The Impact of Personalized Digital Marketing Strategies on the Purchasing Decisions of International Consumers in Taiwan

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Abstract

This research investigates the impact of personalized digital marketing strategies on international consumers' purchasing decisions in Taiwan. As digital marketing evolves, the ability to personalize marketing efforts has emerged as a significant driver of consumer behavior. Personalized Product Recommendations (PPR), Social Media Interactions (SMI), and Targeted Email Campaigns (TEC) are the primary strategies examined in this study. A total of 81 valid survey responses were collected from international consumers in Taiwan, with an emphasis on understanding how these strategies influence purchasing decisions. The findings highlight the strong influence of PPR and SMI, while TEC had a less significant impact. These results offer marketers valuable insights into the preferences of international consumers in Taiwan, suggesting that optimizing product recommendations and social media engagement can enhance the effectiveness of digital marketing campaigns.

Keywords: Personalized Digital Marketing Strategies, Personalized Product Recommendations, Social Media Interactions, Targeted Email Campaigns.

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1. Introduction

In today's fast-paced digital landscape, shifting from traditional marketing to more personalized, data-driven methods has revolutionized consumer behavior. Personalized digital marketing involves tailoring marketing strategies to meet customers' needs, preferences, and behaviors. This customized approach is compelling in the digital realm, where data from various online touchpoints can be utilized to create a customized experience for each consumer.

1.1 Background of Study

The emergence of digital platforms such as e-commerce websites, social media networks, and mobile applications has provided marketers with vast amounts of consumer data. This data can deliver personalized experiences to consumers, increasing the likelihood of engagement and conversion (Alam, 2021). Personalized marketing has become increasingly important for international consumers in Taiwan, a market known for its digital engagement. Taiwan's strong digital infrastructure and high smartphone penetration make it a key market for personalized digital marketing strategies.

This research focuses on understanding how three major personalized digital marketing strategies—Personalized Product Recommendations (PPR), Social Media Interactions (SMI), and Targeted Email Campaigns (TEC)—influence the purchasing decisions of international consumers in Taiwan. Each strategy operates differently, yet they rely on collecting and analyzing consumer data to deliver relevant and timely marketing messages.

1.2 Research Problem and Questions

Despite the growing body of research on personalized marketing, limited studies have explicitly focused on Taiwan's international consumer base. Given the rapid growth of digital marketing in Taiwan, it is essential to explore the specific impact of personalized strategies on international consumers' purchasing behavior in this region. This study, with its unique focus on Taiwan's global consumer base, addresses the following research questions:

RQ1: How do personalized digital marketing strategies (e.g., email campaigns, targeted ads, product recommendations) influence the purchasing decisions of international customers in Taiwan?

RQ2: How does Personalized Product Recommendations (PPR) influence international consumers' purchasing decisions in Taiwan?

RQ3: How do Social Media Interactions (SMI) affect the purchasing behavior of international consumers in Taiwan?

RQ4: What impact do Targeted Email Campaigns (TEC) have on the purchasing decisions of international consumers in Taiwan?

1.3 Significance of the Study

This research is significant for both academics and practitioners. Understanding the effectiveness of personalized marketing strategies in Taiwan will allow marketers to optimize their campaigns to target international consumers better. The findings will provide actionable insights into the types of methods that have the most impact on purchasing behavior in this market. For researchers, this study contributes to the growing body of knowledge on personalized marketing by exploring its influence in a culturally unique and digitally engaged market like Taiwan, thereby providing practical guidance for future marketing strategies.

2. Literature Review

The importance of personalized marketing has been emphasized in numerous studies, and its impact on consumer behavior has been widely discussed. This section reviews the existing literature on personalized digital marketing, its strategies, and their effects on purchasing decisions.

2.1 Personalized Digital Marketing

Personalized marketing uses customer data to tailor marketing messages and offerings to meet consumers' needs and preferences (Rohm, Kaltcheva, & Milne, 2013). According to Kotler et al. (2020), personalized marketing can increase consumer engagement, foster brand loyalty, and boost sales. By delivering targeted messages based on consumer behavior, marketers can make consumers feel more valued and understood.

