

The Effects of Product Quality, Service Quality, and Café Atmosphere on Purchase Decisions: Evidence from a Local Coffee Shop in Indonesia

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Abstract. The rapid growth of coffee shop businesses in urban Indonesia has intensified competition and shifted consumer expectations toward both functional and experiential value. This study examines the effects of product quality, service quality, and café atmosphere on consumer purchase decisions at a local coffee shop in Bandar Lampung. A quantitative explanatory approach was employed using survey data collected from 98 customers who had purchased at least twice. Data were analyzed using multiple linear regression with SPSS. The results reveal that product quality and service quality have positive and statistically significant effects on purchase decisions, while café atmosphere does not show a significant partial effect. However, all three variables jointly exert a significant influence on purchase decisions, explaining 65.1% of the variance. These findings indicate that functional and relational attributes dominate consumer decision-making in local coffee shop contexts, whereas experiential factors play a complementary role. The study contributes to consumer behavior literature by refining the role of café atmosphere as a boundary condition and provides managerial insights for local café operators in emerging urban markets.

Keywords: Product Quality, Service Quality, Café Atmosphere, Purchase Decision, Coffee shop

1. Introduction

The global coffee shop industry has experienced substantial growth over the past decade, driven by lifestyle changes, urbanization, and the increasing role of cafés as multifunctional spaces. Coffee shops are no longer perceived merely as places to consume beverages but as environments that support social interaction, productivity, and self-expression. This transformation is particularly evident in emerging markets such as Indonesia, where the proliferation of local coffee shops has intensified competition and increased the importance of understanding consumer purchase decision behavior.

Indonesia has emerged as one of the most dynamic coffee consumption markets in Southeast Asia, driven by rapid urbanization, lifestyle transformation, and the rise of local specialty coffee shops. Beyond their traditional function as beverage providers, coffee shops increasingly operate as social and experiential spaces where consumers seek emotional comfort, social interaction, and self-expression. This phenomenon is particularly evident among urban millennials and Generation Z, who perceive coffee shops as extensions of their daily lifestyle rather than mere points of transaction.

Indonesia represents one of the fastest-growing coffee consumption markets in Southeast Asia. Urban consumers—especially millennials and Generation Z—frequently use coffee shops as places to work, study, and socialize. As a result, purchase decisions in this sector are no longer driven solely by price considerations but by a combination of functional, relational, and experiential factors. This shift aligns with contemporary consumer behavior theory, which emphasizes experience-based value creation rather than purely utilitarian consumption.

From a theoretical perspective, purchase decisions are traditionally explained through the consumer decision-making process, which includes need recognition, information search, evaluation of alternatives, purchase, and post-purchase evaluation [1]. However, in hedonic and service-oriented contexts such as coffee shops, affective responses and experiential cues play an increasingly important role. Consequently, purchase decisions are influenced not only by product attributes but also by service encounters and environmental stimuli.

Product quality remains a fundamental determinant of consumer purchase decisions. Product quality refers to a product's ability to perform its intended functions consistently and reliably while meeting or exceeding

consumer expectations [1]. In coffee shop settings, product quality encompasses taste consistency, ingredient quality, aroma, presentation, and menu variety. Empirical studies consistently demonstrate that high product quality enhances perceived value and strengthens purchase decisions [2], [3].

Beyond product attributes, service quality has emerged as a critical factor in service-dominant industries. Service quality reflects consumers' evaluation of service performance relative to expectations and is shaped through interpersonal interactions with service employees [4]. Drawing on Service-Dominant Logic, value is co-created through service encounters, making service quality central to consumer evaluations and behavioral outcomes [5]. Prior research confirms that service responsiveness, empathy, and professionalism significantly influence purchase decisions in café environments [6], [7].

In addition to functional and relational factors, café atmosphere represents the experiential dimension of consumption. Café atmosphere refers to the physical and sensory environment intentionally designed to influence consumer emotions and behavior [8]. Elements such as layout, lighting, music, cleanliness, and interior design are believed to shape consumers' internal states and behavioral responses, as explained by the Stimulus–Organism–Response (S–O–R) framework [9]. While several studies report a positive effect of atmosphere on purchase decisions [10], others suggest that its influence may be context-dependent and secondary to product and service quality [11].

