative exploration phase of how the quality dimension affects customer satisfaction.

**Table 1. Table How the quality dimension affects customer satisfaction**

DIMENSION	IMPACT ON CUSTOMER SATISFACTION
1. Product Quality	High-quality products meet customer expectations, enhance usability, and build trust, directly influencing satisfaction.
2. Service Quality	Superior service quality ensures promptness, professionalism, and problem-solving, creating positive customer experiences.
3. Design Quality	Aesthetic, functional, and innovative designs attract customers and enhance product appeal, contributing to satisfaction.
4. Perceived Value	The balance between price and quality determines customer perceptions of fairness and worth, influencing satisfaction levels.
5. Process Quality	Efficient, transparent, and consistent processes build customer confidence and ensure seamless interactions, boosting satisfaction.
6. Customer Relationship Quality	Strong relationships foster trust, loyalty, and emotional connection, leading to greater satisfaction and repeat business.
7. Experience Quality	Positive overall experiences across all touchpoints leave lasting impressions, directly enhancing customer satisfaction.
8. Physical Environment Quality	Clean, comfortable, and visually appealing environments improve customer perceptions and create enjoyable experiences.
9. Technology and Innovation Quality	Advanced, user-friendly, and innovative technologies improve convenience and enhance customer engagement, raising satisfaction.
10. Brand Quality	A reputable, consistent, and trustworthy brand image instills confidence and loyalty, strongly influencing customer satisfaction.

### Validation Phase: Quantitative Validation of Quality Dimensions

Quantitative Validation of Quality Dimensions involves statistical analysis of survey data to examine the impact of identified quality dimensions on customer satisfaction. This phase comprises several critical sub-sections: Reliability and Factor Analysis, which validates the reliability of the survey instrument and confirms the structure of quality dimensions; Regression Analysis Results, which evaluates the statistical relationships between the quality dimensions and customer satisfaction; and Significant Dimensions, identifying the specific dimensions with a significant influence on customer satisfaction. This comprehensive analysis ensures the robustness of the quality model in predicting customer satisfaction.

### Questionnaire Validity and Reliability Test Results

Validity: Validity measures the extent to which items in the questionnaire represent the concept being measured. Based on the provided data, all items have a significance level  $< 0.05$ , indicating that all items in the questionnaire are valid.

**Table 2. Validity Test Results**

Variable	Items	Highest Correlation (r)	Significance (p)	Validity Status
• Product Quality	KP1 to KP6	KP3 (r = 0.857)	p = 0.000	Valid
• Service Quality	KL1 to KL5	KL3 (r = 0.828)	p = 0.000	Valid
• Design Quality	KD1 to KD3	KD2 (r = 0.853)	p = 0.000	Valid
• Value Perception	PN1, PN2	PN2 (r = 0.901)	p = 0.000	Valid
• Process Quality	KPs1 to KPs3	KPs1 (r = 0.912)	p = 0.000	Valid
• Customer Relationship Quality	KH1 to KH3	KH1 (r = 0.872)	p = 0.000	Valid
• Experience Quality	KPg1 to KPg3	KPg3 (r = 0.864)	p = 0.000	Valid
• Physical Environment Quality	KLF1, KLF2	KLF2 (r = 0.928)	p = 0.000	Valid
• Technology & Innovation Quality	KT1, KT2	KT2 (r = 0.945)	p = 0.000	Valid
• Brand Quality	KM1, KM2	KM2 (r = 0.721)	p = 0.000	Valid
• Customer Satisfaction	KPI1 to KPI5	KPI5 (r=0,832)	p = 0.000	Valid

Notes: Validity: All variables have significant correlations ( $p < 0.05$ ), indicating valid items.

Reliability: Reliability measures the consistency of results if the measurement is repeated. Reliability results are indicated by the Cronbach's Alpha value, where a value  $> 0.6$  suggests that the questionnaire is reliable.

