An Extended Technology Acceptance Model (TAM) Perspective on Customer Loyalty in Digitalized Beverage Markets

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DOI: https://doi.org/10.47772/IJRISS.2026.100600333

Received: 02 June 2026; Accepted: 08 June 2026; Published: 23 June 2026

ABSTRACT

As the new-style tea beverage industry becomes increasingly digitalized, customer loyalty is no longer shaped only by product quality or brand reputation. Mobile ordering systems, online delivery platforms, and digital service experiences have gradually become routine parts of the purchasing process. However, whether traditional loyalty drivers remain effective in highly standardized digital environments remains unclear. Based on the extended Technology Acceptance Model (TAM), this study examines the effects of perceived value, perceived ease of use, perceived usefulness, firm reputation, and trust on customer loyalty in digitally mediated consumption contexts. A quantitative research method was adopted using survey data collected from 226 consumers with recent digital purchasing experience. The data were analyzed through descriptive statistics, correlation analysis, and multiple linear regression analysis using SPSS. The findings indicate that perceived usefulness and trust have significant positive effects on customer loyalty, whereas perceived value, perceived ease of use, and firm reputation do not show significant influence. The results suggest that consumers in digitally mature markets are more likely to remain loyal when digital services are reliable, efficient, and able to support smooth purchasing experiences rather than relying primarily on brand prestige or basic digital convenience. This study broadens the application of the Technology Acceptance Model (TAM) within digitally driven FMCG consumption and enhances the understanding of how digital platforms influence the development of customer loyalty in high-frequency consumer markets. The findings further suggest that tea beverage brands should place greater emphasis on functional utility and trust-building to strengthen customer retention in increasingly homogeneous digital markets.

Keywords: New-style tea beverage, Technology Acceptance Model (TAM), perceived value, perceived ease of use, perceived usefulness, firm reputation, trust, customer loyalty

INTRODUCTION

Existing research on customer loyalty often highlights perceived value, brand reputation, and emotional attachment as important factors influencing repeat purchasing behavior (Huang & Rust, 2021; Verhoef et al., 2021; Anita et al., 2025). However, as digital consumption becomes more standardized and increasingly dependent on platforms (Grewal et al., 2020), these traditional explanations may no longer fully explain how customer loyalty is developed (Chaffey & Ellis-Chadwick, 2019). In industries such as the new-style tea beverage market, mobile ordering systems, online delivery services, and digital interaction have gradually become normal parts of daily consumption (Dwivedi et al., 2021; Kumar et al., 2021). This trend reflects the broader digital transformation occurring across modern consumer markets (Verhoef et al., 2021)

In digitally mature markets, many competing brands now provide very similar ordering systems, delivery processes, and promotional activities. Under these conditions, digital convenience and ease of use are often treated as basic expectations rather than important differences between brands. Consumers can also switch between brands more easily because purchasing processes are highly accessible and standardized. As a result, customer loyalty may rely less on symbolic brand evaluations and more on functional experience, service reliability, and trust built through repeated digital interaction (Becker & Jaakkola, 2020; Lemon & Verhoef, 2016).

Previous studies have widely examined customer loyalty through perspectives such as customer satisfaction, service quality, perceived value, and technology adoption. Research based on the Technology Acceptance Model (TAM) has also shown that perceived usefulness and perceived ease of use influence users' behavioral intention in digital environments (Davis, 1989; Venkatesh & Davis, 2000). More recent studies have increasingly focused on platform-based consumption and digital customer experience (Dwivedi et al., 2023; Verhoef et al., 2021). Nevertheless, relatively limited attention has been given to whether traditional loyalty drivers remain important once digital purchasing environments become highly standardized. Limited research has explored how technology-related perceptions and traditional brand-related evaluations influence customer loyalty together within platform-based FMCG consumption contexts.

Against this background, the present study examines the effects of perceived value, perceived ease of use, perceived usefulness, firm reputation, and trust on customer loyalty within digitally mediated tea beverage consumption environments. Based on the extended Technology Acceptance Model (TAM), the study seeks to identify the main factors influencing repeated purchasing behavior in highly competitive platform-based markets. This study provides several contributions. Firstly, it extends the application of TAM into high-frequency FMCG consumption environments beyond traditional technology adoption settings. Secondly, the findings suggest that functional utility and trust may become more influential than traditional symbolic factors in digitally mature markets. Finally, the study contributes to a better understanding of how digital platforms are gradually transforming customer loyalty formation within increasingly homogeneous consumption environments.

LITERATURE REVIEW

Digital Consumption and Platform-Mediated Markets

Digital platforms have gradually changed the way consumers purchase products and interact with brands (Chaffey & Ellis-Chadwick, 2019; Tran, 2025). Customer experience research also suggests that consumer interaction with firms involves multidimensional cognitive and behavioral responses (Becker & Jaakkola, 2020). Mobile applications, online delivery services, digital payment systems, and social media platforms are now closely connected to everyday consumption activities (Dwivedi et al., 2021). In many markets, consumers no longer focus only on product quality or price when making purchasing decisions. Convenience, speed, accessibility, and digital experience are becoming increasingly important during the purchasing process (Lemon & Verhoef, 2016; Becker & Jaakkola, 2020).

