

The Influence of Social Media Marketing on Brand Loyalty through Customer Engagement as a Mediating Factor

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Abstract: This study explores how social media marketing affects brand loyalty through customer engagement as a mediating factor in media/news company. This study focuses on Nihao Indonesia, a media platform that provides Indonesian news and content in Taiwan. The research objective is analyzing how social media marketing affects consumer interaction on Nihao Indonesia's Instagram account in order to enhance brand loyalty. A survey was conducted through Google Forms utilizing purposive sampling, distributed to 115 respondents. Structural equation modeling (SEM) was employed to examine the data. The research outcomes demonstrate a significant, positive correlation among the three variables. The findings are expected to offer hands-on knowledge for media companies on optimizing marketing endeavors on social media to make customers more engaged and loyal to a brand.

Keywords: Social Media Marketing, Brand Loyalty, Customer Engagement, News/Media Company, Marketing

Introduction

In today's world, the global population has increasingly embraced the internet. Almost all aspects of life—information search, communication, transactions, shopping, and business—are now integrated with the Internet. Social media, a significant part of the online experience, has transformed how people communicate and opened new opportunities for businesses.

Among Indonesian students, the trend of pursuing education abroad has grown, particularly in Taiwan. The population of Indonesian students in Taiwan has risen to over 16,000 in the last few years (Ministry of Education Taiwan, 2022). With this increasing community, there is a greater demand for reliable information sources about Taiwan, especially in the Indonesian language. Instagram has emerged as the primary platform for students to access timely information, as it is the preferred social media tool for this group (Wijaya, 2022).

Nihao Indonesia is one of the leading news/media companies catering to this demand by providing diverse and active content about Taiwan in the Indonesian language. The company's Instagram presence play a key role in engaging its audience, particularly Indonesian students abroad, through informative and relevant content.

The rapid expansion of social media platforms like Instagram has transformed how brands interact with their audiences. Studies show that customer engagement through social media marketing can foster strong emotional connections between brands and their consumers, ultimately increasing customers' loyalty to a brand (Vivek et al., 2012; Gómez et al., 2019). As engagement enhances customer experiences, it drives long-term loyalty, making it crucial for companies to not only maintain a social media presence but also effectively connect with their audience (Harrigan et al., 2017).

Yudiana et al. (2016) found that brand loyalty is able to be achieved through social media marketing by encouraging customer engagement. This phenomena needs further investigation since it can serve as a beneficial evaluation tool for businesses seeking to establish competitive strategies through social media utilization.

Methodology

This study applied a quantitative methodology, utilizing purposive sampling with 115 respondents. A survey was conducted on followers of Nihao Indonesia's Instagram account. Data is analyzed using Structural Equation Modeling (SEM) operated in Smart PLS 3.3 software.

To measure the intercorrelation among social media marketing, brand loyalty, and customer engagement, this study employed a survey questionnaire consisting of multiple sections. Each section of the survey is designed to address specific constructs related to the research purposes. The questionnaire of this research consists of 2 parts. The initial part is the respondents' personal data. The second part consists of 3 sections of each variable. A five-point Likert scale was utilized for the survey, where respondents reflected their approval level for the statements in the range of 1 (strongly disagree) to 5 (strongly agree). The survey questionnaire was adapted from prior research.

Table 1: Number of variables measurement

Variables	Number of items	References
Social Media Marketing	11 items	Seo and Park (2018)
Customer Engagement	10 items	Hollebeek et al. (2014)
Brand Loyalty	8 items	Laroche et al. (2012); Alalawan et al. (2017)

Result and Discussion

A survey was distributed via Google Forms to 115 respondents. The study focused on five respondent attributes: gender, age, education, duration of stay in Taiwan (years), and time spent on social media. Table 2 displays the overall characteristics of respondents.

