







“Service quality dimensions as drivers of customer satisfaction in the telecommunications market: Evidence from an emerging economy”

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SERVICE QUALITY DIMENSIONS AS DRIVERS OF CUSTOMER SATISFACTION IN THE TELECOMMUNICATIONS MARKET: EVIDENCE FROM AN EMERGING ECONOMY

Abstract

Despite recent technological improvements in telecommunications services in emerging economies, many users still feel that the service does not meet their expectations. The main objective of this study is to analyze how the five dimensions of service quality influence customer satisfaction among users of a large telecommunications company operating in Lima, Peru. The research employed a quantitative explanatory design and surveyed 247 active customers with ongoing service contracts, using an instrument based on SERVPERF, which demonstrated strong validity and reliability indicators (KMO = 0.833; Cronbach's α = 0.971). Data were analyzed using SPSS, applying an ordinal logistic regression model to evaluate both the general hypothesis and the individual effects of each dimension. The results indicate that all dimensions contribute significantly to explaining customer satisfaction, with reliability and responsiveness standing out as the most influential factors. The model demonstrated a good fit, explaining 57% of the variance in customer satisfaction (Nagelkerke's R^2 = 0.569). These findings suggest that improving the different dimensions of service quality is crucial to increasing satisfaction levels, strengthening user trust, and maintaining competitiveness. From a marketing perspective, this study contributes to the service marketing literature by explaining how perceived service quality dimensions shape customer satisfaction in the telecommunications market of an emerging economy, offering empirical insights that support customer experience management and value creation strategies.

Keywords

service quality, customer satisfaction, ordinal logistic regression, telecommunications, SERVPERF, Peru

JEL Classification

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INTRODUCTION

In highly competitive service markets, customer satisfaction has become a central objective of marketing strategy, particularly in industries characterized by high switching costs and limited differentiation, such as telecommunications (Wattoo et al., 2025). In this context, service quality plays a decisive role in shaping customer perceptions, influencing post purchase evaluations, and strengthening long-term relationships between companies and users. As consumers increasingly compare service experiences across providers, understanding how specific quality dimensions affect satisfaction becomes a key concern for service marketers seeking to enhance customer experience and sustain competitive advantage.

These difficulties affect not only customer satisfaction but also the long-term sustainability of companies operating in an increasingly competitive market. Users often report issues such as poor cus-

customer service, lack of clear information, and slow responses to incidents, all of which contribute to negative perceptions of service quality (Naz et al., 2021; Melinda et al., 2023). From a marketing standpoint, customer dissatisfaction represents not only an operational risk but also a strategic threat, as negative service experiences directly affect brand image, customer loyalty, and repurchase intentions. In service industries, dissatisfaction often translates into switching behavior, negative word of mouth, and declining customer lifetime value. Therefore, analyzing satisfaction drivers is essential for designing marketing strategies focused on retention, relationship management, and perceived value enhancement.

Despite the recognized importance of service quality in marketing research, there is still limited empirical understanding of how its individual dimensions influence customer satisfaction in telecommunications services, particularly in emerging economies. This gap is especially relevant in the Peruvian context, where rapid technological expansion has not always been accompanied by consistent improvements in perceived service quality. As a result, customers continue to report heterogeneous satisfaction levels, suggesting the need for a more detailed analysis of the factors that shape their evaluations. Addressing this issue is essential for advancing knowledge on customer behavior in service markets and for supporting more effective managerial decision-making.

1. LITERATURE REVIEW AND HYPOTHESES

In market research, service quality is recognized as a fundamental antecedent of customer satisfaction and a critical component of customer experience management. Marketing theories emphasize that customers form satisfaction judgments by evaluating service performance across multiple dimensions, which together influence perceived value, loyalty intentions, and relationship continuity. Consequently, service quality measurement models have become essential tools in marketing analytics for understanding consumer evaluations in service based markets. Continuous improvement principles, originally proposed in quality management literature, have been increasingly incorporated into service marketing frameworks, as they support consistent value delivery and reinforce positive customer perceptions over time (Agu, 2021; Cordova-Buiza et al., 2022).

This view highlights that quality is dynamic and constantly evolving, supported by methods such as the PDCA cycle (Plan-Do-Check-Act), which allows organizations to evaluate and improve their procedures on a continuous basis (Ali et al., 2016). In this context, several authors note that service quality is the responsibility of the entire organization, not just production areas or customer service teams (Misztal & Ratajszczak, 2025).