This shift is especially visible in the new-style tea beverage industry. Consumers frequently place orders through mobile applications and delivery platforms rather than purchasing products directly in stores. For many brands, digital platforms are no longer simply marketing tools. They have become part of the overall consumption experience and play an important role in shaping repeated purchasing behavior (Verhoef et al., 2021). At the same time, digitalization has made market competition more homogeneous. Many brands now provide similar ordering systems, delivery services, promotional campaigns, and membership programs. Because of this, consumers can easily move from one brand to another without much effort. The purchasing process itself has become highly standardized across competing platforms.

Under these conditions, some traditional explanations of customer loyalty may become less effective. Consumers may pay less attention to symbolic brand differences and focus more on whether digital services are efficient, reliable, and convenient to use. Recent studies also suggest that digital customer experience and platform interaction increasingly influence repeated purchasing behavior and customer retention (Dwivedi et al., 2023).

Customer Loyalty in Digital Environments

Customer loyalty has long been viewed as an important factor influencing long-term business performance and competitive advantage. The previous studies conceptualized customer loyalty as both behavioral repetition and attitudinal commitment (Dick & Basu, 1994; Pereira et al., 2025). Furthermore, earlier studies often linked loyalty to customer satisfaction, emotional attachment, perceived value, and brand image (Holbrook & Hirschman, 1982; Oliver, 1999; Chaudhuri & Holbrook, 2001). Consumers were generally more likely to continue purchasing from

brands they trusted. Trust has also been widely associated with relationship commitment and long-term loyalty behavior (Morgan & Hunt, 1994).

However, digital consumption environments may gradually change the way loyalty is formed. In platform-based markets, consumers can compare products, switch brands, and complete transactions very quickly through digital systems. The online consumer reviews and digital word-of-mouth also play an increasingly important role in influencing purchasing behavior in digital environments (Chen & Xie, 2008). Search visibility and platform accessibility further increase consumer exposure to competing alternatives online (Baye et al., 2016). Information is more transparent, and consumers are exposed to several alternatives during the purchasing process. As a result, traditional symbolic differences between brands may become less important than before.

This issue is particularly relevant in the new-style tea beverage market. Purchasing behavior is frequent, switching costs are relatively low, and consumers rely heavily on mobile ordering systems and delivery platforms. Product innovation and promotional strategies can also be copied quickly by competitors. Under such conditions, maintaining long-term customer loyalty becomes increasingly difficult. Recent studies suggest that consumers in digital environments increasingly value smooth service experience, transaction efficiency, and reliability during repeated interaction with brands (Becker & Jaakkola, 2020). Loyalty may therefore depend less on emotional preference alone and more on whether digital systems can consistently support convenient purchasing experiences. Although many studies have discussed customer loyalty and digital marketing separately, fewer studies have examined how digital standardization changes loyalty formation in high-frequency FMCG markets. This issue deserves more attention because digital platforms are becoming central to everyday consumption behavior.

Technology Acceptance Model (TAM) in Digital Consumption

The Technology Acceptance Model (TAM) remains one of the most widely used theories for explaining user behavior in digital environments. According to TAM, perceived usefulness and perceived ease of use influence individuals' behavioral intention toward technology usage (Davis, 1989). Earlier studies generally found that consumers were more willing to adopt digital systems when platforms improved efficiency and were easy to operate (Venkatesh & Davis, 2000).

As digital technologies become part of everyday consumption routines, TAM continues to provide a useful explanation for online purchasing behavior. However, the influence of TAM-related variables may not remain the same across different market conditions. In highly digitalized environments, most consumers are already familiar with mobile interfaces, online payment systems, and delivery applications. Because of this, ease of use may gradually become an expected feature rather than an important reason for continued platform usage. Compared with perceived ease of use, perceived usefulness may still play a stronger role in influencing repeated purchasing behavior. Consumers continue to value systems that reduce waiting time, simplify transactions, and improve purchasing efficiency. In high-frequency purchasing environments, consumers may become more loyal when digital systems help make consumption faster and more convenient (Verhoef et al., 2021).

Although TAM has been widely applied in studies related to technology adoption and digital behavior, relatively limited research has explored how TAM-related perceptions influence customer loyalty within platform-based FMCG consumption environments. Most previous studies focus mainly on technology adoption instead of long-term loyalty formation. Therefore, extending TAM into digitally mediated consumption contexts may provide a more practical understanding of repeated purchasing behavior.

