

Explaining Customer Loyalty in Digital Food Delivery Platforms: A Convenience-Led Perspective from Malaysian University Students

Chew Boon Yee, Aidanazima Abashah, Muhammad Safizal bin Abdullah

Faculty of Business & Communication, Universiti Malaysia Perlis (UniMAP), Uniciti Alam Campus,
02100 Padang Besar, Perlis, Malaysia

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ABSTRACT

Digital food delivery platforms compete in markets where users can compare alternatives and switch applications with limited effort. For platform providers, the central challenge is not simply adoption but the conversion of repeated transactions into durable loyalty. This study examines how trustworthiness, service quality and convenience are statistically associated with customer loyalty among Malaysian university students, a digitally intensive and time-constrained user segment. Using an integrated trust, service quality and convenience framework, the article develops a cautious convenience-led interpretation of loyalty in platform-mediated food delivery. Data were collected through an online survey, and 167 valid responses were analysed using descriptive statistics, reliability analysis, Pearson correlation and multiple regression. All three predictors were positively and significantly associated with customer loyalty. Convenience was the strongest statistical predictor ($\beta = 0.491$, $p < 0.001$), followed by service quality ($\beta = 0.231$, $p = 0.001$) and trustworthiness ($\beta = 0.152$, $p = 0.021$). The model explained 54.8% of the variance in customer loyalty. The findings suggest that loyalty among student users is convenience-led but not convenience-only: convenience reduces routine friction, service quality stabilises the user experience, and trustworthiness provides the confidence threshold for digital transactions. The article offers an empirically informed refinement of customer loyalty in low-switching-cost food delivery platforms and practical implications for interface design, operational reliability and student-segment retention.

Keywords: customer loyalty; convenience; digital food delivery; e-service quality; platform loyalty; trustworthiness; university students; Malaysia

INTRODUCTION

Digital food delivery services have become a routine component of contemporary consumption, particularly among younger users who rely on mobile applications for food access, payment, tracking and delivery coordination. In Malaysia, platforms such as GrabFood, Foodpanda and other food delivery applications have normalised app-mediated meal ordering by combining restaurant selection, digital payment and last-mile delivery within a single interface (Nayan & Hassan, 2020; Samsudin et al., 2022). Their growth has also intensified competition because users can compare alternatives quickly and move between applications with limited procedural effort.

This competitive condition shifts the managerial and theoretical question from adoption to loyalty. Adoption indicates that users are willing to try or use a technology; loyalty is a more demanding outcome involving repeat patronage, attitudinal preference and recommendation (Dick & Basu, 1994; Oliver, 1999; Zeithaml et al., 1996). In digital food delivery, repeated use alone may not prove deep loyalty because transactions can be driven by promotions, temporary restaurant availability, campus location or situational convenience. A stronger explanation must therefore ask why users remain committed enough to continue, prefer and recommend a platform when alternatives remain accessible.

University students provide a meaningful analytical context for this question. They are not merely an available survey population. Students are typically mobile-dependent, time-constrained and familiar with competing applications; they also face practical consumption pressures created by academic schedules, campus mobility, limited cooking time and sensitivity to delivery cost. These conditions make them especially responsive to

platform features that reduce ordering friction. Malaysian higher education also represents a substantial digitally active population across public and private institutions (Ministry of Higher Education Malaysia, 2024). The student segment is therefore useful for examining whether loyalty in platform-mediated food delivery is driven primarily by relational confidence, service execution or convenience.

Prior studies on online food delivery and digital services have examined perceived convenience, service quality, security, trust, satisfaction, behavioural intention and continuance intention (Chowdhury, 2023; Foroughi et al., 2023; Kurniawan & Tankoma, 2023; Louisa & Simbolon, 2023; Uzir et al., 2021). However, a large part of this work remains oriented toward adoption, satisfaction or behavioural intention rather than loyalty as a more durable relationship outcome. In information systems research, continuance has long been understood as a post-adoption phenomenon shaped by confirmation, usefulness and satisfaction (Bhattacharjee, 2001), while habit may also affect continued system use (Limayem et al., 2007). These insights suggest that food delivery loyalty should be interpreted beyond one-time adoption, especially where platform use becomes part of everyday routines.

