How social media marketing activities affect consumer equity: A study in culinary brand with brand equity as a mediating factor

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ABSTRACT

This study aims to find out how social media marketing activities influence consumer equity through brand equity in a culinary brand. The study sample is men and women, 200 respondents, within the age range of 18 to 30 years old. This study uses quantitative methods and questionnaires as data collections tools. The data was then analyzed using SmartPLS with the Structural Equation Modelling approach. It is found that social media marketing activities positively influence consumer equity through brand equity in culinary brands. Customer equity is also indirectly affected by brand equity. Therefore, this research can be a basis for future research in social media marketing activities within the scope of culinary brands especially in the context of small-medium enterprises.

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Introduction

The use of social media has become a necessity for both individuals and companies (Chen & Lin, 2019). Companies use social media as a tool or strategy (Felix et al., 2017a) to promote, retain consumers, or strengthen brand loyalty (Erdogmus & ipek, 2012); (Tsimonis & Dimitriadis, 2014), as well as customer equity (AJ Kim & Ko, 2012) (Vogel et al., 2008). While individuals use social media as a form of existence (Chen & Lin, 2019), networking (Felix et al., 2017b), and identity (Tajfel & Turner, 2019).

It is undeniable that social media activities have a direct and indirect impact on a brand or company. With very fast development, social media marketing has its challenges, such as brand image pollution (Dwivedi et al., 2020), lousy consumer/influencer reviews (Yuan et al., 2016), and poor brand exposure. In its journey, companies need loyalty from their consumers so that their brands can survive. These forms of customer loyalty can be translated as customer equity. Loyal customers will tend to advocate their preferred brands (Kotler et al., 2019) and provide positive reviews on social media so that interactions between consumers and companies will run well. Thus, the relationship between consumers and a brand must always be in a good term. Previous research has stated that there is a significant influence between marketing activities on social media and consumer equity (A. J. Kim & Ko, 2012) (K. H. Kim et al., 2012) (Felix et al., 2017b).

Indonesia has thousands and even millions of culinary business actors. Data from the Central Statistics Agency (2018) states that culinary MSMEs in Indonesia reach 17% of non-agricultural MSEs. This indicates that the culinary business sector is still in great demand by Indonesian citizens. However, many of these culinary business actors have not used social media as their marketing

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strategy. According to Indonesian Statistic Bureau (2018), only about 10% have used social media as a promotional medium. However, according to a survey from Kata Data (2020), 54% of MSMEs have used social media to increase sales during the pandemic since March 2020.

As the prevalent user-growth in social media in 2020, author sees an immediate opportunity that requires action from the business actor, especially for Small-Medium Enterprises. Research has found that building relationship in with the consumers through social media will significantly increase consumer trust towards the brand. Plenty of the research are focusing on the luxury products, airline industries, yet only a few numbers of papers are focusing on the small medium enterprise, especially on a specific industry namely culinary.

The main objective of the study is to examine how social media marketing activities influence consumer equity through brand equity in a culinary brand. The study sample consists of 200 respondents within the age range of 18 to 30 years old. This study uses quantitative methods and questionnaires as data collections tools. The Structural Equation Modelling approach has been used.

For the organization of the text, this paper continues with theoretical and empirical review under literature review part. Data, sampling, methodology were explained under research and methodology part. Paper finally concludes with findings, discussion, implications and future research directions in the last part of the study.

Literature Review

Social Media Marketing Activities

Social media marketing can be defined as marketing activities through digitals such as YouTube, Instagram, and Facebook. Experts defined social media as a tool for two-way communications with consumers (Appel et al., 2020). However, social media marketing is not limited to communication activities but is also organized as several activities such as entertainment, interaction, word-of-mouth, trendiness, and customization. (A. J. Kim & Ko, 2012). According to the research by Kim & Ko (2012), social media marketing activities have significant influence through brand or brand equity. Research from DEI Worldwide (2008) mentioned that 70% of global citizens use social media to obtain a piece of information about a product. From which 49% spread this information to their family, friends, or colleague (word of Mouth). Along with the surge of social media users, there are plenty of changes seen. In 2019, for example, the data from Statista showed that 2.95 million people in the world are social media users (Dwivedi et al., 2020). A company is using social media with the expectation of reducing advertising costs, as well as enlarging its network (Dwivedi et al., 2020), however, it comes with challenges such as negative word-of-mouth that tarnished the brand's reputation. (Dwivedi et al., 2020)(Alalwan et al., 2017). The advancement of technology such as augmented reality and virtual reality is also influencing how marketing activities in social media can be customized according to the desired target market (Dwivedi et al., 2020; A. J. Kim & Ko, 2012). A business that has been established for a long time can be ruined if its social media activities are not organized well. As such, the first hypothesis for this research is:

