



The Role Of Digital Marketing And Service Quality In Shaping Customer Loyalty At The Creative Cuisine Restaurant Pizza Creafe In Taiwan

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ABSTRACT

This study aims to analyze the effects of digital marketing and service quality on customer loyalty at the creative culinary restaurant Pizza Creafe in Taiwan. The study employed a quantitative approach using a survey method involving 97 respondents selected through purposive sampling. Data analysis was conducted using multiple linear regression with SPSS version 22. The results show that digital marketing has a positive and significant effect on customer loyalty ($\text{Sig.} = 0.049 < 0.05$), while service quality does not have a significant effect ($\text{Sig.} = 0.155 > 0.05$). Taken together, the two variables did not have a significant effect on customer loyalty ($\text{Sig.} = 0.089$), with a coefficient of determination (R^2) of 0.050, indicating that the model explains 5% of the variation in customer loyalty. These findings suggest that digital marketing plays a more dominant role than service quality in shaping customer loyalty. The research results are expected to provide insights for restaurant managers in optimizing digital marketing strategies to enhance customer loyalty.

INTRODUCTION

The culinary tourism industry has emerged as a key sector in enhancing the competitiveness of tourist destinations. Changes in tourist behavior particularly among Millennials and Generation Z indicate that the decision to visit a restaurant is influenced not only by the quality of the food but also by the overall experience, the quality of service, and information obtained through digital media (Viljoen, 2021; Richards, 2021). In Taiwan, the growth of the creative culinary industry which blends local culture with modern innovation has intensified competition among restaurants. Under these circumstances, implementing effective digital marketing strategies and providing superior service quality have become critical factors in building customer loyalty (Chen, 2022; Park, 2022).

This study was conducted in response to a decline in sales at Pizza Creafe Taiwan during the 2023–2025 period, despite the restaurant's creative culinary concept, interactive activities, and fairly active digital promotions. This situation indicates that the success of digital marketing does not necessarily lead to sustained customer loyalty if it is not supported by adequate service quality. Furthermore, research on the role of digital marketing as a variable that strengthens the influence of service quality on customer loyalty at creative culinary restaurants in Taiwan remains relatively limited, making empirical evidence necessary (Asakdiyah, 2023; Sujatmiko, 2025).

The objectives of this study are to analyze the effect of digital marketing on customer loyalty and to analyze the effect of service quality on customer loyalty at Pizza Creafe Taiwan. Thus, this study seeks to explain the synergy between digital marketing strategies and service quality in building customer loyalty in the culinary tourism industry.

This study employs a quantitative approach using a survey of Pizza Creafe Taiwan customers. The data were analyzed using multiple linear regression analysis to examine the effects of digital marketing and service quality on customer loyalty.

The contribution of this study lies in providing empirical evidence regarding the effects of digital marketing and service quality on customer loyalty at creative culinary restaurants in Taiwan. The findings are expected to enrich the study of digital marketing and service management in the culinary tourism sector, while also providing practical recommendations for industry practitioners in designing marketing strategies and improving service quality to foster sustainable customer loyalty.

LITERATURE REVIEW

Within the Stimulus-Organism-Response (S-O-R) framework, digital marketing serves as an external stimulus by providing promotional content, product information, and online interactions that influence customers' cognitive and emotional response. Likewise, service quality acts as another stimulus that shapes customers' perceptions of value and satisfaction. Positive internal evaluation is expected to encourage favorable behavioral response, including repeat purchase, positive word-of-mouth, and long-term customer loyalty. Therefore, the S-O-R model provides an appropriate theoretical foundation for explaining how digital marketing and service quality contribute to customer loyalty in the culinary tourism industry.

Digital Marketing

Digital marketing (X1) refers to marketing activities that utilize digital media and the internet to create, communicate, and deliver value to customers. Within the S-O-R framework, digital marketing serves as a stimulus capable of attracting attention, building positive perceptions, and increasing customer engagement. (Molinillo et al., 2021) demonstrate that digital marketing activities via social media can enhance customer trust and satisfaction, thereby positively impacting customer loyalty.