This article addresses that gap by examining the relationship between trustworthiness, service quality, convenience and customer loyalty among Malaysian university students using digital food delivery platforms. Rather than presenting the results as a simple list of significant predictors, the article advances a more precise interpretation: student loyalty in this context is convenience-led but not convenience-only. Convenience shows the strongest statistical association with loyalty because it fits students' mobile-dependent and time-sensitive routines. Nevertheless, convenience is supported by service quality, which stabilises the user experience, and trustworthiness, which provides the confidence threshold required for digital exchange.

The article makes three contributions. First, it repositions customer loyalty in digital food delivery as a low-switching-cost platform problem rather than merely an adoption or satisfaction issue. Second, it integrates Commitment-Trust Theory, SERVQUAL, e-service quality, service convenience and TAM-based reasoning to explain loyalty through relational confidence, service execution and effort reduction. Third, it offers a student-segment interpretation from Malaysia by showing that convenience functions as the dominant statistical predictor while service quality and trustworthiness remain significant supporting conditions.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Customer loyalty in platform-mediated food delivery

Customer loyalty is not reducible to repeated purchase. Classic loyalty theory distinguishes between behavioural repetition and attitudinal attachment, arguing that genuine loyalty requires a favourable disposition as well as repeat patronage (Dick & Basu, 1994; Oliver, 1999). This distinction is important in platform markets because repeated transactions may be temporary, promotion-driven or convenience-induced. Anderson and Srinivasan (2003) similarly conceptualise e-loyalty as favourable customer attitude toward an electronic business that results in repeat buying behaviour. In food delivery, loyalty therefore includes continued use, preference over alternatives and willingness to recommend the platform.

Digital food delivery differs from conventional service encounters because the user experience is distributed across several actors: the platform, restaurant, delivery rider, payment system and customer support process. A service failure at any point in this chain can shape the user's evaluation of the platform as a whole. Studies of online food delivery and home delivery services show that trust, perceived value, service quality, satisfaction and convenience are repeatedly associated with continued use and loyalty-related outcomes (Chowdhury, 2023; Louisa & Simbolon, 2023; Samsudin et al., 2022; Uzir et al., 2021).

The low-switching-cost character of platform markets makes loyalty especially fragile. Service research shows that switching barriers and switching costs can influence repurchase intentions (Jones et al., 2000). In food delivery applications, however, switching barriers are often low because users can maintain several apps simultaneously and choose the one offering the best price, restaurant availability or delivery time. Loyalty must therefore be earned through repeated value in use rather than assumed from past transactions. This makes trustworthiness, service quality and convenience analytically important, but their relative strength remains an empirical question.

Trustworthiness as a confidence threshold

Trustworthiness refers to the extent to which users perceive a platform as reliable, secure and capable of fulfilling promised transactions. In digital services, trust reduces uncertainty because customers cannot fully observe the provider before purchase and must rely on system-mediated assurances (Gefen et al., 2003; Pavlou, 2003). Commitment-Trust Theory argues that trust is central to sustaining long-term exchange relationships because it reduces uncertainty and strengthens willingness to maintain a relationship (Morgan & Hunt, 1994).

In digital food delivery, trustworthiness appears through secure payment processes, protection of personal information, transparent order handling, dependable delivery and credible customer support. These features matter because users entrust platforms with personal data, payment details and expectations of timely food fulfilment. Trust is therefore a minimum condition for continuing digital exchange. Empirical studies in online food delivery and digital commerce suggest that trust and e-trust are positively related to satisfaction, intention and loyalty (Gefen et al., 2003; Kurniawan & Tankoma, 2023; Louisa & Simbolon, 2023; Pavlou, 2003).