2.2 Personalized Marketing Strategies

Personalized Product Recommendations (PPR): One of the most used strategies in e-commerce, PPR uses data on past purchases, browsing history, and preferences to suggest relevant products to consumers (Yun & Chun, 2024). Studies have found that 56% of consumers are more likely to purchase when product recommendations are personalized (Challacombe & McElhiney, 2025).

Social Media Interactions (SMI): Social media platforms have become crucial to digital marketing. Interactions with brands on platforms like Facebook, Instagram, and Twitter allow brands to promote their products and engage in two-way communication with consumers. Consumers who engage with brands on social media are likelier to develop a sense of connection and trust, ultimately influencing purchasing decisions (Jones & Glynn, 2019; Kwahk & Kim, 2017; Qin, 2020).

Targeted Email Campaigns (TEC): Email marketing remains one of the most effective ways to reach customers (Goic, Rojas, & Saavedra, 2022). Personalized emails, such as those based on browsing behavior, past purchases, or demographic information, have significantly increased open and conversion rates. However, TEC has been found to have a lower impact compared to PPR and SMI in specific markets.

2.3 Personalized Marketing in Taiwan

Taiwan is a highly digitalized market, with a large proportion of the population actively using

smartphones and engaging with digital content. The commerce market has grown exponentially, with digital marketing becoming crucial to business strategy (Habib, Hamadneh, & Hassan, 2022). However, research on the effectiveness of personalized marketing strategies in Taiwan is limited. This study seeks to fill this gap by examining how international consumers in Taiwan respond to personalized marketing efforts.

3. Methodology

This chapter outlines the research design, data collection methods, and analytical techniques used in this study.

3.1 Research Design

The study follows a quantitative research design, which allows for the systematic measurement of the impact of personalized digital marketing strategies on purchasing decisions. A survey was used as the primary data collection tool to measure the effectiveness of three personalized marketing strategies: PPR, SMI, and TEC.

Purchasing Decisions (dependent variable, DV) represents the outcome influenced by personalized advertising. When consumers are exposed to ads that are highly relevant to their needs or desires, it increases the likelihood that they will make a purchase. By studying this relationship, the research explores how personalized ads directly impact the decision-making process of international customers in Taiwan. In other words, it examines whether seeing personalized ads as a digital marketing strategy drives consumers to purchase products or services and how this influences their overall buying behavior. The study considers personalized ads to indicate purchasing decisions because they catalyze consumer behavior in digital marketing contexts. When consumers are exposed to ads that speak directly to their preferences, their responses (or decisions to purchase) are the outcome of these personalized ad interactions.

3.2 Survey Development

The survey instrument was designed to gather data on consumer attitudes and behaviors related to personalized marketing. It included questions about respondents' experiences with PPR, SMI, and TEC and their purchasing decisions. The Likert scale measured respondents' agreement with statements about each marketing strategy's influence on purchasing decisions.

3.3 Sample and Data Collection

The researcher employed a stratified random sampling technique to gather data from a diverse group of individuals residing in Taiwan, ensuring comprehensive representation across various demographic and occupational backgrounds. To create the sampling frame, the researcher carefully selected key characteristics such as nationality, occupation, and years of stay in Taiwan. This approach allowed for a balanced representation of participants at different stages of their experiences in Taiwan. Data was collected using structured online questionnaires, which were distributed digitally and supplemented by in-person outreach during community events and gatherings. This multi-

channel data collection method ensured high participation and diverse viewpoints. The use of stratified sampling provided a well-rounded sample, facilitating the capture of both student and industry worker experiences and providing rich insights into how personalized digital marketing strategies affect international consumers in Taiwan.

3.4 Data Analysis

The data was analyzed using SPSS software. Descriptive statistics were calculated for each marketing strategy, and regression analysis was conducted to assess the relationships between each strategy and consumer purchasing decisions. The significance level was set at $p < 0.05$.

