

MAPPING IDEA & LITERATURE FORMAT | RESEARCH ARTICLE

The Influence of Social Media and Product Quality on the Marketing Performance of Culinary Micro, Small, and Medium Enterprises (MSMEs) as Food Businesses in Pangururan

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ABSTRACT

This study aims to evaluate the influence of social media usage and product quality on the marketing performance of culinary Micro, Small, and Medium Enterprises (MSMEs) as food businesses in Pangururan. Using quantitative methods with multiple linear regression analysis on 60 sampled food businesses, the study found that both social media usage and product quality, both partially and simultaneously, have a significant positive impact on marketing performance. The regression model achieved an R² value of 0.621, indicating these variables explain 62.1% of performance variance. Theoretically, these results highlight the critical synergy between digital interaction and physical product standards in resource constrained environments. Practically, the findings imply that culinary MSMEs must prioritize high quality visual content alongside strict hygiene and taste consistency to sustain competitiveness and drive repeat purchases in tourism hubs.

Keywords: Social Media Usage, Product Quality, Marketing Performance, Culinary MSMEs.

I. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are a fundamental pillar of the Indonesian economy, contributing 61% to the national GDP and employing 97% of the total workforce. In the specific context of Pangururan District, Samosir Regency, the culinary MSME sector is experiencing rapid growth due to its strategic position as the economic and tourism hub of the Lake Toba region. However, this expansion has led to fierce competition, requiring local businesses to integrate digital strategies with physical product standards to maintain their existence. Despite the high market potential, a significant gap exists between technology adoption and marketing effectiveness among these food businesses. Data indicates that while 72% of culinary MSMEs in Pangururan have utilized social media, the application is not yet optimal as content remains sporadic and lacks interactive engagement. This is exacerbated by low participation in digital marketing training, which stands at only 40%, resulting in a limited customer reach. Furthermore, approximately 40% of business owners only post content 1-3 times per month.

Table 1. The Phenomenon of Culinary MSMEs in Pangururan District (2025)

Phenomenon	Field Data	Impact on marketing performance
Inconsistent use of social media	40% of MSMEs only upload 1-3 times per month on Facebook, WA and Instagram	Low reach, reduced customers
Content is not interesting	55% of MSMEs use unprofessional photos	Purchase interest decreases
Product quality complaints	28% of customers complained about changing taste	Repeat orders decreased
Decrease in Turnover	10-25% in 6 months	Marketing performance weakens
MSMEs are active on social media	42 MSMEs increase sales by 15-35%	Marketing performance increases
Low participation in digital marketing training	40% of MSMEs attended government workshops	Promotional strategies have not been effective

Beyond digital challenges, critical issues regarding product quality standardization have emerged. Inconsistent taste and unattractive packaging have led to a 28% customer dissatisfaction rate. These gaps in quality and communication have directly resulted in revenue declines ranging from 10% to 25% for affected business units. The primary research gap identified in this study is the weak synergy between digital promotion and product standardization, which serves as a major obstacle to marketing performance in the Pangururan region. While several MSMEs that successfully combined consistent social media use with superior quality reported sales increases of up to 35%, many others fail to align these two variables. While previous studies have extensively discussed digital marketing in urban MSMEs, this research offers a unique perspective by focusing on the culinary sector in a developing tourism hub with limited distribution infrastructure, such as Pangururan. The originality of this study lies in its focus on the synergy between digital interaction and physical product standardization as a survival mechanism in areas where mainstream delivery ecosystems are absent. Unlike existing literature that often treats these variables in isolation, this research integrates them to provide a comprehensive framework for MSME sustainability in rural tourist destinations.

Consequently, this study intends to address these issues by empirically analyzing the following research questions:

- a. Does social media usage significantly influence the marketing performance of culinary MSMEs in Pangururan?
- b. Does product quality significantly influence the marketing performance of culinary MSMEs in Pangururan?
- c. Does social media usage and product quality simultaneously affect the marketing performance of these food businesses?