Other studies point out that quality relies on implementing strategic actions that improve process efficiency (Ramos-Farroñan et al., 2020), and further evidence indicates that high-quality service contributes directly to customer loyalty and business profitability (Yum & Yoo, 2023). Customer satisfaction has also been widely analyzed using the expectancy disconfirmation theory, which proposes that satisfaction results from comparing prior expectations with actual service performance (Schiebler et al., 2025; Zhang et al. 2022; Allpoc-Flores et al., 2024; Suchanek & Bucicova, 2025)

Under this model, satisfaction is achieved when perceived performance meets or surpasses expectations, making it a key factor in the development of long-term relationships between users and organizations (Ahrholdt et al., 2017; Casidy & Wymer, 2016; Ji & Prentice, 2021; Rachmawati, 2020; Gómez, 2019).

Besides, service quality is often evaluated through two well-established models. SERVQUAL assesses five core dimensions, which include reliability, responsiveness, assurance, empathy and tangibles, while SERVPERF focuses exclusively on customer perceptions by removing the expectations component. SERVPERF tends to be especially useful in situations where customer expectations could distort evaluations, making it a more reliable option for assessing perceived service qual-

ity (Wibowo, 2019; Jalil et al., 2021; Omar et al., 2021; Campoverde et al., 2020; Abd-Elrahman et al., 2022; Panahi et al., 2024). Previous empirical studies consistently show that service quality plays a significant role in shaping customer satisfaction. In Peru, for instance, studies examining the impact of ISO 9001 certification found clear differences in perceived quality between certified and non-certified organizations, reinforcing the importance of standardization and continuous improvement practices (Benzaquen de las Casas, 2018). Likewise, other analyses confirm that quality management strategies help improve customer satisfaction and strengthen loyalty (Chi & Phan, 2025).

Evidence from banking and manufacturing also shows a direct relationship between service quality, satisfaction, and client retention (Vilca et al., 2021; Barragán-Landy & Astudillo, 2023; Kim et al., 2024), which highlights the relevance of this link across different sectors. In the telecommunications sector, recent studies point to reliability and responsiveness as the factors with the strongest influence on user satisfaction, while assurance and empathy appear to strengthen user trust, (Ortiz-Llana et al., 2023; Abd-Ariyani et al., 2021).

Although quality management has advanced in recent years, telecommunications companies in Latin America still face several significant barriers. One of the main issues is the limited adoption of international quality certifications, particularly the ISO standard (International Organization for Standardization), across the region (Melinda et al., 2023; Santa et al., 2024).

In 2016, for example, only 1,329 Peruvian companies held ISO 9001 certification out of more than one million formal organizations (Benzaquen de las Casas, 2018). Another relevant challenge is the limited effectiveness of organizational change management, which has made it difficult to implement continuous improvement models (Gomez-Pino et al., 2023; Siqueira et al., 2023). Resistance to change, together with limited resources, has reduced the capacity of companies to optimize their services and improve the customer experience (Gardiazabal et al., 2020; Yarin et al., 2023; Cayo-Velásquez et al., 2025).

Finally, the increase in customer dissatisfaction within the telecommunications sector shows that companies need to rethink their quality strategies, especially since consumer protection agencies continue to report a steady rise in complaints, which signals a concerning trend for service providers.

The main objective of this study is to analyze how the five dimensions of service quality influence customer satisfaction among users of a large telecommunications company operating in Lima, Peru. The study examines how the five dimensions of service quality shape users' perceptions of their service experience, to identify opportunities for improvement and propose actions to strengthen service delivery. Accordingly, the research presents a general hypothesis that assumes a significant relationship between service quality and customer satisfaction in a Peruvian telecommunications company.