4. Research Results

4.1 Demographic Information

The sample for this study consists of 81 international respondents residing in Taiwan, with a diverse demographic composition. The majority of respondents were young adults, with 45.7% between the ages of 18–24 and 44.4% between 25–34 years, reflecting the digitally literate and engaged nature of the sample. Females comprised 58% of the respondents, while 42% were male. Regarding duration of stay in Taiwan, 34.6% of participants had lived in the country for 4–6 years, followed by 30.9% who had been in Taiwan for 1–3 years, indicating a well-established group of international residents. Occupation-wise, the largest segment of the sample consisted of students (66.7%), followed by working professionals (28.4%) and entrepreneurs (4.9%). The sample also represented a broad range of nationalities, with significant representation from Eswatini (53.1%), Indonesia (12.3%), and South Africa (6.2%), along with smaller groups from countries such as France, Belize, and Pakistan. This diverse demographic is crucial for examining how personalized digital marketing strategies influence the purchasing decisions of international consumers in Taiwan.

4.2 Reliability and Validity Analysis

A reliability analysis was performed to evaluate the internal consistency of the measurement scale using Cronbach's Alpha. This analysis focused on 16 items distributed across four factors: Purchasing Decisions (PD), Personalized Product Recommendations (PPR), Targeted Email Campaigns (TEC), and Social Media Interactions (SMI). The Cronbach's Alpha for the entire scale was found to be 0.898, well above the threshold of 0.7, which is typically considered acceptable (Nunnally & Bernstein, 1994). This indicates that the measurement scale exhibits good internal consistency and reliability.

Table 1 presents the Item-Total Statistics for each variable, which includes the corrected item-total correlations and the Cronbach's Alpha if each item is deleted. The corrected item-total correlation values ranged from 0.246 to 0.705, with most items showing substantial positive correlations, indicating that they are strongly related to the overall scale.

Table 1. Item-Total Statistics for Each Variable

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PD1	44.12	97.885	0.246	0.902
PD2	45.85	93.378	0.465	0.896
PD3	45.43	87.298	0.682	0.888
PD4	45.47	91.402	0.630	0.890
PPR1	44.65	94.329	0.427	0.897
PPR2	45.17	88.795	0.640	0.889
PPR3	45.69	91.816	0.602	0.891
PPR4	45.56	89.475	0.705	0.888
TEC1	44.89	93.600	0.381	0.899
TEC2	45.27	88.700	0.512	0.896
TEC3	45.31	90.116	0.642	0.890
TEC4	45.84	88.386	0.721	0.887
SMI1	44.74	93.219	0.524	0.894
SMI2	45.11	87.325	0.670	0.888
SMI3	45.38	89.439	0.647	0.889
SMI4	45.40	91.942	0.585	0.892

To further assess the construct validity of the measurement scale, factor analysis was performed using Principal Component Analysis (PCA) with Varimax Rotation. The purpose of the factor analysis was to identify the underlying factors that account for the variance in the observed variables and to validate the grouping of items.

The Kaiser-Meyer-Olkin (KMO) measure was found to be 0.836, which is considered excellent (Kaiser, 1974). A KMO value above 0.6 indicates that the sample size is adequate for factor analysis. Additionally, Bartlett's Test of Sphericity was significant (Chi-Square = 618.533, $p < 0.001$), which confirms that the correlation matrix is not an identity matrix, supporting the suitability of the data for factor analysis.

As per Kaiser's criterion, the Principal Component Analysis (PCA) extracted four components with eigenvalues greater than 1, explaining 66.25% of the variance. Specifically, the first component explained 41.43% of the variance, the second component accounted for 10.34%, the third contributed 7.80%, and the fourth accounted for 6.69%. After Varimax Rotation, which helps with the interpretability of factors, the variance explained by the first four rotated components was 25.15%, 18.88%, 13.82%, and 8.40%, respectively. This shift in variance distribution indicates a more balanced contribution from each factor to the overall structure, suggesting that the scale effectively measures four distinct latent dimensions.

Table 2. Total Variance Explained by Principal Component Analysis

Component	Initial Eigenvalues	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %
1	6.628	41.425	41.425
2	1.654	10.336	51.761
3	1.248	7.801	59.562
4	1.071	6.691	66.253

Extraction Method: Principal Component Analysis.

The results from the reliability analysis show that the measurement scale has good internal consistency, as indicated by a high Cronbach's Alpha (0.898). Additionally, the factor analysis supports the scale's construct validity, with four distinct factors identified through PCA and confirming the appropriateness of the items in measuring the constructs related to Personalized Ads, Personalized Product Recommendations, Targeted Email Campaigns, and Social Media Interactions.