Nevertheless, trustworthiness may not always be the strongest differentiator once users treat security, payment reliability and basic fulfilment as expected standards. In a mature application environment, trust may operate as a confidence threshold: users need enough trust to transact, but additional loyalty may depend more strongly on service performance and convenience (Gefen et al., 2003; Morgan & Hunt, 1994; Pavlou, 2003). This interpretation does not minimise trust. It clarifies its role as a necessary relational condition that supports, rather than fully explains, platform loyalty. Accordingly, the first hypothesis is proposed:

H1: Trustworthiness is positively and significantly associated with customer loyalty among Malaysian university students using digital food delivery platforms.

Service quality as an experience stabiliser

Service quality concerns users' evaluation of service performance relative to expectations. SERVQUAL conceptualises service quality through reliability, responsiveness, assurance, empathy and tangibles (Parasuraman et al., 1988). In electronic environments, service quality has been reframed as e-service quality, referring to the extent to which digital interfaces and fulfilment processes support efficient and effective shopping, purchasing and delivery (Parasuraman et al., 2005; Zeithaml et al., 2002). This broader e-service quality lens is especially relevant to food delivery because the platform experience includes both digital interface performance and offline delivery fulfilment.

In food delivery platforms, reliability appears in correct order fulfilment and delivery consistency; responsiveness appears in customer support, refund handling and complaint resolution; assurance appears in confidence that transactions and deliveries will be managed professionally; tangibles are translated into interface design, visual clarity and app usability. These dimensions influence whether users experience the platform as dependable. Studies in delivery and mobile service contexts consistently show that service quality is associated with satisfaction, behavioural intention and loyalty outcomes (Chowdhury, 2023; Uzir et al., 2021; Yum & Yoo, 2023; Zeithaml et al., 1996).

For university students, service quality stabilises loyalty because food delivery is often used to solve immediate needs. A platform may be easy to use, but repeated late deliveries, inaccurate orders, weak refund procedures or unresponsive customer service can erode trust and diminish repeat use. Service quality therefore functions as an experience stabiliser: it protects the convenience advantage from being undermined by operational failure (Uzir et al., 2021; Zeithaml et al., 1996). Based on this reasoning, the second hypothesis is proposed:

H2: Service quality is positively and significantly associated with customer loyalty among Malaysian university students using digital food delivery platforms.

Convenience as the dominant effort-reduction mechanism

Convenience refers to the extent to which a service reduces users' time, effort and difficulty in completing a task. Service convenience research emphasises that customers evaluate services partly through the effort required to

access, transact, receive benefits and repeat use (Berry et al., 2002; Seiders et al., 2007). In digital food delivery, convenience is experienced through easy navigation, quick ordering, saved addresses, integrated payment, real-time tracking, broad restaurant access and the ability to obtain food without travelling to restaurants.

Convenience is also conceptually linked to perceived ease of use in the Technology Acceptance Model, which argues that users are more likely to accept and continue using technologies they perceive as useful and easy to use (Davis, 1989). Continuance research further suggests that sustained use is shaped by post-adoption evaluations and the development of routines or habits (Bhattacharjee, 2001; Limayem et al., 2007). In food delivery platforms, convenience can therefore move beyond first-time usability and become part of routine consumption when the application repeatedly reduces everyday friction.

For Malaysian university students, convenience may be especially influential because food delivery applications are practical tools for managing time. Students may order food between classes, during examination periods, late at night, when transport is limited or when campus food options are unattractive. In such circumstances, convenience does not merely make the service pleasant. It makes the service functionally useful within daily routines, consistent with research on convenience, continuance and habit in digital service use (Berry et al., 2002; Bhattacharjee, 2001; Limayem et al., 2007). This provides the basis for the third hypothesis:

H3: Convenience is positively and significantly associated with customer loyalty among Malaysian university students using digital food delivery platforms.