Based on the theoretical framework, the following hypotheses are proposed:

- H1: Tangibles have a significant effect on customer satisfaction in the telecommunications sector.*
- H2: Reliability has a significant effect on customer satisfaction in the telecommunications sector.*
- H3: Responsiveness has a significant effect on customer satisfaction in the telecommunications sector.*
- H4: Assurance has a significant effect on customer satisfaction in the telecommunications sector.*
- H5: Empathy has a significant effect on customer satisfaction in the telecommunications sector.*

2. METHODOLOGY

This study applies deductive reasoning within a quantitative explanatory design, using a non-experimental approach and a positivist paradigm suitable for observing and measuring consumer behavior. The population consisted of customers

of a large private telecommunications company operating in the metropolitan area of Lima, Peru, which provides mobile telephony, internet, and bundled digital services to a diverse customer base. For confidentiality and ethical compliance, the name of the company is not disclosed. The organization requested anonymity as a condition for granting access to its customers and operational information. However, it is one of the leading telecommunications providers in Lima, offering mobile, internet, and bundled digital services, which ensures the relevance and representativeness of the study context. A sample of 247 users was selected through non-probabilistic convenience sampling, considering only customers with an active commercial relationship during the study period. Inclusion criteria required participants to be current customers of the company, while individuals without an active commercial relationship at the time of data collection were excluded. Data were collected between May and August 2025 using a structured questionnaire composed of 40 items, including 20 items for service quality and 20 items for customer satisfaction.

The study was conducted following a structured procedure. First, the measurement instrument was designed based on the SERVPERF model and adapted to the telecommunications context. Second, the content validity of the instrument was assessed through expert evaluation, and reliability was verified using statistical tests. Third, data were collected from customers through a structured survey administered during the study period. Finally, the data were prepared for statistical analysis in order to test the proposed hypotheses and examine the relationships between variables.

Responses were recorded on a five-point Likert scale ranging from strongly disagree to strongly agree. The instrument incorporated the main dimensions of the SERVPERF model (Silva-Treviño et al., 2021), assessing service quality through five components: tangibles, related to facilities, equipment, and staff presentation; reliability, associated with fulfillment of commitments and effective problem solving; responsiveness, linked to the speed and clarity with which customer requests are handled; assurance, reflecting trust in the service, contractual conditions, and available resources; and empathy, which includes personalized attention, staff courtesy, and understanding of user needs. Customer satisfaction

was operationalized as a multidimensional construct that includes not only evaluative perceptions such as perceived usefulness, overall satisfaction, and perceived service excellence, but also behavioral and attitudinal components such as intention to continue using the service, willingness to recommend, and perceived value. The items included in the questionnaire were adapted from prior empirical studies applying the SERVPERF model and related approaches in service contexts, ensuring conceptual consistency and facilitating comparison with previous research.

To ensure the validity and reliability of the instrument, several statistical procedures were applied. Content validity was assessed by a panel of five experts in telecommunications and service quality management, and a binomial test indicated statistical significance for both variables ($p = 0.0000305$), confirming validity at an alpha level of 0.05. Construct validity was evaluated through the Kaiser-Meyer-Olkin coefficient (KMO, Kaiser-Meyer-Olkin test), interpreted according to recognized ranges, and the value obtained was 0.800, which indicates very good sampling adequacy (Pizarro-Romero & Martínez Mora, 2020). Bartlett's test of sphericity produced a Chi-square value of 860.326 with a significance level of 0.000, supporting the suitability of the data for factor analysis. Instrument reliability was examined using Cronbach's alpha, which reached 0.971 for both variables, demonstrating excellent internal consistency.

Data were analyzed in two stages. First, the collected information was organized in an Excel spreadsheet and then processed using SPSS software. Descriptive and inferential analyses were performed, including ordinal logistic regression to determine the relationship between service quality and customer satisfaction. Model fit was evaluated through the Nagelkerke coefficient to estimate the proportion of variability in satisfaction explained by service quality. Hypotheses were tested through the likelihood ratio, considering a significance level of 5% ($p < 0.05$). Besides, Cox & Snell, Nagelkerke, and McFadden coefficients were calculated to assess the strength of the association between variables and the robustness of the statistical model.

Table 1 summarizes the results of the validity and reliability analyses. The KMO value of 0.833 and the significance obtained in Bartlett's test ($p = 0.000$)

confirm the suitability of the data for factor analysis, while the Cronbach’s Alpha value of 0.971 reflects the strong internal consistency of the instrument applied in this research. These analyses were conducted following standard procedures for ordinal logistic regression commonly used in telecommunications studies (Gomez-Pino et al., 2023).

Table 1. Kaiser-Meyer-Olkin coefficient (KMO) and Bartlett’s test of sphericity

Source: SPSS output.

Statistical test	Value obtained
Kaiser-Meyer-Olkin measure (KMO)	0.833
Bartlett’s test of sphericity	Chi-square = 860.326
Degrees of freedom (gl)	190
Significance (p-value)	0
Cronbach’s Alpha coefficient	0.971

Note: These results demonstrate the validity and reliability of the measurement instrument.