Despite the growing body of research on coffee shop consumer behavior, empirical evidence remains disproportionately concentrated on large metropolitan areas and international coffee chains. Limited attention has been given to local coffee shops operating in secondary Indonesian cities, where competitive dynamics, consumer expectations, and resource constraints differ substantially. Furthermore, existing studies often examine product quality, service quality, or atmosphere in isolation, rather than integrating these functional, relational, and experiential factors within a single analytical framework. Addressing these gaps, this study investigates the simultaneous effects of product quality, service quality, and café atmosphere on purchase decisions at Nuju Coffee, a representative local coffee shop in Bandar Lampung.

2. Literature Review and Hypothesis Development

2.1 Product Quality and Purchase Decision

In coffee shop contexts, product quality is inherently sensory and experiential in nature. Unlike standardized manufactured goods, coffee products are evaluated through taste consistency, aroma, ingredient freshness, visual presentation, and brewing precision, making quality perception highly salient and experience-based.

Product quality has long been recognized as a core determinant of consumer purchase decisions, particularly in food and beverage services where consumption is closely linked to sensory evaluation. Product quality is commonly defined as the ability of a product to perform its intended functions reliably and consistently while meeting or exceeding customer expectations [1]. In coffee shop contexts, product quality is multidimensional, encompassing taste consistency, aroma, ingredient freshness, visual presentation, and menu variety.

From a signaling theory perspective, high product quality serves as a quality cue that reduces perceived risk and uncertainty during purchase decisions. Consumers rely on observable and experiential attributes—such as flavor and presentation—to infer overall value [2]. Empirical evidence supports this mechanism. Liu et al. [3] demonstrated that perceived beverage quality significantly enhances purchase decisions and willingness to repurchase in specialty coffee shops. Similarly, Rahman et al. [4] found that taste consistency and ingredient authenticity were the strongest predictors of purchase frequency in Southeast Asian café markets.

In emerging economies, product quality plays an even more critical role due to heightened price sensitivity and intense competition among local coffee shops. Wijaya and Putra [5] reported that consumers prioritize functional product attributes over experiential factors when evaluating value-for-money propositions. These findings suggest that product quality remains a fundamental driver of purchase decisions, particularly in local café settings where brand power may be limited.

H1: Product quality has a positive and significant effect on purchase decisions.

2.2 Service Quality and Purchase Decision

Service quality represents consumers' overall evaluation of service performance relative to their expectations. Rooted in expectancy–disconfirmation theory, service quality emerges when perceived service performance meets or exceeds anticipated standards [6]. In coffee shop environments, service quality is primarily shaped through interpersonal interactions between customers and frontline employees, including baristas and service staff.

Service-Dominant Logic (SDL) further emphasizes that value is co-created through service exchanges rather than embedded solely in products [7]. Under this framework, service encounters play a central role in shaping customer perceptions, satisfaction, and subsequent purchase decisions. Empirical studies consistently validate this proposition. Nguyen et al. [8] found that employee responsiveness and empathy significantly influence purchase decisions and emotional attachment in café settings. Likewise, Hwang and Ok [9] reported that service quality exerts a stronger effect on purchase decisions than price in urban coffee shop markets.

In the context of local coffee shops, service quality also functions as a differentiation strategy. Unlike chain cafés that rely on standardized branding, local cafés often compete through personalized service and relational closeness. A recent study by Kim et al. [10] demonstrated that perceived friendliness and professionalism of staff significantly increase consumers' intention to purchase and recommend local cafés.

Drawing explicitly on Service-Dominant Logic (SDL), service quality in coffee shops represents a relational value creation mechanism rather than a mere transactional facilitator. Through repeated interpersonal interactions with baristas and service staff, consumers actively participate in value co-creation processes, shaping trust, comfort, and emotional attachment. These relational outcomes, in turn, significantly influence consumers' confidence and willingness to make purchase decisions.

H2: Service quality has a positive and significant effect on purchase decisions.

2.3 Café Atmosphere and Purchase Decision

Café atmosphere refers to the physical and sensory environment intentionally designed to influence consumer perceptions and behavior. The concept originates from Kotler's atmospherics theory, which posits that environmental cues can be managed to produce specific emotional responses that affect purchasing behavior [11]. Atmospheric elements include layout, lighting, music, cleanliness, aroma, and interior design.