Table 2: Respondents' Characteristics

Classification	Frequency	Percentage (%)
Gender		
Male	44	38.3 %
Female	71	61.7 %
Age		
18-27 years old	105	91.3 %
28-43 years old	8	7 %
44-59 years old	2	1.7 %
Education		
Diploma	3	2.6 %
Bachelor	92	80 %
Master	20	17.4 %
Doctor	0	0%
Duration of Stay in Taiwan		
< 1 year	10	8.7 %
1-2 year	41	35.7 %
> 2 year	64	55.7 %
Time spent on social media		
< 1 hour	31	1.7 %
1-3 hour	2	27 %
> 3 hour	82	71.3 %

Outer Model Analysis

An outer model evaluates the correlation among indicators and latent variables, emphasizing the research model validity and reliability. SmartPLS 3.3 was employed to examine if the outer model is valid and reliable through the use of indicators.

Convergent Validity

An indication that is considered valid in the SmartPLS 3.3 validity test is if its loading factor goes beyond 0.7 and the Average Variance Extracted (AVE) goes beyond 0.5. As stated by Hair et al., convergent validity is a key metric in reflective measurement models that assesses the degree to which indicators of a construct converge, explaining the variance of the items. Table 3 shows that all statement items have obtained outer loading values that exceed 0.7, denoting their validity.

Table 3: Outer Loading Test Result (1)

Variable	Indicator	Outer Loading	Conclusion
Social Media Marketing (X)	SMM 1	0,622	INVALID
	SMM 2	0,718	VALID
	SMM 3	0,603	INVALID
	SMM 4	0,713	VALID
	SMM 5	0,662	INVALID
	SMM 6	0,642	INVALID

	SMM 7	0,563	INVALID
	SMM 8	0,642	INVALID
	SMM 9	0,695	INVALID
	SMM 10	0,757	VALID
	SMM 11	0,751	VALID
Customer Engagement (Z)	CE 1	0,485	INVALID
	CE 2	0,610	INVALID
	CE 3	0,721	VALID
	CE 4	0,735	VALID
	CE 5	0,763	VALID
	CE 6	0,802	VALID
	CE 7	0,754	VALID
	CE 8	0,790	VALID
	CE 9	0,846	VALID
	CE 10	0,856	VALID
Brand Loyalty (Y)	BL 1	0,630	INVALID
	BL 2	0,716	VALID
	BL 3	0,568	INVALID
	BL 4	0,749	VALID
	BL 5	0,643	INVALID
	BL 6	0,722	VALID
	BL 7	0,741	VALID
	BL 8	0,658	INVALID

For further analysis, indicators with outer loading values below 0.7 were identified. Invalid indicators were excluded from data processing due to their failure to meet the validity criteria.

Table 4: Outer Loading Test Result (2)

Variable	Indicator	Outer Loading	Conclusion
Social Media Marketing (X)	SMM 2	0,718	VALID
	SMM 4	0,713	VALID
	SMM 10	0,757	VALID
	SMM 11	0,751	VALID
Customer Engagement (Z)	CE 3	0,721	VALID
	CE 4	0,735	VALID
	CE 5	0,763	VALID
	CE 6	0,802	VALID
	CE 7	0,754	VALID
	CE 8	0,790	VALID
	CE 9	0,846	VALID
	CE 10	0,856	VALID
Brand Loyalty (Y)	BL 2	0,716	VALID
	BL 4	0,749	VALID
	BL 6	0,722	VALID
	BL 7	0,741	VALID

13 indicators were eliminated after being reselected to evaluate the indicators' viability for causality study. The remaining indicators that met the outer loading value requirement of > 0.7 were considered valid. Apart from outer loading, convergent validity identification also requires Average Variance Extracted (AVE) values. Indicator validity is represented by an AVE value above 0.5. The table below presents the AVE values.

Table 5: AVE Value

Variable	AVE
Social Media Marketing (X)	0,581
Customer Engagement (Z)	0,643
Brand Loyalty (Y)	0,601

Table 5 confirms that the AVE value for each variable meets the guideline, with values greater than 0.5. Given the outer loading and AVE values, the indicators in this study are considered valid and demonstrate convergent validity. After reselecting research indicators, the outer model underwent revision. Below is the updated outer model following the convergent validity test (Figure 1).

