
Factors affecting consumer purchasing decisions for quality durian in Rayong Province, Thailand

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Abstract The findings revealed that the majority of durian consumers were women. The average age was 36.97 years old. The majority were married and had a bachelor's degree or higher. Most consumers worked for non-government businesses and earned an average monthly income of less than 20,000 Thai baht, living in a shared household of less than five people. The study found that the marketing mix factors found to be important to the decision to buy quality durian at the highest level consisted of price (mean = 4.35), product (mean = 4.33), service process (mean = 4.31), people (mean = 4.21), physical evidence (mean = 4.20), promotion (mean = 4.20), and place (mean = 4.14), respectively. Multiple regression analysis revealed that three key factors significantly influenced consumer purchasing decisions. From demographic variables, education level showed a significant negative relationship ($\beta = -0.147$, $p = 0.038$) and household size demonstrated a significant positive relationship ($\beta = 0.153$, $p = 0.026$). Among the marketing mix variables, only price emerged as a statistically significant predictor ($\beta = 0.209$, $p = 0.049$).

Keywords: Decision, Quality durian, Consumer

Introduction

Durian, often called the "King of Fruits," is economically significant for Thailand. Its distinctive appearance, taste, and aroma make it popular among Thai consumers (Office of Agricultural Economics, 2022). Thailand leads in global fresh durian exports, with China, Hong Kong, Vietnam, and Taiwan as its primary markets. This situation has increased demand and market growth for Thai durian (Rocket Media Lab, 2021). Recent data show a mixed picture for durian production. The total yield area has expanded to 424,724 rai in 2024, an 8.85% increase from 390,177 rai in 2023. However, the average yield per rai decreased by 7.43%, from 1,991 kg in 2023 to 1,843 kilograms in 2024 (Office of Agricultural Economics, 2024). This decline is attributed to suboptimal flowering and fruiting conditions, reduced average fruit weight, and water

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management challenges in some plantations. Despite these issues, overall durian yield has improved due to an expansion in the cultivation area, offsetting the reduction in per-rai yield (Economic Base, 2024).

Thai durian exports continue to demonstrate growth potential due to increasing global demand; however, the industry faces significant challenges from price undercutting practices, inconsistent product quality, and market control by Chinese operators—necessitating the rigorous implementation of GAP and GMP standards to maintain Thailand’s market position and competitive advantage in the international export arena (Chaichuy and Trimek, 2025). To enhance its global competitiveness, Thailand has focused on improving durian quality, building consumer confidence, and promoting trade. “Quality durian” refers to fruits with high dry meat weight percentages, driven by strong market demand and premium pricing, particularly in export markets. This emphasis on quality has increased income for farmers and entrepreneurs in the sector.

In Rayong Province, durian farmers face challenges in producing high-quality fruit due to pest infestations, necessitating chemical and pesticide use. The introduction of Magik Growth durian wrapping bags has improved fruit quality, addressing these issues (National Science and Technology Development Agency, 2022). However, to fully understand the market, it is crucial to examine the factors influencing consumer purchasing decisions toward quality durian. Consumer purchasing behaviour is complex and traditionally influenced by factors such as price and advertising (Antosova *et al.*, 2023). Trust becomes paramount for online purchases, where physical inspection is impossible (Pruksakit and Samsoon, 2021). Various studies have shown that factors such as price, distribution channels, marketing promotion, personal service, privacy, and trust can significantly impact online fruit purchasing decisions.

Hence, this research investigated the factors influencing the decisions among consumers to purchase quality durian in Rayong Province, considering both traditional and online sales channels. Several key factors influencing the online purchase of fresh durian were examined, including price, distribution channels, marketing promotions, personal service, privacy, and trust.

Materials and methods

Population and sample

The sample study population comprised consumers following the Facebook page “Lady Stylist – Durio Thailand by Chaalhi Style” (Figure 1) managed by Nuanapa Charoenruay. As of December 2024, the page had 4,700 likes, with 10% (470) identified as quality durian farmers from Rayong Province.

Using Taro Yamane's formula (Yamane, 1973), a sample size of 216 was determined from participants who had liked the page and purchased fresh durian through it (Charoenruay, 2024).



Figure 1. Facebook page Lady Stylist – Durio Thailand by Chaalhi Style

Source: <https://www.facebook.com/profile.phpid>

Study area

The area of this study is in the Klaeng District, Rayong Province, where the total agricultural area measures 1,869,770.31 rai, with the location of farmers who sell durian online being in the Noen Kho Sub District (Figure 2). There are 72,835 farmers in the area, with durian being an important economic crop. There are 8,984 durian growers, cultivating 117,753 rai of durian, producing 149,234 tonnes (Office of the Permanent Secretary of the Ministry of Agriculture and Cooperatives, 2022). Most farmers in Rayong Province are engaged in gardening and durian cultivation. Farmers in most areas trade durian directly from their farms, while some products are sold to the market for domestic consumption.



Figure 2. Map showing the Noen Kho Sub District, Klaeng District, Rayong Province, Thailand

Data collection and analysis

The data collection instrument consisted of a tripartite questionnaire administered through Google Forms, an online survey platform, divided into two main parts.