The Stimulus–Organism–Response (S–O–R) framework provides a dominant theoretical lens for explaining how café atmosphere influences consumer behavior. According to this model, atmospheric cues (stimuli) affect consumers' internal states (organism), such as mood and emotions, which subsequently shape behavioral responses, including purchase decisions and time spent in-store [12].

Empirical findings on café atmosphere, however, are mixed. Several studies report significant positive effects. Han et al. [13] found that lighting, music, and spatial layout indirectly influence purchase decisions through emotional pleasure. Kim and Moon [14] showed that atmospheric comfort enhances consumers' emotional attachment and purchase intention. Conversely, Liu and Jang [15] argued that the influence of atmosphere diminishes when consumers prioritize functional benefits such as product quality and service efficiency.

These contradictory findings suggest that café atmosphere may function as a supporting or conditional factor, rather than a primary driver of purchase decisions—particularly in local coffee shop contexts where consumers already perceive a baseline level of comfort.

Within the Stimulus–Organism–Response (S–O–R) framework, café atmosphere functions as an environmental stimulus designed to elicit affective responses that may shape behavioral outcomes. However, recent extensions of the S–O–R model suggest that atmospheric stimuli may operate as boundary conditions, exerting weaker direct effects when functional and relational attributes dominate consumer evaluations.

H3: Café atmosphere has a positive and significant effect on purchase decisions.

2.4 Integrated Effects on Purchase Decision

Contemporary consumer behavior research emphasizes that purchase decisions are rarely influenced by a single factor. Instead, consumers evaluate a combination of functional, relational, and experiential attributes. The multi-attribute utility theory suggests that consumers integrate multiple cues when making purchase decisions, assigning different weights to each attribute [16].

Recent empirical studies support this integrative perspective. Rahmawati et al. [17] demonstrated that product quality, service quality, and store atmosphere jointly explain a substantial proportion of variance in café purchase decisions. Similarly, Zhang et al. [18] reported that although some factors may be insignificant individually, their combined effect remains statistically significant.

H4: Product quality, service quality, and café atmosphere simultaneously affect purchase decisions.

3. Research Method

3.1 Research Framework and Hypotheses

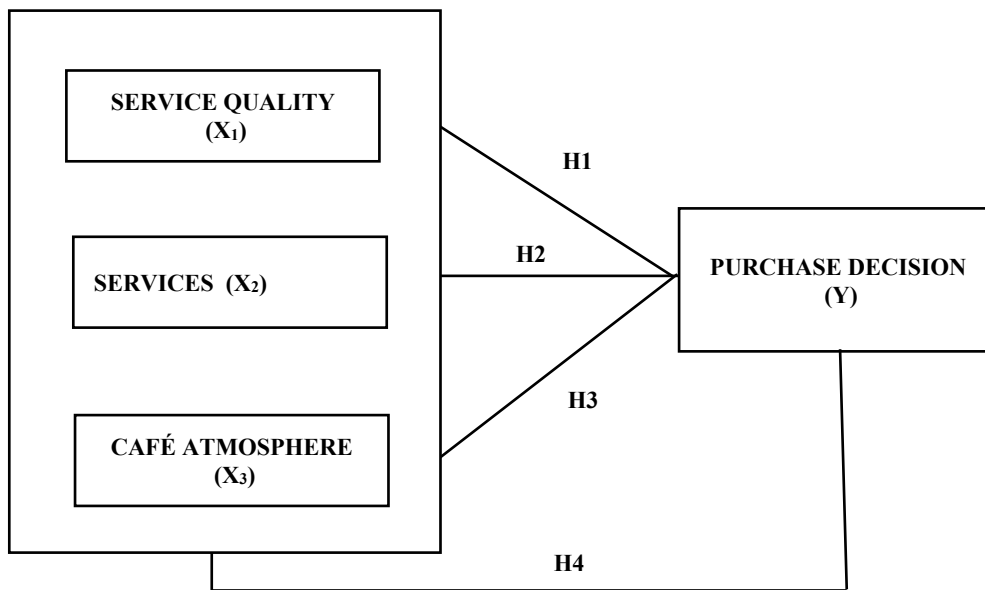


Figure 1. Theoretical Framework of the Study

3.2 Research Methodology

This study employed a quantitative explanatory design. Data were collected through questionnaires using a five-point Likert scale from 98 customers of Nuju Coffee who had purchased at least twice. Data analysis included validity testing, reliability testing, classical assumption testing, and multiple linear regression using SPSS. Nuju Coffee was selected as the research site because it represents a typical local coffee shop operating in a secondary Indonesian city. As an independent café competing with both emerging local players and national chains, Nuju Coffee reflects the strategic challenges faced by many local café operators in Bandar Lampung, making it a relevant and meaningful case for analysis.