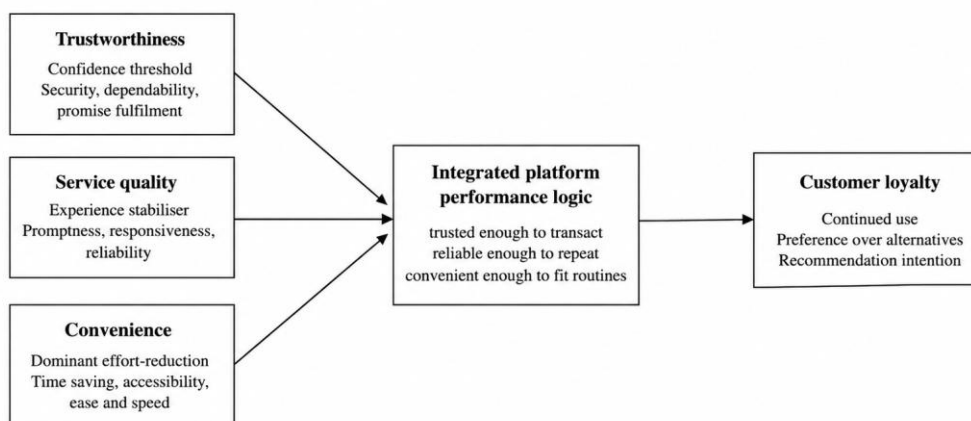
Integrated theoretical framing

The three constructs examined in this study are theoretically distinct but complementary. Commitment-Trust Theory explains the relational condition that makes users willing to rely on a digital platform (Morgan & Hunt, 1994). SERVQUAL and e-service quality scholarship explain how users evaluate service performance across digital and fulfilment processes (Parasuraman et al., 1988; Parasuraman et al., 2005; Zeithaml et al., 2002). TAM and service convenience research explain why technologies and services that reduce effort are more likely to be used repeatedly (Berry et al., 2002; Davis, 1989; Seiders et al., 2007).

Figure 1 presents the study's interpretive framework. It should not be read as a newly validated causal theory. Rather, it is an empirically informed interpretation of the pattern reported in this study: convenience shows the strongest standardised coefficient, while service quality and trustworthiness remain significant supporting predictors. The framework therefore conceptualises trustworthiness as a confidence threshold, service quality as an experience stabiliser and convenience as the dominant effort-reduction mechanism within the examined student segment. Table 1 summarises how each construct is positioned theoretically and operationalised in the study.

Convenience-Led Interpretation of Customer Loyalty

Digital food delivery platforms among Malaysian university students



Interpretive claim: *convenience-led*, but not *convenience-only*

Figure 1. Convenience-led interpretation of customer loyalty in digital food delivery platforms

Table 1. Theoretical and measurement mapping of study constructs

Construct	Interpretive role	Measurement focus	Theoretical anchor
Trustworthiness	Confidence threshold	Perceived security, dependability and promise fulfilment	Commitment-Trust Theory; digital trust
Service quality	Experience stabiliser	Promptness, responsiveness, expectation fulfilment and reliability	SERVQUAL and e-service quality
Convenience	Dominant effort-reduction mechanism	Time saving, accessibility, ease and speed of ordering	TAM and service convenience
Customer loyalty	Relationship outcome	Continued use, preference and recommendation	Customer loyalty and e-loyalty

METHODOLOGY

Research design and sample

The study adopted a quantitative cross-sectional survey design. This design is appropriate for examining statistical associations among constructs at a single point in time, although it does not support strong causal claims (Creswell & Creswell, 2022; Sekaran & Bougie, 2016). The target population comprised Malaysian university students who had used digital food delivery applications such as GrabFood, Foodpanda or related platforms.

Respondents were recruited through an online questionnaire using purposive non-probability sampling. The inclusion logic was that participants had to be university students in Malaysia and users of digital food delivery applications. A total of 191 responses were collected. Data screening removed 24 responses because they were unsuitable for the final analysis, including straight-line responses and responses from users who did not meet the active-use requirement. The final dataset contained 167 valid responses, representing a usable response rate of 87.4%. The available data-cleaning documentation did not specify the exact operational thresholds used to classify straight-lining or active use; this limitation is stated transparently to avoid overstating the precision of the screening procedure.