H1. SMMA influences brand equity positively

Brand Equity and Consumer Equity

The value that consumers bring to the company or brand is not limited to once or twice transactions, but it affects the total benefit that consumers bring during the time they make a purchase. (A. J. Kim & Ko, 2012). Customer equity is usually defined as a determinant of long-term value in a company. Lemon et al. (2001) classified three equities, namely value, brand, and relationship, as a driver for customer equity. Those three things influence how quality, the value of the product in the eyes of consumers, and their consumer's relationship with a brand, where a brand is considered better than any other brand (Lemon et al., 2001). Past research from more than a decade ago as well as recent research, has proved that value equity, relationship equity, and brand equity; influence consumer equity (Chang et al., 2012)(Lassar et al., 1995)(K. H. Kim et al., 2012)(Rust et al., 2004). Therefore, this research proposes a hypothesis as follows:

H2. Brand equity influences customer equity positively

H3. SMMA influence indirectly influence consumer equity positively through brand equity

Research & Methodology

This research uses quantitative methods. The quantitative method is used to find empirical evidence, which is then used to understand how far social media marketing activities influence customer equity mediated by the brand equity variable. The data collection method is through a questionnaire for primary data and then analyzed using SmartPLS. The secondary data from article screening where it is classified by each Variable with data from publicly available reports or reputable articles.

The research objects are culinary consumers with falls into the criteria as follows 1) purchase a culinary product more than once in the past one year, 2) using social media as a tool to engage with the culinary brand (interaction), 3) using social media to review, or to read a review of the culinary product (e-Word of Mouth), 4) an active social media user for the last three years. The research sample is men and women ranging from 18 to 30 years old, with a total number of respondents of 200.

Analysis and Findings

This section will begin by explaining the tests results that has been conducted. Author will explain about the results on outer models' measurement, followed by inner model measurement, and the hypothesis testing. On the last section, author will discuss the implications of this study.

Outers Models Measurements

There are several tests that are conducted for outer model measurements. There are reflective indicators that consist of convergent validity, discriminant validity, composite reliability, average variance extracted, and Cronbach alpha.

Convergent validity

Table 1: Loading Factor Value

	SMMA	BE	CE	P-VALUE
X1	0.755			<0.001
X2	0.769			<0.001
X3	0.088			0.101
X4	0.781			<0.001
X5	0.750			<0.001
X6	0.632			<0.001
X7	0.697			<0.001
X8	0.620			<0.001
X9	0.731			<0.001
Z1		0.761		<0.001
Z2		0.696		<0.001
Z3		0.452		<0.001
Z4		0.849		<0.001
Z5		0.834		<0.001
Z6		0.767		<0.001
Y1			0.821	<0.001
Y2			0.855	<0.001
Y3			0.862	<0.001
Y4			0.857	<0.001

According to the table above, it can be inferred that all items have a p-value loading factor <0.001 (valid), except for item X3 with a p-value of 0.101. With the elimination of X3, the next indicator can be used for further steps. In each variable, there is the most dominant indicator that supports the Variable. The result is as follows:

- i. The most dominant indicator in the SMMA variable is X4, with a loading factor of 0.781
- ii. The most dominant indicator in the Brand Equity variable is Z4, with a loading factor of 0.849
- iii. The most dominant indicator in Customer Equity is Y3, with a loading factor of 0.862

Discriminant validity, Cronbach alpha, composite reliability, dan AVE

Table 2: Cross loading factor value

	SMMA	BE	CE
X1	0.755	-0.211	-0.077
X2	0.769	-0.367	-0.165
X3	0.088	0.218	0.341
X4	0.781	-0.087	-0.016
X5	0.750	0.129	-0.227
X6	0.632	0.139	-0.102
X7	0.697	0.286	-0.117
X8	0.620	-0.005	0.449
X9	0.731	0.150	0.281
Z1	0.144	0.761	-0.026
Z2	0.255	0.696	-0.056
Z3	-0.199	0.452	0.063
Z4	0.063	0.849	0.059
Z5	-0.211	0.834	-0.086
Z6	-0.097	0.767	0.068
Y1	0.285	-0.145	0.821
Y2	0.011	-0.112	0.855
Y3	-0.137	0.135	0.862
Y4	-0.146	0.114	0.857

According to Table 2, it can be concluded that all item has a cross-loading factor that is bigger than each Variable compared to the other loading factor value. The loading factor value in SMMA is large than SMMA (X1, X2, X4,X5, X6, X7, X8, X9), while BE variable is larger than BE (Z1, Z2, Z3, Z4, Z5, Z6). In contrast, the CE variable is larger than CE (Y1, Y2, Y3, Y4).

Table 3: Composite Reliability, Cronbach Alpha, and AVE Value

	SMMA	BE	CE
Composite reliability	0.875	0.874	0.912
Cronbach alpha	0.833	0.824	0.871
Avg.var.extrac. (AVE)	0.461	0.545	0.721

For the composite reliability from each Variable, it should be higher than 0,7 for higher reliability. The composite reliability for each Variable is as follows, SMMA is 0.875, BE is 0.874, and CE is 0.912.

While for Cronbach's Alpha value, each Variable scored more than 0.7 with SMMA being 0.833, BE being 0.824, and CE 0.871. For the AVE, it is known that each Variable has a slightly larger AVE, more than 0.5, except for SMMA. The followings number on SMMA is 0.461, BE is 0.545, and CE is 0.721.

