

Digital Marketing Strategies and Customer Loyalty: The Mediating Role of Brand Equity in Online Consumer Behavior

Agus Cholik^{1*}, Andi Kurniawati²

¹ Universitas Esa Unggul, Indonesia

² Akademi Akuntansi Effendi Harahap (EFHAR) Semarang, Indonesia

*Corresponding Author

e-mail: agus.cholik@esaunggul.ac.id

Received: April 18, 2026; **Revised:** August 15, 2026; **Accepted:** Sept 12, 2026

Abstract: This study examines the relationships among Digital Marketing Strategies, Brand Equity, and Customer Loyalty among online consumers in DKI Jakarta and West Java, Indonesia. A quantitative cross-sectional survey was conducted with 400 respondents selected through purposive and quota sampling, with equal representation from the two regions. Respondents evaluated one brand they had purchased online, and the constructs were measured using a five-point Likert scale. Data were screened in Microsoft Excel and SPSS and analyzed using Partial Least Squares Structural Equation Modeling in SmartPLS 4. The reported results indicate that Digital Marketing Strategies were not statistically associated with Customer Loyalty at the 5% significance level ($\beta = 0.218$, $p = 0.063$), whereas Digital Marketing Strategies were positively associated with Brand Equity ($\beta = 0.701$, $p < 0.001$), and Brand Equity was positively associated with Customer Loyalty ($\beta = 0.400$, $p < 0.001$). The reported indirect effect through Brand Equity also did not meet the 5% significance criterion ($\beta = 0.152$, $p = 0.067$). These findings suggest that, within this sample, digital marketing perceptions were more closely related to consumer-based brand value than to loyalty directly. The study contributes by examining a multi-touchpoint view of Digital Marketing Strategies and by distinguishing brand-building outcomes from loyalty formation. The cross-sectional design, self-reported data, and geographically bounded sample limit causal and broader population inferences.

Keywords: Digital Marketing Strategies; Brand Equity; Customer Loyalty; Online Consumer Behavior; PLS-SEM

How to Cite: Cholik, A., & Kurniawati, A. (2026). Digital marketing strategies and customer loyalty: The mediating role of brand equity in online consumer behavior. *Journal of Economic Education and Entrepreneurship Studies*, 7(5), 60-75. <https://doi.org/10.62794/je3s.v7i5.506>.

Copyright 2026 © The Author(s)

The work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/)



INTRODUCTION

Digital consumer behavior is increasingly organized around connected encounters rather than a single advertising exposure or purchase channel. Consumers may discover a brand through social media, compare it in a marketplace, evaluate reviews, interact with the brand through messaging features, and complete or reconsider a purchase through a mobile application. This shift makes digital marketing a strategic configuration of content, interaction, data use, and platform experience rather than a narrow promotional activity (Li et al., 2021). Research on digital and social media marketing similarly emphasizes that contemporary consumer journeys combine firm-generated communication, user-generated content, and technology-mediated

interactions that can affect awareness, engagement, and downstream behavior (Dwivedi et al., 2021). At the same time, data-driven marketing has increased the capacity to personalize consumer contact while creating new questions about how repeated digital exposure translates into durable relationships rather than short-lived responses (Theodorakopoulos & Theodoropoulou, 2024). The central issue is therefore not whether consumers encounter digital marketing, but what those encounters build in the consumer's evaluation of a brand.

The multi-touchpoint character of online consumption makes this issue especially relevant to brand evaluation. Omnichannel research shows that consumers assess experiences across several dimensions, including communication, personalization, service consistency, information safety, delivery, and loyalty-related benefits (Rahman et al., 2022). Service integration across channels can shape customer experience and loyalty because the consumer evaluates whether information and processes remain coherent from one digital contact point to another (Quach et al., 2022). Related evidence indicates that integration, individualization, and interaction can contribute differently to brand experience and customer retention, depending on how consumers purchase across channels (Yin et al., 2022). Personalization also does not operate uniformly: personalized price promotions can reduce perceived effort and support loyalty in some online settings, whereas recommendation systems do not always generate the same relational response (Hallikainen et al., 2022). These findings imply that the quality of a digital journey may matter more than the sheer intensity of digital promotion.

Electronic word-of-mouth further complicates the relationship between marketing exposure and loyalty because consumers evaluate brands through information produced by other consumers. Online reviews influence purchase decisions through dimensions such as source credibility, volume, comprehensibility, and relevance (Fernandes et al., 2022). Textual review content can also reveal brand image and positioning because consumers express functional and emotional associations in their own language (Alzate et al., 2022). Recent work shows that e-WOM can contribute to brand equity when consumers regard reviews as trustworthy and when review content supports brand awareness and image formation (Le et al., 2024). In social-commerce settings, reviews and brand equity can jointly shape consumer identification and behavioral intention, although their roles may differ by context and level of analysis (Huang et al., 2022). Consequently, online consumers may respond to a brand's digital strategy through both firm-controlled signals and socially generated evidence.

Customer loyalty is more demanding than a favorable reaction to an advertisement, promotion, or platform feature. Online customer experience can be associated with loyalty through engagement, indicating that relational mechanisms may be necessary between an experience and a durable behavioral intention (Ahmad et al., 2022). In live-streaming commerce, trust in technological and social elements is related to continuance intention, which illustrates why interactivity alone may not be sufficient unless consumers develop confidence in the transaction environment (Zhang et al., 2022). Platform stickiness research likewise links real-time interaction, perceived value, satisfaction, and flow to continued use rather than treating exposure as equivalent to retention (Bao & Zhu, 2023). Brand relationships can also become more stable when trust and relationship quality convert positive consumer advocacy into loyalty (Quaye et al., 2022). This distinction is important for the present study because Customer Loyalty includes repurchase intention, recommendation intention, brand preference, and resistance to switching, not merely repeated purchase.

A substantial stream of recent research connects social and digital marketing activity with brand-related outcomes, but the dominant evidence does not support one simple pathway. In

banking, social media marketing activities have been examined as antecedents of brand equity through mechanisms such as brand love, trust, brand experience, and perceived uniqueness (Hafez, 2021, 2022). Research in traditional-market and technology contexts also links social networking or social media marketing activities with customer equity, brand awareness, brand image, repurchase intention, and loyalty-related responses (Wang et al., 2021; Yang et al., 2022). Among portable technology consumers, brand awareness and brand image help connect social media marketing activities with loyalty and willingness to pay a premium (Malarvizhi et al., 2022). Evidence from handicraft marketing similarly shows that social media marketing activities can strengthen brand awareness, brand image, and brand equity (Guha et al., 2021). Taken together, these studies indicate that brand value is a plausible intermediate outcome of digital marketing, even when the final loyalty response varies across settings.