Digital marketing has become an essential strategy in the hospitality and culinary industries because it enables businesses to communicate with customers more effectively through social media, websites, mobile applications, and online review platforms. Compared with conventional marketing, digital marketing offers broader market reach, real-time interaction, and personalized communication, all of which contribute to stronger customer engagement. Previous studies have consistently reported that effective digital marketing enhances brand awareness, customer trust, and purchase intention, ultimately leading to stronger customer loyalty (Rather et al., 2021 ; Park, 2022;). Therefore, digital marketing is expected to positively influence customer loyalty.

Service Quality

Service Quality (X2) refers to In the restaurant industry, service quality plays an important role in creating memorable dining experiences. Customers evaluate service quality not only through the quality of food but also through employee responsiveness, reliability, assurance, empathy, and physical facilities. High service quality can increase customer satisfaction and strengthen long-term relationships with customers. Previous studies have demonstrated that superior service quality positively influences customer satisfaction and customer loyalty in hospitality and restaurant businesses (Chowdhury et al., 2023; Trang & Nguyen, 2024). Consequently, service quality is expected to have a positive effect on customer loyalty.a company’s ability to provide service that meets or exceeds customer expectations. According to (Parasuraman, Zeithaml, Valarie, Berry, & L., 1988), service quality is measured using the five dimensions of SERVQUAL: tangibles, reliability, responsiveness, assurance, and empathy.

Customer Loyalty

Customer loyalty (Y) is considered one of the most valuable assets for service businesses because loyal customers tend to make repeat purchases, recommend the business to others, and are less likely to switch to competitors (Richard L. Oliver, 1999). In the culinary industry, customer loyalty contributes to sustainable business performance through positive word-of-mouth and long-term customer relationships. Therefore, understanding the factors influencing customer loyalty is essential for maintaining competitiveness in increasingly dynamic markets (Septiana, Eka, Annisa, Suryani, & Tatik, 2022).

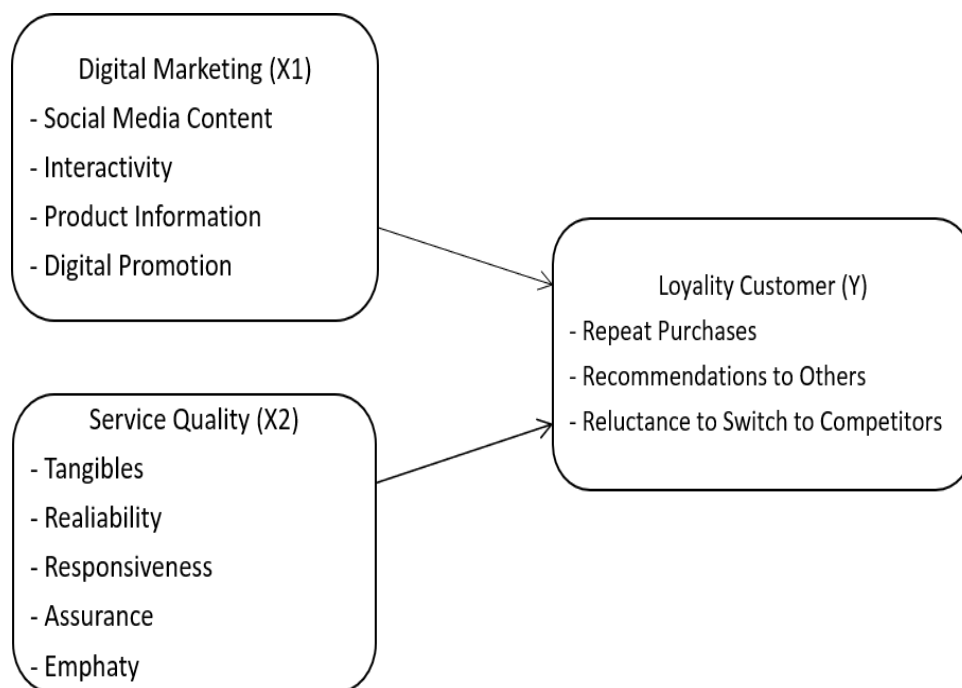
Table 1. Previous Research

Researcher	Variable	Research Findings
Rather et al. (2021)	Digital Marketing – Customer Loyalty	Positive effect
Molinillo et al. (2021)	Social Media Marketing – Customer Loyalty	Positive effect
Chen et al. (2022)	Digital Marketing – Tourist Behavior	Positive effect
Park & Morrison (2022)	Food Tourism Marketing	Positive effect
Chowdhury et al. (2023)	Service Quality – Customer Loyalty	Significant positive effect
Trang & Nguyen (2024)	Service Quality – Customer Loyalty	Positive effect