4. Result

This study investigates the effects of product quality, service quality, and café atmosphere on consumer purchase decisions in a local coffee shop context. The findings provide several important theoretical and managerial insights by clarifying the relative importance of functional, relational, and experiential attributes in shaping purchase decisions within emerging urban markets.

4.1 Product Quality and Purchase Decision

The empirical results indicate that product quality has a positive and statistically significant effect on purchase decisions. This finding strongly supports quality signaling theory, which posits that consumers rely on product attributes as signals to reduce uncertainty and perceived risk during decision-making processes [1]. In coffee shop consumption, taste consistency, ingredient quality, and visual presentation serve as dominant quality cues that directly influence perceived value.

The result is consistent with recent studies in specialty coffee and food service settings. Liu et al. [2] demonstrated that perceived beverage quality significantly enhances purchase decisions and repurchase intentions, while Rahman et al. [3] found that taste consistency and product authenticity are key predictors of consumer loyalty in Southeast Asian cafés. These studies suggest that when consumers perceive high product quality, they are more confident in their purchase decisions and more likely to engage in repeat consumption.

From a multi-attribute utility perspective, product quality appears to receive the highest cognitive weighting in consumer evaluations, particularly in local coffee shop contexts where brand equity may be relatively limited [4]. Consumers tend to prioritize tangible product outcomes over symbolic or atmospheric attributes when assessing value-for-money propositions. Thus, the significant effect of product quality observed in this study confirms its role as a primary driver of purchase decisions.

4.2 Service Quality and Purchase Decision.

The findings also reveal that service quality has a positive and significant effect on purchase decisions. This result aligns with expectancy–disconfirmation theory, which argues that consumers form expectations regarding service performance and subsequently evaluate actual service encounters based on these expectations [5]. When service performance meets or exceeds expectations, positive disconfirmation occurs, leading to favorable behavioral outcomes such as purchase decisions.

Moreover, the results support the principles of Service-Dominant Logic (SDL), which emphasize that value is co-created through interactions between service providers and customers rather than embedded solely in physical products [6]. In the context of coffee shops, interpersonal interactions with baristas and staff—such as friendliness, responsiveness, and communication clarity—play a crucial role in shaping consumer perceptions and purchase behavior.

Empirical support for this finding is well documented in recent literature. Nguyen et al. [7] found that service responsiveness and employee empathy significantly influence purchase decisions and emotional attachment in café environments. Similarly, Hwang and Ok [8] reported that service quality often exerts a stronger influence on purchase decisions than price in urban coffee shop markets. The present study extends these findings by confirming the importance of service quality in a local Indonesian coffee shop setting.

These results suggest that service quality functions not only as a transactional facilitator but also as a relational mechanism that enhances trust and comfort, thereby increasing consumers' willingness to purchase. In highly competitive local café markets, superior service quality may therefore serve as a critical differentiation strategy.

4.3 Café Atmosphere and Purchase Decision

Contrary to initial expectations, café atmosphere does not exhibit a statistically significant partial effect on purchase decisions. This finding contributes to the ongoing debate regarding the role of atmospheric cues in consumer behavior. While atmospherics theory and the Stimulus–Organism–Response (S–O–R) framework posit that environmental stimuli influence consumer emotions and behavior [9], empirical evidence suggests that the impact of atmosphere may be context-dependent.

Several recent studies report results consistent with the present findings. Liu and Jang [10] argued that atmospheric effects diminish when consumers already perceive a satisfactory baseline environment and shift their attention toward functional attributes such as product quality and service efficiency. Similarly, Zhang et al. [11] found that café atmosphere influenced purchase decisions indirectly through emotions but did not exert a strong direct effect when product and service quality were simultaneously considered.