The inconsistency of loyalty outcomes is itself theoretically informative. A meta-analysis found a positive overall relationship between social media marketing activities and brand loyalty, while also showing that the size of that relationship varies across contextual and methodological conditions (Ibrahim, 2022). Studies of luxury and e-commerce settings further identify brand experience, satisfaction, relationship quality, engagement, brand love, and trust as mechanisms that can explain why similar marketing activities produce different loyalty outcomes (Fetais et al., 2023; Song & Kim, 2022; Banerji & Singh, 2024; Kumar & Hsieh, 2024). In online travel and digital-platform contexts, brand trust and brand loyalty have also been modeled as intervening mechanisms between social media marketing and later consumer responses (Azhar et al., 2023), while evidence from B2B platforms suggests that digital adoption may even weaken loyalty when it reduces the value of e-WOM (Belhadi et al., 2023). More recent studies of influencer marketing and consumer experience likewise show that e-WOM and e-brand experience can be associated with e-brand loyalty, with emotional attachment modifying some relationships (Valmohammadi et al., 2025), and restaurant research identifies satisfaction and brand love as relevant antecedents of loyalty and e-WOM (Aragonés-Jericó et al., 2024). Despite this growing evidence, prior studies have predominantly examined specific forms of social media marketing or isolated relational mechanisms such as trust, engagement, satisfaction, and brand experience. Less attention has been given to an integrated multi-touchpoint view of Digital Marketing Strategies that simultaneously distinguishes Brand Equity from Customer Loyalty and tests Brand Equity as a mediating mechanism. This limitation provides the specific research gap addressed in the present study.

Against this background, the present study examines Digital Marketing Strategies, Brand Equity, and Customer Loyalty among online consumers in DKI Jakarta and West Java. Digital Marketing Strategies are treated as a multi-touchpoint construct covering content quality, social media interactivity, personalization, digital promotion, electronic word-of-mouth, and platform experience, while Brand Equity captures awareness, image, perceived quality, and brand association. The study tests whether Digital Marketing Strategies are related to Customer Loyalty directly, whether they are related to Brand Equity, whether Brand Equity is related to Customer Loyalty, and whether Brand Equity mediates the relationship between Digital Marketing Strategies and Customer Loyalty. The theoretical contribution lies in distinguishing digital marketing as a brand-building process from loyalty as a stronger relational outcome rather than assuming that campaign exposure automatically produces retention. The practical contribution is to help firms interpret digital marketing performance beyond reach, clicks, promotions, and other short-term indicators by examining whether consumers develop favorable and differentiated

brand value. Because the design is cross-sectional, the analysis is interpreted as evidence of statistical relationships within the observed sample rather than proof of temporal causation.

Digital Marketing Strategies as a Multi-Touchpoint Consumer Interface

Digital Marketing Strategies refer in this study to coordinated consumer-facing activities that operate across digital content, social interaction, personalized offers, promotions, e-WOM, and platform experience. This conceptualization follows the broader view that social media marketing strategy involves deliberate patterns of digital engagement rather than isolated communication tactics (Li et al., 2021). It also reflects the reality that consumer journeys combine owned, paid, and socially generated touchpoints whose effects depend on how consumers interpret and connect them (Dwivedi et al., 2021). The six dimensions used in the instrument represent different forms of evidence available to consumers: content informs and attracts attention, interactivity signals responsiveness, personalization increases relevance, promotion supplies economic incentives, e-WOM supplies peer evaluation, and platform experience shapes transaction convenience. Research on omnichannel customer experience supports treating such encounters as interconnected evaluations rather than independent channel effects (Rahman et al., 2022).

The dimensions should nevertheless be interpreted as consumer perceptions of visible digital activity, not as direct measures of a firm's internal marketing capability. Personalized recommendations and promotions, for example, can reduce cognitive effort but can generate different loyalty responses depending on how consumers evaluate their relevance (Hallikainen et al., 2022). Online reviews also influence decisions through credibility, relevance, and comprehensibility rather than through their presence alone (Fernandes et al., 2022). These findings support a perception-based measurement approach in which respondents evaluate how one focal brand is experienced across digital contact points. In the present model, Digital Marketing Strategies therefore represent the consumer's integrated assessment of those touchpoints.

Digital Marketing Strategies and Customer Loyalty

Digital marketing may be associated with Customer Loyalty when repeated digital encounters reduce effort, improve relevance, support interaction, and create a favorable experience. Meta-analytic evidence indicates that social media marketing activities are generally related to brand loyalty, but the relationship varies across contexts and study designs (Ibrahim, 2022). In e-commerce, perceived social media marketing activities can contribute to loyalty through relationship quality, showing that trust, commitment, and satisfaction may be necessary between communication and retention (Banerji & Singh, 2024). Brand experience has also been identified as a mediator between social media marketing activities and brand loyalty (Kumar & Hsieh, 2024). These studies imply that a direct relationship is plausible but should not be assumed to be uniform across online consumer settings.

Customer Loyalty in this study combines repurchase intention, recommendation intention, brand preference, and resistance to switching. This definition sets a higher threshold than simple repeat purchase because it requires both future behavioral intention and a comparatively stable preference. Research on online customer experience indicates that engagement can connect experience with loyalty (Ahmad et al., 2022), while live-commerce studies show that platform value, satisfaction, trust, and flow are relevant to continued use (Zhang et al., 2022; Bao & Zhu, 2023). Digital activities can therefore support loyalty, but consumers may still switch when competing offers are more attractive or when relational mechanisms remain

weak. The direct path is consequently tested empirically rather than treated as a predetermined outcome.

H1: Digital Marketing Strategies positively influence Customer Loyalty.

Digital Marketing Strategies and Brand Equity

Brand Equity represents the value consumers attach to a brand through recognition, image, perceived quality, and distinctive associations. Digital touchpoints can contribute to that value because they repeatedly expose consumers to information and social evidence that shape what the brand means and how credible it appears. Banking studies show that social media marketing activities can be related to brand equity through brand trust, brand love, brand experience, and perceived uniqueness (Hafez, 2021, 2022). Studies in technology markets similarly associate social media marketing dimensions with brand awareness and brand image, both of which can support later repurchase responses (Yang et al., 2022; Malarvizhi et al., 2022). The brand-building role of digital marketing is therefore expected to be stronger when different touchpoints present coherent and credible signals.