The sample was dominated by bachelor degree students and included respondents from both public and private universities. Female respondents represented 57.5% of the final sample, while male respondents represented 42.5%. Most respondents were aged between 23 and 25 years. GrabFood and Foodpanda were the most frequently used platforms among the respondents, suggesting that the analysed sample largely reflected users of the dominant Malaysian food delivery applications. Table 2 summarises the sample and platform-use profile.

Measures and data analysis

The questionnaire measured customer loyalty, trustworthiness, service quality and convenience using five-point Likert-scale items ranging from strongly disagree to strongly agree. The measurement logic was adapted from established literature on e-loyalty, digital trust, e-service quality and service convenience (Anderson & Srinivasan, 2003; Berry et al., 2002; Gefen et al., 2003; Parasuraman et al., 2005; Seiders et al., 2007). Customer loyalty captured intention to continue using the applications, recommendation and preference over alternatives. Trustworthiness captured perceived dependability, transaction security, information protection and promise fulfilment. Service quality captured promptness, responsiveness, expectation fulfilment and reliability. Convenience captured time saving, ease of ordering, accessibility and speed of finding food.

Data were analysed using SPSS based on the available statistical outputs. The analysis included descriptive statistics, Cronbach's alpha reliability analysis, Pearson correlation and multiple regression. The significance level was set at $p < 0.05$ (Field, 2013). Because only the final statistical outputs were available for the present manuscript, additional procedures such as exploratory factor analysis, confirmatory factor analysis, common method variance diagnostics and robustness checks could not be conducted. This limitation is acknowledged explicitly rather than treated as absent.

Ethical safeguards were observed throughout the survey process. Participation was voluntary, respondents were informed that their responses would be used for academic research purposes, and no personally identifiable information such as names, student identification numbers or contact details was collected. Responses were analysed in aggregate form to protect anonymity and confidentiality.

Table 2. Sample and platform-use summary

Profile element	Dominant category / result	Value
Total responses collected	Survey responses received	191
Valid responses analysed	After data screening	167
Usable response rate	Valid responses / total responses	87.4%
Gender	Female respondents	57.5%
Age	23-25 years	56.9%
University type	Public university	60.5%
Study level	Bachelor degree	85.6%
Most-used platforms	GrabFood and Foodpanda	Highest/high usage dominates

RESULTS

Descriptive statistics and reliability

Table 3 reports the descriptive statistics and reliability results for the study constructs. The descriptive results indicate generally favourable perceptions of digital food delivery services among the respondents. Convenience recorded the highest composite mean (4.5195), followed by customer loyalty (4.4701), trustworthiness (4.3832) and service quality (4.3509). This ordering is substantively important because it suggests that students rated convenience most strongly, consistent with the argument that friction reduction is central to their platform experience.

Reliability analysis showed acceptable internal consistency for all constructs. Cronbach's alpha values were above the commonly accepted threshold of 0.70, ranging from 0.712 for trustworthiness to 0.779 for service quality. These results support the internal consistency of the measurement items, although they should not be interpreted as full evidence of construct validity in the absence of factor analytic tests.

Table 3. Descriptive statistics and reliability of study constructs

Construct	Number of items	Composite mean	Cronbach alpha
Customer loyalty	4	4.4701	0.740
Trustworthiness	4	4.3832	0.712
Service quality	5	4.3509	0.779
Convenience	4	4.5195	0.728

Correlation analysis

Table 4 presents the Pearson correlation matrix. Pearson correlation analysis showed that all independent variables were positively and significantly correlated with customer loyalty. Convenience had the strongest correlation with customer loyalty ($r = 0.685$, $p < 0.01$), followed by service quality ($r = 0.588$, $p < 0.01$) and trustworthiness ($r = 0.497$, $p < 0.01$). These correlations provide preliminary evidence that all three constructs move in the expected direction. They also suggest that convenience has the strongest bivariate association with loyalty among the constructs examined.

