

Consumer Satisfaction with Chicken Meat Quality: Index and Importance–Performance Analysis in Kaligondang District, Purbalingga, Indonesia

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ABSTRACT

Chicken meat is a primary source of affordable animal protein in Indonesia, yet the quality delivered to consumers varies with the marketing channel. This study evaluated and compared consumer satisfaction with chicken meat quality across three channels—traditional markets, mobile vendors, and chicken slaughterhouses (CSHs) in Kaligondang District, Purbalingga Regency, Central Java. We conducted a cross-sectional survey of 70 respondents selected through purposive sampling, all of whom had bought chicken meat from the three channels. We measured perceptions of product quality, price, service, and satisfaction on a five-point Likert scale across 14 indicators. We analyzed the data using the Customer Satisfaction Index (CSI) to quantify overall satisfaction and Importance–Performance Analysis (IPA) to identify priority attributes for improvement. All items were valid ($r > 0.235$) and reliable (Cronbach's $\alpha = 0.726$ – 0.856). CSI values were 79.89% for traditional markets (satisfied), 79.14% for mobile vendors (satisfied), and 84.76% for CSHs (very satisfied). IPA placed service speed and responsiveness in the first-priority quadrant for traditional markets; price stability was the weakest attribute for mobile vendors (conformity 79.0%); and price affordability, together with service speed, was the main gap for CSHs (conformity 84.0%) despite their superior product color, texture, and aroma. CSHs achieved the highest satisfaction, driven by standardized handling and hygiene, whereas mobile vendors excelled in interpersonal service and traditional markets in price affordability. Channel-specific strategies are recommended to close the identified importance–performance gaps and strengthen consumer loyalty.

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INTRODUCTION

Chicken meat is the most widely consumed and most affordable source of animal protein in Indonesia, and broiler (*Gallus gallus domesticus*) meat dominates household

protein intake because it is comparatively cheap, nutritious, and available through many distribution channels (1). National household consumption of broiler meat has trended upward over recent years, rising from roughly 5.23 kg per capita in 2020 to about 6.41 kg per capita in 2024; when non-household consumption in restaurants, hotels, and the culinary industry is included, total consumption is estimated at more than 13 kg per capita per year (3). This growth is mirrored at the sub-national level: recorded broiler meat production in Kaligondang District, Purbalingga Regency, fluctuated between 2022 and 2024, reflecting shifting market demand, input prices, and enterprise conditions (4). Rising consumption at both national and district scales signals a growing consumer base whose expectations of product quality must be met (2).

Demand growth must be matched by attention to the quality consumers actually receive. Chicken meat quality is a primary determinant of purchase decisions and of satisfaction, and it is judged through a bundle of physical and sensory attributes colour, texture, aroma, freshness, and cleanliness as well as microbiological safety (5),(6). Consumer-facing attributes such as appearance and odor form the first quality judgment before purchase, while texture and freshness shape post-purchase evaluation; several Indonesian studies confirm that these attributes drive attitudes toward fresh broiler carcasses at the point of sale (7).

In practice, chicken meat reaches consumers through several marketing channels that differ markedly in handling, sanitation, and temperature control, and this heterogeneity produces variation in the quality and safety of the product delivered. Traditional markets rely on simple distribution with short storage times but often face cold-chain and sanitation limitations. Mobile vendors offer proximity and interpersonal closeness, yet product quality depends heavily on selling duration and ambient conditions. Chicken slaughterhouses (CSHs) use more standardized slaughter and handling procedures and are therefore expected to deliver more uniform, hygienic meat (8). Evidence from Indonesian and regional settings shows that microbial contamination of chicken meat is common in markets and is strongly influenced by slaughterhouse hygiene and sanitation practices (9),(10),(11), underscoring why the channel through which meat is bought can matter to consumers.

Consumer satisfaction is an evaluative response that arises after a buyer compares the perceived performance of a product with prior expectations; when performance meets or exceeds expectations, the consumer is satisfied and more likely to repurchase and recommend, whereas performance below expectations produces dissatisfaction (12). In services marketing, satisfaction is shaped jointly by product quality, price fairness, and the quality of the service encounter (13), and empirical work in Indonesia confirms that product quality, service quality, and price influence repurchase intention through satisfaction (14).