This relationship is particularly relevant when consumers cannot inspect a product or service physically before purchase. Content quality can clarify brand meaning; interaction can signal responsiveness; personalization can increase perceived relevance; e-WOM can provide social confirmation; and a reliable platform experience can support judgments of quality. Research on handicraft promotion found that social media marketing activities were related to brand awareness, brand image, and brand equity (Guha et al., 2021), while social networking activity has also been linked with customer-equity outcomes that include brand-related value (Wang et al., 2021). These studies support the expectation that consumers who evaluate a brand's digital marketing more favorably will also report stronger Brand Equity.

H2: Digital Marketing Strategies positively influence Brand Equity.

Brand Equity and Customer Loyalty

Brand Equity may support Customer Loyalty because recognized, positively evaluated, and differentiated brands reduce uncertainty and provide reasons to remain with the same choice. When a consumer can recall a brand easily, regards its image positively, perceives its quality as favorable, and associates it with a distinctive character, competing offers must overcome more than price or convenience. Research on brand relationships shows that trust and relationship quality can connect positive consumer advocacy with loyalty (Quaye et al., 2022). Evidence from digital retail similarly links e-brand experience and e-WOM with e-brand loyalty (Valmohammadi et al., 2025). Restaurant research also demonstrates that satisfaction and brand love are relevant antecedents of loyalty and e-WOM, suggesting that accumulated brand evaluation can stabilize future preference (Aragonés-Jericó et al., 2024).

In the present study, Brand Equity does not include brand loyalty as one of its dimensions because Customer Loyalty is modeled as a separate endogenous construct. This separation reduces conceptual overlap and allows the analysis to test whether awareness, image, perceived quality, and association are related to repurchase intention, recommendation, preference, and resistance to switching. Recent e-WOM research further shows that trust in review information can strengthen brand awareness and image and contribute to brand equity formation (Le et al., 2024). The proposed relationship therefore treats Brand Equity as an evaluative basis from which loyalty-related responses may emerge, while recognizing that the cross-sectional design cannot establish the temporal order of that process.

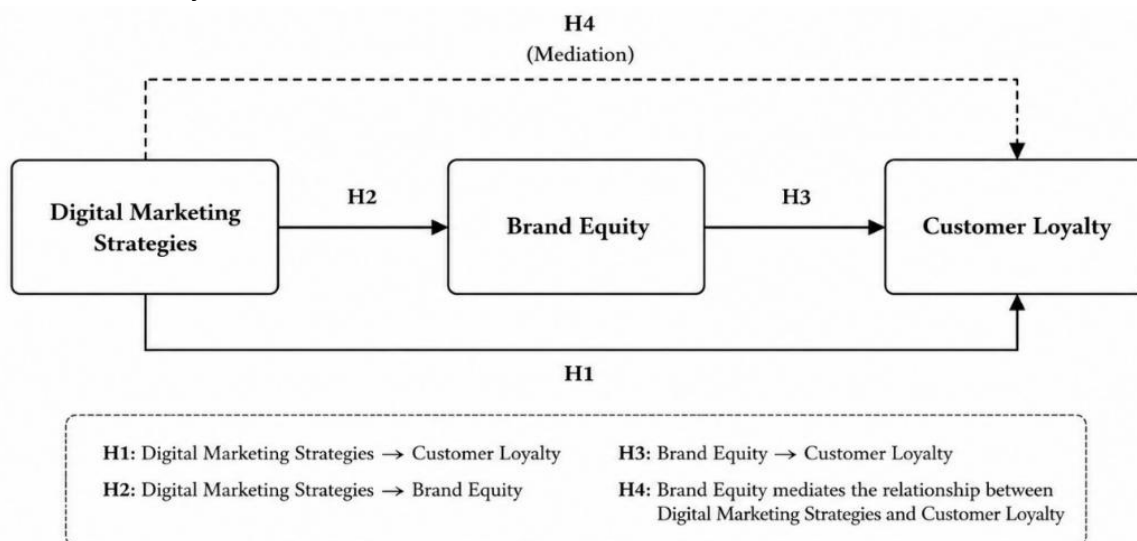
H3: Brand Equity positively influences Customer Loyalty.**Brand Equity as a Mediating Mechanism**

The mediation hypothesis tests whether the statistical relationship between Digital Marketing Strategies and Customer Loyalty operates through Brand Equity. The mechanism is conceptually plausible because digital encounters can first shape consumer knowledge and evaluation of a brand, which may then be associated with a stronger preference for repurchase and recommendation. In online travel, social media marketing has been linked to purchase behavior through brand trust and brand loyalty, illustrating the importance of intervening brand-level states (Azhar et al., 2023). Hafez (2022) likewise shows that brand experience can help explain how social media marketing activities relate to brand equity. These studies do not establish that Brand Equity must mediate in every market, but they support testing an indirect pathway rather than assuming only a direct promotional effect.

The proposed mediation is also consistent with evidence that online customer experience can be associated with loyalty through engagement (Ahmad et al., 2022) and that social-media-driven brand experience can connect marketing activity with continued usage and loyalty (Kumar & Hsieh, 2024). If the indirect effect is supported, the model would indicate that consumer evaluations of digital marketing are related to loyalty partly through accumulated brand value. If it is not supported, the result would suggest that Brand Equity and loyalty are related but that additional relational or experiential variables may be required to explain how digital activity is connected to loyalty. The mediation test is therefore treated as an empirical question rather than as a necessary consequence of the direct paths.

H4: Brand Equity mediates the relationship between Digital Marketing Strategies and Customer Loyalty.**Conceptual Framework**

The conceptual framework positions Digital Marketing Strategies as the exogenous construct, Brand Equity as the mediator, and Customer Loyalty as the final endogenous construct. The model contains one direct path from Digital Marketing Strategies to Customer Loyalty and one indirect pathway through Brand Equity. Online Consumer Behavior is the empirical setting rather than a separately measured latent variable. Figure 1 summarizes the four hypotheses tested in the study.

**Figure 1.** Research Framework

METHOD

Research Design

The study used a quantitative explanatory survey with a cross-sectional design. Data were collected once from eligible online consumers and analyzed as statistical relationships among the latent constructs Digital Marketing Strategies, Brand Equity, and Customer Loyalty. The design was suitable for estimating a measurement model, direct structural paths, and an indirect mediation path within one model. Because observations were collected at one point in time, the reported path estimates are interpreted as associations that are consistent or inconsistent with the hypotheses rather than as evidence of temporal causation. PLS-SEM was selected because the study estimated latent constructs from multiple indicators and examined prediction-oriented structural relationships and mediation (Dash & Paul, 2021; Memon et al., 2021).