Table 4. Pearson correlation matrix

Variable	TW	SQ	CON	CL
Trustworthiness (TW)	1	0.565**	0.438**	0.497**
Service quality (SQ)	0.565**	1	0.553**	0.588**

Variable	TW	SQ	CON	CL
Convenience (CON)	0.438**	0.553**	1	0.685**
Customer loyalty (CL)	0.497**	0.588**	0.685**	1

Note. N = 167. ** p < 0.01 (two-tailed).

Multiple regression and hypothesis testing

Table 5 reports the multiple regression coefficients. Multiple regression was conducted to examine the relative statistical association of trustworthiness, service quality and convenience with customer loyalty. The regression coefficients show that all three predictors were positive and statistically significant. Convenience was the strongest predictor (beta = 0.491, p < 0.001), followed by service quality (beta = 0.231, p = 0.001) and trustworthiness (beta = 0.152, p = 0.021). The VIF values ranged from 1.490 to 1.769, suggesting that multicollinearity was not a serious issue in the available regression output.

Table 5. Multiple regression coefficients

Predictor	Standardised beta	t-value	p-value	VIF
Trustworthiness	0.152	2.338	0.021	1.520
Service quality	0.231	3.297	0.001	1.769
Convenience	0.491	7.639	< 0.001	1.490

Table 6 summarises the overall regression model fit, while Table 7 presents the hypothesis testing decisions based on the regression coefficients and p-values. The overall regression model was statistically significant. The R value was 0.740 and the R Square value was 0.548, indicating that the three predictors collectively explained 54.8% of the variance in customer loyalty. The adjusted R Square was 0.540, and the model was significant at F = 65.829, p < 0.001. The Durbin-Watson value of 1.799 fell within an acceptable range for interpreting the independence of residuals in the available regression output. At the same time, 45.2% of the variance remained unexplained, indicating that additional factors such as satisfaction, perceived value, price sensitivity, promotions, habit and switching cost may also matter.

Table 6. Regression model summary

R	R Square	Adjusted R Square	F-value	p-value	Durbin-Watson
0.740	0.548	0.540	65.829	< 0.001	1.799

Table 7. Hypothesis Testing Results

Hypothesis	Standardised Beta (β)	p-value	Decision	Interpretation
H1: Trustworthiness → Customer Loyalty	0.152	0.021	Supported	Significant positive predictor
H2: Service Quality → Customer Loyalty	0.231	0.001	Supported	Significant positive predictor
H3: Convenience → Customer Loyalty	0.491	< 0.001	Supported	Strongest positive predictor

DISCUSSION

The findings support all three hypotheses and indicate that customer loyalty among Malaysian university students using digital food delivery platforms is associated with trustworthiness, service quality and convenience. More importantly, the results reveal a hierarchy among the predictors. Convenience is not only significant; it is the dominant predictor in the model. This does not mean that trustworthiness and service quality are unimportant. Rather, the empirical pattern suggests a layered interpretation of loyalty: trustworthiness enables digital exchange, service quality protects the experience, and convenience is most strongly associated with repeat platform preference in this student segment.

Trustworthiness: necessary but not dominant

Trustworthiness had a significant positive association with loyalty, supporting H1. This is consistent with digital trust scholarship, which argues that trust reduces uncertainty in online transactions (Gefen et al., 2003; Pavlou, 2003), and with relationship marketing theory, which positions trust as central to durable exchange (Morgan & Hunt, 1994). In food delivery platforms, students must trust the application to process payments securely, protect personal information, coordinate orders and fulfil delivery promises.

However, trustworthiness had the smallest standardised beta among the three predictors. A plausible interpretation is that trust functions as a threshold condition. Students may require sufficient trust before using a platform, but once basic trust has been established, loyalty is more strongly shaped by the platform's ability to make daily ordering easy and reliable. This interpretation is compatible with the low-switching-cost nature of food delivery applications: users may trust several platforms simultaneously, but choose repeatedly the one that best reduces friction and performs dependably.