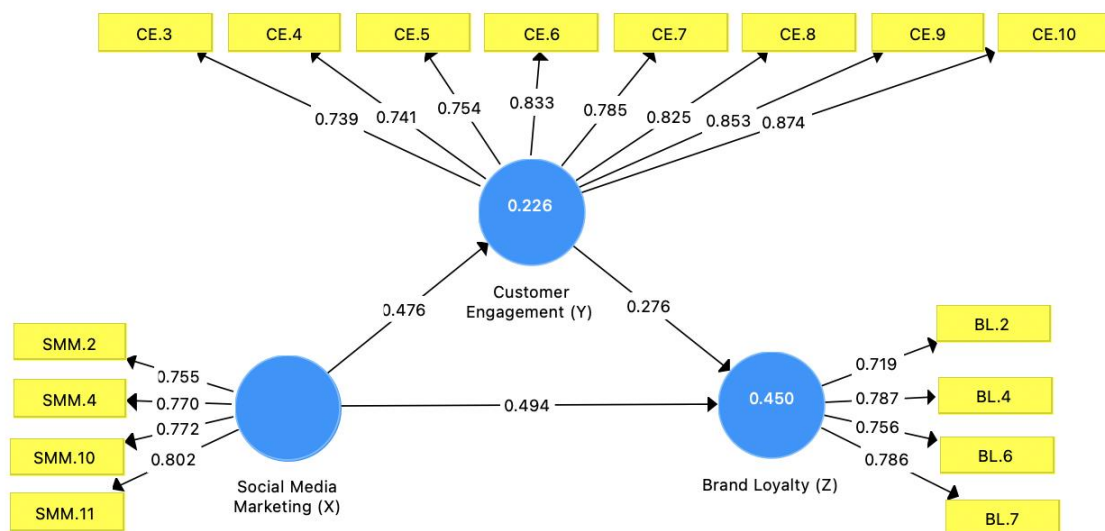


Figure 1. Structure Model

Discriminant Validity

Discriminant validity ensures that a construct is distinct from others by uniquely representing unexplored phenomena within the model. Specifically, an indicator must demonstrate a higher loading on its construct than any cross-loadings it has with other constructs to pass the discriminant validity test. It is considered valid when its cross-loading on the intended construct exceeds the cross-loadings on other constructs.

Table 6: Cross Loading Factors

Indicator	Social Media Marketing	Customer Engagement	Brand Loyalty
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SMM 2	0,775	0,398	0,465
SMM 4	0,770	0,494	0,445
SMM 10	0,772	0,250	0,507
SMM 11	0,802	0,312	0,526
CE 3	0,458	0,739	0,362
CE 4	0,387	0,741	0,424
CE 5	0,388	0,754	0,400
CE 6	0,385	0,833	0,283
CE 7	0,348	0,785	0,437
CE 8	0,315	0,825	0,377
CE 9	0,388	0,853	0,480
CE 10	0,365	0,874	0,474
BL 2	0,412	0,301	0,719
BL 4	0,503	0,562	0,787
BL 6	0,524	0,202	0,756
BL 7	0,524	0,437	0,786

Based on Table 6, all indicators appear valid, because each indicator has the highest loading value on the construct that should be measured. It can be concluded that the 16 indicator items are valid and suitable as measurement tools for this study.

Reliability Test

In SmartPLS, reliability is assessed using two methods: Cronbach's alpha and composite reliability. If its internal consistency value is more than 0.7, it can be considered reliable. Table 7 demonstrates the reliability test.

Table 7: Reliability Test

Variable	Cronbach's Alpha	rho_A	Composite Reliability
Social Media Marketing	0,779	0,780	0,601
Customer Engagement	0,920	0,920	0,643
Brand Loyalty	0,762	0,762	0,581

Based on Table 7, the three latent variables yielded Cronbach's alpha and composite values exceeding the 0.7 threshold, indicating the variables' validity or consistency.

Inner Model Analysis

The inner model test evaluates the data structure based on reliable and valid statements, with model accuracy being crucial, as measured by the R-Square value. This test's objective is evaluating the impact of changes in exogenous variables on endogenous variables, with a higher R-Square percentage indicating greater precision in the data assessment.