To address the research questions previously established, it is essential to build a theoretical framework that connects digital strategy with tangible output. Therefore, this section explores the conceptual foundations of social media, product quality, and marketing performance.

II. Literature Review and Hypothesis Development

2.1. Social Media Use

a. Definition and Core Concepts Social Media Use

Rohmah et al (2025) According to a 2023 report from Statista, Indonesia has over 200 million active social media users, making it one of the top countries in terms of social media usage worldwide. This situation presents a significant opportunity for MSMEs to utilize social media as an effective and affordable marketing

tool. However, various studies show that many MSMEs still face challenges in optimizing their use of social media, such as a lack of digital literacy, a shortage of qualified workers, and a low ability to produce engaging and relevant content. The use of social media platforms by culinary Micro, Small, and Medium Enterprises (MSMEs) as a form of food business is a strategic step in leveraging digital channels like Facebook, WhatsApp, and Instagram. In this context, the food business encompasses all entities that produce and market consumer goods, from food stalls and coffee shops to home industries that serve as economic pillars in tourism areas like Pangururan. Based on Kotler & Keller, (2016), social media is described as “planning and activities that use digital technology to develop relationships with customers through visual content and interactive communication, which allows MSMEs to expand their reach without incurring large costs.”

Kaplan & Haenlein, (2016) state that social media is “A set of internet-based applications built on technology that enables the creation and exchange of content between users”. Beyond the traditional marketing management perspective, Chaffey, (2019) emphasized that social media use for small businesses should be viewed as a technology integration that facilitates two-way communication and real-time customer relationship management. This is reinforced by Išoraitė, (2018), who stated that marketing effectiveness in the digital era depends heavily on a business's ability to build consistent interactions to create sustainable customer satisfaction. Recent studies emphasize that social media for MSMEs has evolved from a mere promotional tool into a critical 'social CRM' system that fosters long-term consumer trust through real-time engagement. In tourism-dependent regions, the role of visual storytelling on platforms like Instagram has become a primary driver in bridging the information gap for visiting tourists. The social media strategy for culinary MSMEs in Pangururan serves not only as a digital billboard but also as a mitigation mechanism for distribution infrastructure restrictions in tourist areas. Through this platform, businesses create an efficient, independent transaction ecosystem without relying on third parties, making posting frequency and visual content key determinants in building tourist trust before they even make a physical visit (Kowiyo et al., 2024). The use of social media platforms has a strategic function in increasing the effectiveness of marketing for MSMEs in the culinary sector. According to Kotler & Keller, (2016), the main objective of digital marketing is to create solid and measurable interactive relationships with customers. Social media platforms provide MSMEs with the opportunity to monitor consumer interests, understand their behavior, and adjust marketing strategies based on market needs.

b. Indicators for Social Media Use

Chaffey, (2019) explains that the objectives of utilizing social media include increasing brand awareness, enhancing interaction with consumers, expanding promotional reach, and increasing sales volume. Therefore, the objectives of social media utilization for micro, small, and medium enterprises in the culinary sector are not only to introduce products, but also to create closer bonds, improve business image, emphasize the visual appeal of goods, and boost overall marketing performance. Referring to Sadeghpour, (2020), the use of social media by MSMEs is measured through the following operational indicators: 1) Frequency of Posts, 2) Quality of Digital Content, 3) Customer Interaction (Engagement), 4) Use of Social Media Features, 5) Ease of Internet Access. While social media serves as the primary gateway for customer engagement and reach, its effectiveness cannot stand alone without the actual value delivered through the product itself. Consequently, the focus must shift to product quality as the fundamental promise that a business must fulfill to sustain the interest generated online.