Service quality: stabilising the platform experience

Service quality had a significant positive association with loyalty, supporting H2. The finding is consistent with SERVQUAL and e-service quality perspectives, which argue that service performance, fulfilment, responsiveness and reliability shape favourable customer responses (Parasuraman et al., 1988; Parasuraman et al., 2005; Zeithaml et al., 1996; Zeithaml et al., 2002). In food delivery, service quality is not confined to the app interface; it also includes delivery punctuality, order accuracy, complaint handling and the coordination between restaurants, riders and platform systems.

The result suggests that service quality operates as an experience stabiliser. Convenience may attract repeated use, but loyalty becomes fragile if the service repeatedly fails at fulfilment. For students ordering during time-sensitive academic routines, delays, missing items or poor customer response can undermine the practical value of the platform. Service quality therefore sustains the convenience advantage by making the experience dependable enough to repeat.

Convenience: the strongest statistical predictor

Convenience emerged as the strongest predictor of customer loyalty, supporting H3. This finding aligns with TAM-based reasoning that ease of use encourages technology acceptance and continued use (Davis, 1989), and with service convenience research showing that customers value services that reduce time and effort (Berry et al., 2002; Seiders et al., 2007). It also resonates with food delivery studies that identify convenience as a major driver of behavioural intention and platform use (Chowdhury, 2023; Samsudin et al., 2022).

The strength of convenience is especially meaningful in the student context. For university students, food delivery applications can solve practical problems: limited time between classes, late-night study routines, limited transport, campus location constraints and the need for quick meal access. Convenience therefore becomes more than interface ease. It becomes a form of routine fit. The study does not directly measure habit or routine embeddedness, and this point should be interpreted cautiously; nevertheless, the dominance of convenience is consistent with the idea that platforms become loyalty-relevant when they repeatedly reduce everyday friction (Bhattacharjee, 2001; Limayem et al., 2007).

Overall interpretation: convenience-led but not convenience-only

Taken together, the findings support a convenience-led but not convenience-only account of loyalty. Convenience has the strongest statistical association with loyalty, but its influence is supported by trustworthiness and service quality. A highly convenient platform that is insecure or operationally unreliable is unlikely to sustain durable loyalty. Similarly, a trustworthy and reliable platform may still lose student users if its interface is slow, ordering process is cumbersome or delivery access is inconvenient.

The article therefore reframes loyalty in digital food delivery as an outcome of integrated platform performance. For student users, loyalty is likely to emerge when the platform is trusted enough to transact, reliable enough to

repeat and convenient enough to fit daily routines. This interpretation is more precise than treating all significant predictors as equal. It explains why convenience can dominate statistically while trustworthiness and service quality remain essential supporting conditions.

Theoretical Contributions

This study offers an empirically informed interpretive refinement of customer loyalty in student-based digital food delivery contexts. It does not claim to develop a fully validated new theory. Instead, it uses the observed regression pattern to sharpen understanding of how loyalty may operate in low-switching-cost platform environments.

First, the study distinguishes loyalty from adoption, satisfaction and continuance intention. By drawing on loyalty theory and digital continuance research (Anderson & Srinivasan, 2003; Bhattacharjee, 2001; Dick & Basu, 1994; Oliver, 1999), it positions customer loyalty as a more demanding relationship outcome involving continued use, preference and recommendation. This distinction matters in food delivery because repeated use may reflect convenience or promotions rather than genuine loyalty.

Second, the study integrates relational, service-performance and effort-reduction perspectives. Trustworthiness, service quality and convenience are not treated as unrelated predictors. They are interpreted as complementary mechanisms: a confidence threshold, an experience stabiliser and a dominant effort-reduction mechanism. This integrated framing helps explain why convenience may dominate statistically while trustworthiness and service quality remain significant.

