

# Customer Satisfaction in Online Platforms: An Empirical Analysis of Key Influencing Factors

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## ABSTRACT

This study investigates the determinants of customer service satisfaction in online platforms, emphasising four critical factors such as price, service quality, promotion and privacy. The objectives are to analyse these key issues, examine their impact on satisfaction, and propose actionable recommendations for improvement. Using a structured questionnaire distributed among 450 students at a private university in Shah Alam, the research employs correlation and regression analyses to examine the relationships between these variables and overall satisfaction. Findings reveal that promotional strategies exert the strongest influence on customer satisfaction ( $R^2 = 0.571$ ), followed by price ( $R^2 = 0.551$ ) and service quality ( $R^2 = 0.507$ ), while privacy, though significant, demonstrates a comparatively weaker effect ( $R^2 = 0.281$ ). These results underscore the necessity for businesses to adopt a balanced approach that integrates competitive pricing, superior service delivery, strategic promotional activities and robust data protection measures to enhance trust and loyalty. The study contributes to the literature on digital consumer behaviour and offers actionable insights for e-commerce operators seeking sustainable growth. By promoting inclusive and secure digital practices, this research aligns with SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 12 (Responsible Consumption and Production).

**Keywords:** Customer Satisfaction; Online Platforms; Price; Service Quality; Promotion; Privacy

## INTRODUCTION

### Research Background

Customer satisfaction has remained a central construct in marketing and consumer behaviour research due to its strong influence on customer retention, repeat purchase intention, and long term organizational performance. In digital environments, according to the Budur and Poturak, 2021 and Fithoni et al., 2023, they defined customer satisfaction as the outcome of customer's evaluation based on their online platforms experience. To reiterate, customer satisfaction elicits information about the quality of product, either meet or exceed their expectation during service encounters. Aftermath pandemic, the usage of digital platforms particularly in business has skyrocketed, therefore, scholars argue to have more studies on analysing to provide a better understanding on factors that contribute to customer satisfaction and how these online platforms are shaping consumption patterns.

E-commerce has been growing and have created an intense competition among online platforms. Subsequently, it has led firms to prioritise customer satisfaction as a main objective by ensuring customer needs are fulfilled. In sum, the convenience, accessibility, and efficiency offered by online platforms have transformed customer expectations, requiring firms to continuously optimise service delivery and customer experience. A copious of studies have indicated that customer satisfaction in online platforms is closely interrelated to business sustainability, revenue growth, and customer loyalty (Kim & Yum, 2024; Yum & Kim, 2024). In a nutshell,

customer satisfaction has become a key performance indicator that reflects the effectiveness of organizational strategies in digital contexts (Riaza et al., 2024).

In a specific view, the rapid expansion of the digital economy has significantly increased consumer reliance on online platforms for purchasing goods and services. For example, in 2024, Department of Statistics Malaysia (DOSM) have had recorded e-commerce activities have substantial contribution on digital platforms by generating more than RM918 billion in revenue. It reflects that due to high internet penetration, widespread smartphone usage, and improved digital infrastructure have accelerated online consumption patterns and sustained growth in digital transactions and online consumption across sectors.

Moreover, recent consumer-level evidence further highlights the importance of customer satisfaction in Malaysia's online marketplace. According to the Malaysian Communications and Multimedia Commission (MCMC), a substantial proportion of Malaysian internet users engage in online shopping regularly, with consumers reporting that price competitiveness, convenience, and promotional incentives are key factors influencing their satisfaction and platform choice (MCMC, 2023). These findings suggest that Malaysian online consumers actively evaluate platforms based on both economic value and service experience, rather than accessibility alone. In addition, market research from Ipsos Malaysia also indicates that although e-commerce platform usage remains high, fluctuations in purchasing frequency are often associated with concerns related to pricing transparency, promotional credibility, service performance and delivery efficiency (Ipsos, 2023). It can be concluded that this trend underscores the increasing sensitivity of Malaysian consumers to service quality and promotional effectiveness, particularly in highly competitive online markets where multiple platforms offer similar product assortments.