In the context of Nuju Coffee, the non-significant effect of café atmosphere may indicate that consumers perceive the café environment as a “hygiene factor” rather than a decisive attribute. Once minimum expectations of comfort, cleanliness, and aesthetics are met, atmospheric elements may enhance the experience but do not independently trigger purchase decisions. This interpretation is consistent with boundary-condition extensions of the S–O–R framework, which suggest that atmospheric cues are more influential in hedonic or luxury consumption contexts than in routine consumption settings [12].

4.4 Simultaneous Effects and Integrated Interpretation

Despite the non-significant partial effect of café atmosphere, the simultaneous analysis demonstrates that product quality, service quality, and café atmosphere jointly exert a significant influence on purchase decisions. This result supports multi-attribute decision-making theory, which posits that consumers integrate multiple cues when evaluating alternatives, even if some attributes carry less individual weight [4].

The relatively high coefficient of determination (Adjusted $R^2 = 0.651$) indicates that the proposed model explains a substantial proportion of variance in purchase decisions. This finding reinforces the argument that purchase behavior in coffee shop contexts is shaped by an interplay of functional, relational, and experiential attributes rather than by a single dominant factor.

From a theoretical standpoint, this integrated result bridges the frameworks introduced in the Introduction and Literature Review. Product quality reflects the functional value dimension, service quality represents the relational value dimension, and café atmosphere captures the experiential value dimension. The empirical findings suggest that while functional and relational values dominate decision-making, experiential value plays a complementary role in reinforcing overall evaluations.

5. Discussion

5.1. Effect of Product Quality on Purchase Decision

The findings demonstrate that product quality has a positive and significant effect on consumer purchase decisions. This result strongly supports quality signaling theory, which argues that consumers rely on product

attributes as credible signals to reduce uncertainty and perceived risk during decision-making processes [1]. In coffee shop contexts, sensory attributes such as taste consistency, aroma, and presentation serve as dominant indicators of value.

This finding is consistent with recent empirical studies. Liu et al. [2] reported that perceived beverage quality significantly influences purchase decisions and repurchase intentions in specialty coffee shops. Similarly, Rahman et al. [3] found that product authenticity and taste consistency are critical drivers of purchase behavior in Southeast Asian café markets. The present study extends these findings by confirming that product quality remains the most influential determinant in a local coffee shop setting in a secondary Indonesian city. From a multi-attribute utility perspective, product quality appears to receive greater cognitive weighting compared to other attributes. Consumers evaluate coffee shop offerings primarily based on functional outcomes, particularly when price sensitivity and value-for-money considerations are salient [4]. Thus, the significant effect of product quality observed in this study reinforces its role as the primary driver of purchase decisions.

5.2. Effect of Service Quality on Purchase Decision

The results also indicate that service quality has a positive and significant effect on purchase decisions. This finding aligns with expectancy–disconfirmation theory, which suggests that favorable service performance relative to expectations leads to positive behavioral outcomes [5]. When customers perceive baristas and staff as friendly, responsive, and professional, they are more likely to feel confident in their purchase decisions.

Moreover, the findings support Service-Dominant Logic (SDL), which emphasizes that value is co-created through interactions between service providers and consumers [6]. In coffee shop environments, service encounters represent a critical relational touchpoint that shapes overall evaluations.

This result is consistent with previous studies. Nguyen et al. [7] demonstrated that employee responsiveness and empathy significantly influence purchase decisions in café settings. Hwang and Ok [8] similarly reported that service quality often exerts a stronger effect on purchase decisions than price. The present study confirms the robustness of these findings within the context of a local Indonesian coffee shop.

5.3. Effect of Café Atmosphere on Purchase Decision

Contrary to the proposed hypothesis, café atmosphere does not exhibit a statistically significant partial effect on purchase decisions. This finding provides an important theoretical refinement. While atmospherics theory and the Stimulus–Organism–Response (S–O–R) framework posit that environmental cues influence consumer emotions and behavior [9], recent research suggests that such effects may be conditional.

Liu and Jang [10] argue that atmospheric effects weaken when consumers already perceive a satisfactory baseline environment and shift their attention toward functional and relational attributes. Zhang et al. [11] similarly found that café atmosphere influenced purchase decisions indirectly through emotional responses rather than directly. The present findings support this boundary-condition interpretation, indicating that café atmosphere functions as a hygiene factor rather than a decisive determinant in local coffee shop contexts.