Part 1: Demographics: Seven closed-ended questions on the respondent's gender, age, marital status, education, occupation, monthly income, and household size.

Part 2: Consumer opinions on marketing mix factors and their importance in durian purchasing decisions: Closed-ended questions assessed the consumers' perspectives on seven elements (Product, Price, Promotion, Place, Process, and Physical Evidence).

Consumer satisfaction levels on marketing mix factors in this study were measured using a 5-point Likert scale (1-least important, 2-less important, 3-moderately important, 4-very important, and 5-most important) under the following satisfaction criteria (Srisa-ard, 2010) as follows:- 4.21–5.00 Most important, 3.41–4.20 Very important, 2.61–3.40 Moderately important, 1.81–2.60 Less important and 1.00–1.80: Least important.

Multiple regression analysis examined relationships between purchasing decisions (dependent variable) and two independent variables: demographic factors and marketing mix elements. Two distinct regression models isolated the effects of these different factor categories. The analysis used standard statistical procedures with a significance level of $\alpha = 0.05$. This methodological approach identified significant predictors from demographic characteristics and marketing mix elements influencing consumer purchasing behavior in Rayong Province's durian market.

Results

Demographics of consumers

The demographics of consumers (Table 1) revealed a predominantly female sample (54.63%) with a mean age of 36.97 years. Married individuals constituted 53.24% of respondents, while 81.02% held at least a bachelor's degree. The majority (89.81%) worked in non-governmental sectors, with most earning less than 20,000 Thai baht monthly. Households typically comprised fewer than five members (64.35%).

Table 1. Demographics of consumers

Demographic Factors	Number of People (n = 134)	Percentage (100%)
Gender		
Male	98	45.37
Female	118	54.63
Age		
Average 36.97 years	216	100.00
Marital status		
Single	101	46.76
Married	115	53.24
Education		
Below bachelor's degree	41	18.98
Bachelor's degree and higher	175	81.02
Occupation		
Government service	22	10.19
Non-government occupations	194	89.81
Average monthly income		
Less than 20,000 Thai baht per month	112	51.85
More than 20,000 Thai baht per month	104	48.15
Number of members in a shared household		
Less than five people	139	64.35
More than five people	77	35.65
Total	216	100.00

Consumer opinions on the importance of marketing mix factors in durian purchasing decisions

Consumers were found the price to be the most influential factor in their durian purchasing decisions ($\bar{x} = 4.35$, S.D. = 0.62), followed closely by product considerations ($\bar{x} = 4.33$, S.D. = 0.64) and process ($\bar{x} = 4.31$, S.D. = 0.64 (Table 2). Overall, consumers rated the entire marketing mix as 'most important' (grand

mean = 4.24, S.D. = 0.67), indicating that a comprehensive approach to marketing strategy is essential for durian sales. While all seven Ps of the marketing mix were rated highly, the place received the lowest score for relative importance (\bar{x} = 4.14, S.D. = 0.71), although it still fell within the ‘very important’ category.

Table 2. Consumer opinions on the importance of marketing mix factors in durian purchasing decisions

Marketing Mix	\bar{X}	S.D.	Scale of Opinions	Rank
Product	4.33	0.64	Most important	2
Price	4.35	0.62	Most important	1
Place	4.14	0.71	Very important	6
Promotion	4.20	0.68	Very important	5
People	4.21	0.68	Most important	4
Physical evidence	4.20	0.73	Very important	5
Process	4.31	0.64	Most important	3
Grand	4.24	0.67	Most important	

Demographic factors affecting the purchasing decision of consumers in Rayong Province toward quality durian

The results of the multiple regression analysis on the demographic factors influencing durian purchasing decisions is shown in Table 3. The analysis yielded $R = 0.239$ and $R^2 = 0.114$, indicating that approximately 11.4% of the variance in durian purchasing decisions can be explained by the demographic variables included in the model. Among the seven demographic factors examined, only two variables emerged as statistically significant predictors. Education level demonstrated a significant negative relationship with purchasing decisions ($\beta = -0.147$, $p = 0.038$), suggesting that consumers with higher education levels may exhibit different purchasing behaviours regarding durian. Additionally, the number of members in a shared household showed a significant positive relationship ($\beta = 0.153$, $p = 0.026$), indicating that larger households were more likely to purchase durian. The remaining demographic variables, including gender, age, marital status, occupation, and average monthly income that were not statistically significant relationships with durian purchasing decisions ($p > 0.05$).