Inner Model Measurement

The test that conducted for inner model measurement is consist of determinant coefficient using R square, predictive relevance with Q square, and Goodness of Fit Index (GoF)

Determinant Coefficient (R²)

Table 4: R Square results

Influence	R Square
SMMA → BE	0.570
BE → CE	0.527

The R-square number is obtained from model 1, which is the influence of SMMA variable towards BE, which accounted for 0.570. As such, the BE variable can be explained by the independent variable SMMA amounted to 57%, and the remaining is 43% influenced

by another variable that is excluded in this research. The R-square number obtained from model 2 is the influence of BE variable towards CE, which accounted for 0.527. The CE variable can be explained by the independent Variable BE amounted to 52.7%, and the remaining is 47.3% influenced by another variable excluded in this research.

Predictive Relevance (Q^2)

The total data variance explained in the model is calculated with the formula :

$$Q^2 = 1 - [(1 - R^2_1) \times (1 - R^2_2)]$$

Where R^2_1 is the *R square* for the equation number 1, which is 0.570, whereas R^2_2 is the *R square* for the equation number 2, which accounted for 0.527:

$$Q^2 = 1 - [(1 - 0.570) \times (1 - 0.527)] = 0.797$$

The results of the Q square indicate a data variance that explained from both models is 0.797. It can be then explained that the information on the data, 79.7%, can be explained by both models. And for both models is a strong model (>0.35).

Goodness Of Fit Index (GoF)

The *Goodness Of Fit* testing model is used to see the fitness of the model. Multiply the overall value of the determinant coefficient with the average communality score (AVE). Below are the calculations

$$GoF = \sqrt{Communality \times R^2}$$

$$GoF = \sqrt{\left(\frac{0.545 + 0.721}{2}\right) \times \left(\frac{0.570 + 0.527}{2}\right)}$$

$$GoF = \sqrt{0.3472} = 0.589$$

The calculations result is 0.589, which can be inferred that the model fitness is included in the larger category (>0.36).

Hypothesis Testing

This section is the testing where the hypothesis is calculated, which shows one latent Variable towards another latent variable. An influence is considered significant if the T statistics are smaller than 1.96, and the influence is significant if the T statistics are smaller than 1.96. The results from the SmartPLS software is as follows:

Direct Influence

Table 5: Direct Influence Results with T-statistics

Influence	Path Coefficient	p-values	Notes
SMMA $\rightarrow$ BE	0.755	<0.001	Significant
BE $\rightarrow$ CE	0.726	<0.001	Significant

According to Table 5 above, the SMMA variable has a positive influence and is significant on BE, with the p-values smaller than α (<0.001). The positive coefficient reflects that the increase in SMMA can also increase the BE significantly.

BE Variable has a positive and significant influence on CE, with the p-values being smaller than α (<0.001). The positive coefficient shows that the increase in BE can also increase the CE significantly. Therefore, the path coefficient on the structural model as well as the loading factor in the research model can be illustrated in figure 2 below :

Figure 1: Structural Model; *Source:* Authors

Indirect Influence

Overall, the model in this research is divided into two direct influences and one indirect influence. This Table demonstrates the indirect influence hypothesis testing:

Table 6: Indirect Influence Hypothesis Testing

Endogen Variable	Mediating Variable	Exogen Variable	Coefficient	Sobel	p-values	Result
SMMA	BE	CE	0.548	8.603	0.000	Significant

The indirect influence between SMMA towards CE through BE was obtained by multiplying the direct influence between X and Z and the direct influence between Z and Y variables. The amount of indirect influence is 0.548, with the p-value from the Sobel test being smaller than. Therefore, the indirect influence between SMMA (Social media marketing activities) towards CE (Customer Equity) through BE (Brand Equity) is significant. Thus, it concluded that BE becomes a mediating variable from SMMA towards CE.

Conclusion

The study found that the direct influence between social media marketing is apparent and proving the first hypothesis which is social media marketing activities, in culinary-SME influence brand equity significantly and positively. This result is supported by previous study such as the work of (Seo, 2018);(Hafez, 2021). For SME ahead, social media marketing strategy can be utilized to engage with the consumers and enhance its brand equity. The second hypothesis, Brand Equity is positively and significantly influence Customer Equity in culinary-SME. This result is supported by the work of (Keller, 1993; Mathur, 2018) which now is proved significant not only in the luxury industry but also in a smaller scale, in a Small-Medium Enterprise. The third hypothesis is indirect influence that brand equity has on social media marketing activities towards consumer equity. Based on our research result, it is significant. This can be inferred that small medium enterprise can leveraged on social media marketing activities to enhance their brand equity and customer equity that has previously done by larger companies in different industries with different applications such as in airline industries (Koay, 2021); in a connection between consumers and the brand (Panigyrakis, 2020); also on the development of the model or conceptual framework for further research and analysis (Pham, 2015).

Finally, the demonstrated that social media marketing activities positively influence consumer equity through brand equity in culinary brands. Brand equity is also influenced indirectly towards consumer equity. This research contributes to the research in branding and social media marketing. However, for further research, larger sample may be needed to develop a deeper understanding of the impact of social media marketing activities on consumer equity.

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