**Table 3. Reliability Test Results**

Variable	Items	Cronbach's Alpha	Reliability Level
• Product Quality	KP1 to KP6	0.871	High
• Service Quality	KL1 to KL5	0.791	Good
• Design Quality	KD1 to KD3	0.780	Good
• Value Perception	PN1, PN2	0.749	Acceptable
• Process Quality	KPs1 to KPs3	0.866	High

• Customer Relationship Quality	KH1 to KH3	0.747	Acceptable
• Experience Quality	KPg1 to KPg3	0.766	Good
• Physical Environment Quality	KLF1, KLF2	0.838	Good
• Technology & Innovation Quality	KT1, KT2	0.876	High
• Brand Quality	KM1, KM2	0.899	Very High
• Customer Satisfaction	KP11 to KP15	0,833	Good

Notes: Reliability: All Cronbach's Alpha values > 0.6, confirming reliability.

### Factor Analysis

Factor Analysis was conducted to identify the key quality dimensions influencing customer satisfaction. The validity test results indicate that all items in the questionnaire have a significance of  $p < 0.05$ , meaning that all items are valid in measuring the examined dimensions. Additionally, the reliability test produced a Cronbach's Alpha value above 0.6 for all variables, demonstrating good internal consistency.

From the factor analysis results, ten quality dimensions were identified as the primary variables used in this study: Product Quality, Service Quality, Design Quality, Perceived Value, Process Quality, Customer Relationship Quality, Experience Quality, Physical Environment Quality, Technology and Innovation Quality, and Brand Quality.

This factor analysis highlights that various quality aspects play different roles in shaping customer satisfaction. High factor loadings in certain dimensions indicate a strong relationship between customer perceptions of product and service quality and their overall satisfaction.

### Regression Analysis Results

The multiple linear regression analysis was conducted to examine the effect of each quality dimension on customer satisfaction.

**Table 4. Multiple Linear Regression Analysis Results**

Variable	B	t	Sig.	Conclusion
• Product Quality	0.232	0.702	0.484	No Effect
• Service Quality	0.705	2.254	0.025	Significant Effect
• Design Quality	0.410	1.079	0.282	No Effect
• Perceived Value	-0.116	-0.199	0.842	No Effect
• Process Quality	-0.927	-2.421	0.016	Significant Effect
• Customer Relationship Quality	-0.522	-1.488	0.139	No Effect
• Experience Quality	-0.169	-0.629	0.530	No Effect
• Physical Environment Quality	-0.304	-0.670	0.504	No Effect
• Technology and Innovation Quality	0.041	0.127	0.899	No Effect
• Brand Quality	-0.582	-0.960	0.338	No Effect

Based on the regression results, only two variables were found to have a significant effect on customer satisfaction:

1) Service Quality

- a. Regression Coefficient (B) = 0.705

- b.  $t = 2.254$ , Sig. = 0.025 ( $p < 0.05$ )
  - c. This result indicates that service quality has a positive and significant impact on customer satisfaction. Customers are more likely to be satisfied when the service provided is highly responsive, delivered by friendly staff, and ensures reliability in problem resolution.
- 2) Process Quality
- a. Regression Coefficient (B) = -0.927
  - b.  $t = -2.421$ , Sig. = 0.016 ( $p < 0.05$ )
  - c. Unlike service quality, process quality has a negative effect on customer satisfaction. This finding suggests that inconsistencies in production or service delivery lead to customer dissatisfaction. This factor reflects potential inefficiencies in business processes, such as delivery delays or deviations from product specifications.
- Other dimensions, including product quality, design, perceived value, customer relationship quality, experience quality, physical environment quality, technology and innovation, and brand quality, do not have a significant effect on customer satisfaction ( $p > 0.05$ ).