Two complementary techniques are widely used to translate these perceptions into actionable insight. The Customer Satisfaction Index (CSI) combines the importance and

performance of individual attributes into a single index expressed as a percentage, giving an overall, easily interpreted measure of satisfaction (15),(28). Importance-Performance Analysis (IPA) maps each attribute onto a four-quadrant matrix of importance against performance, identifying which attributes should be prioritized for improvement, maintained, or de-emphasized (16),(17); the approach is frequently combined with service-quality and Kano frameworks in food and service contexts (18),(19),(20). Prior Indonesian studies have applied CSI and IPA to assess satisfaction with broiler carcasses within a single channel—slaughterhouse products, wet-market carcass, or specific outlets (21),(22),(23),(24), but few have compared traditional markets, mobile vendors, and slaughterhouses simultaneously within one consumer base, and none has done so in Kaligondang. A channel-level comparison is directly relevant to consumer-oriented and sustainable livestock marketing, where matching products and services to consumer expectations supports both profitability and food security (25).

Therefore, this study aimed to measure and compare consumer satisfaction with chicken meat quality across traditional markets, mobile vendors, and chicken slaughterhouses in Kaligondang District using the Customer Satisfaction Index, and to identify the priority attributes for improvement in each channel using Importance-Performance Analysis.

MATERIALS AND METHODS

Study Site and Design

This study used a cross-sectional consumer survey conducted from 28 July to 2 August 2026 in Kaligondang District, Purbalingga Regency, Central Java, Indonesia. Data were collected from three chicken-meat marketing channels operating in the district: traditional markets, mobile vendors, and chicken slaughterhouses. Primary data were obtained directly from consumers through structured interviews and a self-administered questionnaire (26).

Sampling and Respondents

Respondents were selected by purposive sampling based on predefined criteria: aged 17 years or older; had purchased chicken meat from all three channels in Kaligondang; purchased chicken meat at least twice per month to ensure familiarity; and were willing to participate. Because the population of chicken-meat consumers in the district is not precisely known, the sample size was determined using Hair's indicator-based rule, which recommends 5–10 respondents per measured indicator (26). With 14 indicators and a multiplier of five, the target sample was $14 \times 5 = 70$ respondents.

Questionnaire and Variables

The questionnaire measured three independent constructs and one dependent construct on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The independent constructs were meat quality (X1), price (X2), and service (X3); the dependent construct was consumer satisfaction and repurchase intention (Y). The price

indicators referred to the national reference retail price for broiler meat of about IDR 36,750/kg set under BAPANAS Regulation No. 5 of 2022. Each construct and its indicators are summarised in Table 2. Respondents rated each indicator separately for the three channels, allowing within-subject comparisons across channels.

Data Analysis

We checked instrument quality before the main analysis. Validity was assessed by comparing the Pearson product-moment correlation of each item with the corrected item-total correlation against the critical value of the r-table ($df = N - 2 = 68$; $r\text{-table} = 0.235$ at $\alpha = 0.05$); items with r-count greater than or equal to the r-table were considered valid. Reliability was assessed using Cronbach's alpha, with alpha greater than 0.60 considered reliable (27).

The Customer Satisfaction Index (CSI) was computed in the standard sequence: (i) the Mean Importance Score (MIS) and Mean Satisfaction Score (MSS) were calculated for each attribute; (ii) a Weighting Factor (WF) was derived as each attribute's MIS as a proportion of the total MIS; (iii) a Weight Score (WS) was obtained as $WF \times MSS$; and (iv) the CSI was calculated as the sum of the WS divided by the maximum scale (5) and expressed as a percentage. CSI values of 66–80% denote a satisfied category and values above 80% denote a very satisfied category (15, 28).