Research Setting, Population, and Sample

The research was conducted among online consumers domiciled in DKI Jakarta and West Java who had purchased products through digital channels. The target context included marketplaces, social media stores, brand websites, mobile applications, and social-commerce platforms. The final sample contained 400 respondents, with an equal quota of 200 respondents from DKI Jakarta and 200 from West Java. Purposive sampling was used because participation required specific online-purchase and digital-brand-interaction experience, while quota sampling maintained equal regional representation. Respondents were eligible when they were at least 17 years old, lived in one of the two study regions, had purchased products online at least twice during the preceding six months, had interacted with brand content through digital channels, and could identify one brand they had purchased online and evaluate that brand. The source manuscript did not specify the calendar period of data collection, so no collection dates are added in this revision.

Instrument and Measurement

Data were collected with a structured online questionnaire using a five-point Likert response format ranging from 1 (strongly disagree) to 5 (strongly agree). Digital Marketing Strategies were measured with eight items representing content quality, social media interactivity, personalization and digital offers, digital promotion, e-WOM, and platform experience. Brand Equity was measured with six items covering brand awareness, brand image and trustworthiness, perceived quality, and distinctive brand association. Customer Loyalty was measured with five items covering repurchase intention, consideration for the next purchase, recommendation intention, brand preference, and resistance to competitor promotions. Brand loyalty was not included as an indicator of Brand Equity because Customer Loyalty was modeled separately as the endogenous outcome. Respondents answered all construct items with reference to one specific brand that they had previously purchased online, which reduced ambiguity about the object being evaluated.

Table 1. Operational Definition and Measurement Indicators

Variable	Code	Indicator
Digital Marketing Strategies	DMS1	The digital content of this brand is informative and easy to understand.
Digital Marketing Strategies	DMS2	The digital content of this brand attracts my attention.
Digital Marketing Strategies	DMS3	This brand actively interacts with consumers through social media or other digital channels.
Digital Marketing Strategies	DMS4	This brand responds well to consumer questions, comments, or complaints.
Digital Marketing Strategies	DMS5	The digital offers from this brand match my needs.
Digital Marketing Strategies	DMS6	Digital promotions such as discounts, vouchers, or cashback from this brand are attractive to me.
Digital Marketing Strategies	DMS7	Online reviews, ratings, or testimonials make me more confident about this brand.

Variable	Code	Indicator
Digital Marketing Strategies	DMS8	The digital channels of this brand are easy to use and provide a comfortable experience.
Brand Equity	BE1	I can easily recognize this brand compared to other brands.
Brand Equity	BE2	I can easily remember this brand when I need similar products.
Brand Equity	BE3	This brand has a positive image in my mind.
Brand Equity	BE4	This brand appears trustworthy.
Brand Equity	BE5	I consider the products or services of this brand to have good quality.
Brand Equity	BE6	This brand has a character or impression that differs from its competitors.
Customer Loyalty	CL1	I intend to repurchase products from this brand.
Customer Loyalty	CL2	I will still consider this brand for my next purchase.
Customer Loyalty	CL3	I am willing to recommend this brand to others.
Customer Loyalty	CL4	I prefer this brand over other similar brands.
Customer Loyalty	CL5	I am not easily attracted to competing brands even when they offer promotions.

Data Collection and Screening Procedure

The questionnaire was distributed online through social media, online consumer communities, student and professional networks, e-commerce user groups, and other relevant digital channels. Screening questions were placed before the main instrument to assess age, domicile, online purchase frequency, digital brand interaction, and the respondent's ability to identify a focal brand. Responses that failed the eligibility criteria were excluded. Before structural modeling, the dataset was screened for missing responses, duplicate submissions, response duration, straight-lining, consistency with domicile and purchase criteria, and the presence of a named focal brand. Microsoft Excel was used for data organization and duplicate checking, while SPSS was used for descriptive inspection and response-pattern screening. Only the 400 valid cases reported in the source manuscript were retained for the analysis presented here.

Measurement Model and Structural Analysis

The measurement model was examined before the structural model. Indicator reliability was assessed through outer loadings, with values above 0.70 treated as satisfactory for the reflective indicators, while discriminant validity was examined with the Heterotrait-Monotrait ratio using the reported threshold below 0.85. The original method also stated that Cronbach's alpha, composite reliability, and Average Variance Extracted would be evaluated, but their numerical results were not available in the source manuscript; those statistics are therefore not reconstructed or inferred in this revision. The structural model was assessed using the reported R-square and adjusted R-square values, path coefficients, t-statistics, p-values, and the reported indirect effect. Bootstrapping in SmartPLS 4 was used for significance testing, although the source manuscript did not unambiguously state the final number of bootstrap resamples. The original method also mentioned VIF, f-square, and Q-square, but corresponding numerical outputs were unavailable; interpretation is therefore restricted to the results that can be documented from the supplied manuscript.

Mediation Analysis and Decision Rule

Mediation was assessed for the indirect pathway Digital Marketing Strategies → Brand Equity → Customer Loyalty. The source manuscript used a 5% significance level and treated an indirect effect as supported when the bootstrapped result was statistically significant and its confidence interval excluded zero. Direct and indirect paths were interpreted jointly to determine whether the proposed mediation was supported. The statistical values reported in the Results section are reproduced from the supplied manuscript without recalculation or alteration. Because the reported indirect coefficient and confidence-interval information require verification against the original SmartPLS output, the mediation conclusion should be checked by the author before final submission.

Ethical Considerations

Participation was voluntary, and respondents were informed that the survey was used for academic purposes. The manuscript reports that no personally identifying information was required for the analysis and that responses were processed in aggregate form. Screening questions were used to establish eligibility rather than to identify individual participants. No additional ethics-approval number or institutional review statement was available in the source manuscript, so none is added in this revision.