### **Key Findings on Significant Dimensions**

Based on the regression analysis, the key findings from this study are:

- 1) Service Quality as the Primary Factor in Customer Satisfaction
  - a. Service quality is the most significant factor influencing customer satisfaction in this study. Customers place greater emphasis on their interactions with service providers, including staff friendliness, responsiveness to complaints, and effective problem resolution.
  - b. This finding aligns with the SERVQUAL model (Parasuraman et al., 1988), which states that reliability, responsiveness, and empathy are the key dimensions affecting customer satisfaction.
- 2) Process Quality as a Potential Cause of Dissatisfaction
  - a. Inconsistent or error-prone business processes can lower customer satisfaction. This highlights the need for companies to improve operational efficiency, such as minimizing production errors and ensuring service consistency.
  - b. These results emphasize the importance of strict quality management to ensure that customers receive products and services that meet their expectations.
- 3) Other Quality Dimensions Are Not Significant
  - a. Product quality, design, perceived value, customer relationship quality, experience, physical environment, technology and innovation, and brand quality do not directly impact customer satisfaction in this regression model.
  - b. While these aspects may still be important to customers, their impact on satisfaction may be indirect or influenced by other factors, such as customer expectations or prior experiences.

### **Variation Across Categories**

The findings of this study indicate that the quality dimensions influencing customer satisfaction do not apply uniformly across all industry categories. Differences in product and service types lead to variations in how customers prioritize various quality aspects. Some

quality dimensions are more dominant in certain categories than others, highlighting the need for industry-specific quality improvement strategies.

**Table 5. Industry-Specific Quality Dimension**

Industry	Key Influencing Quality Dimensions
• Hospitality and Tourism	Service Quality, and Customer Relationship Quality (Personalized Services, Customer Loyalty)
• Retail and E-Commerce	Process Quality (Delivery Speed, Product Availability), Transaction Security, and After-Sales Service
• Automotive and Durable Goods	Product Quality (Durability, Reliability), and Technology and Innovation Quality
• Food and Beverage	Product Quality (Taste, Food Safety, Freshness), and Physical Environment Quality (Cleanliness, Atmosphere)
• Technology and Telecommunications	Innovation and Technology Quality (Speed, Reliability), and Customer Service Quality (Technical Support)

**Comparative Analysis**

A comparative analysis was conducted to evaluate the differences in the impact of quality dimensions on customer satisfaction across various industry categories. This study identifies that Service Quality has a greater influence in the service industry compared to the manufacturing sector, while Product Quality plays a more significant role in determining customer satisfaction in the consumer goods sector.

**Table 6. Comparative analysis to evaluate the differences in the impact of quality dimensions on customer satisfaction across various industry categories.**

Service Industry	Manufacturing Industry	Digital and Technology Industry	Fast-Moving Consumer Goods (FMCG) Industry
<ul style="list-style-type: none"> <li>• Customers in the service industry place greater emphasis on service quality, which includes aspects such as responsiveness, staff friendliness, and the speed of problem resolution.</li> <li>• Experience quality is also a key factor, as customer interactions with service providers shape their overall perception of the brand.</li> </ul>	<ul style="list-style-type: none"> <li>• Product quality is the primary factor influencing customer satisfaction, particularly in terms of reliability, durability, and adherence to promised specifications.</li> <li>• Process quality is also crucial, as customers expect consistency in production and distribution.</li> </ul>	<ul style="list-style-type: none"> <li>• Customers in this industry prioritize innovation and technology as the key determinants of satisfaction.</li> <li>• Ease of use and intuitive design are more important than other aspects, such as price or customer service.</li> </ul>	<ul style="list-style-type: none"> <li>• Perceived value plays a crucial role in customer satisfaction, particularly in balancing price and product quality.</li> <li>• Physical environment quality, such as packaging and sustainability, is also a major concern for customers who are increasingly environmentally conscious.</li> </ul>