Collectively, existing empirical and institutional evidence in Malaysia confirms that price, service quality, promotion, and privacy remain central determinants of customer satisfaction in online platforms. These factors jointly shape customers' perceived value, trust, and overall evaluation of online services, ultimately influencing satisfaction and loyalty in the digital economy (Top & Ali, 2021; Tzeng et al., 2021). Understanding customer satisfaction within the Malaysian online context is therefore essential for platform operators seeking to enhance competitiveness, consumer trust, and sustainable growth. By promoting efficient service delivery, fair pricing practices, strategic marketing, and secure data management, online businesses can contribute to the Sustainable Development Goals (SDGs) such as SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 12 (Responsible Consumption and Production). As online platforms continue to expand, examining the existing determinants of customer satisfaction remains a critical area of academic and practical importance.

Despite the rapid expansion of e-commerce literatures, yet it still exhibits a notable gap in explaining the relative influence of digital platforms on consumer outcomes.

Therefore, this study will investigate different key factors in influencing customer satisfaction and to what extent those factors have shape the e-commerce activities in Malaysia.

## LITERATURE REVIEW

Customer satisfaction is the foundation of competitive advantage in online platforms, shaping repeat purchase, continued usage, and loyalty across e-commerce and digital services. Four levers, price, service quality, promotion, and privacy, consistently emerge as salient antecedents. Synthesising recent empirical evidence, this review evaluates how these drivers affect customer satisfaction and consolidates testable hypotheses for subsequent analysis. Service quality in digital environments, encompassing responsiveness, reliability, information accuracy, and remediation, consistently exhibits strong positive effects on satisfaction. In marketplace settings, Kim and Yum (2024) report that service quality significantly increases satisfaction, trust and continuous usage intention; satisfaction and trust further mediate the service-quality effect, amplifying downstream outcomes.

Complementary evidence from a study demonstrates that service quality positively influences satisfaction in e-retail, with "contact" and "privacy" facets ranking as the most influential, emphasising the roles of human contact

channels and data-protection assurances (Ganie & Bhat, 2023). Fu (2023) further isolates privacy/security, responsiveness, information accuracy, and remediation as critical dimensions that strengthen trust, which closely tracks satisfaction in the e-commerce context. Despite these findings, existing models emphasise traditional dimensions and overlook emerging aspects such as AI-driven support and cross-device continuity, which are increasingly relevant in digital platforms. Addressing these gaps will refine service-quality frameworks and improve predictive validity.

Promotions are powerful but often affect satisfaction indirectly. Liu, Zhao and Zheng (2022) find that promotional activities increase loyalty via customer satisfaction as a mediator, indicating that well-designed promotions improve both perceived values and satisfaction when aligned with expectations and reliable service delivery. Yet another study cautions that online advertising alone does not significantly raise satisfaction; its impact strengthens when brand knowledge mediates the relationship, suggesting that informational depth and familiarity transform promotions into genuine value rather than transient stimuli (Salameh et al., 2022). For promotion, studies largely examine short-term effects, with insufficient attention to long term impacts such as promotion fatigue and discount anchoring on sustained satisfaction.

Price remains a central determinant of online satisfaction through perceived fairness and value. Zhao et al. (2021) show that competitive pricing coupled with clear product information significantly influences buying behaviour, with customer satisfaction fully mediating the pricing-behaviour relationship, evidence that pricing affects satisfaction not only directly but also by shaping perceived value and expectations. Experimental work complements these mechanisms, where Priester and Roth (2021) find that frequent, opaque price changes reduce fairness perceptions and thereby satisfaction unless consumers are accustomed to variable pricing for specific categories, highlighting that price transparency and category norms moderate the price-satisfaction link. Together, these results underscore the importance of transparent discount policies, price-history cues, and ethical personalisation to preserve fairness perceptions alongside value. However, most research on pricing fairness is concentrated in Western or Chinese contexts, leaving a gap in understanding how dynamic pricing and transparency affect satisfaction in Southeast Asian online markets.

Privacy has shifted from a hygiene factor to a strategic differentiator that shapes trust and satisfaction in digital commerce. Saeed (2023) shows that concerns over credit card usage and information security strongly influence perceptions of data security and trust, which in turn affect satisfaction, affirming a direct and indirect role of privacy. Extending to omnichannel contexts, a study demonstrates that privacy concerns moderate the relationship between connectivity or channel integration and trust; trust subsequently mediates the effect of omnichannel experience on satisfaction, suggesting that privacy sensitivity alters how customers process multi-touch journeys and evaluate outcomes (Riaza et al., 2024). While the influence of privacy's role in trust formation is well-documented, the role of privacy across different payment methods and cultural contexts remains underexplored.