Source: Table by Authors, 2026

Although previous studies have consistently demonstrated that digital marketing and service quality positively influence customer loyalty, most of these studies were conducted in hotels, general restaurants, tourism destinations, and e-commerce settings across different countries. Limited studies have specifically examined the combined effects of digital marketing and service quality on customer loyalty within creative culinary restaurants in Taiwan. Furthermore, previous findings regarding the influence of service quality on customer loyalty remain inconsistent across different research contexts. Therefore, this study seeks to fill this research gap by examining the effects of digital marketing and service quality on customer loyalty at Pizza Creafe Taiwan.

Figure 1. CONCEPTUAL FRAMEWORK



Source: Figure by Authors, 2026

Hypothesis Development

Previous studies indicate that digital marketing enhances customer engagement, trust, and brand awareness, which subsequently strengthen customer loyalty (Molinillo et al., 2021; Rather et al., 2021). Therefore, digital marketing is expected to positively influence customer loyalty.

H1: Digital marketing has a positive effect on customer loyalty.

Service quality creates positive customer experiences through reliable, responsive, and empathetic services. High-quality services encourage repeat purchases and positive word-of-mouth, thereby strengthening customer loyalty (Chowdhury et al., 2023; Trang & Nguyen, 2024)

H2: Service quality has a positive effect on customer loyalty.

Digital marketing and service quality are complementary strategies that jointly influence customer loyalty. Effective digital communication attracts customers, while excellent service quality maintains long-term relationships. Therefore, both variables are expected to simultaneously influence customer loyalty.

H3: Digital marketing and service quality simultaneously affect customer loyalty.

Table 2. Operational Variable

Variable	Definition	Indicators	Source
Digital Marketing (X1)	Digital Media Marketing Activities	Social media content, interactivity, product information, digital promotions	Molinillo et al. (2021)
Service Quality (X2)	Ability to meet customer expectations	Tangibles, Reliability, Responsiveness, Assurance, Empathy	Parasuraman et al. (1988)
Customer Loyalty (Y)	Customer commitment to repeat purchases	Repeat purchases, recommendations, no switching to competitors	Oliver (1999)

Source: Table by Authors, 2026

METHODS

This study employs a quantitative research design using a survey approach to examine the effects of digital marketing and service quality on customer loyalty at Pizza Creafe, a creative cuisine restaurant in Taiwan. The quantitative approach was chosen because it allows for objective measurement of research variables, statistical testing of relationships between variables, and conclusions based on numerical data collected from respondents.

The study population consists of local and international tourists who have visited or ordered from Pizza Creafe and interacted with the restaurant's digital platforms within the past five months. Since the exact population size is unknown, a non-probability purposive sampling technique was used. Respondents were selected based on the following criteria: (1) at least 18 years of age; (2) having visited or ordered from Pizza Creafe within the past five months, including first-time visitors; and (3) actively using social media or online review platforms such as Instagram, Google Reviews, or Facebook to search for culinary information.

The initial sample size was estimated using Cochran's (1977) formula, which recommends a minimum of 385 respondents for an unknown population. However, following data collection, screening, and verification, 97 questionnaires met the established inclusion criteria and were complete for statistical analysis. Therefore, the final sample consisted of 97 respondents.

Primary data were collected through a structured questionnaire using a five-point Likert scale. The research instrument was tested for validity using Pearson's product-moment correlation and for reliability using Cronbach's alpha coefficient. The collected data were analyzed using descriptive statistics, validity and reliability tests, classical assumption tests, multiple linear regression with IBM SPSS Statistics version 22.