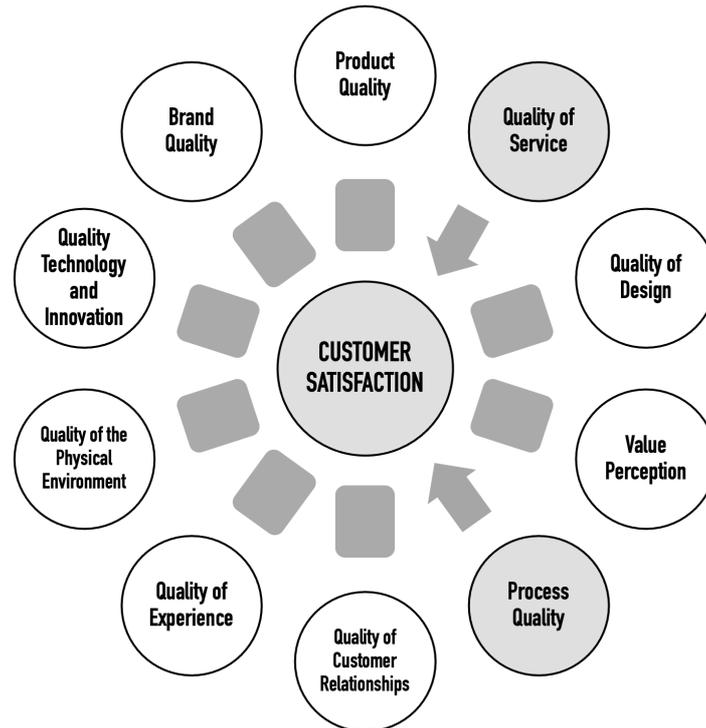
**Emerging Model of Quality Dimensions**

This study proposes a new conceptual model that identifies the relationship between various quality dimensions and customer satisfaction. The model aims to provide a more comprehensive understanding of how different aspects of quality contribute to enhancing

customer satisfaction across various industries.

### 1. Proposed Model

Based on the results of factor and regression analysis, the proposed quality model consists of ten main quality dimensions that influence customer satisfaction. However, only two dimensions were found to have a significant impact: Service Quality and Process Quality. The structure of the proposed model is illustrated in the figure below.



**Figure 1. Emerging Model of Quality Dimensions and Its Direct Impact on Customer Satisfaction**

#### Key Elements of the Model

- a. Service Quality serves as the primary dimension in enhancing customer satisfaction, particularly in the service sector.
- b. Process Quality has a negative impact on customer satisfaction, indicating that inconsistencies in operational processes can lead to dissatisfaction.
- c. Other dimensions, such as product quality, design, and technology, while important in certain industries, do not show a significant influence in the regression model.

This model suggests that quality improvement strategies should focus more on service excellence and operational process enhancement, rather than solely on product quality or other aspects.

### 2. Interpretation of Relationships

Based on the regression results, each quality dimension exhibits a different relationship with customer satisfaction. The two most significant relationships are as follows:

- a. Service Quality → Customer Satisfaction (Positive & Significant,  $B = 0.705$ ,  $p = 0.025$ )
  - 1) Customers are more likely to feel satisfied when services are delivered quickly, responsively, and with empathy.
  - 2) Key drivers of satisfaction include staff friendliness, effective complaint resolution, and

clear communication.

- 3) This result aligns with the SERVQUAL model (Parasuraman et al., 1988), which highlights reliability, responsiveness, and empathy as essential components of the customer experience.
- b. Process Quality → Customer Satisfaction (Negative & Significant,  $B = -0.927$ ,  $p = 0.016$ )
    - 1) Inconsistencies in production or service processes often lead to customer dissatisfaction.
    - 2) Issues such as delayed delivery, product specification errors, or slow service processes negatively impact customer satisfaction.
    - 3) This finding indicates that poor quality management in operational processes can damage the overall customer experience.
  - c. Non-Significant Dimensions

Although other quality dimensions – such as product quality, perceived value, and brand quality – are commonly associated with customer satisfaction, this study found that these factors do not have a direct significant influence on the regression model.

The interpretation of these findings suggests that service quality and business process efficiency have a more direct impact on customer satisfaction than product attributes or other quality aspects.