Importance–Performance Analysis (IPA) was then applied. The mean importance and mean performance (satisfaction) scores of all attributes defined the axes of a Cartesian diagram, and the grand means served as the cut-points dividing the plane into four quadrants: Quadrant I (concentrate here; high importance, low performance), Quadrant II (keep up the good work; high importance, high performance), Quadrant III (low priority; low importance, low performance), and Quadrant IV (possible overkill; low importance, high performance). The level of conformity (Tki) between performance and importance was calculated for each attribute as $Tki = (\text{performance score} / \text{importance score}) \times 100\%$ (16),(17).

RESULTS

Respondent Characteristics

Seventy consumers who met all inclusion criteria participated. Women made up the majority of respondents (60.0%), consistent with their dominant role in household food purchasing, and most respondents were of productive age, with 38.6% aged 26–35 years and 30.0% aged 36–45 years (Table 1). All respondents purchased chicken meat at least twice per month, satisfying the frequency criterion and indicating adequate familiarity with the three channels.

Table 1. Characteristics of respondents (n = 70)

Characteristic	Category	n	%
Sex	Male	28	40.0

Characteristic	Category	n	%
Age (years)	Female	42	60.0
	17–25	6	8.6
	26–35	27	38.6
	36–45	21	30.0
	46–57	16	22.9
Purchase frequency	≥ 2 times per month	70	100.0
Total		70	100.0

Instrument Validity and Reliability

All questionnaire items were valid: every corrected item–total correlation exceeded the r-table value of 0.235 (Table 3). Reliability was satisfactory for all four constructs, with Cronbach's alpha ranging from 0.726 for price to 0.856 for satisfaction, all above the 0.60 threshold and indicating good internal consistency. The instrument was therefore suitable for measuring consumer satisfaction across the three channels.

Table 2. Research variables, indicators, and measurement scale

Variable	Type	Indicators	Scale
Meat quality (X1)	Independent	Colour, texture, aroma, freshness, cleanliness	Likert 1–5
Price (X2)	Independent	Price–quality suitability, affordability, price stability (reference price ≈ IDR 36,750/kg)	Likert 1–5
Service (X3)	Independent	Friendliness, comfort, service speed, security, scale accuracy	Likert 1–5
Consumer satisfaction (Y)	Dependent	Overall satisfaction, repurchase intention, willingness to recommend	Likert 1–5

Table 3. Validity and reliability of the questionnaire

Construct	Items	Pearson r range	Cronbach's α	Decision
Meat quality (X1)	12	0.328–0.793	0.810	Valid & reliable
Price (X2)	12	0.379–0.681	0.726	Valid & reliable
Service (X3)	12	0.245–0.818	0.834	Valid & reliable
Satisfaction (Y)	12	0.250–0.776	0.856	Valid & reliable

Note: r-table ($df = 68$, $\alpha = 0.05$) = 0.235; Cronbach's α threshold = 0.60. Items were assessed across the three channels (12 items per construct).

Customer Satisfaction Index

The CSI differed across the three channels (Table 4, Figure 2). Traditional markets scored 79.89% and mobile vendors 79.14%, both within the satisfied category, while chicken slaughterhouses scored 84.76%, reaching the very satisfied category. In traditional markets, service was the most important construct (MIS = 4.07), yet the largest performance gaps occurred for price stability (MSS = 3.44) and service speed (MSS = 3.77). For mobile vendors, friendliness recorded the highest performance of any attribute in the study (MSS = 4.44, exceeding its importance of 4.20), whereas price stability was strikingly low (MSS = 3.07). For slaughterhouses, the three product-quality attributes achieved the highest satisfaction scores: overall color 4.63, texture 4.64, and aroma 4.71, each surpassing its importance level, while affordability lagged behind expectation (MSS = 3.51 against MIS = 4.19).

