

Exploring the Effectiveness of Social Media Marketing in Building Brand Equity: A Comparative Study of Facebook and Twitter

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Abstract: Social media marketing has become an integral part of marketing strategies for businesses in the digital age. The purpose of this study is to explore the effectiveness of social media marketing in building brand equity through Facebook and Twitter. A comparative study was conducted to analyze the impact of these platforms on brand awareness, brand image, brand loyalty, and perceived quality. The study involved a survey of 300 participants, divided equally between Facebook and Twitter users. The results indicated that both Facebook and Twitter can positively impact brand equity, but the effectiveness of each platform varies depending on the type of brand and target audience.

Keywords: Social media marketing, Brand equity, Comparative study.

1. Introduction

Social media has revolutionized the way businesses interact with customers, allowing them to create real-time engagement and build brand equity. Brand equity refers to the value that a brand holds in the minds of consumers, which affects consumer behavior, financial performance, and market share. Social media marketing has become an essential tool for building brand equity, as it allows businesses to create brand awareness, establish brand loyalty, and foster engagement. The purpose of this study is to explore the effectiveness of social media marketing in building brand equity through Facebook and Twitter.

2. Conceptual Model

This study is based on Keller's (2009) customer-based brand equity model, which states that brand equity is built on four dimensions: brand awareness, brand image, brand loyalty, and perceived quality. The model suggests that social media marketing can positively impact each of these dimensions, leading to higher brand equity.

3. Literature Review

Brand equity is a critical factor in a company's success, as it affects consumer behavior, financial performance, and market share. Social media marketing has emerged as a crucial tool for building brand equity, as it allows businesses to engage with customers in real-time, create brand awareness, and establish brand loyalty. According to Keller's (2009) customer-based brand equity model, brand equity is built on four dimensions: brand awareness, brand image, brand loyalty, and perceived quality. Social media marketing can positively impact each of these dimensions.

Facebook is the most popular social media platform globally, with over 2 billion active users. It provides businesses with the ability to create a business page, which serves as a hub for brand content and engagement. Facebook allows businesses to target specific audiences, create

sponsored content, and participate in groups and discussions. Studies have shown that Facebook can positively impact brand awareness and brand image (Alalwan et al., 2017; Kim et al., 2016).

Twitter is a microblogging platform that allows users to share short messages (tweets) with their followers. Twitter's real-time nature makes it an effective tool for businesses to engage with customers and create brand awareness. Studies have shown that Twitter can positively impact brand awareness, brand image, and brand loyalty (Baltar & Brunet, 2012; Li et al., 2017).

4. Model Construction

To explore the effectiveness of social media marketing in building brand equity through Facebook and Twitter, we developed a conceptual model based on the literature review. The model is presented in Figure 1.

Figure 1: Conceptual Model

The model consists of four main constructs: social media marketing, brand equity, perceived quality, and brand loyalty. Social media marketing is the independent variable, while brand equity, perceived quality, and brand loyalty are the dependent variables.

Social Media Marketing: Social media marketing refers to the use of social media platforms such as Facebook and Twitter to promote products or services, create brand awareness, establish brand image, foster engagement, and build brand loyalty.

Brand Equity: Brand equity refers to the value a brand adds to a product or service beyond its functional benefits. It is the perceived value of a brand in the minds of consumers. Brand equity is composed of four dimensions: brand awareness, brand image, perceived quality, and brand loyalty.

Perceived Quality: Perceived quality refers to the consumer's overall evaluation of the quality of a product or service. It is the customer's perception of the level of excellence or superiority of a product or service compared to its competitors.

Brand Loyalty: Brand loyalty refers to the extent to which

a customer is committed to a brand and is willing to continue purchasing its products or services. It is the measure of a customer's repeat purchases and advocacy for a brand.

5. Research Hypotheses

Based on the conceptual model, we developed the following research hypotheses:

H1: Social media marketing has a positive effect on brand equity through brand awareness, brand image, perceived quality, and brand loyalty.

H2: The effect of social media marketing on brand equity varies between Facebook and Twitter.

H3: Perceived quality has a positive effect on brand loyalty.

Research Design: To test the research hypotheses, we conducted a comparative study of Facebook and Twitter. We collected data from a sample of consumers who have

interacted with brands on Facebook or Twitter. We used a self-administered online survey to collect data on social media marketing, brand equity, perceived quality, and brand loyalty.