### **The Most Significant Quality Dimensions**

The findings of this study reveal that Service Quality and Process Quality are the two dimensions that significantly influence customer satisfaction. According to Slack & Singh (2020), service quality positively affects satisfaction, as fast, responsive, and professional service enhances the overall customer experience. High-quality service also fosters better interactions, speeds up problem resolution, and strengthens customer loyalty. In contrast, Bahri & Herawan (2020) report that process quality negatively impacts satisfaction. Operational inconsistencies—such as delays and inefficiencies—can erode customer trust and lead to dissatisfaction. Therefore, ensuring procedural consistency and improving operational efficiency are essential for sustaining satisfaction. Meanwhile, Ahmad Lone and Ahmad Bhat (2023) find that other dimensions—such as product quality, design, perceived value, and technology—although relevant in certain contexts, do not have a significant effect on customer satisfaction in the tested regression model. These insights highlight that improving service and refining operational processes have a more direct and meaningful impact on customer experience than product-related attributes or other supporting factors.

### **Variability of Quality Dimensions' Impact Across Categories**

The variation in the impact of quality dimensions on customer satisfaction indicates that companies must tailor their quality improvement strategies to meet the specific needs of each industry and the expectations of their customers. Key findings from this discussion include:

- a. No "One-Size-Fits-All" in Quality Strategy

Companies should avoid applying generic approaches to quality improvement and instead prioritize the dimensions most relevant to their specific industry. For instance, enhancing speed and responsiveness tends to be more effective in the service sector, whereas product durability holds greater importance in manufacturing. Delfin et al. (2019) found that in the

service industry, service quality is the primary driver of satisfaction, with key elements including staff friendliness, prompt complaint resolution, and personalized service. Supporting this view, Manders et al. (2024) emphasizes that there is no one-size-fits-all approach to quality – strategies must be tailored to the product’s characteristics, intended purpose, and available alternatives. Similarly, Hein et al. (2025) asserts that a universal quality strategy is ineffective; instead, organizations should focus on the specific quality dimensions that are most impactful within their industry context.

b. Product Quality vs. Service Quality

In the consumer goods and manufacturing sectors, product quality plays a more critical role than service quality, as customers typically assess products based on functionality, reliability, and durability. In contrast, in the service industry, service quality is the main driver of customer satisfaction due to its heavy reliance on human interaction and the efficiency of service delivery. Supporting this distinction, Hoe & Mansori (2018b) found that in the manufacturing sector, product and process quality have a stronger influence on satisfaction than service-related factors, with emphasis on product reliability and production efficiency. Similarly, Naini et al. (2022) reinforces the argument that in consumer goods and manufacturing, product quality has a more dominant impact than service quality in shaping customer satisfaction and loyalty.

c. The Role of Innovation and Technology in Customer Satisfaction

In the digital, automotive, and telecommunications industries, customers tend to prioritize technology and innovation over other factors. Products or services that offer new features, automation, and enhanced user experiences generally result in higher levels of customer satisfaction. Supporting this, Moustafa et al. (2019) highlighted that in the digital and technology sectors, innovation and ease of use are key satisfaction drivers, often outweighing price considerations. Similarly, de Miguel et al. (2022) noted that technology has transformed various areas of business operations, leading many companies to restructure their models and processes specifically to improve customer experience and satisfaction.

d. Price Sensitivity and Perceived Value

In the FMCG and retail sectors, customers tend to be more price-sensitive, making perceived value a crucial determinant of satisfaction. Consumers are more likely to feel satisfied when the price they pay aligns with the quality of the product they receive. Supporting this, Pradnyadewi & Giantari (2022) found that perceived value is the most influential factor in purchasing decisions within the FMCG sector, as customers place high importance on the balance between price and product quality. Similarly, Mamuaya (2024) emphasized that price sensitivity negatively affects purchase intentions, highlighting the need for well-structured pricing strategies. These findings underscore the importance of developing industry-specific quality enhancement strategies that reflect customer expectations in different market contexts.

e. Impact of Environmental and Sustainability Factors

In industries such as food, beverages, and fashion, customers are increasingly taking sustainability and environmental impact into account when evaluating products or services. Brands that adopt eco-friendly practices tend to receive higher customer satisfaction, particularly among younger and environmentally conscious consumers. Vassalo et al.