Table 4. Mean importance (MIS) and mean satisfaction (MSS) scores and CSI by marketing channel

Attribute	TM MIS	TM MSS	MV MIS	MV MSS	CSH MIS	CSH MSS
Colour	3.96	3.97	3.86	3.80	4.41	4.63
Texture	3.96	3.87	3.86	3.67	4.41	4.64
Aroma	3.96	3.99	3.86	3.76	4.41	4.71
Price-quality	3.94	3.99	3.89	3.76	4.19	4.11
Affordability	3.94	4.33	3.89	3.76	4.19	3.51
Price stability	3.94	3.44	3.89	3.07	4.19	4.03
Friendliness	4.07	4.26	4.20	4.44	4.16	4.09
Service speed	4.07	3.77	4.20	4.16	4.16	3.93
Responsiveness	4.07	3.81	4.20	4.10	4.16	4.01
Overall satisfaction	4.03	3.97	4.16	3.96	4.30	4.43
Repurchase	4.03	4.17	4.16	4.07	4.30	4.36
Recommendation	4.03	4.36	4.16	4.04	4.30	4.31
Mean	4.00	3.99	4.03	3.88	4.27	4.23
CSI / category	79.89%	satisfied	79.14%	satisfied	84.76%	very satisfied

Note: TM = traditional market; MV = mobile vendor; CSH = chicken slaughterhouse. CSI category: 66–80% = satisfied; > 80% = very satisfied.

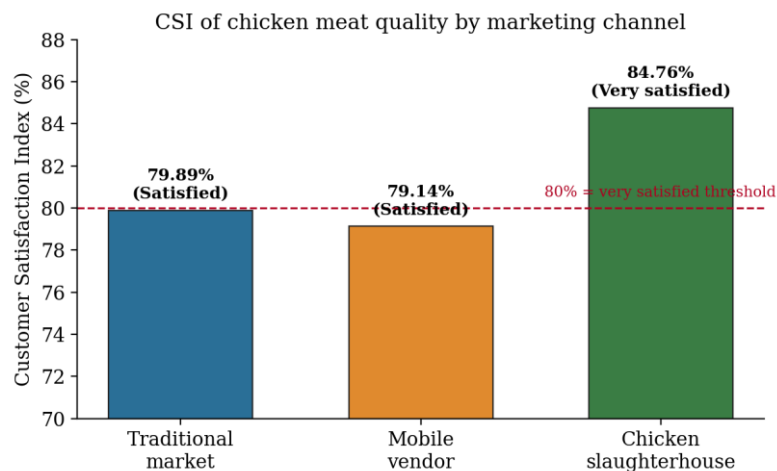


Figure 2. Customer Satisfaction Index of chicken meat quality by marketing channel.

Importance-Performance Analysis

IPA revealed distinct improvement priorities for each channel (Table 5, Figure 3). In traditional markets, service speed and responsiveness fell in Quadrant I (concentrate here): both were rated important (4.07), but under-performed (3.77 and 3.81), and their conformity levels were 92.6% and 93.7%. Friendliness, repurchase intention, overall satisfaction, and recommendation occupied Quadrant II (keep up the good work), while affordability, color, aroma, and price-quality suitability sat in Quadrant IV, indicating already-strong performance on lower-priority attributes. Price stability had the lowest conformity in this channel (87.3%).

For mobile vendors, no attribute fell in Quadrant I, indicating that the attributes consumers valued were generally performing well. Service attributes friendliness, speed, and responsiveness together with the three satisfaction indicators formed a strong Quadrant II cluster, confirming interpersonal service as the channel's core strength. All product-quality and price attributes sat in Quadrant III; among them price stability was the clear weak point, with the lowest conformity of the entire study (79.0%) driven by a satisfaction score of only 3.07.

For chicken slaughterhouses, product-quality attributes (colour, texture, aroma) joined the satisfaction indicators in Quadrant II, reflecting the channel's superior and well-appreciated product. Price and service attributes fell in Quadrant III. Here the standout gap was affordability, whose conformity of 84.0% was the lowest for the channel—consumers accepted the higher product quality but perceived the price as less affordable—followed by service speed (conformity 94.5%). The level-of-conformity profile across all attributes and channels is summarised in Figure 4.