Table 8: R Square Value

Variable	R Square	R Square Adjusted
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Customer Engagement	0,226	0,219
Brand Loyalty	0,450	0,440

Based on table 8, customer engagement yielded an R-squared value of 0,226. The number indicates that social media marketing affects customer engagement by 22,6%, with 77,4% of the influence coming from factors that examined by this study. On the other hand, Brand Loyalty yielded an R-squared value of 0,450. The number denotes that Social Media Marketing influences Brand Loyalty by 45%, with 55% of factors not examined by this study.

Hypothesis Test

The hypothesis test employs the bootstrapping method and the following requirements must be met in order to accept the hypothesis:

1. If $t_0 > t_\alpha$, H_0 is rejected, and H_α is accepted.
2. If $t_0 < t_\alpha$, H_0 is accepted, and H_α is rejected.

With significance determined by a P Value greater than 0,05 (5%) and T-Statistic value of 1.96 for the two-tailed hypothesis. This also included two tests, both direct and indirect effects.

Direct Effect Hypothesis

Table 9: Hypothesis Test Result (Direct Effect)

Variable	Original Sample (0)	T Statistics (OI/STDEV)	P Values	Conclusion
SMM → CE	0,476	6,891	0,000	H1: Accepted (Significant)
CE → BL	0,276	3,669	0,000	H2: Accepted (Significant)
SMM → BL	0,494	6,899	0,000	H3: Accepted (Significant)

Based on outcomes (Table 9), the hypothesis results can be described as follows:

1. Effect of Social Media Marketing (SMM) on Customer Engagement (CE):

A T-Statistic of 6.891, a P Value of 0.000, and a positive path coefficient of 0.476 were found based on bootstrapping results. This indicates that the T-Statistic (6.891) > T-Table (1.96) and the P Value (0.000) < 0.05. Therefore, the hypothesis implying marketing via social media significantly leads to customer engagement has been proven (H_0 is rejected, H_1 is accepted). Additionally, a positive relationship is identified by a path coefficient value of 0.476, implying that effective social media marketing causes customers to engage more with a brand.

2. Effect of Customer Engagement (CE) on Brand Loyalty (BL):

The bootstrapping results show a T-Statistic of 3.669, a P Value of 0.000, and a path coefficient of 0.276. Since the T-Statistic (3.669) > T-Table (1.96) and the P Value (0.000) < 0.05, the hypothesis denoting customer engagement significantly leads to brand

loyalty has been proven. (H0 is rejected, H1 is accepted). The path coefficient value of 0.276 demonstrates a positive correlation, implying that increased customer engagement positively influences customer loyalty to a brand.

3. Effect of Social Media Marketing (SMM) on Brand Loyalty (BL):

Bootstrapping results yielded a T-Statistic of 6.899, a P Value of 0.000, and a positive path coefficient of 0.494. With the T-Statistic (6.899) > T-Table (1.96) and the P Value (0.000) < 0.05, the hypothesis denoting marketing on social media significantly generates brand loyalty has been proven (H0 is rejected, H1 is accepted). The path coefficient of 0.494 demonstrates a positive correlation, meaning improved social media marketing leads to stronger brand loyalty.

Indirect Effect Hypothesis

Table 10: Hypothesis Test Result (Indirect Effect)

Variable	Original Sample (0)	T Statistics (OI /STDEV)	P Values	Conclusion
SMM → CE → BL	0,131	3,476	0,001	H4: Accepted (Significant)

4. Effect of Social Media Marketing (SMM) on Brand Loyalty (BL) through Customer Engagement (CE):

Based on bootstrapping results, the T-Statistic is 3.476, the P Value is 0.001, and the positive path coefficient is 0.131. Since the T-Statistic (3.476) > T-Table (1.96) and the P Value (0.001) < 0.05, the hypothesis implying marketing on social media indirectly generates brand loyalty, mediated by customer engagement, has been proven (H0 is rejected, H4 is accepted), or put another way, customer engagement contributes to a mediating effect when customers develop loyalty to a brand because of their marketing on social media. The path coefficient of 0.131 indicates a positive indirect relationship, showing that enhanced marketing endeavors on social media, mediated by improved customer engagement, significantly and positively generate brand loyalty.