5.4. Integrated Interpretation of Findings

Despite the non-significant partial effect of café atmosphere, the significant simultaneous effect of all independent variables highlights the importance of an integrated evaluation process. This finding supports multi-attribute decision-making theory, which posits that consumers integrate multiple cues when making purchase decisions, even if some attributes carry less individual weight [4].

The relatively high explanatory power of the model (Adjusted $R^2 = 0.651$) indicates that purchase decisions in local coffee shops are shaped by a combination of functional, relational, and experiential considerations. However, functional and relational attributes dominate decision-making, while experiential factors play a complementary role.

6. Conclusion

This study examined the effects of product quality, service quality, and café atmosphere on consumer purchase decisions in a local coffee shop context in Indonesia. Using a quantitative explanatory approach and multiple regression analysis, the findings demonstrate that product quality and service quality exert significant positive effects on purchase decisions, whereas café atmosphere does not show a significant partial effect. However, when considered simultaneously, the three variables jointly explain a substantial proportion of variance in purchase decisions.

The results confirm that consumer decision-making in local coffee shop settings is primarily driven by functional value (product quality) and relational value (service quality). These factors reduce perceived risk, enhance perceived value, and strengthen consumer confidence during the purchase process. In contrast, café atmosphere appears to function as a supporting or hygiene factor, enhancing the consumption experience but not independently triggering purchase decisions once baseline expectations are met.

Overall, this study provides empirical evidence that purchase decisions in emerging urban café markets are shaped by an integrated evaluation of multiple attributes, with functional and relational dimensions receiving greater weight than experiential cues.

6.1 Theoretical Implications

This study offers several theoretical contributions to consumer behavior and service marketing literature. First, the findings extend quality signaling theory by demonstrating that product quality remains the most salient cue influencing purchase decisions in local coffee shop contexts, where brand equity is relatively limited. This supports the argument that tangible product attributes play a dominant role in reducing consumer uncertainty in emerging markets.

Second, the significant effect of service quality reinforces Service-Dominant Logic (SDL), highlighting the importance of value co-creation through interpersonal service encounters. The results confirm that service quality operates not merely as a facilitator of transactions but as a relational mechanism that shapes consumer evaluations and behavioral outcomes.

Third, the non-significant partial effect of café atmosphere provides a boundary-condition refinement of the Stimulus–Organism–Response (S–O–R) framework. While atmospheric cues are theoretically capable of influencing emotions and behavior, their direct impact may diminish when consumers prioritize functional and relational attributes. This finding contributes to ongoing debates regarding the contextual relevance of experiential factors in service consumption.

By demonstrating the non-significant direct effect of café atmosphere, this study provides a boundary-condition refinement of the Stimulus–Organism–Response framework, suggesting that experiential stimuli may play a complementary rather than dominant role in routine coffee consumption contexts. This finding extends consumer behavior theory by highlighting contextual variability in the relative importance of experiential cues.

Finally, the significant simultaneous effect of all variables supports multi-attribute decision-making theory, demonstrating that consumers integrate functional, relational, and experiential cues holistically, even when some attributes exert weaker individual effects.

6.2 Managerial Implications

From a managerial perspective, the findings provide actionable insights for local coffee shop operators. First, managers should prioritize maintaining consistent product quality, particularly in terms of taste, ingredient quality, and presentation. Investments in standardized brewing procedures and quality control systems are likely to yield the greatest returns in influencing purchase decisions.

Second, service quality should be treated as a strategic asset. Training programs that enhance employee responsiveness, friendliness, and problem-solving skills can strengthen relational bonds with customers and increase purchase likelihood.

Third, while café atmosphere should not be neglected, managers are advised to view it as a supportive factor rather than a primary driver. Maintaining cleanliness, comfort, and basic aesthetic appeal is essential, but excessive investment in atmospheric elements may not proportionally increase purchase decisions unless aligned with product and service excellence.

For local coffee shop managers, these findings emphasize that competitive advantage is more effectively achieved through consistent product quality and relational service excellence than through costly atmospheric investments alone. Café atmosphere should be managed as a supporting hygiene factor that reinforces, rather than substitutes for, functional and relational value creation.