2.2. Product Quality

a. Definition and Core Concepts Product Quality

Product quality in the food industry relates to the extent to which the food produced can meet consumer expectations in terms of taste, appearance, cleanliness, and consistency. Kotler & Armstrong, (2018) state that product quality is “the ability of a product to perform its function, which includes durability, reliability, accuracy, ease of use, and other added values”. In the context of MSMEs, product quality is assessed

not only by physical attributes but also through innovation that adapts to dynamic market trends (Pradana et al., 2021). Recent research shows that for food businesses, product quality combined with a relationship marketing strategy is a crucial factor in influencing repeat purchase decisions, especially in highly competitive markets such as tourist areas.

According to Tjiptono, (2015), product quality is a standard set to meet or even exceed consumer expectations. In micro, small, and medium enterprises in the culinary sector, this is reflected in consistent taste, hygienic production processes, quality raw materials, attractive appearance, and orderly presentation. In the world of MSMEs in the food and beverage sector, product quality is understood as the ability of a product to consistently meet criteria regarding taste, appearance, cleanliness, and safety so that it can meet customer expectations. This factor is an important element that influences customer satisfaction and loyalty, as well as determining business sustainability. The dimensions of product quality include physical, functional, and aesthetic aspects that together shape customers' perceptions of the product's quality. Physical aspects relate to the appearance and design of the product, functional aspects relate to taste and freshness of ingredients, while aesthetic aspects include attractive packaging and visuals that increase the interest of potential consumers (Nuraini et al., 2019).

b. Dimensions of Product Quality

Product quality has eight dimensions that are important in assessing the standards of culinary MSME products, namely: 1) Performance, 2) Reliability, 3) Additional Features, 4) Durability, 5) Suitability, 6) Perceived Quality, 7) Aesthetics, 8) Ease of Repair (Hoe & Mansori, 2018). Beyond physical attributes, contemporary research highlights that product quality in the food industry is increasingly measured by 'perceived safety' and hygiene transparency, which are now as vital as taste consistency for repeat purchase intentions (Purwanto et al., 2021). This shift reflects a broader global trend where culinary MSMEs must align their physical output with the digital promises made on social media.

c. Indicators for Product Quality

Referring to Kotler & Armstrong, (2018), product quality indicators in culinary MSMEs include: 1) Product taste, 2) Cleanliness and health, 3) Product appearance and aesthetics, 4) Consistency in taste and size, 5) Product appearance/aesthetics, 6) Product packaging. These indicators are used to evaluate whether culinary products from MSMEs meet customer needs and expectations. Product quality in the culinary industry in tourism areas has dimensions that go beyond mere taste standards; it serves as a key determinant of repurchase intention amidst high tourist expectations. Given the characteristics of culinary MSMEs as food businesses in Pangururan serving local dishes, standardization in hygiene and packaging aesthetics is a crucial element of differentiation. Product quality is no longer a static attribute, but rather a brand promise validated by customers' direct sensory experiences. This consistency of quality serves as an anchor for the effectiveness of digital promotions, where expectations built through social media must align with the reality of the product received by consumers.

2.3. Marketing Performance

a. Definition and Core Concepts Marketing Performance

Zulfikar, (2018) explain that marketing performance is "an indicator of the results of a company's marketing activities related to the effectiveness of the marketing strategies implemented to attract, retain, and satisfy consumers." This indicates that marketing performance does not only emphasize sales figures, but also the company's success in forming long-term relationships, creating enjoyable experiences, and maintaining customer loyalty. In the food MSME sector, marketing effectiveness is greatly influenced by a business's ability to implement digital strategies, maintain product standards, and understand consumer desires and needs (Jayadi et al., 2025). The more effective MSME players are in interacting with customers through social media platforms and maintaining product taste and hygiene, the higher the possibility of

increasing the number of consumers and sales. This is in line with the statement Işoraité, (2018) which states that marketing effectiveness can be measured by the ability of businesses to attract interest in products, create customer satisfaction, and maintain sales sustainability over a long period of time.