RESULTS

Descriptive Statistics

Based on the results of a descriptive statistical analysis using SPSS version 22 on 97 respondents, an overview of the research variables was obtained, as presented in Table 1.

Table 3. Descriptive Statistics

Variable	N	Mean	Std. Deviation
Customer Loyalty (Y)	97	15,05	1,54
Digital Marketing (X1)	97	20,87	3,53
Service Quality (X2)	97	38,95	3,09

Source: Data by SPSS, 2026

The Customer Loyalty variable (Y) has a mean of 15.05 with a standard deviation of 1.54. A standard deviation smaller than the mean indicates that the respondents' answers are relatively homogeneous, suggesting that the level of customer loyalty in this study tends to be consistent across respondents.

The Digital Marketing variable (X1) has a mean of 20.87 with a standard deviation of 3.53. This value indicates that respondents' perceptions of the implementation of digital marketing strategies are fairly positive, although the variation in respondents' answers is slightly greater than for the other variables.

The Service Quality variable (X2) had a mean of 38.95 with a standard deviation of 3.09. The relatively high mean, coupled with a small standard deviation, indicates that respondents' assessments of Pizza Creafe's service quality tend to be uniform and positive.

Overall, the standard deviations of all variables are smaller than their respective means ($SD < \text{Mean}$), indicating a relatively good distribution of data and fairly consistent responses from the respondents; therefore, the data are suitable for further analysis, specifically multiple linear regression analysis.

Results of Multiple Linear Regression Analysis

Multiple linear regression analysis was used to test the effects of Digital Marketing (X1) and Service Quality (X2) on Customer Loyalty (Y), both simultaneously and partially. Before testing the hypotheses, a model suitability test was first conducted.

Model Validation

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.224	.050	.030	1.520	1.889

Source: Data by SPSS, 2026

An R value of 0.224 indicates that the relationship between Digital Marketing and Service Quality and Customer Loyalty is relatively weak. An R-squared value of 0.050 indicates that these two independent variables account for only 5.0% of the variation in Customer Loyalty, while the remaining 95.0% is influenced by other factors outside the scope of this study. The Adjusted R-Square value of 0.030 shows that the model's ability to explain Customer Loyalty after adjusting for the number of predictors is 3.0%. The Durbin-Watson value of 1.889, which is close to 2, indicates that the regression model does not exhibit autocorrelation, thus fulfilling the assumption of residual independence.

Simultaneous Test (F-Test)

Table 3. Results Of The F-Test (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	11.477	2	5.738	2.483	.089
Residual	217.266	94	2.311		
Total	228.742	96			

Source: Data by SPSS, 2026

The results of the F-test show a calculated F-value of 2.483 with a significance level of 0.089. Since this significance level is greater than 0.05, the hypothesis stating that Digital Marketing and Service Quality simultaneously influence Customer Loyalty cannot be accepted. Thus, the two independent variables together have not been proven to have a significant effect on Customer Loyalty at the 5% significance level.

Partial Test (t-Test)

Table 4. Results Of The T-Test (Coefficients)

Model	B	Std. Error	Beta	t	Sig.
(Constant)	16.053	2.018		7.955	.000
Digital Marketing (X1)	.090	.045	.206	1.994	.049
Service Quality (X2)	-.074	.052	-.148	-1.433	.155

Source: Data by SPSS, 2026

The t-test was used to determine the partial effect of each independent variable on customer loyalty. The test results show that Digital Marketing has a regression coefficient (B) of 0.090 with a t-value of 1.994 and a significance level of 0.049 ($p < 0.05$), indicating that Digital Marketing has a positive and significant effect on Customer Loyalty. Conversely, Service Quality has a regression coefficient of -0.074 with a t-value of -1.433 and a significance level of 0.155 ($p > 0.05$), which means this variable does not have a significant effect on Customer Loyalty.

Hypothesis Testing

A summary of the results of the research hypothesis testing is presented below.

H1: Digital marketing influences customer loyalty.

The analysis results show a calculated t-value of 1.994 with a significance level of 0.049 ($p < 0.05$), so H1 is accepted. This finding indicates that the better the implementation of digital marketing strategies, the higher the customer loyalty toward Pizza Creafe.