HYPOTHESIS DEVELOPMENT

Perceived Value and Customer Loyalty

Perceived value is often considered an important factor influencing customer loyalty. Recent mobile payment studies also indicate that perceived value significantly influences digital loyalty behavior (Zhong & Chen, 2023). Because consumers are generally more likely to continue purchasing brands when they believe the benefits

received are greater than the costs involved. Previous studies consistently report a positive relationship between perceived value and repeated purchasing behavior (Chen & Dubinsky, 2003). However, in highly competitive digital markets, pricing strategies, promotional activities, and service processes are becoming increasingly similar across brands. Consumers may therefore perceive fewer obvious differences between competing products and services. Under such conditions, the influence of perceived value on customer loyalty may become weaker than in traditional consumption environments.

H1: Perceived value positively influences customer loyalty.

Perceived Ease of Use and Customer Loyalty

Perceived ease of use refers to the extent to which consumers believe that digital systems are simple and convenient to operate (Davis, 1989). Earlier studies suggest that consumers are generally more willing to adopt digital platforms that require less effort during usage. However, as consumers become more familiar with mobile applications, online ordering systems, and digital payment methods, ease of use may gradually become a normal expectation. Most digital platforms already provide relatively user-friendly interfaces, making it more difficult for ease of use to function as a strong differentiating factor in repeated purchasing behavior.

H2: Perceived ease of use positively influences customer loyalty.

Perceived Usefulness and Customer Loyalty

Perceived usefulness reflects the extent to which consumers believe that digital systems improve purchasing efficiency and support consumption activities. In high-frequency purchasing environments, consumers increasingly value systems that help save time, simplify transactions, and improve convenience. Previous studies generally suggest that perceived usefulness positively influences continued usage behavior (Venkatesh & Davis, 2000). When digital systems can support smooth and efficient purchasing experiences, consumers may become more willing to continue using the same platform or brand repeatedly.

H3: Perceived usefulness positively influences customer loyalty.

Firm Reputation and Customer Loyalty

Firm reputation is commonly associated with product quality, reliability, and reduced purchasing risk. Previous studies suggest that corporate reputation can strengthen consumer confidence and influence purchasing behavior (Fombrun, 1996; Walsh et al., 2009; Keh & Xie, 2009). Nevertheless, in platform-based markets, consumers increasingly rely on direct digital experience, online reviews, and peer feedback during the purchasing process. Because digital interaction becomes central to consumption activities, traditional reputation signals may become less influential in shaping repeated purchasing decisions.

H4: Firm reputation positively influences customer loyalty.

Trust and Customer Loyalty

Trust is widely regarded as an important factor influencing long-term customer relationships (Mayer et al., 1995), especially in digital environments where uncertainty and transaction risk may exist. Consumers are generally more likely to remain loyal when digital systems are perceived as reliable, secure, and capable of providing consistent service experiences (Wei et al., 2025). The recent studies in digital application environments also identified trust as an important mediating mechanism in loyalty formation (Shi et al., 2025). In digitally mediated consumption environments, repeated positive interaction may gradually strengthen consumers' confidence toward brands and platforms. Previous studies also suggest that trust positively influences customer retention and repeated purchasing behavior within online environments (Gefen et al., 2003; Baabdullah et al., 2019).

H5: Trust positively influences customer loyalty.