Ethical considerations were strictly observed throughout the study. Participation was voluntary, and respondents were informed about the academic purpose of the research. The anonymity of participants was guaranteed, and no personal identifiers were collected, ensuring impartiality and reducing potential response bias.

3. RESULTS

This section presents the main findings of the study. To facilitate the analysis, tables are included to summarize the information collected, allowing for a clear and organized interpretation of the results.

3.1. Distribution of perception of service quality

Table 2 presents the distribution of respondents’ perceptions of service quality across its five dimensions. The results indicate that only 4% of respondents rated overall service quality as low, while 52.6% perceived it as medium and 43% as high. This distribution suggests that although most users hold a moderately positive perception of service quality, there remains considerable room for improvement in achieving consistently high evaluations.

Among the five dimensions examined, assurance obtained the highest proportion of high-level responses (55%), showing that users feel a relatively strong degree of trust and confidence in the service provided. Reliability (53%) and empathy (51%) were mainly assessed at the medium level, which suggests that users perceive moderate levels of consistency and personalized attention. Meanwhile, tangibles (49%), responsiveness (49%) and overall service quality (43%) received lower proportions of high-level responses, indicating that fewer than half of the respondents considered these aspects fully satisfactory.

3.2. Distribution of customer satisfaction

Table 3 presents the distribution of customer satisfaction levels and its dimensions. The findings show that 5% of respondents reported low satisfaction, 50% medium satisfaction, and 45% high

Table 2. Frequency distribution of perceived service quality and its dimensions

Source: SPSS output.

Level	Service quality	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Low	10 (4%)	11 (5%)	20 (8%)	12 (5%)	8 (3%)	7 (3%)
Medium	130 (53%)	115 (46%)	132 (53%)	111 (45%)	103 (42%)	125 (51%)
High	107 (43%)	121 (49%)	95 (38%)	122 (49%)	136 (55%)	115 (46%)
Total	247 (100%)	247 (100%)	247 (100%)	247 (100%)	247 (100%)	247 (100%)

Table 3. Frequency distribution of satisfaction and its dimensions

Source: SPSS output.

Level	Satisfaction	Perceived usefulness	Overall satisfaction	Excellence
Low	12 (5%)	9 (4%)	15 (6%)	21 (9%)
Medium	123 (50%)	122 (49%)	131 (53%)	119 (48%)
High	112 (45%)	116 (47%)	101 (41%)	107 (43%)
Total	247 (100%)	247 (100%)	247 (100%)	247 (100%)

satisfaction. Regarding the dimensions assessed, perceived usefulness (49%), overall satisfaction (53%), and excellence (48%) recorded the highest percentages at the medium level. Overall, more than half of users expressed moderate rather than high satisfaction, particularly in terms of usefulness and excellence. This situation may prompt customers to consider alternative services in the future, which could affect the organization’s long-term sustainability.

3.3. Hypotheses testing

3.3.1. General hypothesis testing

The general hypothesis proposed that service quality has a significant influence on customer satisfaction in a telecommunications company. To analyze this relationship, an ordinal logistic regression model was used. Table 4 shows the model fit based on pseudo R squared statistics, which indicate the proportion of the variance in customer satisfaction explained by service quality.

Table 4. Hypothesis testing – likelihood-ratio test and pseudo R-squared

Source: SPSS output.

Contrast	General hypothesis ^a
Chi-square	154.826
df	1
Sig.	0
Cox & Snell	0.466
Nagelkerke	0.569
McFadden	0.368

The Chi-square statistic ($\chi^2 = 154.826$; $p < 0.001$) confirms that the model is statistically significant, supporting the existence of a meaningful relationship between service quality and customer satisfaction. The Nagelkerke coefficient (0.569) indicates that service quality explains approximately 56.9% of the variability in satisfaction, while the

Cox & Snell coefficient (0.466) also supports the explanatory capacity of the model. Besides, the McFadden value (0.368) confirms that the model presents an adequate fit. Taken together, these indicators support the general hypothesis and show that higher levels of perceived service quality are associated with higher levels of satisfaction. Therefore, it is essential for the telecommunications company to enhance service quality in order to strengthen the user experience.