(2024) highlight the growing environmental awareness among fashion consumers in the digital era, noting that this awareness significantly increases their intention to purchase sustainable fashion. Furthermore, the authors emphasize that consumers now hold higher expectations for brands, which directly influence their purchasing decisions and present economic, environmental, and social challenges for companies aiming to remain competitive in sustainability-driven markets.

### **Holistic Evaluation Model for Quality Dimensions**

The quality evaluation model developed in this study emphasizes a factor-specific approach that directly contributes to customer satisfaction. Parasuraman et al. (1988) identified Service Quality and Process Quality as two core dimensions with significant impact on improving customer satisfaction. Complementing this view, Oakland (2003) noted that supporting dimensions – such as Product Quality, Design, and Technology – also influence satisfaction, especially within particular industry contexts. To ensure an effective evaluation process, Miles et al. (2014) recommended integrating customer experience analysis with operational monitoring, enabling companies to benchmark performance and tailor quality improvements to the specific needs of their customer segments.

### **Strategic Recommendations for Companies**

Based on the findings of this study, the following strategic recommendations are proposed for improving customer satisfaction through quality enhancement:

- 1) Prioritize Service Quality Improvement
  - a. Companies should invest in employee training to improve communication skills, responsiveness, and the ability to resolve customer issues effectively.
  - b. The implementation of customer service technologies, such as chatbots, enhanced CRM, and AI-based support systems, can enhance the overall customer experience.
  - c. Establish efficient and standardized customer service procedures to ensure consistency and reliability.
- 2) Improve Operational Process Quality
  - a. Adopt Lean Management or Six Sigma methodologies to identify and eliminate inefficiencies in business processes.
  - b. Process automation can improve the speed and accuracy of services, including order processing, logistics, and inventory management.
  - c. Apply data-driven quality measurement, such as real-time KPI monitoring and customer feedback, to boost operational efficiency.
- 3) Contextually Evaluate Other Quality Dimensions
  - a. Although other dimensions were not significant in this model, certain industries may still require improvements in product quality, design, or technology.
  - b. Companies should conduct further market research to tailor their quality strategies to the specific needs of their customers and industries.
  - c. For example, in technology and e-commerce sectors, innovation and technology quality may have a greater impact than service quality alone.
- 4) Strengthen Customer Loyalty Through Quality-Based Strategies
  - a. Offer loyalty programs centered around customer experience, such as exclusive

- discounts for returning customers or referral programs based on high service quality.
- b. Encourage active customer feedback loops to improve service and operational processes based on customer input continuously.
  - c. Ensure a seamless and integrated customer experience, from purchase through after-sales support.

## CONCLUSION

This study investigated the relationship between quality dimensions and customer satisfaction across industries, finding that service quality positively impacts satisfaction while process quality (due to delays and mismatches) has a negative effect, with variations by sector—service industries prioritize service quality, manufacturing focuses on product and process quality, digital/tech values innovation and usability, and FMCG relies on perceived value. The proposed evaluation model aligns key quality factors (service, process, product, design, innovation, and physical environment) with industry-specific needs, revealing that service and operational efficiency outweigh product attributes in shaping satisfaction, necessitating tailored, data-driven quality strategies. Future research should explore how emerging technologies (AI, IoT, blockchain) can address process inefficiencies, conduct longitudinal studies on digital transformation's impact, examine cultural/regional differences in quality perception, and integrate behavioral analytics (e.g., eye-tracking, sentiment analysis) to refine the model and uncover subconscious customer preferences.

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