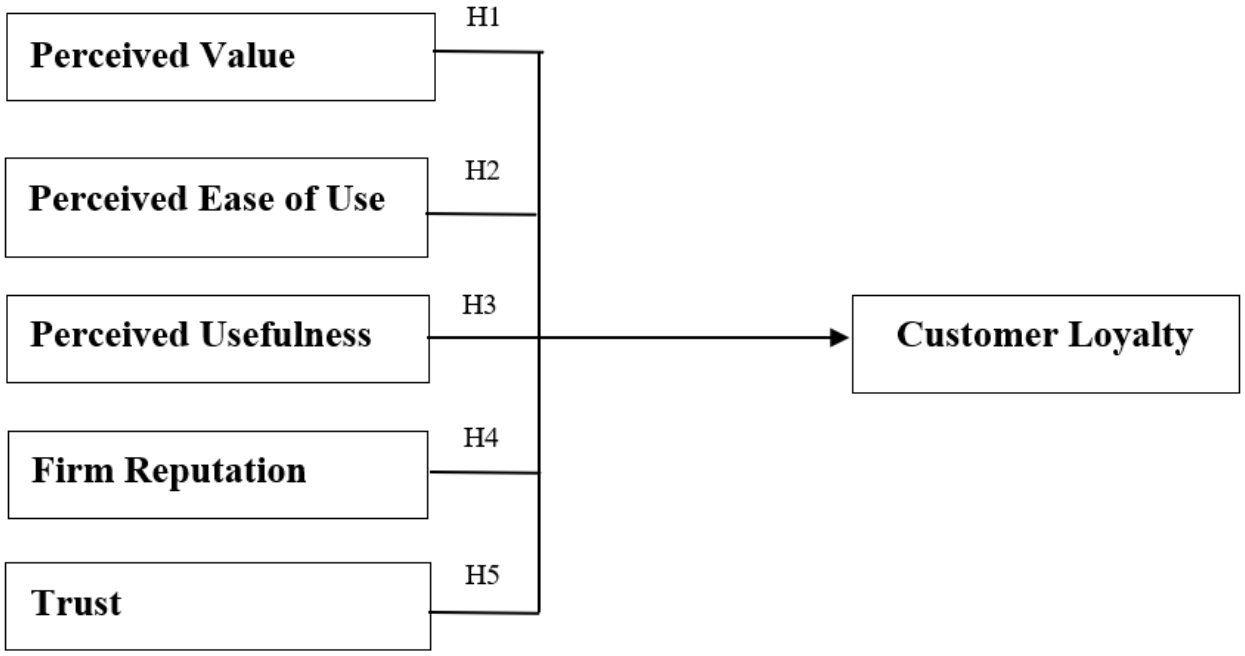

Figure 1: Conceptual framework

RESEARCH METHODOLOGY

This study employed a quantitative research approach to examine the factors influencing customer loyalty in digitally mediated tea beverage consumption environments. A cross-sectional survey design was adopted to capture consumers' perceptions and purchasing behavior within a specific timeframe. The study was developed based on the extended Technology Acceptance Model (TAM). Customer loyalty was treated as the dependent variable, while perceived value, perceived ease of use, perceived usefulness, firm reputation, and trust were treated as independent variables. Since the study focuses on examining the relationships between several predefined variables, a quantitative approach was considered appropriate for the research objectives.

Sampling and Data Collection

The target respondents of this study were consumers who had experience purchasing tea beverages through digital platforms such as mobile ordering applications and online delivery systems. To improve the relevance of the responses, only individuals with recent digital purchasing experience were included in the survey.

The questionnaire survey was conducted in China between March 2025 and May 2025 through online distribution channels. Questionnaire links were disseminated via online survey platforms, social media communities, including WeChat groups and Xiaohongshu communities, university social networks, and consumer communities related to new-style tea beverage brands. Given that the target respondents were consumers with experience purchasing new-style tea beverages through digital channels, including brand mini-programs, food delivery platforms, and mobile applications, online distribution was considered appropriate for the study. This approach enabled the research to reach active digital consumers who regularly engaged in platform-based purchasing behavior.

To improve the relevance of the responses, respondents were required to purchase new-style tea beverages through digital channels at least twice within the previous three months. Convenience sampling was adopted because it provided efficient access to consumers who met the study criteria. A total of 226 valid responses were retained for the final analysis. Previous studies suggest that quantitative research involving multiple independent variables requires an adequate sample size to ensure stable statistical estimation (Hair et al., 2019). Therefore, the final sample was considered sufficient for the objectives of this study.

Data was collected through an online questionnaire distributed using social media platforms and online communication channels. Convenience sampling was adopted because it allowed access to consumers who

regularly use digital purchasing systems during daily consumption activities. A total of 226 valid responses were collected and used for the final analysis. The sample size was considered suitable for multiple regression analysis. Previous studies suggest that quantitative studies involving several independent variables require an adequate sample size to produce stable statistical results (Hair et al., 2019). Therefore, the collected sample was considered sufficient for the objectives of this study.

Measurement Development

The questionnaire items used in this study were adapted from previously validated studies. Minor wording adjustments were made to ensure that the items matched the context of digitally mediated tea beverage consumption. Perceived usefulness and perceived ease of use were adapted from Davis (1989). Perceived value items were adapted from Sweeney and Soutar (2001), while trust items were adapted from Gefen et al. (2003). Firm reputation items were adapted from studies related to brand and corporate evaluation in digital environments. Customer loyalty items were adapted from earlier studies focusing on repeated purchasing behavior and repurchase intention. All variables were measured using a seven-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"). The questionnaire consisted of two sections. The first section collected respondents' demographic information, while the second section measured the variables included in the research framework. Before the actual data collection process, the questionnaire was reviewed to improve clarity and reduce possible misunderstanding of the items.

Data Analysis

The collected data were analyzed using SPSS version 26.0. Several statistical analyses were conducted to examine the proposed hypotheses and the relationships between variables. Descriptive analysis was used to summarize respondents' demographic information and response patterns. Reliability analysis using Cronbach's alpha values was conducted to evaluate the internal consistency of the measurement items. Correlation analysis was also performed to examine the relationships between the independent variables and customer loyalty. Multiple linear regression analysis was then conducted to determine the extent to which perceived value, perceived ease of use, perceived usefulness, firm reputation, and trust influence customer loyalty within digitally mediated tea beverage consumption environments.

Ethical Considerations

Participation in the survey was voluntary, and respondents were informed that the study was conducted for academic purposes only. All responses were collected anonymously, and no personally identifiable information was recorded during the data collection process.

DATA ANALYSIS AND FINDINGS

Respondent Profile

A total of 226 valid questionnaires were included in the final analysis. Female respondents accounted for 52.21% of the sample, while male respondents represented 47.79%, showing a relatively balanced gender distribution. Most respondents were between 18 and 25 years old, indicating that younger consumers remain the main group within the new-style tea beverage market. Respondents with bachelor's degrees formed the largest educational category, while students and office workers made up most of the sample. This reflects the strong connection between digital tea beverage consumption and younger urban consumers.