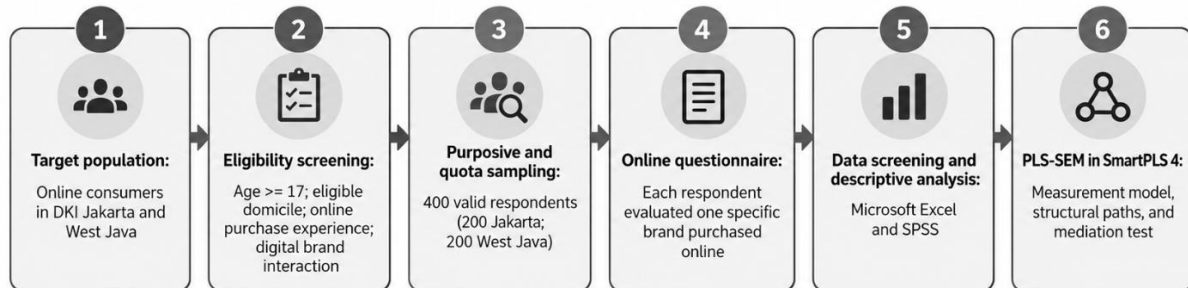


Figure 2. Research Procedure

RESULTS AND DISCUSSION

Research Results

Respondent Profile

The final dataset consisted of 400 valid respondents, evenly divided between DKI Jakarta and West Java. Female respondents represented 51.5% of the sample and male respondents 48.5%. The largest age group was 25–34 years (40.8%), followed by 17–24 years (34.8%). Most respondents held a diploma or bachelor's degree (65.0%), and employees (44.0%) and students (33.0%) formed the two largest occupational groups. Marketplace platforms were the most frequently used shopping channel (65.3%), followed by social commerce (18.5%), indicating that most respondents had regular exposure to digital brand information, reviews, promotional features, and platform-based transactions.

Table 2. Respondent Profile

Characteristic	Category	Frequency	Percentage
Domicile	DKI Jakarta	200	50.0
Domicile	West Java	200	50.0
Gender	Female	206	51.5
Gender	Male	194	48.5
Age	17–24 years	139	34.8
Age	25–34 years	163	40.8
Age	35–44 years	64	16.0
Age	>44 years	34	8.5
Education	Senior high school	92	23.0
Education	Diploma/Bachelor	260	65.0
Education	Postgraduate	48	12.0
Occupation	Student	132	33.0
Occupation	Employee	176	44.0
Occupation	Entrepreneur	67	16.8
Occupation	Other	25	6.3
Online shopping frequency	2–3 times in the last six months	63	15.8
Online shopping frequency	1–2 times per month	175	43.8
Online shopping frequency	3–5 times per month	114	28.5
Online shopping frequency	>5 times per month	48	12.0
Most frequently used platform	Marketplace	261	65.3

Characteristic	Category	Frequency	Percentage
Most frequently used platform	Social commerce	74	18.5
Most frequently used platform	Brand website/application	48	12.0
Most frequently used platform	Other digital channels	17	4.3

Source: processed data

Descriptive Statistics

The three construct means were above the midpoint of the five-point scale. Digital Marketing Strategies had a mean of 4.1006 (SD = 0.68872), Brand Equity had a mean of 4.1675 (SD = 0.64242), and Customer Loyalty had the highest mean at 4.3050 (SD = 0.62910). These values describe the central tendency of the responses and should not be interpreted as evidence for the structural hypotheses. The reported minimum values also show that the dataset retained response variation rather than containing only high agreement scores.

Table 3. Descriptive Statistics of Research Variables

	N	Minimum	Maximum	Mean	Std. Deviation
DMS_Mean	400	1.75	5.00	4.1006	.68872
BE_Mean	400	2.00	5.00	4.1675	.64242
CL_Mean	400	1.60	5.00	4.3050	.62910
Valid N (listwise)	400				

Source: processed data

Measurement Model Results

All 19 reported indicator loadings exceeded 0.70. The loadings for Digital Marketing Strategies ranged from 0.730 to 0.905, those for Brand Equity ranged from 0.753 to 0.854, and those for Customer Loyalty ranged from 0.781 to 0.869. On the criterion stated in the method, each indicator therefore met the threshold for indicator reliability and was retained. The HTMT ratios were 0.546 for Brand Equity–Customer Loyalty, 0.574 for Brand Equity–Digital Marketing Strategies, and 0.611 for Customer Loyalty–Digital Marketing Strategies, all below the reported 0.85 criterion. These results support discriminant validity among the three constructs, but internal-consistency and convergent-validity statistics should not be claimed until Cronbach's alpha, composite reliability, and AVE outputs are verified from the original analysis.

Table 4. Outer Loading Results

Construct	Indicator	Outer Loading	Decision
Digital Marketing Strategies	DMS1	0.805	Retained
Digital Marketing Strategies	DMS2	0.805	Retained
Digital Marketing Strategies	DMS3	0.832	Retained
Digital Marketing Strategies	DMS4	0.793	Retained
Digital Marketing Strategies	DMS5	0.826	Retained
Digital Marketing Strategies	DMS6	0.730	Retained
Digital Marketing Strategies	DMS7	0.905	Retained
Digital Marketing Strategies	DMS8	0.859	Retained
Brand Equity	BE1	0.753	Retained
Brand Equity	BE2	0.839	Retained
Brand Equity	BE3	0.824	Retained
Brand Equity	BE4	0.800	Retained
Brand Equity	BE5	0.823	Retained
Brand Equity	BE6	0.854	Retained
Customer Loyalty	CL1	0.852	Retained
Customer Loyalty	CL2	0.832	Retained
Customer Loyalty	CL3	0.781	Retained
Customer Loyalty	CL4	0.869	Retained
Customer Loyalty	CL5	0.853	Retained

Source: processed data

Table 5. HTMT Results

Construct	Brand Equity	Customer Loyalty	Digital Marketing Strategies
Brand Equity	-	0.546	0.574
Customer Loyalty	-	-	0.611
Digital Marketing Strategies	-	-	-

*Source: processed data***Structural Model Results**

The reported R-square value for Brand Equity was 0.491 (adjusted R-square = 0.486), indicating that Digital Marketing Strategies accounted for 49.1% of the observed variance in Brand Equity within the model. The reported R-square for Customer Loyalty was 0.330 (adjusted R-square = 0.316), indicating that Digital Marketing Strategies and Brand Equity jointly accounted for 33.0% of the variance in Customer Loyalty. Within the interpretation adopted in this study, the R-square values were classified as moderate. They indicate the proportion of variance in the endogenous constructs accounted for by the predictors in the estimated model and should not be interpreted as evidence of causal determination.