The above literature have explained that customer satisfaction in online platforms is a multifaceted construct influenced by the price, service quality, promotion and privacy. Empirical evidence consistently validates these factors as significant variables in analysing customer satisfaction. Moreover, service quality remains a key predictor, with responsiveness, accuracy, and privacy dimensions driving trust and satisfaction. Promotional strategies exert indirect effects through brand knowledge and perceived value, suggesting that short-term incentives alone are insufficient for lasting satisfaction. Privacy, once considered a basic requirement, now has had considered as a significant variable in shaping trust and influencing customer satisfaction outcomes.

## METHODOLOGY

### Research Design and Sample

This research adopts a quantitative research design using a cross-sectional survey approach to examine the relationships between price, service quality, promotion, privacy, and customer satisfaction among online platform users. A structured questionnaire was employed as the data collection instrument, enabling systematic measurement of perceptions across predefined constructs. The target population comprised students enrolled at a private university in Shah Alam, Malaysia, as this group represents active users of online platforms and offers

accessibility for controlled sampling. A total of 450 respondents were selected by using simple random sampling to ensure representativeness and minimise selection bias, which satisfies the sample size requirements, calculated from Krejcie and Morgan (1970), for correlation and regression analyses and enhances the generalisability of findings with the study context.

### Data Collection Procedure

Data were collected through self-administered questionnaires distributed both physically and online through various channels on social media (Facebook, Instagram and WhatsApp) and at a private university to maximise reach and response rates. Prior to distribution, respondents were briefed on the study objectives and assured of confidentiality and voluntary participation. Ethical considerations, including informed consent and anonymity, were strictly observed. The data collection process spanned four weeks, allowing sufficient time for responses and follow-up reminders to achieve the targeted sample size.

### Measures and Instrumentation

The research instrument consisted of a structured questionnaire divided into two sections: demographic information and measurement items for the study variables. All constructs, price, service quality, promotion, privacy and customer satisfaction were operationalised using multi-item scales adapted from validated prior studies and refined through expert review to ensure contextual relevance. Price was measured using items adapted from Zhao et al. (2021), focusing on perceptions of fairness and transparency (e.g., *“The prices on this platform are reasonable compared to competitors”*; *“Discounts offered are clearly communicated”*). Service quality employed dimensions from Kim and Yum (2024) and Ganie and Bhat (2023), including responsiveness, reliability, and assurance (e.g., *“Customer service responds promptly to inquiries”*; *The platform provides accurate and reliable information”*). Promotion items were adapted from Liu et al. (2022) and Salameh et al. (2022), assessing the attractiveness and clarity of promotional campaigns (e.g., *“Promotional offers on this platform are appealing”*; *I understand the terms and conditions of promotions”*). Privacy was measured using items from Saeed (2023) and Riaza et al. (2024), capturing perceptions of data security and confidentiality (e.g., *“I feel confident that my personal information is secure on this platform”*; *The platform clearly explains its privacy policies*). Customer satisfaction items were adapted from Yum and Kim (2024), reflecting overall satisfaction and fulfilment of expectations (e.g., *“I am satisfied with my experience on this platform”*; *The platform meets my expectations for online shopping”*).

All items were rated on a five-point Likert scale ranging from 1 (“Strongly Disagree”) to 5 (“Strongly Agree”). The questionnaire was pre-tested with a pilot group to ensure clarity and reliability. Internal consistency was assessed using Cronbach’s alpha, with all constructs exceeding the recommended threshold of 0.70. Data analysis employed correlation and multiple regression techniques to examine the hypothesised relationships between independent variables (price, service quality, promotion, privacy) and the dependent variable (customer satisfaction).

**Table 1 Reliability of Measurement Scales (N = 450). All constructs show high internal consistency ( $\alpha > 0.80$ ), indicating that survey items for each variable are reliable measures**

Construct	Number of Items	Cronbach’s $\alpha$ (Reliability)
Customer Satisfaction	8	0.910
Price	8	0.851
Service Quality	8	0.894
Promotion	8	0.909
Privacy	8	0.846

## RESULT

### Descriptive Analysis

A total of 450 valid responses were obtained from students of a private university in Shah Alam and were included in the final analysis. The demographic characteristics of the respondents provide an overview of the

sample composition and confirm its suitability for examining customer satisfaction-related perceptions among university students. In terms of gender distribution, the sample was relatively balanced, with female students constituting the majority (56.4%), followed by male students (43.6%). This distribution reflects the general gender composition of enrolment in Malaysian private universities, particularly within business and science-related programmes. Regarding age, most respondents were within the 18-22 years age group (68.9%), followed by those aged 23-25 years (24.7%), while a smaller proportion were above 25 years old (6.4%). This indicates that the sample predominantly represents traditional undergraduate students, aligning with the study's focus on study consumers, particularly Generation Z.