3.3.2. Testing of specific hypotheses

To examine the individual contribution of each service quality dimension to customer satisfaction, five specific hypotheses were evaluated using ordinal logistic regression. Table 5 presents the pseudo R-squared values for each dimension.

The results indicate that all dimensions of service quality have a statistically significant effect on customer satisfaction, although with varying degrees of influence.

The tangibles dimension shows a Nagelkerke coefficient of 0.315, indicating a moderate contribution to the model’s explanatory capacity. This suggests that perceived service quality is influenced by elements such as infrastructure, available equipment, and staff presentation, although it is the dimension with the lowest relative impact.

Reliability stands out as one of the strongest predictors of satisfaction, with a Nagelkerke coefficient of 0.453. This reflects the importance customers place on the fulfilment of commitments and efficient problem resolution. Enhancing this dimension could notably improve perceptions of quality and promote customer loyalty.

Responsiveness also shows a strong effect, with a Nagelkerke coefficient of 0.448 and a Cox & Snell

Table 5. Specific hypotheses test – pseudo R-squared

Source: SPSS output.

Hypotheses	Chi-square	df	Sig.	Cox & Snell	Nagelkerke	McFadden
H1: Tangibles	73.638	1	0.000	0.258	0.315	0.175
H2: Reliability	114.526	1	0.000	0.371	0.453	0.272
H3: Responsiveness	112.826	1	0.000	0.367	0.448	0.268
H4: Assurance	91.450	1	0.000	0.309	0.378	0.217
H5: Empathy	102.680	1	0.000	0.340	0.416	0.244

value of 0.367. These metrics suggest that this dimension explains between 36.7% and 44.8% of the variability in satisfaction. The results confirm that customers value prompt and efficient service, particularly in a sector where delays can quickly generate dissatisfaction.

Assurance presents a Nagelkerke coefficient of 0.378 and a Cox & Snell value of 0.309, which means that it explains between 30.9% and 37.8% of the variability in satisfaction. These results highlight the relevance of trust, transparency and confidence in shaping the user experience, even if this dimension does not represent the strongest predictor.

Finally, empathy obtained a Nagelkerke coefficient of 0.416 and a Cox & Snell value of 0.34, indicating that individualized attention, courtesy and sensitivity to customer needs play a significant role in shaping satisfaction. This is particularly relevant in the telecommunications sector, where interactions are often mediated through digital channels and can sometimes feel impersonal. Strengthening this dimension can therefore contribute meaningfully to increased overall satisfaction.

4. DISCUSSION

The results obtained in this study provide empirical evidence that service quality significantly influences customer satisfaction in the telecommunications sector. In particular, the findings show that customers evaluate their satisfaction based on multiple dimensions of the service experience, rather than on a single attribute. This result is consistent with previous research indicating that positive perceptions of service quality contribute to higher levels of customer satisfaction and stronger customer relationships in service contexts (Wibowo, 2019; Abd-Ariyani et al., 2021; Abd-Elrahman et al., 2022; Jalil et al., 2021). However, the present findings extend this understanding by showing that the relative importance of each dimension may vary depending on the specific characteristics of the telecommunications market.

In the context of telecommunications services, these findings underline the strategic relevance of service quality as a marketing asset rather than

solely an operational concern. Service quality directly contributes to customer experience management, brand reputation, and loyalty formation in highly competitive markets. From a marketing strategy standpoint, the results emphasize the importance of prioritizing operational consistency and response efficiency as key levers for enhancing customer satisfaction, reducing churn, and sustaining competitive advantage.

The results also coincide with evidence from other service sectors. For instance, (Vilca et al., 2021), examined the relationship between service quality and customer satisfaction in Banco de la Nación in Peru and found a statistically significant association between both variables (Chi-square = 0.003). Likewise, (Barragán-Landy & Astudillo, 2023), in a study of manufacturing companies in Ecuador based on the SERVQUAL model, concluded that service quality significantly affects customer satisfaction, reporting a coefficient of $\beta = 0.426$ and an impact of 18.1% ($p < 0.05$). Although these studies were conducted in different settings, they reinforce the idea that service quality has a consistent, cross-sector effect on customer satisfaction across various economic contexts.