The findings also show that online purchasing has become a common consumption habit. More than 77% of respondents preferred purchasing tea beverages through mobile ordering systems and delivery platforms, while only a small proportion mainly relied on offline store purchases. In addition, many respondents reported purchasing tea beverages regularly each month, suggesting that tea beverage consumption has gradually become part of everyday lifestyle behavior. Among the brands mentioned by respondents, Mixue Ice Cream & Tea and HEYTEA appeared most frequently. This suggests that consumers are highly familiar with large tea beverage brands operating within competitive digital markets.

Table 1: Demographic profile of respondents

Items	Categories	Frequency	Percentage %	Valid percent %	Cumulative %
Demographic information					
Gender	Female	118	52.21	52.21	52.21
	Male	108	47.79	47.79	100.00
	＜12	0	0	0	0
Age	12-18	24	10.62	10.62	10.62
	18-25	114	50.44	50.44	61.06
	26-30	39	17.26	17.26	78.32
	31-40	33	14.60	14.60	92.92
	≥51	16	7.08	7.08	100
	Junior high school and below	13	5.75	5.75	5.75
Education	Senior high school and vocational	18	7.96	7.96	13.71
	University (bachelor's degree/ associate degree)	132	58.41	58.41	58.41
	Master's degree or above	63	27.88	27.88	27.88
Occupational	Office worker	106	46.90	46.90	46.90
	Student	69	30.53	30.53	77.43
	Freelance work	25	11.06	11.06	88.49
	Unemployed	16	7.08	7.08	95.57
	Retirement/Retirement	10	4.43	4.43	100
Monthly Income	No Income	40	17.7	17.7	17.7
	1-1999	16	7.1	7.1	24.8
	2000-3999	43	19	19	43.8
	4000-5999	56	24.8	24.8	68.6
	6000-9999	44	19.5	19.5	88.1
	≥10000	27	11.9	11.9	100

Purchase information					
How often do purchase	Rarely buys (1< time per month）	32	14.2	14.2	14.2
New tea drink brand	Once or twice a month	91	40.3	40.3	54.4
	3 to 5 times per month	54	23.9	23.9	78.3
	6 to 10 times per month	27	11.9	11.9	90.3
	More than 10 times per month	22	9.7	9.7	100
Preferred Channels	Online Instant	176	77.9	77.9	77.9
	Online pre-sale	28	12.4	12.4	90.3
	Offline: Stores	22	9.7	9.7	100
What was the latest new tea drink brand that you purchased last time?	Mixue Ice Cream & Tea	63	27.88	27.88	27.88
	Heytea	56	24.78	24.78	52.66
	Chagee	31	13.72	13.72	66.38
	Molly Tea	14	6.19	6.19	72.57
	ChaPanda	13	5.75	5.75	78.32
	Naisnow	13	5.75	5.75	84.07
	Auntea Jenny	12	5.31	5.31	89.38
	Other	24	10.62	10.62	100
What is the new-style tea drink brand that you purchase most frequently?	Mixue Ice Cream & Tea	73	32.30	32.30	32.30
	HEYTEA	47	20.80	20.80	53.10
	CHAGEE	29	12.83	12.83	65.00
	Naisnow	25	11.06	11.06	65.93
	ChaPanda	17	7.52	7.52	84.51
	Molly Tea	10	4.42	4.42	88.93
	Auntea Jenny	5	2.21	2.21	91.14
	Other	20	8.85	8.85%	100.00
Total respondents		226			

Reliability Analysis

Cronbach's alpha analysis was conducted to examine the reliability of the measurement items. All variables recorded alpha values above the recommended threshold of 0.70, indicating acceptable internal consistency for further analysis. Perceived value recorded the highest reliability value, while customer loyalty showed the lowest alpha value. However, the value remained within the acceptable range for social science research. The findings suggest that the questionnaire items were able to measure the intended constructs consistently within the context of digitally mediated tea beverage consumption.

Table 2 Reliability Analysis Results

ID	Variable name	Mean **(n=226)**	Number of items	Cronbach's alpha
PV	Perceived value	5.555	9	0.756
PEOU	Perceived ease of use	5.631	7	0.803
PU	Perceived usefulness	5.558	7	0.775
FR	Firm's reputation	5.448	7	0.784
TR	Trust	5.666	7	0.816
CL	Customer Loyalty	5.321	5	0.774

The Cronbach's α coefficients of all variables are greater than 0.7, indicating that the scale has good internal consistency and the data reliability meets the requirements for analysis.

Normality Assessment

Normality testing was conducted before the regression analysis to examine whether the dataset satisfied the assumptions required for multiple regression analysis. The histogram showed a relatively symmetric residual distribution that generally followed a bell-shaped pattern. The Normal Q-Q Plot also indicated that most residual values were distributed close to the diagonal reference line, with no serious deviation observed. The skewness and kurtosis values remained within acceptable ranges. These results suggest that the dataset did not show serious normality problems and was suitable for regression analysis.