Table 5. IPA quadrant classification and level of conformity (Tki, %) by attribute and channel

Attribute	TM Tki	TM quadrant	MV Tki	MV quadrant	CSH Tki	CSH quadrant
Colour	100.4	IV	98.5	III	104.9	II
Texture	97.8	III	95.2	III	105.2	II
Aroma	100.7	IV	97.4	III	106.8	II
Price-quality	101.1	IV	96.7	III	98.3	III
Affordability	109.8	IV	96.7	III	84.0	III
Price stability	87.3	III	79.0	III	96.2	III
Friendliness	104.6	II	105.8	II	98.3	III
Service speed	92.6	I	99.0	II	94.5	III
Responsiveness	93.7	I	97.6	II	96.6	III
Overall satisfaction	98.6	II	95.2	II	103.0	II
Repurchase	103.5	II	97.9	II	101.3	II
Recommendation	98.2	II	97.3	II	100.3	II

Note: Tki = (performance / importance) × 100%. Quadrant I = concentrate here; II = keep up the good work; III = low priority; IV = possible overkill. TM = traditional market; MV = mobile vendor; CSH = chicken slaughterhouse.

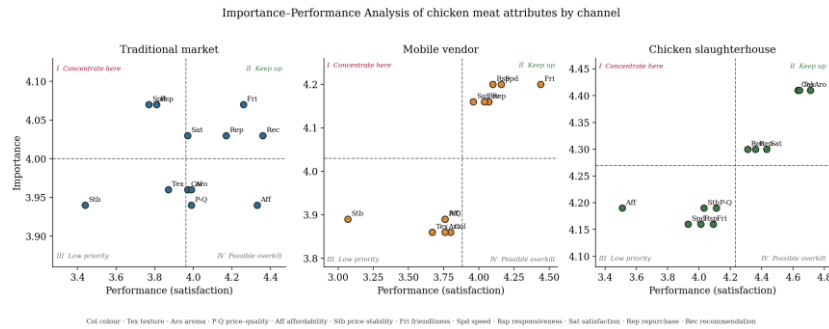


Figure 3. Importance-Performance Analysis diagrams for the three marketing channels.

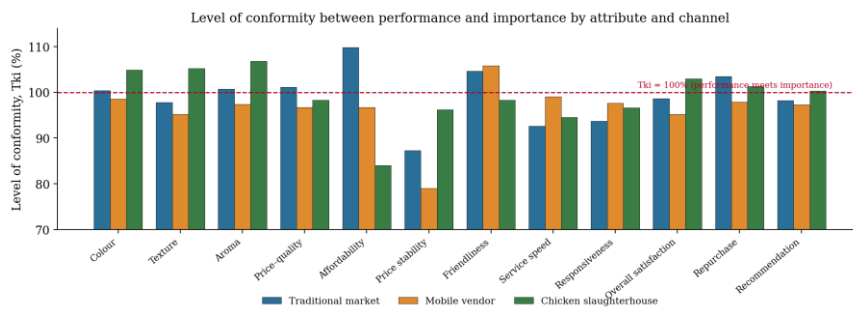


Figure 4. Level of conformity (Tki) between performance and importance by attribute and channel.

DISCUSSION

All three channels delivered relatively high satisfaction, but chicken slaughterhouses were clearly superior, as the only channel to reach the very satisfied category. This ranking is biologically and operationally plausible. Slaughterhouses apply more standardized slaughter and handling and are subject to stricter sanitation requirements, which yield more uniform and hygienic carcasses (8); microbiological studies in Indonesia and the wider region consistently show that hygiene and sanitation at the slaughter stage are the dominant determinants of the bacterial load subsequently found in retail chicken meat (9),(10),(11). The very high satisfaction with slaughterhouse product quality color, texture, and aroma, each scoring above 4.6 and exceeding their importance is consistent with the physical quality advantages reported for well-managed, standardized broiler processing (5),(6).

Product-quality attributes emerged as the principal driver of the satisfaction ranking. Colour, texture, and aroma are the sensory cues consumers use to judge freshness before and after purchase, and their prominence here mirrors evidence that these attributes govern consumer evaluation of fresh broiler carcass in Indonesian markets (7),(6). Because slaughterhouses converted these attributes into satisfaction most effectively, their CSI advantage over traditional markets and mobile vendors is best interpreted as a product-quality effect rather than a price or service effect.