Table 6. Structural Model Quality

Endogenous Construct	R-square	Adjusted R-square	Interpretation
Brand Equity	0.491	0.486	Moderate
Customer Loyalty	0.330	0.316	Moderate

Source: processed data

For the direct paths, H1 was reported as not supported: Digital Marketing Strategies → Customer Loyalty had a coefficient of 0.218, $t = 1.186$, and $p = 0.063$. H2 was reported as supported, with Digital Marketing Strategies → Brand Equity at $\beta = 0.701$, $t = 12.632$, and $p = 0.000$. H3 was also reported as supported, with Brand Equity → Customer Loyalty at $\beta = 0.400$, $t = 3.543$, and $p = 0.000$. On the reported 5% decision rule, the results therefore distinguish a strong Digital Marketing Strategies–Brand Equity relationship from the non-significant direct Digital Marketing Strategies–Customer Loyalty path.

Table 7. Direct Effect Results

Hypothesis	Path	Coefficient	t-statistic	p-value	Decision
H1	Digital Marketing Strategies → Customer Loyalty	0.218	1.186	0.063	Not supported
H2	Digital Marketing Strategies → Brand Equity	0.701	12.632	0.000	Supported
H3	Brand Equity → Customer Loyalty	0.400	3.543	0.000	Supported

*Source: processed data. Author verification required for the reported H1 t-statistic and p-value combination before submission.***Mediation Result**

The reported indirect pathway Digital Marketing Strategies → Brand Equity → Customer Loyalty had a coefficient of 0.152, $t = 1.831$, and $p = 0.067$. Under the 5% significance criterion used in the manuscript, H4 was therefore reported as not supported. The supplied table contains only one confidence-interval value (0.082), so the interval cannot be independently assessed from the manuscript alone. In addition, the reported indirect coefficient should be verified against the original SmartPLS bootstrapping output because it is not directly reconcilable with the two displayed component path coefficients. No alternative coefficient or confidence interval is introduced in this revision because the underlying output file was not supplied.

Table 8. Indirect Effect and Mediation Result

Hypothesis	Indirect Path	Coefficient	t-statistic	p-value	Confidence Interval	Mediation Type
H4	Digital Marketing Strategies → Brand Equity → Customer Loyalty	0.152	1.831	0.067	0.082	No mediation

Source: processed data. Confidence-interval reporting and the indirect coefficient require verification against the original SmartPLS output.

Discussion

The reported results separate brand building from loyalty formation in a way that is consistent with the multi-touchpoint logic developed in the literature review. Digital Marketing Strategies were strongly and positively associated with Brand Equity, whereas the direct path to Customer Loyalty did not meet the 5% significance criterion. This pattern suggests that respondents who evaluated a focal brand's content, interaction, offers, promotions, reviews, and platform experience more favorably also tended to report stronger awareness, image, perceived quality, and distinctive association, but those evaluations were not sufficient to explain a comparably strong direct loyalty response. The result is compatible with research showing that social media marketing activities can strengthen brand-equity dimensions and other customer-equity outcomes (Hafez, 2021; Wang et al., 2021; Yang et al., 2022; Malarvizhi et al., 2022). Within this sample, the more defensible interpretation is therefore that digital marketing perceptions were closely associated with consumer-based brand value, not that digital activity automatically created loyal behavior.

The non-significant H1 result is particularly relevant because a considerable part of the literature reports positive relationships between social media marketing activities and loyalty. Ibrahim's (2022) meta-analysis identifies a positive overall association but also shows that contextual and methodological conditions affect the magnitude of that relationship. More recent e-commerce research similarly indicates that relationship quality can mediate the link between social media marketing activities and customer loyalty (Banerji & Singh, 2024), while brand experience can connect such activities with continued use and brand loyalty (Kumar & Hsieh, 2024). The present result does not contradict the possibility that digital marketing contributes to loyalty; instead, it indicates that the direct route was not statistically supported under the reported model and decision rule. One possible interpretation is that favorable evaluations of digital touchpoints may coexist with continued comparison of competing alternatives. Because switching costs, competitor attractiveness, and actual switching behavior were not directly measured, this explanation should be treated as a theoretical interpretation rather than an empirical finding of the present study. That explanation remains theoretical because switching conditions were not measured directly in this study.

The supported H2 path reinforces the interpretation of Digital Marketing Strategies as a brand-building interface. Prior research in banking has shown that social media marketing activities can be associated with brand equity through brand trust, brand love, brand experience, and perceived uniqueness (Hafez, 2021, 2022). Guha et al. (2021) also found that social media marketing activities were related to brand awareness, brand image, and brand equity, while recent work on e-WOM shows that trustworthy review content can support brand awareness and image formation (Le et al., 2024). These studies help explain why a composite assessment of content, interaction, personalization, promotion, reviews, and platform experience can align strongly with consumer-based brand value. The finding is also coherent with the respondent task in this study, because participants evaluated one specific brand rather than digital shopping in

general. Their digital evaluations and brand-equity judgments therefore referred to the same focal object, which gives the H2 association a clear interpretive basis.

The positive H3 relationship indicates that stronger Brand Equity was associated with stronger Customer Loyalty. This result is consistent with the idea that loyalty becomes more likely when consumers possess a favorable and differentiated representation of the brand rather than merely recognizing a promotional offer. Quaye et al. (2022) show that trust and brand relationship quality are important mechanisms in brand loyalty, and Valmohammadi et al. (2025) link e-brand experience and e-WOM with e-brand loyalty in online retail. Aragonés-Jericó et al. (2024) likewise show that satisfaction and brand love are relevant antecedents of loyalty and e-WOM. The present model does not measure those relational states, but the significant Brand Equity–Customer Loyalty path is consistent with the broader view that accumulated brand evaluation provides a more stable basis for repurchase, recommendation, preference, and resistance to switching than promotional exposure alone. Because the study is cross-sectional, this relationship should still be read as statistical association rather than proof that Brand Equity temporally caused loyalty.

The reported mediation result did not meet the 5% significance criterion. However, because the reported indirect coefficient and confidence-interval information still require verification against the original SmartPLS output, the non-mediation finding should be regarded as provisional. Accordingly, interpretation of H4 should remain limited until the underlying bootstrapping results are confirmed. This is theoretically informative because the direct H2 and H3 paths were significant, yet the reported indirect test was not. Research in related settings frequently identifies additional mechanisms between digital activity and consumer outcomes, including engagement (Ahmad et al., 2022), trust (Azhar et al., 2023), satisfaction and flow (Bao & Zhu, 2023), and brand experience (Kumar & Hsieh, 2024). Belhadi et al. (2023) further show that digitalization can have counterintuitive loyalty implications when it changes the value consumers assign to e-WOM. These studies suggest that a single mediator may not fully represent the process through which digital marketing perceptions become loyalty. However, the numerical inconsistency in the reported indirect output must be resolved before the non-mediation result is treated as a definitive statistical contribution.