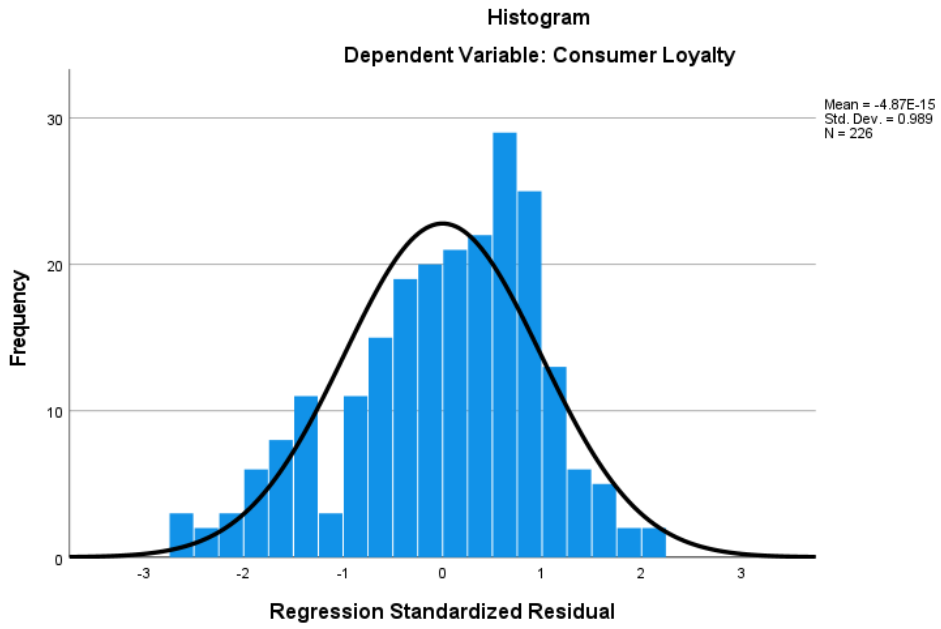

Figure 2 Histogram of Standardized Residuals

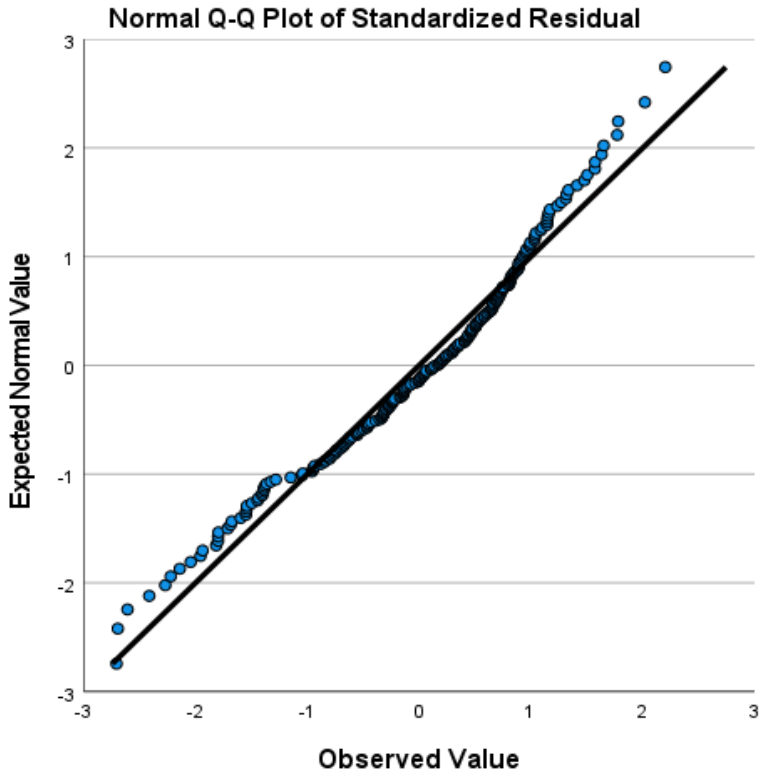

Figure 3 Normal Q-Q Plot of Regression Residuals

Table 3: Skewness and Kurtosis Results

Descriptive Statistics					
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Standardized Residual	226	-.551	.162	-.128	.322
Valid N (listwise)	226				

Descriptive Statistics and Correlation Analysis

Descriptive statistics and Pearson correlation analysis were conducted to examine the relationships among the variables included in the research framework. The descriptive statistics show that all variables recorded relatively positive mean scores, suggesting that respondents generally had favorable perceptions toward digitally mediated tea beverage purchasing experiences. Trust recorded the highest mean score among all variables, followed by perceived usefulness and perceived value. Customer loyalty also showed a relatively positive average score.

The correlation analysis further showed that all independent variables were positively associated with customer loyalty at the 0.01 significance level. Among the variables, trust demonstrated the strongest relationship with customer loyalty, followed by perceived usefulness.