The service dimension explained much of the difference among the two lower-scoring channels. Mobile vendors turned interpersonal service into their strongest

asset: friendliness was the single highest-performing attribute in the study and, together with speed and responsiveness, formed a robust Quadrant II cluster. This reflects the close, flexible seller–buyer relationship characteristic of mobile vending, in which proximity and personal rapport substitute for the formal amenities of fixed premises (24),(13). Traditional markets, by contrast, showed their only Quadrant I attributes in the service domain: speed and responsiveness, indicating that although shoppers value quick, attentive service during face-to-face transactions, current performance falls short. Improving queue management, weighing, and transaction speed is therefore the highest-return intervention for traditional-market sellers (17, 20).

Price behaved differently in each channel and revealed a quality–price trade-off. Traditional markets and mobile vendors were valued for affordability but penalized for price instability, which recorded the lowest conformity in both channels (87.3% and 79.0%, respectively); unstable prices widen the gap between what consumers expect and what they experience, eroding trust (14). Slaughterhouses displayed the opposite pattern: their superior product quality came at a price consumers perceived as less affordable, so affordability was the channel's weakest attribute (conformity 84.0%). This trade-off indicates that consumers are willing to accept higher prices for demonstrably better and safer meat, but only up to a threshold, and that transparent, stable pricing is a lever for all channels.

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Finally, the satisfaction indicators overall satisfaction, repurchase intention, and willingness to recommend sat in Quadrant II for the slaughterhouse and, largely, for the mobile vendor, signaling that positive experiences are already translating into loyalty and word-of-mouth. This is consistent with the expectation-confirmation view that meeting or exceeding expectations promotes repurchase and recommendation (12), and with Indonesian evidence linking product and service quality to repurchase through satisfaction (14, 21). Channel-specific strategies therefore emerge naturally from the analysis: traditional markets should prioritize service speed, responsiveness, and price stability while preserving their affordability and interpersonal warmth; mobile vendors should safeguard their service strength and stabilize prices; and slaughterhouses should protect their product-quality edge while managing affordability and service speed. Such consumer-oriented calibration of product, price, and service supports the broader goal of sustainable, competitive livestock marketing (25, 29).

Two features of the study warrant caution when generalizing the findings. First, the survey covered a single district and used purposive sampling, so the results describe Kaligondang consumers rather than the national market. Second, all measures were self-reported perceptions; they were not paired with laboratory measurement of the physical or microbiological quality of the meat actually sold. Future research should widen the geographic scope and sample size, incorporate explicit cleanliness, food-safety, and freshness variables, and, where feasible, link consumer perceptions to objective carcass-quality and microbiological indicators (9),(30),(31). Such integration

would strengthen the evidence base for channel-level quality improvement and consumer protection in the poultry sector.

CONCLUSION

Consumer satisfaction with chicken meat quality in Kaligondang District was high across all three marketing channels but highest for chicken slaughterhouses. CSI values were 79.89% for traditional markets (satisfied), 79.14% for mobile vendors (satisfied), and 84.76% for slaughterhouses (very satisfied), the last driven mainly by superior product color, texture, and aroma. Importance–Performance Analysis identified channel-specific priorities: service speed and responsiveness are the top priorities for traditional markets; price stability is the key weakness for mobile vendors (conformity 79.0%); and price affordability, alongside service speed, is the main gap for slaughterhouses (conformity 84.0%), despite their product-quality advantage. Each channel has a distinct competitive edge: affordability and interpersonal warmth for traditional markets, service quality for mobile vendors, and product quality for slaughterhouses, so sellers and policymakers should pursue channel-tailored strategies that close the identified importance–performance gaps to raise satisfaction and strengthen consumer loyalty. Larger, multi-district studies that combine consumer perceptions with objective quality and safety measurements are recommended to consolidate these conclusions.

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AUTHOR CONTRIBUTIONS

W.R.A. and F.D.E. conceived and designed the study; W.R.A. and S. carried out the consumer survey and collected the data; W.R.A. and F.D.E. analyzed the data and performed the CSI and IPA computations; W.R.A. drafted the manuscript; S. and F.D.E. critically revised it for important intellectual content; all authors read and approved the final manuscript.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

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