With respect to level of study, the majority of respondents were undergraduate students (78.2%), while postgraduate students accounted for 21.8% of the sample. This distribution is appropriate given that undergraduate students form the largest segment of this private university's student population and are more actively engaged in campus-related services and digital platforms. In terms of faculty or field of study, respondents were mainly enrolled in Business and Management programmes (41.6%), followed by Health Life Sciences (26.9%), Information Technology and Engineering (18.4%) and other disciplines, including education and hospitality (13.1%). This diversity enhances the representation of the sample across academic disciplines within this university. Concerning the year of the study, first and second year students comprised 52.0% of the respondents, while third and final year students represented 48.0%. This relatively even distribution ensures that perceptions are captured from students at different stages of their academic journey, which may influence their expectations and satisfaction levels.

Overall, the demographic profile indicates that the sample is adequately diverse and representative of this private university student population in Shah Alam, thereby providing a reliable basis for subsequent inferential analyses examining the effects of price, service quality, promotion, and privacy on customer satisfaction.

### **Hypothesis testing**

**H1: Price → Customer Satisfaction.** The correlation analysis revealed a strong positive relationship between price and customer satisfaction ( $r = 0.743$ ,  $p < 0.001$ ). This indicates that respondents who perceived prices as fair, transparent, and competitive tended to report higher levels of satisfaction. The strength of this correlation suggests that pricing perceptions play a substantial role in shaping customer evaluations of online platforms. Regression analysis further confirmed this relationship, with price explaining 55.1% of the variance in customer satisfaction ( $R^2 = 0.551$ ). This finding demonstrates that pricing is a strong predictor of satisfaction, highlighting the importance of affordability and value-for-money considerations in online purchasing decisions. Therefore, H1 is supported, indicating that price has a significant and positive effect on customer satisfaction.

**H2: Service Quality → Customer Satisfaction.** The results showed a strong positive correlation between service quality and customer satisfaction ( $r = 0.712$ ,  $p < 0.001$ ). This suggests that higher levels of perceived responsiveness, reliability, and service efficiency are associated with increased customer satisfaction. The magnitude of the correlation emphasises that service quality remains a critical determinant even in digitally mediated environments. Regression analysis demonstrated that service quality accounts for 50.7% of the variance in customer satisfaction ( $R^2 = 0.507$ ). This indicated that more than half of customer satisfaction can be attributed to the perception of service delivery quality. Customers value timely responses, accurate information, and effective problem resolution, which collectively enhance the overall online experience. Accordingly, H2 is supported.

**H3: Promotion → Customer Satisfaction.** The correlation results indicated the strongest positive relationship among all variables between promotion and customer satisfaction ( $r = 0.756$ ,  $p < 0.001$ ). This finding suggests that respondents who perceived promotional activities as attractive, clear, and valuable reported higher satisfaction levels. Promotions such as discounts, special offers, and vouchers appear to strongly influence consumers' emotional and economic evaluations. Regression analysis further revealed that promotion explains 57.1% of the variance in customer satisfaction ( $R^2 = 0.571$ ), making it the most influential predictor in the model. This indicates that effective promotional strategies significantly enhance perceived value and engagement, thereby increasing satisfaction. Hence, H3 is strongly supported.

H4: Privacy → Customer Satisfaction. Privacy showed a moderate positive correlation with customer satisfaction ( $r = 0.532, p < 0.001$ ). This suggests that while customers value data security and privacy protection, its influence on satisfaction is comparatively weaker than price, service quality, and promotion. Nonetheless, customers who had greater confidence in the platform’s data protection still reported higher satisfaction. Regression results indicated that privacy explains 28.1% of the variance in customer satisfaction ( $R^2 = 0.281$ ). Although this effect is smaller relative to other predictors, it remains statistically significant, confirming that privacy concerns do shape customer evaluations, particularly through trust formation. Consequently, H4 is supported, albeit with a weaker effect size.