Regarding specific Hypothesis 1 (*H1*), the findings confirm that tangibles significantly influence customer satisfaction, with contributions ranging from 25.8% to 31.5% according to the Nagelkerke (0.315) and Cox & Snell (0.258) coefficients. Although this impact is lower compared with the other dimensions, it remains relevant in shaping the user experience. This conclusion is aligned with the study presented in (Benzaquen de las Casas, 2018), which highlights the importance of ISO 9001-based quality management systems and the role of continuous improvement in service processes. Aspects such as infrastructure, the layout of service points, and the modernization of technological equipment may strengthen users' perceptions, even though they are not the main drivers of satisfaction.

Regarding specific Hypothesis 2 (*H2*), the results show that reliability is one of the dimensions with the greatest impact on customer satisfaction, explaining between 37.1% and 45.3% of its variability. This aligns with the study conducted in Mexico (Silva-Treviño et al., 2021), which found a strong

correlation between service quality and loyalty, emphasizing that the fulfilment of commitments and effective problem resolution are key determinants of customer loyalty. In telecommunications, reliability is closely linked to connection stability, accurate information on service plans, and the fulfilment of commercial commitments, all of which are essential factors in shaping users' evaluations.

In relation to specific Hypothesis 3 (*H3*), the findings indicate that responsiveness explains between 36.7% and 44.8% of customer satisfaction. This highlights the importance of timely responses and effective problem-solving as core elements of perceived service quality. It should be noted, however, that the influence of responsiveness may vary depending on the institutional environment. For example, the study reported in (Ortiz-Llana et al., 2023), found a lower association between responsiveness and perceived quality ($p = 0.008$, Rho Spearman = 0.260) in a Peruvian municipal government, a result that could be attributed to bureaucratic processes and limitations inherent to public administration. These differences suggest that while responsiveness is critical in commercial and telecommunications contexts, its effect may be moderated in governmental scenarios by structural factors such as resource constraints and expected service efficiency.

Concerning specific Hypothesis 4 (*H4*), the findings show that assurance has a significant effect on customer satisfaction, with contributions ranging from 30.9% to 37.8%. This aligns with Deming's continuous improvement theory, which emphasizes that building confidence in service delivery directly enhances user satisfaction. In telecommunications, assurance is linked to clarity in contractual terms, protection of customer data, and continuity of service. Similarly, the study in the hospital sector presented in (Podestá-Gavilano & Maceda-Kuljich, 2017) found that organizations prioritizing safety-oriented practices, such as clear communication, sound risk prevention, and consistent compliance with service standards, achieve higher levels of trust and perceived quality. This suggests that assurance-related strategies have measurable effects on the user experience across multiple industries, reinforcing the importance for telecommunications companies of safeguarding customer data, providing transparent information, and ensuring reliable service delivery.

Finally, the findings for specific Hypothesis 5 (*H5*) indicate that empathy is a key determinant of customer satisfaction, with contributions ranging from 34.0% to 41.6%. This shows that personalized attention, courtesy, and the ability of staff to understand and respond to customer needs play a central role in enhancing the user experience. Similar results were observed in the study reported in Ortiz-Llana et al. (2023), which found a significant relationship between empathy and user satisfaction ($p = 0.001$, Rho Spearman = 0.382), although with a moderate effect. In the telecommunications sector, where interactions often occur through digital channels and may feel impersonal, reinforcing communication skills and promoting customer centred practices becomes essential for improving satisfaction levels.

Although the findings are broadly consistent with previous studies, some differences can be observed in the relative importance of service quality dimensions. In contrast to research conducted in more developed markets, where tangible aspects often have a stronger influence on customer satisfaction, the results of this study highlight reliability and responsiveness as the primary drivers. This difference may be explained by the characteristics of emerging economies, where customers tend to prioritise service performance and problem resolution over physical attributes. These findings provide context specific evidence that contributes to a more nuanced understanding of customer satisfaction in telecommunications services.

Beyond confirming the relevance of service quality dimensions in shaping customer satisfaction, this study contributes to the service marketing literature by providing deeper insights into how customers evaluate their service experiences in the telecommunications market. The findings highlight that satisfaction levels are not formed in a linear manner, but rather reflect ordered evaluations of perceived value derived from multiple service quality dimensions. This perspective is particularly relevant in emerging economies, where customer perceptions often concentrate at intermediate levels and where understanding subtle differences in satisfaction becomes essential for designing effective customer experience and relationship marketing strategies.