The reliability and validity analyses indicate that the scale used in this study is robust and appropriate for capturing the effects of personalized marketing strategies on consumer purchasing decisions.

4.3 Hypothesis Testing and Results

This section presents the results of the regression analyses performed to test the hypotheses regarding the influence of personalized digital marketing strategies on consumer behavior, specifically purchasing decisions in Taiwan. The three hypotheses focus on the impact of personalized product recommendations, targeted email campaigns, and social media interactions of personalized ads on the effectiveness of purchasing decisions. The results were analyzed using regression analysis to examine the relationship between these predictors and the dependent variable, influencing Purchasing Decisions (PD).

H1: The Influence of Personalized Product Recommendations on Purchasing Decisions

The regression analysis conducted for H1 suggests that Personalized Product Recommendations (PPR) significantly predict the effectiveness of Purchasing Decisions. The model summary Table 3 shows that PPR explains 48.8% of the variance in PD, with a strong positive correlation (R = 0.699).

Table 3. Model Summary for H1 Regression Analysis

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.699	0.488	0.482	0.49666	2.185

Predictor: (Constant), Personalized Product Recommendations (PPR)
Dependent Variable: Purchasing Decisions (PD)

Table 4. ANOVA for H1 Regression Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	18.353	1	18.353	74.401	0.000
Residual	19.240	78	0.247		
Total	37.593	79			

Predictor: (Constant), Personalized Product Recommendations (PPR)
Dependent Variable: Purchasing Decisions (PD)

Table 5. Coefficients for H1 Regression Analysis

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.	Tolerance	VIF
(Constant)	1.015	0.241		4.216	0.000		
PPR	0.678	0.079	0.699	8.626	0.000	1.0	1

Dependent Variable: Purchasing Decisions (PD)

A simple linear regression analysis was conducted to examine the effect of Personalized Product Recommendations (PPR) on Purchasing Decisions (PD). The model was statistically significant, as shown in Table 4, $F(1, 78) = 74.401$, $p < .001$. The analysis revealed that PPR is a significant predictor of PD, accounting for 48.8% of the variance in Purchasing Decisions ($R^2 = 0.488$), as shown in Table 3. The standardized beta coefficient ($\beta = 0.699$, $p < .001$) indicates a strong, positive relationship, suggesting that an increase in personalized recommendations is associated with a significant increase in purchasing decisions.

H2: The Influence of Targeted Email Campaigns on Purchasing Decisions

For H2, the analysis revealed that targeted email campaigns (TEC) significantly influence the effectiveness of purchasing decisions (PD). A simple linear regression was performed to test the relationship between Targeted Email Campaigns (TEC) and Purchasing Decisions (PD). As shown in the Model Summary (Table 6), the model accounted for 27.7% of the variance in Purchasing Decisions ($R^2 = 0.277$). The ANOVA results (Table 7) indicated the model was statistically significant, $F(1,78) = 29.825$, $p < .001$. Further examination of the Coefficients table (Table 8) revealed that TEC is a significant positive predictor of PD ($\beta = 0.526$, $p < .001$), with a one-unit increase in TEC corresponding to a 0.455-unit increase in Purchasing Decisions ($\beta = 0.455$). The Durbin-Watson statistics of 2.396 suggest no significant autocorrelation, and the VIF of 1.0 indicates that multicollinearity is not an issue. These findings support the hypothesis that targeted email campaigns have a significant positive influence on consumer purchasing decisions.

Table 6. Model Summary for H2 Regression Analysis

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.526	0.277	0.267	0.59047	2.396

Predictor: (Constant), TEC Dependent Variable: PD

Table 7. ANOVA for H2 Regression Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10.398	1	10.398	29.825	0.000
Residual	27.195	78	0.349		
Total	37.593	79			

Predictor: (Constant), TEC
Dependent Variable: PD

Table 8. Coefficients for H2 Regression Analysis

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.	Tolerance	VIF
(Constant)	1.708	0.252		6.786	0.00		
TEC	0.455	0.083	0.526	5.461	0.00	1.00	1.0