The Jakarta and West Java setting adds context to these relationships without justifying broader regional generalization. The sample was deliberately balanced across the two regions, but the main model did not test regional differences, so the results represent the combined sample rather than evidence that the two markets behave identically. The respondent profile also shows that the sample was concentrated among younger adults, diploma/bachelor graduates, employees, students, and marketplace users. Those characteristics are relevant because platform-based consumers routinely encounter reviews, promotions, recommendations, and competing offers in the same decision environment. Omnichannel studies show that customer experience depends on integration, individualization, and cross-channel consistency (Rahman et al., 2022; Quach et al., 2022; Yin et al., 2022), which supports interpreting the Digital Marketing Strategies construct as a bundle of connected consumer perceptions. Future work could test whether the observed paths differ by region, platform type, product category, or shopping intensity rather than assuming homogeneous online consumer behavior.

The study's main contribution is therefore conceptual rather than causal: it distinguishes the ability of digital marketing touchpoints to correlate with brand value from their ability to correlate directly with durable loyalty. For managers, this distinction implies that high engagement, attractive promotions, or convenient digital interfaces should not be treated as substitutes for evidence that consumers recognize, value, prefer, and trust the brand over

alternatives. Digital campaigns can be assessed not only through immediate response metrics but also through whether they strengthen brand awareness, image, perceived quality, and distinctive associations. At the same time, the non-significant direct and reported indirect paths indicate that loyalty may require complementary relational mechanisms that were not measured here. The findings are therefore best used to motivate more complete models incorporating trust, satisfaction, perceived value, engagement, or service quality rather than to conclude that Brand Equity is unimportant. Longitudinal or repeated-measure designs would be especially useful for testing whether changes in digital experience precede changes in brand equity and loyalty over time.

CONCLUSIONS

This study examined the relationships among Digital Marketing Strategies, Brand Equity, and Customer Loyalty in a cross-sectional sample of 400 online consumers from DKI Jakarta and West Java. Based on the statistics reported in the supplied manuscript, Digital Marketing Strategies were not significantly related to Customer Loyalty at the 5% level, while Digital Marketing Strategies were positively and significantly related to Brand Equity and Brand Equity was positively and significantly related to Customer Loyalty. The reported indirect effect through Brand Equity also did not meet the 5% significance criterion. These results support a cautious interpretation in which favorable evaluations of digital marketing touchpoints are closely associated with consumer-based brand value, whereas loyalty appears to require a broader relational basis than digital exposure or promotion alone. The study contributes by treating Digital Marketing Strategies as a multi-touchpoint consumer interface and by separating Brand Equity from Customer Loyalty rather than embedding loyalty inside the equity construct.

The conclusions are bounded by the study design and the available analysis output. The data are self-reported, cross-sectional, purposively sampled, and limited to respondents in two Indonesian regions, so causal and population-wide claims are not warranted. The model does not compare regions or product categories and does not include potentially relevant mechanisms such as brand trust, satisfaction, perceived value, customer engagement, or e-service quality. In addition, several PLS-SEM statistics described in the original method, including Cronbach's alpha, composite reliability, AVE, VIF, f-square, Q-square, and the exact bootstrap resample count, were not available in the supplied manuscript and should be verified before submission. The H1 t-statistic/p-value combination and the H4 indirect-effect/confidence-interval reporting also require direct checking against the original SmartPLS output. Future research can strengthen the model by using longitudinal designs, broader and probability-based samples where feasible, product-category comparisons, and verified serial or parallel mediation models.

REFERENCES

- Ahmad, F., Mustafa, K., Hamid, S. A. R., Khawaja, K. F., Zada, S., Jamil, S., Qaisar, M. N., Vega-Muñoz, A., Contreras-Barraza, N., & Anwer, N. (2022). Online customer experience leads to loyalty via customer engagement: Moderating role of value co-creation. *Frontiers in Psychology*, 13, 897851. <https://doi.org/10.3389/fpsyg.2022.897851>
- Alzate, M., Arce-Urriza, M., & Cebollada, J. (2022). Mining the text of online consumer reviews to analyze brand image and brand positioning. *Journal of Retailing and Consumer Services*, 67, 102989. <https://doi.org/10.1016/j.jretconser.2022.102989>
- Aragonés-Jericó, C., Rodríguez Santos, C., Kuster-Boluda, I., & Vila-Lopez, N. (2024). Brand loyalty and electronic word-of-mouth antecedents: The moderating effects of experiences. *British Food Journal*, 126(12), 4242–4259. <https://doi.org/10.1108/BFJ-10-2023-0877>