CONCLUSIONS

The main objective of this study is to analyze how the five dimensions of service quality influence customer satisfaction among users of a large telecommunications company operating in Lima, Peru. The findings demonstrate that service quality represents a decisive element in shaping customer evaluations, with reliability and responsiveness emerging as the most influential dimensions, followed by empathy, assurance, and tangibles. These results indicate that customer satisfaction is driven not only by technical performance or fulfilment of service commitments but also by experiential and relational factors that shape perceived value. From a service marketing perspective, the study highlights the strategic relevance of customer experience as a key differentiating element in telecommunications services, particularly in highly competitive and dynamic market environments.

From a marketing perspective, the findings highlight the need for telecommunications firms to prioritize reliability and responsiveness as core elements of customer experience strategies, as these dimensions exert the strongest influence on satisfaction and, consequently, on customer retention and loyalty. These findings highlight the need for telecommunications companies to prioritize operational consistency and timely service responses as key drivers of customer satisfaction. Measures aimed at building trust, improving response times and enhancing the interaction between customers and the company may provide competitive advantages. Likewise, investments in infrastructure and technological resources that support efficient and transparent service processes can reinforce quality perceptions and help organizations develop improvement plans that enhance satisfaction and optimize the overall customer experience.

This research presents several limitations. First, the study focused on customers of a single telecommunications provider in Peru, which limits the generalization of the results to other contexts. Second, the cross-sectional design does not allow the analysis of changes in satisfaction over time. Third, the use of self-reported perceptions may be influenced by previous expectations or past experiences. Besides, the model did not consider other relevant variables such as pricing, competition, or the quality of digital channels, which future studies should include in order to develop a more comprehensive analysis.

Future research should broaden the scope by incorporating multiple providers and geographic regions and, when possible, by using longitudinal designs to observe how satisfaction evolves. Including additional variables such as pricing, perceived value, or digital channel performance would provide a more complete understanding of the customer experience. Combining survey responses with behavioral indicators, such as churn rates or official complaint records, may also help reduce potential self-report bias. Overall, this research supports the relevance of service quality as a strategic marketing asset and provides empirical evidence that can guide service marketing decisions aimed at enhancing customer satisfaction and sustaining competitive advantage in telecommunications markets.

AUTHOR CONTRIBUTIONS

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APPENDIX A

Table A1. Questionnaire items used in the study sample

Variables	Questions
Quality	1. Do devices such as modems, antennas, and internet equipment, among others, appear to be modern?
	2. Are the company's physical facilities visually appealing?
	3. Do the workers look clean?
	4. Does the appearance of the facilities match the type of service provided?
	5. When the company promises to do something within a certain time frame, do they follow through?
	6. If there is a problem, do employees show a sincere interest in solving it?
	7. Is the company reliable?
	8. Does the company provide timely service?
	9. Do employees accurately inform customers when each service will be completed?
	10. Do employees serve you quickly?
	11. Are employees always willing to help you?
	12. Are employees usually willing to answer your questions?
	13. Does the behavior of employees inspire confidence in you?
	14. Do you feel secure in your payment transactions with employees?
	15. Do employees show kindness and confidence in their actions?
	16. Do employees demonstrate the support of their team or colleagues to do their job well?
	17. Do employees give you personalized attention?
	18. Do employees understand your needs?
	19. Is the company committed to improving its service offering to satisfy its customers?
	20. Does the company have flexible opening hours and customer service channels?
Satisfaction	21. Did the features of the service provided by the company determine whether the purchased service was useful to you?
	22. Were you willing to pay the price for the service provided by the company?
	23. Were you given all the information about the service before purchasing it?
	24. Do you prefer to purchase services from this company compared to others in the sector?
	25. Do you consider the service provided by this company to be better than that of its competitors?
	26. Do you expect to continue using this company's services on a regular basis?
	27. Do you feel that your personal data is securely protected by the company?
	28. Would you be willing to pay a higher price if the company offered you greater benefits in terms of service?
	29. Would you continue to use this company's services even if competitors lowered their prices?
	30. Do your digital channels or websites display up-to-date information?
	31. Are you satisfied with the service provided by the company?
	32. Would you file any complaints or claims regarding the service provided?
	33. Is the quality adequate for the price you paid?
	34. Would you use the company's services again?
	35. Would you recommend the company for the service it provides?
	36. Does the company provide excellent service?
	37. Did the service provided exceed your expectations?
	38. Is the service provided superior to that of the competition?
	39. Does using the service generate additional benefits for you?
	40. Do employees demonstrate expertise when providing the service?

Note: Questionnaire administered to the study sample.