Dependent Variable: PD

H3: The Influence of Social Media Interactions on Purchasing Decisions

For H3, A simple linear regression was conducted to examine the effect of Social Media Interactions (SMI) on Purchasing Decisions (PD). As shown in the Model Summary (Table 9), the model explained a significant portion of the variance in Purchasing Decisions (R^2 =0.350), indicating that 35.0% of the variability in PD can be attributed to SMI. The ANOVA results (Table 10) confirmed that the overall model was statistically significant, F (1,78) =41.979,p<.001. The Coefficients table (Table 11) further details the relationship, showing that SMI is a significant positive predictor of PD (β=0.592, p<.001). For every one-unit increase in Social Media Interactions, Purchasing Decisions are predicted to increase by 0.538 units (β=0.538). These findings provide strong evidence that social media interactions have a significant positive influence on consumer purchasing.

Table 9. Model Summary for H3 Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.592	0.350	0.342	0.55976	2.195

Predictor: (Constant), SMI
Dependent Variable: PD

Table 10. ANOVA for H3 Regression Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	13.153	1	13.153	41.979	0.000
Residual	24.440	78	0.313		
Total	37.593	79			

Predictor: (Constant), SMI
Dependent Variable: PD

Table 11. Coefficients for H3 Regression Analysis

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.	Tolerance	VIF
(Constant)	1.371	0.264		5.188	0.00		
SMI	0.538	0.083	0.592	6.479	0.00	1.0	1.0

Dependent Variable: PD

The regression analyses conducted for this study provide robust empirical evidence supporting all three proposed hypotheses regarding the influence of personalized marketing strategies on the purchasing decisions of international consumers in Taiwan. Hypothesis 1, which posited that Personalized Product Recommendations (PPR) significantly impact Purchasing Decisions (PD), was strongly supported by the results, with a high standardized beta coefficient ($\beta = 0.699$, $p < 0.001$), indicating a substantial positive effect. Similarly, Hypothesis 2, concerning the influence of Targeted Email Campaigns (TEC) on PD, was validated with a moderate yet statistically significant beta value ($\beta = 0.526$, $p < 0.001$). Hypothesis 3, which examined the role of Social Media Interactions (SMI), also demonstrated a significant positive relationship ($\beta = 0.592$, $p < 0.001$). Across all models, the R^2 values ranged from 0.277 to 0.488, highlighting varying levels of explanatory power, with PPR accounting for the highest variance in personalized advertising outcomes.

H4: Personalized digital marketing strategies positively influence international consumers' purchasing decisions. The overall influence of personalized digital marketing strategies on purchasing decisions was tested by considering the combined effect of Personalized Product Recommendations (PPR), Targeted Email Campaigns (TEC), and Social Media Interactions (SMI) on Purchasing Decisions (PD). The model explained 51.8% of the variance in PD, demonstrating the significant role these strategies play in shaping consumer behavior.

Table 12. Model Summary for H4 Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.720	0.518	0.499	0.48804	2.161

Predictor: (Constant), PPR, TEC, SMI
Dependent Variable: PD

Table 13. ANOVA for H4 Regression Analysis

	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.491	3	6.497	27.276	0.000
Residual	18.102	76	0.238		
Total	37.593	79			

Table 14. Coefficients for H4 Regression Analysis

Variable	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	0.798	0.257		3.109	0.003		
PPR	0.517	0.109	0.533	4.725	0.000	0.499	2.006
TEC	0.038	0.100	0.044	0.383	0.703	0.470	2.127
SMI	0.189	0.109	0.208	1.737	0.086	0.442	2.260

These results confirm that personalized digital marketing strategies significantly influence purchasing decisions, with personalized product recommendations being the strongest predictor.

The results of the multiple regression analysis for Hypothesis 4 affirm that personalized digital marketing strategies collectively exert a significant positive influence on international consumers' purchasing decisions in Taiwan. The model, which integrates Personalized Product Recommendations (PPR), Targeted Email Campaigns (TEC), and Social Media Interactions (SMI), explains 51.8% of the variance in purchasing decisions ($R^2 = 0.518$) in Table 12, indicating a substantial degree of explanatory power. PPR emerged as the most influential factor among the three predictors, with a standardized beta coefficient of 0.533 ($p < 0.001$), signifying a substantial and statistically significant effect. While SMI demonstrated a positive yet marginally significant relationship ($\beta = 0.208$, $p = 0.086$), TEC showed no statistically significant impact on purchasing decisions in the combined model ($\beta = 0.044$, $p = 0.703$). The overall model fit was statistically significant ($F(3,76) = 27.276$, $p < 0.001$) in Table 13, and diagnostic indicators such as the Durbin-Watson statistic (2.161) and acceptable VIF values (Table 14) confirmed the absence of multicollinearity and autocorrelation. These findings reinforce the conclusion that while all three strategies contribute to shaping consumer behavior, personalized product recommendations positively influence international consumers' purchasing decisions within the Taiwanese market.