H2: Service quality influences customer loyalty.

The analysis results show a calculated t-value of -1.433 with a significance level of 0.155 ($p > 0.05$), so H2 is rejected. This finding indicates that, among the respondents in this study, service quality has not been proven to have a significant effect on customer loyalty a result that contradicts the study's initial hypothesis.

Sample Size Limitations

The sample size for this study was initially estimated using Cochran's (1977) formula, which suggested a minimum of 385 respondents. However, due to limited field access, time constraints, and the availability of respondents in Taiwan, only 97 valid questionnaires were successfully collected and used in the final analysis. According to Green's (1991) guidelines, the minimum sample size required for a regression model with three predictors is 107 respondents. Therefore, the findings of this study should be interpreted with these sample size limitations in mind.

DISCUSSION

The primary objective of this study is to analyze the impact of digital marketing and service quality on customer loyalty at Pizza Creafe restaurants in Taiwan. This study is important because increasingly fierce competition in the culinary industry is driving businesses to understand the factors that tangibly shape customer loyalty, whether through digital marketing strategies or improvements in service quality. By examining both variables simultaneously, this study provides empirical insights into which factor plays a more dominant role in shaping customer loyalty for international culinary businesses operating in the Taiwanese market.

The results of the first hypothesis test show that digital marketing has a positive and significant effect on customer loyalty. These findings indicate that the more actively and effectively Pizza Creafe utilizes social media, online promotions, marketing content, and digital communication, the higher the level of loyalty demonstrated by its customers as evidenced by their willingness to return, recommend the restaurant to others, and maintain a relationship with it. This reaffirms that in today's digital age, a brand's presence and activities on digital platforms are no longer merely supplementary; rather, they have become one of the key determinants of customers' decisions to remain loyal to a brand.

Conversely, the second hypothesis which posits that service quality has a significant effect on customer loyalty is not supported by the data. This finding, which does not align with initial expectations, can be explained by several possibilities. First, Pizza Creafe customers in Taiwan are believed to prioritize a unique and creative dining experience, brand image, and the ease of accessing information through digital media over technical service aspects such as speed, staff friendliness, or the physical comfort of the outlet. Second, in a market with a high level of digital penetration such as Taiwan, customers may have come to view good service quality as a minimum standard that every restaurant must meet, so that variations in service quality across outlets no longer serve as a significant differentiator in shaping loyalty. Third, it is possible that the effect of service quality on loyalty is indirect that is, through mediating variables such as customer satisfaction which were not explicitly tested in this research model.

From a managerial perspective, these findings have important implications for Pizza Creafe's management and similar food and beverage businesses. Investing in digital marketing strategies such as consistent social media management, creating engaging and relevant content, and actively interacting with customers through digital channels should be a top priority, as these have been shown to have a tangible impact on customer loyalty. Although service quality did not show a significant influence in this study, management still needs to maintain service standards as a fundamental requirement, while redirecting the majority of marketing resources toward strengthening its digital presence as a key competitive differentiator.

This study has several limitations that should be considered when interpreting the findings. In terms of internal validity, this study involved only two independent variables digital marketing and service quality so it is possible that other variables that influence customer loyalty were not included in the model, such as customer satisfaction, trust, product quality, or brand image. In terms of external validity, this study is limited to a single research subject Pizza Creafe in Taiwan so the findings may not necessarily be generalizable to other restaurants or the culinary industry with different market characteristics and consumer cultures. Additionally, the use of a cross-sectional research design limits this study's ability to capture changes in customer loyalty behavior over time.

Given these limitations, future research is recommended to expand the research model by adding mediating variables, such as customer satisfaction or customer trust, to clarify the mechanisms underlying the relationship between service quality and customer loyalty. Future research could also broaden the scope of the study to include several restaurants or other culinary industries in various countries so that the findings have broader generalizability. The use of a longitudinal approach could also be considered to gain a more comprehensive understanding of the dynamics of customer loyalty over time, and further exploration is needed regarding the role of digital technology in shaping the customer experience in the culinary industry..