Collectively, the findings confirm that all four independent variables significantly influence customer satisfaction. Promotion emerged as the strongest predictor, followed by price and service quality, while privacy, although significant, exerted the weakest influence. This pattern suggests that customers on online platforms prioritise economic and experiential benefits over privacy, although data protection remains a necessary foundation for trust. These results provide strong empirical support for the proposed research model and align with existing literature on customer satisfaction in digital platforms.

**Table 2. Results of Correlation and Regression Analyses.**

Predictor (Independent Variable)	Outcome (Dependent Variable)	Pearson r	R <sup>2</sup>	p-value	Hypothesis Support
Price	Customer Satisfaction	0.743	0.551	< 0.001	Yes (H1 supported)
Service Quality	Customer Satisfaction	0.712	0.507	< 0.001	Yes (H2 supported)
Promotion	Customer Satisfaction	0.756	0.571	< 0.001	Yes (H3 supported)
Privacy	Customer Satisfaction	0.532	0.281	< 0.001	Yes (H4 supported)

The responses were examined and cleaned to identify any missing and inconsistent items after data collection. The final dataset ( $N = 478$ ) was then analysed using IBM SPSS (Version 30). The analysis proceeded in several steps. Descriptive statistics were computed to indicate the sample demographic composition and the distribution of responses for each construct. The demographic profile indicated female shoppers (65.7%) accounted for the majority, whereas male shoppers (34.3%) made up the minority, and a substantial proportion of respondents were aged 18–25 years. The distribution of the sample was well-educated (over 60% had a diploma or higher) and ethnically diverse (approximately 41% Malay, 23% Chinese, 18% Indian, and 18% other ethnic groups). That meant that the data represented the average cross-section of AEON Bukit Tinggi’s clientele, comprising predominantly young adult shoppers from diverse backgrounds. Descriptive statistics for construct variables included mean and standard deviation values and normality checks. Skewness and kurtosis scores for all variables were within ranges considered acceptable (skewness close to 0, kurtosis between -1.3 and -1.1), indicative of the observations that were approximately normally distributed. This warranted the application of parametric statistical tests for deeper analyses.

Second, Pearson correlation analysis was conducted to analyse the bivariate relationships between the independent variables (service quality, product quality, and price-saving orientation) and the dependent variable (customer satisfaction). This served as an initial test of our hypotheses concerning positive associations. The correlation matrix shows that service quality, product quality, and price-saving orientation are highly positively related to customer satisfaction (e.g., each  $r \approx 0.83, p < 0.001$ ). Service quality and customer satisfaction were strongly correlated at  $r = 0.830$ , product quality at  $r = 0.833$ , and price-saving orientation at  $r = 0.826$  (all  $p < 0.001$ ). Correlation coefficients greater than 0.70 were found to be highly significant by traditional standard benchmarks. These findings provide some initial evidence which supports all three hypotheses that enhancements in any of the three categories are related to better customer satisfaction.

Third, for measuring the predictive power of the factors for satisfaction, separate simple linear regressions were done for each independent variable. We conclude with the conclusion shown in Table 2, that each model is significant, and that it explains a sizable proportion of the variance in satisfaction by means of a predictor to itself. So service quality explained  $R^2 = 0.689$  and product quality explained  $R^2 = 0.694$  and price-saving orientation explained  $R^2 = 0.683$  of the variance. In other words, every factor alone explains about 68–69% of

the customer satisfaction variability. These  $R^2$  values reflect strong explanatory power (consumer behaviour research would say that over 0.60 is substantial). The regression coefficients for each of the three predictors were positive and significant ( $p < 0.001$ ), meaning they had a positive effect on customer satisfaction and hence supported Hypotheses 1, 2, and 3. Importantly, product quality demonstrated the strongest  $R^2$ , suggesting that product quality might act as the single strongest predictor (although the difference among those three factors was slight).

Lastly, a multiple regression was carried out to assess the joint influence of the three factors. Multicollinearity was considered (for example, if the store was known to offer high-quality product it would also likely be perceived as providing good value), since service quality, price-saving orientation, and product quality are likely interrelated. The multiple regression produced an adjusted  $R^2$  of about 0.75 together for the three predictors, suggesting that these factors together accounted for 75% of the variance in customer satisfaction, while all predictors remained positive and significant,  $p < 0.001$ . We assessed the variance inflation factors (VIFs), which were also monitored, thus suggesting that multicollinearity had not unduly affected the regression estimates ( $<5$ ). The integrated model demonstrates that a comprehensive integrated strategy across service, product, and pricing dimensions together yields an extremely high level of customer satisfaction.