Table 3. Demographic factors influencing purchasing decision behaviour

Independent Variable	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
A (constant)	2.414	0.466		5.175	0.000
Gender	-0.169	0.140	-0.082	-1.206	0.229
Age	0.000	0.008	-0.004	-0.049	0.961
Marital status	0.062	0.152	0.030	0.407	0.684
Education	-0.383	0.184	-0.147	-2.084	0.038*
Occupation	-0.075	0.240	-0.022	-0.315	0.753
Average monthly income	0.166	0.147	0.081	1.134	0.258
Number of members in a shared household	0.326	0.146	0.153	2.237	0.026*

Note: Statistically significant at the .05 level. $R = 0.239$, $R^2 = 0.114$, Durbin-Watson = 1.921
Sig < 0.05*

Marketing mix factors affecting consumer purchasing decisions toward quality durian in Rayong Province

The multiple regression analysis influenced marketing mix factors on durian purchasing decisions (Table 4). The model yielded R was .292 and R^2 was 0.170, indicating that approximately 17% of the variance in purchasing decisions was explained by the marketing mix variables examined. Among the seven marketing mix factors, only price emerged as a statistically significant predictor ($\beta = 0.209$, $p = 0.049$), demonstrating a positive relationship with purchasing decisions. This suggested that price considerations significantly influence consumers' decisions when purchasing durian. The remaining marketing mix factors, including product, promotion, place, people, physical evidence, and process were not statistically significant relationships with durian purchasing decisions ($p > 0.05$).

While product approached significance ($\beta = 0.164$, $p = 0.095$), it did not meet the threshold for statistical significance. Interestingly, physical evidence and place showed negative beta coefficients, suggesting that as these factors increased in importance, purchasing decisions was slightly decreased.

Table 4. Marketing mix factors that affect buying decision behaviour

Independent Variable	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
A (constant)	0.968	0.706		1.371	0.172
Product	0.329	0.196	0.164	1.675	0.095
Price	0.386	0.195	0.209	1.982	0.049*
Promotion	-0.069	0.180	-0.037	-0.385	0.701
Place	-0.185	0.154	-0.107	-1.198	0.232
People	0.145	0.187	0.083	0.774	0.440
Physical evidence	-0.273	0.198	-0.160	-1.382	0.169
Process	-0.074	0.196	-0.039	-0.374	0.709

Note: Statistically significant at the .05 level. $R = 0.292$, $R^2 = 0.170$, Durbin–Watson = 2.068
 Sig < 0.05*

Discussion

The demographic findings reveal that durian purchasers in Rayong Province are predominantly female (54.63%), with a mean age of 36 years, mostly married (53.24%), employed in non-government sectors (81.02%), and earning less than 20,000 Thai baht monthly (89.81%). These results are largely consistent with Sathan *et al.* (2021), who similarly found that online agricultural product consumers were predominantly female (60.5%) and in a comparable, though slightly younger, age bracket (mean age 32 years). The demographic profile offers important insights for market segmentation strategies. Female consumers showed particular concern for product appearance, quality, price, promotions, and ordering convenience. Income level also influenced purchasing priorities, with consumers in the 10,001–20,000 Thai baht monthly income bracket emphasising satisfaction, cost-effectiveness, and warranties. These preference patterns align with our regression findings on price significance and suggest that targeted marketing approaches should consider both gender and income level when developing pricing strategies and value propositions for durian sales in this region.

The demographic factors affecting consumers' decision to buy quality durians in Rayong Province found that education level (negatively) and household size (positively) were the only significant predictors. The education level and household size influence purchasing decisions because consumers with a bachelor's degree or higher tend to pay attention to the value and quality of the products they buy, ensuring that the quantity is sufficient for household consumption. This finding is consistent with Thongkaew *et al.* (2017), who identified five key factors influencing the decision to buy durians: the number of

household members, average monthly income, size of the purchased durians, willingness to pay more for quality durians, and price satisfaction. As household members increase, consumers are more likely to justify spending a higher price for quality durians. These factors were found to be statistically significant ($p < 0.05$).

The results demonstrated that among marketing mix factors, only price significantly influences durian purchasing decisions due to its premium nature, seasonal availability, and consumers' desire to ensure value for money when investing in this luxury fruit. Consumers routinely compare prices across platforms to ensure optimal value, evaluating cost in relation to product quality and market rates. This finding contrasts with Chuaychunoo's (2016) research, which identified additional influential marketing mix factors such as personnel, product quality, promotions, and store image. Additionally, Manae *et al.* (2021) corroborate the significance of pricing, noting consumers' willingness to pay premiums for quality durians, particularly when coupled with attractive packaging and competitive pricing. Strategies such as increased volume at constant prices or price reductions can further enhance consumer appeal.

Harnsuek *et al.* (2019) found that marketing mix factors correlate with purchasing decisions, recommending two key strategies: diversify durian offerings to increase per-transaction purchases while clearly communicating price-quality relationships that justify premium pricing and expand distribution channels with improved product labelling for greater market reach and customer clarity. These strategies aim to stimulate consumer purchasing decisions in the competitive durian market. These insights can guide durian sellers and marketers in Rayong Province to tailor their strategies to meet consumer preferences and maximise sales in the competitive durian market.

In conclusion, education level, household size, and price are found to be the key factors influencing quality durian purchasing decisions in Rayong Province, especially among female consumers with moderate incomes. Our findings emphasize the importance of product diversity, transparent pricing, and expanded distribution channels as online shopping increases. Durian sellers should prioritize these elements to meet consumer preferences and remain competitive in Rayong's evolving market.

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