CONCLUSION

This study aims to analyze the impact of digital marketing and service quality on customer loyalty at Pizza Creafe in Taiwan. Based on the results of the data analysis, it can be concluded that digital marketing has a positive and significant effect on customer loyalty. These findings

indicate that the use of social media, engaging digital content, and effective interactions through digital platforms can increase customers' willingness to return, recommend the restaurant to others, and maintain a relationship with the restaurant.

Conversely, service quality did not show a significant effect on customer loyalty. These results indicate that, in the context of this study, service quality has not yet become a major factor influencing customer loyalty. This situation is likely influenced by the characteristics of Pizza Creafe's customers, who place greater emphasis on creative culinary experiences, brand image, and information obtained through digital media than on the service provided.

REFERENCES

- Adam Viljoen, Martinette Kruger. (2021). The "art" of creative food experiences: A dimension-based typology. *International Journal of Gastronomy and Food Science*, 21.
- Asakdiyah, Salamatus, Hakiki, Ridwan, & Tunjungsari, Hetty Karunia. (2023). Kepuasan Pelanggan di Era Digital: Strategi untuk mempertahankan loyalitas pelanggan jangka panjang. *Takaza Innovatix Labs*.
- Chen, Chiang Ming, Jih, Chia Yu, Lin, Yu Chen, & Hung, Wei Hsi. (2022). The impact of border control policy on tourists' behaviors in Taiwan during the COVID-19 pandemic. *Journal of Hospitality and Tourism Management*, 53, 160-164.
- Chowdhury, Binoy, Haque, Rasheedul, Senathirajah, Abdul Rahman bin S., Khalil, Md. Ibrahim, Ahmed, Saif, Krishnasamy, Hariharan N., & Ganesh Ramasamy. (2023). Page 1 Mediation of Customer Satisfaction and Customer Loyalty in Fast-Food Restaurants Aimed at Sustainable Growth. *International Journal of Operations and Quantitative Management*, 23(9), 114-128.
- Eerang Park, Andy Widyanta. (2022). Food tourism experience and changing destination foodscape: An exploratory study of an emerging food destination. *Tourism Management Perspectives*, 42.
- Molinillo, Sebastian, Aguilar-Illescas, Rocío, Anaya-Sánchez, Rafael, & Liébana-Cabanillas, Francisco. (2021). Desain situs web perdagangan sosial, nilai yang dirasakan, dan niat perilaku loyalitas: Peran moderasi jenis kelamin, usia, dan frekuensi penggunaan. *Jurnal Perdagangan Ritel Dan Layanan Konsumen*, 63.
- Parasuraman, Zeithaml, A., Valarie, Berry, & L., Leonard. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Park, Eerang, & Morrison, Alastair M. (2022). Food tourism and social media: A systematic review of contemporary research. *Tourism Management Perspectives*, 41, 101053.
- Rather, Raouf Ahmad, Hollebeek, Linda D., & Rajibul Hasan. (2021). Exploring tourists' virtual reality-based brand engagement: A uses-and-gratifications perspective. *Journal of Travel Research*, 63(3).
- Richard L. Oliver. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 63(4).
- Richards, G. (2021). Evolving research perspectives on food and gastronomic experiences in tourism. *International Journal of Contemporary Hospitality Management*, 33(3), 1037-1058.
- Septiana, Eka, Annisa, Suryani, & Tatik. (2022). *The Effect of Customer Satisfaction and Trust on Performance Expectancy and Word of Mouth (WOM) at Shopee Applications Users*.

- Sujatmiko, S., Rosanti, Novita, Ar, Dhita Pratiwi, Hamdat, Aminuddin, & Salam, Karta Negara. (2025). User-Generated Content (UGC) and Its Impact on Tourism Marketing: A Systematic Literature Review. *Golden Ratio of Mapping Idea and Literature Format*, 5(2), 97-105.
- Trang, Ha Thi Thu, & Nguyen, T. H. (2024). *The Impact of Service Quality on Customer Satisfaction and Customer Loyalty : A Case Study of Michelin-awarded Restaurants in Vietnam*.