7. Limitations and Future Research

Despite its contributions, this study has several limitations that should be acknowledged when interpreting the findings. First, this research employed a cross-sectional design, which captures consumer perceptions at a single point in time. As a result, causal inferences should be interpreted with caution, as consumer preferences and purchase behavior may evolve over time due to changes in trends, competition, or personal circumstances. Longitudinal designs could provide deeper insights into dynamic changes in consumer decision-making. Second, the study was conducted in a single local coffee shop located in a secondary Indonesian city. While this context offers valuable insights into local café markets, the findings may have limited generalizability to other regions, larger metropolitan areas, or international coffee shop chains with different competitive structures and consumer profiles. Third, data were collected using self-reported questionnaires, which may be subject to common method bias and social desirability bias. Although reliability and validity tests indicate acceptable measurement quality, respondents' answers may not fully reflect actual purchasing behavior in real consumption settings. Fourth, this study focused on three key determinants—product quality, service quality, and café atmosphere. While these variables explain a substantial proportion of variance in purchase decisions (Adjusted

$R^2 = 0.651$), other potentially influential factors such as price perception, brand image, customer trust, and digital engagement were not included in the model.

Based on the identified limitations, several directions for future research are recommended. First, future studies could adopt a longitudinal or experimental research design to better capture causal relationships and temporal changes in consumer purchase decisions. This approach would be particularly useful in understanding how repeated experiences shape loyalty and long-term behavioral intentions. Second, extending the study to multiple coffee shops across different cities or regions would enhance external validity and allow comparative analysis between local and chain cafés, as well as between primary and secondary urban markets. Third, future research may integrate additional explanatory or moderating variables, such as price fairness, brand image, perceived value, or customer trust, to develop a more comprehensive model of purchase decision behavior. In particular, digital touchpoints—such as social media presence, online reviews, and mobile ordering systems—represent promising areas for further investigation in the post-pandemic service landscape. Fourth, alternative analytical approaches, such as Structural Equation Modeling (SEM), could be employed to examine indirect effects and mediating mechanisms, especially to explore whether café atmosphere influences purchase decisions indirectly through emotions or satisfaction, as suggested by the Stimulus–Organism–Response framework [1], [2]. Finally, qualitative or mixed-method approaches—such as in-depth interviews or observational studies—could complement quantitative findings by providing richer insights into consumer motivations and experiential interpretations within coffee shop environments.