## DISCUSSION

### Theoretical Implications

The findings of this study offer several important theoretical implications for cuice quality, promotion, and privacy function as salient evaluative cues that shape satisfaction through customers' post-consumption assessments. These results reinforce ECT's central proposition that customer satisfaction emerges from the confirmation of expectations formed prior to service usage (Oliver, 1980; Bhattacharjee, 2001).

First, the strong and significant impact of promotion on customer satisfaction provides theoretical support for the role of value-enhancing stimuli in the expectation-confirmation process. While ECT traditionally emphasises core performance attributes such as usefulness and service outcomes, the present findings highlight that promotional incentives such as discounts and vouchers form an important part of customers' initial expectations in online platforms. When promotional benefits are perceived as fair and effectively delivered, customers' expectations are positively confirmed, thereby strengthening satisfaction. This extends existing ECT applications by demonstrating that economic and experiential incentives, rather than functional performance alone, can be primary drivers of satisfaction in digital environments (Liu et al., 2022; Kaveh et al., 2020).

Second, the significant effect of price on customer satisfaction enhances the theoretical understanding of price fairness within online service evaluation models. Consistent with prior literature, the findings suggest that customers assess price not in absolute terms, but relative to perceived value and competing platform offerings (Zhao et al., 2021; Fithoni et al., 2023). From an ECT perspective, price acts as a confirmation cue that validates or invalidates customers' value expectations. This supports the theoretical position that pricing strategies in online platforms should be conceptualised not merely as cost indicators, but as integral components of satisfaction formation through value confirmation.

Third, the positive influence of service quality on customer satisfaction reinforces the relevance of traditional service evaluation theories within technology-mediated contexts. The results align with both SERVQUAL-based arguments and the S-O-R framework, where service quality functions as a powerful external stimulus affecting customers' internal evaluations and emotional responses (Mehrabian & Russell, 1974; Muharam et al., 2021). In line with S-O-R theory, responsiveness, reliability, and system performance shape customers' cognitive and affective states, which ultimately manifest as satisfaction. This confirms that despite the digital nature of online platforms, service quality remains a foundation determinant of satisfaction rather than being diminished by technological mediation.

Fourth, although privacy demonstrated a comparatively weaker effect on customer satisfaction, its statistical significance provides important theoretical insights. The findings support existing trust-based models that view

privacy as a hygiene factor, which is essential for preventing dissatisfaction rather than actively enhancing satisfaction (Dehghanpouri et al., 2020; Saeed, 2023). Within ECT, privacy may function as a threshold condition where customers expect basic data protection as a given, and satisfaction arises when this expectation is met rather than exceeded. This nuanced role of privacy extends theoretical debates by suggesting that while privacy is critical for trust formation, its contribution to satisfaction may be indirect or conditional.

Taken together, the study advances theoretical understanding by demonstrating that customer satisfaction in online platforms is shaped by a combination of economic, experiential, and trust-related factors, operating through expectation confirmation and stimulus response mechanisms. By empirically validating the applicability of ECT and S-O-R frameworks in a Malaysian online consumer context, the findings strengthen the generalisability of these theories beyond Western settings. Furthermore, the differential strength of the predictors highlights the need for future theoretical models to account for contextual factors such as market competitiveness and consumer price sensitivity when explaining satisfaction formation in digital commerce.

### **Practical Implications**

The findings of this study offer several practical implications for online platform operators, marketers, and policy stakeholders seeking to enhance customer satisfaction in digital environments. The empirical evidence indicates that customer satisfaction in online platforms is influenced by a combination of economic, experiential, and trust-related factors, requiring a balanced and integrated managerial approach.

First, given that promotion emerged as the strongest predictor of customer satisfaction, online platforms should prioritise the development of strategic and customer-centric promotional campaigns. Managers are encouraged to design promotional offers such as discounts, vouchers, free delivery, and limited-time incentives that are transparent, easy to understand, and aligned with customer expectations. Clearly communicated promotions can enhance perceived value and stimulate positive customer evaluations. However, platform operators should ensure that promotional promises are consistently fulfilled, as misleading or overly complex promotions may lead to dissatisfaction and erode trust. This suggests that promotional effectiveness should be assessed not only by short-term sales outcomes but also by its contribution to sustained customer satisfaction.