Compared with convenience alone, consumers appeared to place greater importance on reliability and practical usefulness during digital purchasing activities. Perceived ease of use showed the weakest relationship with customer loyalty among the independent variables, possibly because consumers in digitally mature markets already treat platform usability as a basic expectation. The correlation values among the independent variables remained below problematic levels, indicating that multicollinearity was not a serious issue in the dataset.

Table 4 Descriptive Statistics and Correlation Matrix

Variable	Mean	SD	Perceived value	Perceived ease of use	Perceived usefulness	Firm reputation	Trust	Customer loyalty
Perceived value	5.555	0.768	1.000	0.690**	0.710**	0.626**	0.645**	0.508**
Perceived ease of use	5.631	0.934	0.690**	1.000	0.710**	0.594**	0.621**	0.432**
Perceived usefulness	5.558	0.969	0.710**	0.710**	1.000	0.675**	0.708**	0.567**
Firm reputation	5.448	0.946	0.626**	0.594**	0.675**	1.000	0.727**	0.540**
Trust	5.666	0.934	0.645**	0.621**	0.708**	0.727**	1.000	0.512**
Customer loyalty	5.321	0.950	0.508**	0.432**	0.567**	0.540**	0.512**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

+ Mean replacement is used for missing data

Regression Analysis and Hypothesis Testing

Multiple regression analysis was conducted to examine the effects of perceived value, perceived ease of use, perceived usefulness, firm reputation, and trust on customer loyalty. The regression model was statistically significant ($F = 26.916$, $p < 0.001$), indicating that the independent variables collectively explained a meaningful proportion of variation in customer loyalty.The model explained approximately 38.0% of the variance in customer loyalty ($R^2 = 0.380$), while the adjusted R^2 value was 0.365, suggesting that the extended Technology Acceptance Model (TAM) demonstrated moderate explanatory power within digitally mediated tea beverage consumption environments.

The Durbin–Watson value of 2.016 suggested that autocorrelation was not a serious concern in the regression model. In addition, all VIF values remained below the recommended threshold level, indicating that multicollinearity was not a major issue among the predictor variables. Among the five independent variables, perceived usefulness and trust showed statistically significant positive effects on customer loyalty. Perceived usefulness recorded the strongest regression coefficient ($\beta = 0.295$, $p = 0.001$), followed by trust ($\beta = 0.225$, $p = 0.008$).

The findings indicate that consumers pay close attention to whether digital systems improve purchasing efficiency and provide smooth purchasing experiences during repeated consumption activities. Consumers were also more likely to remain loyal when digital systems were perceived as reliable and capable of delivering consistent service experiences.

In contrast, perceived value, perceived ease of use, and firm reputation did not show statistically significant relationships with customer loyalty. One possible explanation is that acceptable pricing, platform usability, and general brand reputation have gradually become standard expectations within highly digitalized tea beverage markets. Under such conditions, these factors may no longer strongly influence repeated purchasing behavior. The hypothesis testing results indicate that H3 and H5 were supported, while H1, H2, and H4 were not supported.

Table 5: ANOVA[a]

ANOVA[a]						
Model		Quadratic sum	Degree of freedom	Mean square	F	Sig.
1	Regression	77.123	5	15.425	26.916	0.000[b]
	Residual	126.075	220	0.573		
	Total	203.198	225			
a dependent variable：consumer loyalty						
b Predictors: (constant)：PV PE PU FR TR						

Table 6 Model Summary

Multiple Linear Regression R&R^2						
Model	R	R^2	Adjusted R^2	SE of the estimate	Durbin-Watson	P
1	.616[a]	0.380	0.365	0.7570	2.016	＜0.001
Notes:a: Predictors: (constant)：PV PE PU FR TR						
B: dependent variable：consumer loyalty						

Table 7 Regression Results and Hypothesis Testing

Variable	Beta	SE	t	Sig.	VIF	Conclusion
Perceived value	0.181	0.104	1.741	0.085	2.512	Not supported
Perceived ease of use	-0.069	0.084	-0.832	0.406	2.413	Not supported
Perceived usefulness	0.295	0.090	3.257	0.001	3.016	Supported
Firm reputation	0.086	0.089	0.966	0.335	2.714	Not supported
Trust	0.225	0.084	2.687	0.008	2.472	Supported

DISCUSSION AND CONCLUSION

The findings suggest that customer loyalty in digital consumption environments is increasingly influenced by usefulness and trust rather than traditional symbolic factors. Although all variables showed positive relationships with loyalty, only perceived usefulness and trust remained significant in the regression analysis. This may indicate that as digital consumption becomes more standardized, some traditional loyalty drivers gradually lose their influence.

Perceived usefulness emerged as the strongest predictor of customer loyalty. Consumers appear to care more about whether digital systems make purchasing simple, fast, and convenient. In the tea beverage industry, mobile ordering, delivery services, and online payment systems have already become part of daily consumption habits.