Conclusion

The research findings reveal a significant and positive intercorrelation among social media marketing, customer engagement, and brand loyalty. Notably, marketing endeavors on social media directly cause customers to be loyal to a brand, and indirectly through customer engagement, highlighting the importance of customer engagement as a mediating factor. This implies that enhancing promotional activities on social media can effectively increase brand loyalty by making customers more engaged to a brand. To further strengthen brand loyalty, it is recommended that strategies focus on improving the interactive and engaging aspects of social media marketing, ensuring alignment with current trends. This limitation is that the object of the research is only focused on students in Taiwan. In addition, the sample used was only 115 respondents due to limited time. This

research framework can also be expanded by including additional variables for the mediator factor.

References

- Ayutiani, D., & Putri, B. (2018). Penggunaan akun Instagram sebagai media informasi wisata kuliner. *PRofesi Humas*, 3(1), 39–59.
- Danang Sunyoto. (2015). Strategi pemasaran. Yogyakarta: Center for Academic Publishing Service (CAPS).
- Fadhil Umar, Raharja, E., Mahardika, J. A., & Arkhiansyah, M. T. B. (2023). Social media marketing and brand loyalty, the mediating role of brand trust: A partial least square algorithm (PLS) approach. *Scientific Journal of Informatics*, 10(3). <http://journal.unnes.ac.id/nju/index.php/sji>
- Ferliansyah, M. D., Pradana, M., Kartawinata, B. R., Wasono, L. W., & Wijaksana, T. I. (2022). The Influence of Social Media Marketing on Brand Loyalty through Customer Engagement as Intervening Variable on Sociolla's Instagram Account. *The Influence of Social Media Marketing on Brand Loyalty Through Customer Engagement as Intervening Variable on Sociolla's Instagram Account*. <https://doi.org/10.46254/af03.20220231>
- Gómez, M., Lopez, C., & Molina, A. (2019). An integrated model of social media brand engagement. *Computers in Human Behavior*, 96, 196-206.
- Harrigan, P., Evers, U., Miles, M., & Daly, T. (2017). Customer engagement with tourism brands on social media: An abstract. In *Developments in marketing science: Proceedings of the Academy of Marketing Science* (pp. 819–820). https://doi.org/10.1007/978-3-319-47331-4_161
- Herman, L. E., & Athar, H. S. (2018). Pengembangan model social media marketing dan keputusan berkunjung: Sebuah pendekatan konseptual. *J-IKA*, 5(2). <https://doi.org/10.31294/kom.v5i2.4688>
- Ministry of Education Taiwan. (n.d.). <https://english.moe.gov.tw/cp-117-34009-25231-1.html> (accessed July 10, 2024)
- Muchardie, B. G., Yudiana, N. H., & Gunawan, A. (2016). Effect of social media marketing on customer engagement and its impact on brand loyalty in Caring Colours Cosmetics, Martha Tilaar. *Binus Business Review*, 7(1), 83. <https://doi.org/10.21512/bbr.v7i1.1458>

- Murtiningsih, D. (2017). Pengaruh social media marketing, brand equity, brand trust terhadap brand loyalty (Studi pada perguruan tinggi swasta di Jakarta) (Dissertation, Universitas Brawijaya).
- Rahmawati, E., & Aji, S. (2015). Pengaruh customer engagement terhadap kepuasan pelanggan dan kepercayaan merek serta dampaknya pada loyalitas merek. *Jurnal Riset Ekonomi dan Manajemen*, 15(2), 246. <https://doi.org/10.17970/jrem.15.150204.id>
- Seo, E., & Park, J. (2018). A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. *Journal of Air Transport Management*, 66, 36–41. <https://doi.org/10.1016/j.jairtraman.2017.09.014>
- Wijaya, D. (2022). Aktivitas divisi PR dalam akun Instagram @nihaoindo sebagai sarana media informasi mahasiswa Indonesia di negara Taiwan.
- Żymkowska, K. (2019). Customer engagement in theory and practice. Springer International Publishing.