5. Conclusion and Future Research

The hypothesis testing results provide valuable insights into the impact of personalized digital marketing strategies on consumer behavior among international customers in Taiwan. Hypotheses H1, H2, and H3 were fully supported, indicating that PPR, TEC, and SMI each exert a statistically significant and positive influence on the effectiveness of PD. These findings highlight the effectiveness of individual marketing strategies in enhancing consumer engagement with personalized advertising. However, Hypothesis H4, which posited a collective positive influence of all strategies (PPR, SMI, and TEC) on PD, was only partially supported. While the overall model was statistically significant and explained a substantial portion of the variance in purchasing decisions, only PPR and, to a lesser extent, SMI demonstrated significant predictive power. In contrast, TEC did not contribute significantly to the model. This suggests that while personalized strategies are effective, their individual contributions may vary, with product recommendations playing the most influential role in shaping consumer purchasing behavior.

Future research should explore the role of emerging technologies, such as artificial intelligence (AI) and machine learning, in enhancing personalized marketing strategies. Additionally, further studies could examine the cultural differences in personalized marketing effectiveness across different regions of Asia and the long-term impact of these strategies on brand loyalty. Lastly, examining the integration of personalized digital marketing with offline marketing efforts could offer a more holistic view of consumer behavior in an omnichannel environment (Macías Urrego, García Pineda, & Montoya Restrepo, 2024).

References

Alam, I., (2021), "Integrating social media and traditional modes of customer interaction for new B2B service development," *Journal of Business-to-Business Marketing*, 28(4), 321-345.

Challacombe, D. J. and E. N. McElhiney, (2025), "Phishing susceptibility among healthcare workers: The impact of awareness, email type, and location," *International Journal of Advanced Corporate Learning*, 18(1), 4-15.

Goic, M., A. Rojas, and I. Saavedra, (2022), "The effectiveness of triggered email marketing in addressing browse abandonments," *Journal of Interactive Marketing*, 55(1), 118-145.

Habib, S., N. N. Hamadneh, and A. Hassan, (2022), "The relationship between digital marketing, customer engagement, and purchase intention via OTT platforms," *Journal of Mathematics*, 5327626.

Jones, K. and M. Glynn, (2019), "How children use social media for brand interactions," *Young Consumers*, 20(2), 145-160.

Kaiser, H. F., (1974), "An index of factorial simplicity," *Psychometrika*, 39(1), 31-36.

Kotler, P., K. L. Keller, and A. Chernev, (2020), *Marketing management* (16th ed.), Pearson Education.

Nunnally, J. C. and I. H. Bernstein, (1994), *Psychometric theory* (3rd ed.), McGraw-Hill.

Kwahk, K. and B. Kim, (2017), "Effects of social media on consumers' purchase decisions: Evidence from Taobao," *Service Business*, 11(4), 803-829.

Macías Urrego, J. A., V. García Pineda, and L. A. Montoya Restrepo, (2024), "The power of social media in the decision-making of current and future professionals: A crucial analysis in the digital era," *Cogent Business & Management*, 11(1), 2421411.

Qin, Y. S., (2020), "Fostering brand–consumer interactions in social media: The role of social media uses and gratifications," *Journal of Research in Interactive Marketing*, 14(3), 337-354.

Rohm, A., V. D. Kaltcheva, and G. R. Milne, (2013), "A mixed-method approach to examining brand–consumer interactions driven by social media," *Journal of Research in Interactive Marketing*, 7(4), 295-311.

Yun, X. and M. H. Chun, (2024), "The impact of personalized recommendation on purchase intention under the background of big data," *Big Data and Information Analytics*, 8, 80-108.