Recent studies on food delivery platforms also indicate that digital service quality and online interaction increasingly shape customer loyalty behavior (Ly, 2025).Repeated purchasing behavior is therefore closely connected to smooth digital experiences and reduced effort during the purchasing process.

Trust also played an important role. However, trust in digital environments differs from traditional brand trust. Consumers now rely heavily on online reviews, delivery systems, platform information, and digital transactions when making purchasing decisions. Loyalty therefore becomes closely related to system reliability and service consistency.

The non-significant effects of perceived value, perceived ease of use, and firm reputation may reflect the growing similarity among brands in digitally mature markets. This may suggest that perceived value, perceived ease of use, and firm reputation have gradually evolved into hygiene factors within highly standardized digital markets. Consumers may already treat acceptable pricing, platform usability, and basic brand credibility as minimum expectations rather than meaningful sources of differentiation. Under such conditions, perceived usefulness and trust become more influential in driving repeated purchasing behavior and long-term customer loyalty. Many tea beverage brands now offer similar products, pricing strategies, promotional activities, and digital ordering systems. Consumers may already treat acceptable value, usability, and basic credibility as normal expectations rather than key reasons for loyalty.

This is especially visible in relation to ease of use. Ordering systems, payment interfaces, and delivery procedures increasingly follow similar interaction patterns across platforms. Convenience remains important, but once usability becomes standardized, its ability to differentiate brands naturally weakens. A similar shift appears in relation to firm reputation. Consumers now rely more on peer reviews, platform ratings, and repeated digital experience when evaluating brands. Reputation is therefore shaped less by traditional corporate image and more by ongoing digital interaction.

Overall, the findings suggest that customer loyalty within digitally mediated markets is gradually shifting away from symbolic attachment and becoming more connected to convenience, stable service, and reliable digital experiences.

Theoretical Implications

The findings provide a different perspective on customer loyalty in digital consumption environments. Earlier loyalty research often emphasized emotional attachment, perceived value, and brand image as the main reasons consumers repeatedly purchase from the same brand. However, the results suggest that these factors may become less influential once digital markets become highly standardized.

Perceived usefulness remained the strongest predictor of loyalty, showing that consumers increasingly value convenience and efficiency in daily purchasing activities. In digitally mature markets, usefulness becomes closely connected to routine consumption behavior rather than technology acceptance alone.

The weaker effects of perceived value, perceived ease of use, and firm reputation also suggest that consumers may already treat these factors as basic market expectations. Since many brands now provide similar ordering systems, delivery services, and promotional activities, consumers may no longer view these features as important reasons to remain loyal to one brand. More broadly, the findings suggest that customer loyalty within platform-based markets may gradually shift from emotional attachment toward convenience, routine behavior, and system reliability.

Managerial Implications

The findings suggest that firms may need to rethink traditional loyalty strategies in digitally competitive markets. Relying only on brand image, promotional campaigns, or symbolic marketing may no longer be enough to maintain long-term loyalty. Consumers increasingly expect smooth and convenient digital experiences as part of normal purchasing behaviour.

Operational efficiency now plays an important role in customer retention. Mobile ordering systems, payment

functions, delivery coordination, and platform responsiveness strongly influence how consumers evaluate their purchasing experience. Brands that can reduce waiting time and maintain stable digital interaction may be more likely to encourage repeated purchases. Trust is also becoming increasingly important in digital consumption environments. Consumers are more willing to remain loyal when platforms provide reliable service, secure payment systems, accurate information, and consistent delivery experiences.

LIMITATIONS AND FUTURE RESEARCH

Several limitations should be acknowledged. The research adopted a cross-sectional design, meaning that consumer perceptions were collected at one point in time. Customer loyalty in digital environments may continue to change as technologies and consumption habits evolve. Future research could therefore use longitudinal designs to examine how loyalty develops over time. The analysis focused specifically on the new-style tea beverage industry, where digital ordering systems and high-frequency purchasing behaviour are already highly developed. The findings may therefore not fully represent industries with different levels of digital dependence or consumer involvement.

Future research may extend the analysis to other FMCG sectors or platform-based service industries. Variables such as digital engagement, platform dependency, and habitual consumption behaviour may also provide deeper insight into how digital systems shape repeated purchasing decisions.

CONCLUSION

The findings suggest that customer loyalty within digitally mediated consumption environments is gradually changing. Traditional loyalty drivers such as perceived value, ease of use, and firm reputation appear to have weaker influence once digital markets become highly standardized. Consumers may already treat these factors as basic expectations rather than key reasons for remaining loyal to a particular brand. By contrast, perceived usefulness and trust remained the most important factors influencing customer loyalty. Consumers increasingly care about whether digital systems can provide convenient purchasing experiences, reduce effort, and maintain stable service quality over time.

More broadly, the findings suggest that digital platforms are changing how loyalty is formed in everyday consumption environments. Consumers are no longer loyal simply because they emotionally prefer a brand. Instead, loyalty increasingly develops through smooth, reliable, and convenient digital experiences that gradually become part of daily consumption habits.

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