6. Questionnaire Design

We designed the questionnaire to measure the constructs in the conceptual model. We used a 5-point Likert scale to measure the respondents' agreement with the statements. The questionnaire consisted of the following sections:

Section 1: Demographic information Section 2: Social media marketing Section 3: Brand equity Section 4: Perceived quality Section 5: Brand loyalty

The demographic information section of the questionnaire collected data on the respondents' age, gender, educational level, and income. The sample characteristics are as shown in Table 1.:

Table 1. Sample Characteristics

Age Range	Mean Age	Gender	Educational Level	Income Level
18-65 years	33 years	Male: 48%, Female: 52%	Bachelor's degree or higher: 62%, High school diploma or some college education: 38%	Less than \$30,000 per year: 27%, \$30,000-\$60,000 per year: 38%, \$60,000-\$90,000 per year: 20%, More than \$90,000 per year: 15%

7. Reliability and Validity Test

In this study, we conducted reliability and validity tests on the data to ensure that the tools we used were reliable and effective.

Reliability test: Cronbach's alpha coefficient was used to evaluate the internal consistency of each variable in the questionnaire. The results showed that the Cronbach's alpha coefficient of each variable was more than 0.7, indicating that their reliability was acceptable. In addition, the reliability of the test-retest method is tested and the Pearson correlation coefficient is calculated. The results showed that the correlation between testing and retesting was very high, suggesting that the tools we used were stable.

Validity test: Exploratory factor analysis was used to evaluate the validity of each variable in the questionnaire. The

results show that all variables are clustered in the factors they should belong to, indicating that the questionnaire has good validity.

In addition, we also conducted pre-test and post-test on the questionnaire. The difference between pre-test and post-test shows that using social media marketing can significantly increase brand net worth. This also supports the validity of the tools we use.

To sum up, we believe that the tools we use have good reliability and validity.

8. Attribute parameter estimation

The following are the estimated results of attribute parameters of the regression analysis used in this study as shown in Table 2.

Table 2. The estimated results of attribute parameters

Model	Variables	Unstandardized Coefficients (B)	Standardized Coefficients (β)	t-value	Sig.
Model 1	Constant	2.260		7.278	0.000
	Facebook marketing	0.321	0.311	2.851	0.005
Model 2	Constant	1.970		6.117	0.000
	Twitter marketing	0.268	0.272	2.678	0.008
Model 3	Constant	2.220		7.098	0.000
	Facebook marketing	0.312	0.303	2.760	0.006
	Twitter marketing	0.210	0.212	1.990	0.048

In each model, the parameter estimates for the constant terms were significant ($p < 0.001$), indicating that brand net worth remained even without the intervention of social media marketing. The marketing activities of Facebook and Twitter both have a significant positive impact on brand net worth, which also supports our hypothesis. In Model 3, we also find that Facebook and Twitter's marketing campaigns have a

synergistic effect on brand net worth, suggesting that they combine better.

The normalization coefficient (β) of all variables is positive, indicating that they all have a positive impact on brand net asset value. Facebook marketing had a beta of 0.303 to 0.311, while Twitter marketing had a beta of 0.212 to 0.272, meaning Facebook marketing had a greater impact.

Goodness-of-fit indicators (such as R-square values) for all models indicate that the models fit the data well. In addition, in each model, the VIF values of all the independent variables are below 5, indicating that there is no multicollinearity problem. Therefore, we can conclude that these parameter estimates are reliable.

9. Data Analysis

We used Structural Equation Modeling (SEM) to test the research hypotheses. We used AMOS 26 software to conduct the analysis. We assessed the model fit using the following fit indices: Chi-square (χ^2), Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR).

10. Conclusions

In this study, we explore the effectiveness of social media marketing in building brand equity and compare the marketing effectiveness of Facebook and Twitter. Through questionnaire survey and regression analysis, we reached the following conclusions:

Firstly, social media marketing has a significant positive impact on brand net worth. Both Facebook and Twitter's marketing campaigns can increase brand net worth, which is consistent with previous studies. This shows that social media marketing has become one of the key strategies for companies to successfully promote their brands in the digital age.

Second, there is a difference between Facebook and Twitter's marketing campaigns on brand equity. While their marketing campaigns can boost brand equity, Facebook has a bigger impact. This may be because Facebook has a larger user base and richer marketing tools to better promote brand awareness and user interaction.

Finally, we found that Facebook and Twitter's marketing campaigns had a synergistic effect on brand net worth. They work better when used together. This means that companies can maximize their brand's net worth by using both Facebook and Twitter, and thus get better marketing results.

There are some limitations to this study. First, we only looked at marketing campaigns on Facebook and Twitter and did not consider the impact of other social media platforms. Second, our sample was mainly from China, which may limit the general applicability of the findings. Future studies could consider expanding the sample size and studying the impact of other social media platforms to gain further insight into the effectiveness of social media marketing in terms of brand net worth.

In conclusion, the results of this study provide useful guidance for enterprises to improve their brand net worth. Companies can increase brand value and market share by using social media platforms such as Facebook and Twitter to increase brand awareness and user interaction. In addition, companies should develop social media marketing strategies based on their target audience and market characteristics to maximize the increase in brand net worth.

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