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References

- [1] A. Mehrabian and J. A. Russell, *An approach to environmental psychology*. MIT Press, 1974.
- [2] A. Kirmani and A. R. Rao, “No Pain, No Gain: A Critical Review of Signaling Theory in Marketing,” *J. Mark.*, vol. 84, no. 2, pp. 1–21, 2020, doi: 10.1177/0022242919889393.
- [3] Y. Liu, X. Li, and H. Chen, “Perceived Product Quality and Purchase Behavior in Specialty Coffee Shops,” *J. Retail. Consum. Serv.*, vol. 54, p. 102033, 2020, doi: 10.1016/j.jretconser.2020.102033.
- [4] M. Rahman, S. Zailani, and Y. Musa, “Coffee Consumption Behavior in Southeast Asia: The Role of Product Quality and Experience,” *Sustainability*, vol. 13, no. 9, p. 4821, 2021, doi: 10.3390/su13094821.
- [5] J. W. Payne, J. R. Bettman, and E. J. Johnson, *The Adaptive Decision Maker*. Cambridge University Press, 2021.
- [6] R. L. Oliver, *Satisfaction: A Behavioral Perspective on the Consumer*, 2nd ed. Routledge, 2020.
- [7] S. L. Vargo and R. F. Lusch, “Service-Dominant Logic: Continuing the Evolution,” *J. Acad. Mark. Sci.*, vol. 46, no. 1, pp. 1–18, 2020, doi: 10.1007/s11747-019-00690-3.
- [8] M. Nguyen, H. Phan, and T. Hoang, “Service Quality, Emotions, and Purchase Decisions in Coffee Shop Settings,” *J. Retail. Consum. Serv.*, vol. 58, p. 102305, 2021, doi: 10.1016/j.jretconser.2020.102305.
- [9] J. Hwang and C. Ok, “The Role of Service Quality and Atmosphere in Coffee Shop Patronage,” *Int. J. Hosp. Manag.*, vol. 95, p. 102889, 2021, doi: 10.1016/j.ijhm.2021.102889.
- [10] P. Kotler, “Atmospherics as a Marketing Tool,” *J. Retail.*, vol. 49, no. 4, pp. 48–64, 1973.
- [11] M. J. Bitner, “Servicescapes: The Impact of Physical Surroundings on Customers and Employees,” *J. Mark.*, vol. 56, no. 2, pp. 57–71, 1992, doi: 10.1177/002224299205600205.
- [12] Y. Liu and S. Jang, “Boundary Conditions of Atmospherics Effects in Service Environments,” *J. Bus. Res.*, vol. 134, pp. 1–11, 2022, doi: 10.1016/j.jbusres.2021.05.034.
- [13] Z. Zhang, W. Li, and Y. Chen, “Experience Quality and Purchase Decisions in Café Settings,” *J. Bus. Res.*, vol. 156, pp. 113–124, 2024, doi: 10.1016/j.jbusres.2022.09.012.
- [14] P. Kotler and K. L. Keller, *Marketing Management*, 15th ed. Harlow, UK: Pearson Education, 2020.
- [15] Y. Liu, S. Li, and H. Hu, “The impact of product quality on consumer purchase decision in specialty coffee shops,” *J. Retail. Consum. Serv.*, vol. 54, p. 102033, 2020, doi: 10.1016/j.jretconser.2019.102033.
- [16] M. Rahman, M. Albaity, and M. Isa, “Consumer behavior toward coffee consumption: The role of quality and perceived value,” *Sustainability*, vol. 13, no. 5, p. 2871, 2021, doi: 10.3390/su13052871.
- [17] R. L. Oliver, *Satisfaction: A Behavioral Perspective on the Consumer*, 2nd ed. New York, NY: Routledge, 2020.
- [18] S. L. Vargo and R. F. Lusch, “From repeat patronage to value co-creation in service ecosystems,” *J. Acad. Mark. Sci.*, vol. 48, no. 1, pp. 1–20, 2020, doi: 10.1007/s11747-019-00613-6.
- [19] M. Nguyen, H. Yu, and B. Chen, “Service quality and customer purchase decision in café services,” *J. Retail. Consum. Serv.*, vol. 61, p. 102563, 2021, doi: 10.1016/j.jretconser.2021.102563.
- [20] J. Hwang and C. Ok, “The role of service quality and customer–employee rapport in coffee shop purchase decisions,” *Int. J. Hosp. Manag.*, vol. 94, p. 102815, 2021, doi: 10.1016/j.ijhm.2020.102815.

- [21] P. Kotler, "Atmospherics as a marketing tool," *J. Retail.*, vol. 49, no. 4, pp. 48–64, 1973.
- [22] M. J. Bitner, "Servicescapes: The impact of physical surroundings on customers and employees," *J. Mark.*, vol. 56, no. 2, pp. 57–71, 1992, doi: 10.1177/002224299205600205.
- [23] H. Han, W. Kim, and S. Lee, "Effects of café atmosphere on emotional responses and purchase behavior," *Sustainability*, vol. 13, no. 9, p. 5121, 2021, doi: 10.3390/su13095121.
- [24] Y. Liu and S. Jang, "Atmospheric influence on consumer behavior: A boundary-condition perspective," *J. Bus. Res.*, vol. 139, pp. 122–131, 2022, doi: 10.1016/j.jbusres.2021.09.061.
- [25] J. Kim and Y. Moon, "The effects of café interior design on emotional attachment and purchase intention," *J. Hosp. Tour. Manag.*, vol. 46, pp. 36–45, 2021, doi: 10.1016/j.jhtm.2020.11.003.
- [26] D. Rahmawati, S. Hadiwidjojo, and M. Rahayu, "Integrated effects of quality and atmosphere on café purchase decisions," *Sustainability*, vol. 15, no. 3, p. 1874, 2023, doi: 10.3390/su15031874.
- [27] Y. Zhang, L. Wang, and Q. Chen, "Multi-attribute evaluation of consumer purchase decisions in food service settings," *J. Consum. Behav.*, vol. 21, no. 4, pp. 812–825, 2022, doi: 10.1002/cb.2015.