- Azhar, M., Husain, R., Hamid, S., & Rahman, M. N. (2023). Effect of social media marketing on online travel purchase behavior post-COVID-19: Mediating role of brand trust and brand loyalty. *Future Business Journal*, 9, 13. <https://doi.org/10.1186/s43093-023-00192-6>
- Banerji, R., & Singh, A. (2024). Do social media marketing activities promote customer loyalty? A study on the e-commerce industry. *LBS Journal of Management & Research*, 22(1), 93–109. <https://doi.org/10.1108/LBSJMR-04-2023-0016>
- Bao, Z., & Zhu, Y. (2023). Understanding customers' stickiness of live streaming commerce platforms: An empirical study based on modified e-commerce system success model. *Asia Pacific Journal of Marketing and Logistics*, 35(3), 775–793. <https://doi.org/10.1108/APJML-09-2021-0707>
- Belhadi, A., Kamble, S., Benkhathi, I., Gupta, S., & Mangla, S. K. (2023). Does strategic management of digital technologies influence electronic word-of-mouth (eWOM) and customer loyalty? Empirical insights from B2B platform economy. *Journal of Business Research*, 156, 113548. <https://doi.org/10.1016/j.jbusres.2022.113548>
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, 173, 121092. <https://doi.org/10.1016/j.techfore.2021.121092>
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Fernandes, S., Panda, R., Venkatesh, V. G., Swar, B. N., & Shi, Y. (2022). Measuring the impact of online reviews on consumer purchase decisions: A scale development study. *Journal of Retailing and Consumer Services*, 68, 103066. <https://doi.org/10.1016/j.jretconser.2022.103066>
- Fetais, A. H., Algharabat, R. S., Aljafari, A., & Rana, N. P. (2023). Do social media marketing activities improve brand loyalty? An empirical study on luxury fashion brands. *Information Systems Frontiers*, 25, 795–817. <https://doi.org/10.1007/s10796-022-10264-7>
- Guha, S., Mandal, A., & Kujur, F. (2021). The social media marketing strategies and its implementation in promoting handicrafts products: A study with special reference to Eastern India. *Journal of Research in Marketing and Entrepreneurship*, 23(2), 339–364. <https://doi.org/10.1108/JRME-07-2020-0097>
- Hafez, M. (2021). The impact of social media marketing activities on brand equity in the banking sector in Bangladesh: The mediating role of brand love and brand trust. *International Journal of Bank Marketing*, 39(7), 1353–1376. <https://doi.org/10.1108/IJBM-02-2021-0067>
- Hafez, M. (2022). Unpacking the influence of social media marketing activities on brand equity in the banking sector in Bangladesh: A moderated mediation analysis of brand experience and perceived uniqueness. *International Journal of Information Management Data Insights*, 2(2), 100140. <https://doi.org/10.1016/j.ijime.2022.100140>
- Hallikainen, H., Luongo, M., Dhir, A., & Laukkanen, T. (2022). Consequences of personalized product recommendations and price promotions in online grocery shopping. *Journal of Retailing and Consumer Services*, 69, 103088. <https://doi.org/10.1016/j.jretconser.2022.103088>
- Huang, G. Q. I., Wong, I. K. A., Xiong, X., & Yi, K. (2022). Hotel brand equity and online reviews on social commerce intention: A cross-level identification process. *International Journal of Hospitality Management*, 105, 103267. <https://doi.org/10.1016/j.ijhm.2022.103267>
- Ibrahim, B. (2022). Social media marketing activities and brand loyalty: A meta-analysis examination. *Journal of Promotion Management*, 28(1), 60–90. <https://doi.org/10.1080/10496491.2021.1955080>

- Kumar, S., & Hsieh, J.-K. (2024). How social media marketing activities affect brand loyalty? Mediating role of brand experience. *Asia Pacific Journal of Marketing and Logistics*, 36(10), 2300–2323. <https://doi.org/10.1108/APJML-09-2023-0900>
- Le, M. T. H., Nguyen Thi Thao, V., Huynh Huu, A. L., Nguyen Tuan, H., Nguyen Ngoc Thanh, N., & Nguyen Thi Hong, V. (2024). Establish trust with electronic word-of-mouth to improve brand equity. *SAGE Open*, 14(4), 1–17. <https://doi.org/10.1177/21582440241292815>
- Li, F., Larimo, J., & Leonidou, L. C. (2021). Social media marketing strategy: Definition, conceptualization, taxonomy, validation, and future agenda. *Journal of the Academy of Marketing Science*, 49, 51–70. <https://doi.org/10.1007/s11747-020-00733-3>
- Malarvizhi, C. A., Al Mamun, A., Jayashree, S., Naznen, F., & Abir, T. (2022). Modelling the significance of social media marketing activities, brand equity and loyalty to predict consumers' willingness to pay premium price for portable tech gadgets. *Heliyon*, 8(8), e10145. <https://doi.org/10.1016/j.heliyon.2022.e10145>
- Memon, M. A., Ramayah, T., Cheah, J.-H., Ting, H., Chuah, F., & Cham, T. H. (2021). PLS-SEM statistical programs: A review. *Journal of Applied Structural Equation Modeling*, 5(1), 1–14.
- Quach, S., Barari, M., Moudry, D., & Quach, N. D. K. (2022). Service integration in omnichannel retailing and its impact on customer experience. *Journal of Retailing and Consumer Services*, 65, 102267. <https://doi.org/10.1016/j.jretconser.2020.102267>
- Quaye, E. S., Taoana, C., Abratt, R., & Anabila, P. (2022). Customer advocacy and brand loyalty: The mediating roles of brand relationship quality and trust. *Journal of Brand Management*, 29, 363–382. <https://doi.org/10.1057/s41262-022-00276-8>
- Rahman, S. M., Carlson, J., Gudergan, S. P., Wetzels, M., & Grewal, D. (2022). Perceived omnichannel customer experience (OCX): Concept, measurement, and impact. *Journal of Retailing*, 98(4), 611–632. <https://doi.org/10.1016/j.jretai.2022.03.003>
- Song, S., & Kim, H.-Y. (2022). Is social media marketing worth it for luxury brands? The dual impact of brand page satisfaction and brand love on word-of-mouth and attitudinal loyalty intentions. *Journal of Product & Brand Management*, 31(7), 1033–1046. <https://doi.org/10.1108/JPBM-06-2020-2936>
- Theodorakopoulos, L., & Theodoropoulou, A. (2024). Leveraging big data analytics for understanding consumer behavior in digital marketing: A systematic review. *Human Behavior and Emerging Technologies*, 2024, 3641502. <https://doi.org/10.1155/2024/3641502>
- Valmohammadi, C., Asayesh, F., Mehdikhani, R., & Taraz, R. (2025). Influencer marketing, EWOM, E-brand experience, and retail E-brand loyalty: Moderating influence of E-brand love. *Journal of Relationship Marketing*, 24(1), 66–92. <https://doi.org/10.1080/15332667.2024.2405292>
- Wang, H., Ko, E., Woodside, A., & Yu, J. (2021). SNS marketing activities as a sustainable competitive advantage and traditional market equity. *Journal of Business Research*, 130, 378–383. <https://doi.org/10.1016/j.jbusres.2020.06.005>
- Yang, Q., Hayat, N., Al Mamun, A., Makhbul, Z. K. M., & Zainol, N. R. (2022). Sustainable customer retention through social media marketing activities using hybrid SEM-neural network approach. *PLoS ONE*, 17(3), e0264899. <https://doi.org/10.1371/journal.pone.0264899>
- Yin, C.-C., Chiu, H.-C., Hsieh, Y.-C., & Kuo, C.-Y. (2022). How to retain customers in omnichannel retailing: Considering the roles of brand experience and purchase behavior. *Journal of Retailing and Consumer Services*, 69, 103070. <https://doi.org/10.1016/j.jretconser.2022.103070>
- Zhang, M., Liu, Y., Wang, Y., & Zhao, L. (2022). How to retain customers: Understanding the role of trust in live streaming commerce with a socio-technical perspective. *Computers in Human Behavior*, 127, 107052. <https://doi.org/10.1016/j.chb.2021.107052>