Second, the significant influence of price on customer satisfaction highlights the importance of maintaining competitive and fair pricing strategies. Online businesses should continuously monitor marketplace prices and competitors' offerings to ensure that customers perceive prices as reasonable relative to the value received. Dynamic pricing mechanisms should be implemented cautiously, accompanied by transparency in pricing policies to avoid negative perceptions of price unfairness. Managers should also consider value-based pricing strategies that reinforce customers' perceptions of affordability and fairness, particularly in price-sensitive markets such as digital commerce.

Third, the strong effect of service quality underscores the necessity of delivering reliable and efficient online services. Platform operators should invest in system reliability, fast response times, and accurate information delivery to enhance the overall user experience. Efficient customer support, including timely resolution of complaints and accessible communication channels, remains essential even in technology-mediated environments. Service quality initiatives should therefore focus on both technological performance and human support mechanisms to meet customers' evolving expectations.

Fourth, although privacy demonstrated a comparatively weaker impact on customer satisfaction, its significance indicates that data security remains a foundational requirement for online platforms. Managers should implement robust data protection measures and clearly communicate privacy policies to enhance customers' confidence in online transactions. While privacy protection alone may not substantially elevate satisfaction levels, inadequate privacy practices can result in trust erosion and customer attrition. Consequently, privacy should be treated as a critical hygiene factor that supports satisfaction by preventing dissatisfaction.

From a broader perspective, the practical implications of this study extend to policymakers and regulators involved in Malaysia's digital economy. Strengthening data protection enforcement, promoting transparent

online business practices, and supporting digital service quality standards can foster consumer trust and satisfaction at the industry level. Such initiatives are consistent with Malaysia's digital development objectives and contribute to sustainable economic growth.

Overall, the findings suggest that online platforms must adopt an integrated management approach that balances promotional effectiveness, pricing fairness, service quality excellence, and data privacy protection. By doing so, digital businesses can enhance customer satisfaction, foster trust and loyalty, and achieve sustainable growth in increasingly competitive online markets.

## CONCLUSION

This study examined the determinants of customer satisfaction in online platforms by focusing on four key factors: price, service quality, promotion and privacy within the context of Malaysia's growing digital economy among students in a private university in Shah Alam, Selangor, Malaysia. Drawing on empirical data collected from online platform users, the findings provide robust evidence that all four factors significantly influence customer satisfaction, thereby supporting the proposed hypotheses (H1-H4). The results reaffirm the multidimensional nature of customer satisfaction and highlight the importance of integrating economic, experiential, and trust-related considerations in digital service environments.

Among the examined determinants, promotion emerged as the most influential predictor of customer satisfaction, indicating that well-designed and transparent promotional strategies play a critical role in enhancing perceived value and satisfaction in online platforms. Price and service quality also demonstrated strong and significant effects, underscoring the importance of pricing fairness, affordability, system reliability, and responsive customer support in shaping positive user experiences. Although privacy exhibited a comparatively weaker effect, its significance confirms that data security and privacy protection remain conditions for maintaining customer trust and satisfaction in online transactions.

From a theoretical perspective, the findings extend the applicability of ECT and the S-O-R framework to online platform contexts in emerging digital economies. The results demonstrate that online platform attributes act as external stimuli that shape consumers' internal evaluations and satisfaction responses through expectations confirmation mechanisms. By validating these theoretical frameworks in a Malaysian setting, the study contributes to the broader literature on digital consumer behaviour and customer satisfaction in online environments.

Practically, the study offers actionable insights for online platform operators and policymakers. The findings suggest that sustainable competitiveness in digital markets requires a balanced strategy that combines effective promotional initiatives, fair pricing policies, high service quality standards, and robust privacy safeguards. These implications are particularly relevant for countries experiencing rapid digitalisation, where consumer expectations continue to evolve alongside technological advancements.

Despite its contributions, the study is not without limitations. The use of a cross-sectional design and a student-based sample may limit the generalisability of the findings. Future research may consider longitudinal approaches, diverse consumer segments, and the inclusion of mediating or moderating variables such as trust or perceived value. Nonetheless, the present study provides a solid foundation for understanding customer satisfaction in online platforms and offers meaningful guidance for both scholars and practitioners seeking to enhance customer experience and digital service performance.

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