Third, the study contributes contextual nuance by focusing on Malaysian university students. The findings suggest that in a digitally literate and time-constrained student segment, loyalty may be shaped less by abstract platform attachment and more by the platform's ability to reduce everyday friction while performing reliably and maintaining trust. This advances a context-sensitive understanding of food delivery loyalty in Malaysia.

Practical Implications

For platform providers, the findings suggest that student loyalty strategies should prioritise convenience while protecting service quality and trustworthiness. Because convenience is the dominant predictor, platforms should reduce ordering friction through faster app loading, fewer checkout steps, intuitive navigation, saved addresses, reliable reordering functions, integrated payment options and accurate delivery tracking. These features should be viewed not merely as interface enhancements but as retention mechanisms.

Because service quality remains significant, platforms must strengthen operational reliability. This includes order accuracy, delivery punctuality, rider-restaurant coordination, packaging quality, refund processes and responsive customer support. Convenience can attract repeated use, but service failure can weaken the loyalty effect by disrupting the practical value users expect.

Because trustworthiness remains significant, platforms must maintain confidence infrastructure. Secure payment gateways, privacy protection, transparent pricing, clear cancellation and refund policies, and consistent fulfilment of delivery promises are necessary for sustained digital exchange. For student users, targeted retention strategies such as campus-area delivery optimisation, student discounts, loyalty points and personalised meal recommendations may be useful, but these should support rather than substitute convenience and reliable service execution.

Limitations and Future Research

Several limitations should be acknowledged. First, the study used a cross-sectional design, which prevents causal inference and does not capture changes in loyalty over time. Future research should use longitudinal designs to examine whether convenience, service quality and trustworthiness continue to predict loyalty as platform habits develop or as service experiences change.

Second, the analysis relied on self-reported survey responses. Such data may be affected by recall bias, social desirability bias or differences in how respondents interpret Likert-scale items. Future studies could combine

survey data with behavioural indicators such as order frequency, platform switching, promotion use, complaint history or transaction records.

Third, the model examined only three predictors. Although the R Square value of 0.548 is meaningful, 45.2% of the variance in loyalty remained unexplained. Future research should examine additional factors such as satisfaction, perceived value, price sensitivity, promotional attractiveness, food quality, platform reputation, habit, social influence and perceived switching cost. Mediation and moderation models would also be useful. For example, satisfaction may mediate the relationship between service quality and loyalty, while frequency of use, price sensitivity or switching cost may moderate the effect of convenience. Future studies should also include control variables such as gender, university type, income level, platform preference and frequency of platform use to assess whether the observed relationships remain stable across student subgroups.

Fourth, measurement validity was assessed primarily through adapted items, pilot testing and Cronbach's alpha. Although reliability was acceptable, future studies should conduct exploratory or confirmatory factor analysis, convergent validity tests, discriminant validity tests and common method variance assessments. These procedures would strengthen confidence in the measurement model and reduce concern about construct overlap.

Fifth, the study focused on Malaysian university students and should not be generalised uncritically to all consumers. Working adults, rural users, international students and lower-income consumers may evaluate food delivery platforms differently. Comparative studies across user groups, regions or Southeast Asian countries would provide a richer understanding of digital food delivery loyalty.

CONCLUSION

This study examined the relationship between trustworthiness, service quality, convenience and customer loyalty among Malaysian university students using digital food delivery platforms. The findings show that all three predictors are positively and significantly associated with customer loyalty. Convenience emerged as the strongest predictor, followed by service quality and trustworthiness. The model explained 54.8% of the variance in customer loyalty.

The main conclusion is that loyalty in this context is convenience-led but not convenience-only. Convenience is most strongly associated with loyalty because it reduces time, effort and friction in students' daily routines. Service quality stabilises this loyalty by ensuring that the platform performs reliably. Trustworthiness provides the confidence threshold that allows users to transact digitally. For digital food delivery platforms competing in low-switching-cost markets, sustainable loyalty therefore depends on integrating convenient design, reliable service execution and trustworthy platform governance.

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