Specifically, the marketing performance of SMEs in the culinary sector can be measured by several factors, such as increased revenue, increased repurchase frequency, and positive customer perceptions of the products provided. In the culinary industry, maintaining consistent quality and good communication with customers are crucial factors in creating a business reputation and strengthening marketing success. Therefore, marketing performance can be considered the overall result of all interconnected and continuous marketing activities (Salam et al., 2024). According to (Leonidou et al., 2013), the goal of marketing performance is not only limited to achieving high sales figures, but also relates to the company's ability to attract, retain, and satisfy customers. This shows that marketing performance focuses on creating long-term value by improving customer experience, building loyalty, and establishing sustainable relationships. Therefore, one of the important goals of marketing performance is to create customer satisfaction that can encourage consistent repeat purchases.

b. Indicators for Marketing Performance

According to Kotler & Keller, (2016) marketing performance indicators can be observed from several aspects that reflect the level of success in attracting customers, increasing sales, and maintaining loyalty. These indicators are very important for small food and beverage businesses that rely on promotion through social media, product quality, and customer interaction in order to achieve maximum, Marketing Performance Indicators are as follows: 1) Sales Growth, 2) Customer Growth, 3) Repurchase Frequency, 4) Customer Satisfaction Level, 5) Business Turnover Increase, 6) Business Competitiveness. Zufikar, (2018) expand this definition by stating that marketing performance is an indicator of the results of marketing activities related to the effectiveness of strategies in attracting and retaining consumers as a form of organizational value creation. Furthermore, highlight that successful marketing performance must also reflect a company's ability to build long-term relationships that enhance customer experience and loyalty. The synergy between an effective digital presence and high product standards ultimately manifests in the overall success of the business. To evaluate this success, the following discussion defines marketing performance as the ultimate outcome of these integrated activities.

The integration of these three variables suggests that practical success in the culinary sector requires a shift from static business management to an adaptive, feedback-driven model. In practice, the findings imply that social media is no longer just a promotional gallery, but a critical tool for 'social listening' where food businesses can adjust their menus and services based on real-time customer engagement. Furthermore, maintaining product quality standards in taste and hygiene serves as the operational foundation that validates the digital marketing efforts. For MSMEs in tourism hubs, this means that every digital promise made on platforms like Instagram must be strictly met by the physical dining experience to ensure long-term sustainability through repeat purchases and positive word-of-mouth (Mala et al., 2023).

2.4. Hypothesis

A hypothesis is a temporary answer or assumption that still needs to be tested for validity. The hypotheses in this study are as follows:

a. Social Media Usage Variable

H0: Social media usage does not have a significant effect on the marketing performance of culinary MSMEs in Pangururan District

H1: Social media usage has a significant effect on the marketing performance of culinary MSMEs in Pangururan District.

b. Product Quality Variable

H0: Product quality does not have a significant effect on the marketing performance of culinary MSMEs in Pangururan District.

H1: Product quality has a significant effect on the marketing performance of culinary MSMEs in Pangururan District.

c. Social Media Use and Product Quality Variables

H0: Social media use and product quality simultaneously have no significant effect on the marketing performance of culinary MSMEs in Pangururan District.

H1: Social media use and product quality simultaneously have a significant effect on the marketing performance of culinary MSMEs in Pangururan District.

III. Research method

This type of research uses quantitative methods because all variables are measured numerically and analyzed using statistical techniques. According to Sugiyono, (2019) quantitative research is a research method based on positivism and uses standardized instruments to measure numerical data. This study uses an associative design because it aims to analyze the cause-and-effect relationships and the degree of interconnectedness between the variables studied. This design is considered the most appropriate because the research question requires empirical evidence regarding the extent to which the independent variables (social media usage and product quality) are able to predict or influence the dependent variable (marketing performance). By employing an associative approach, the research can identify systematic relationship patterns through statistical analysis techniques, moving beyond descriptive observation to provide a functional explanation of the mechanisms of influence between these variables within the culinary MSME sector. This allows for a rigorous testing of the hypotheses regarding how digital and physical factors work in tandem to drive business outcomes.

In the book Siagian, (2021) population refers to all research objects (figures, events, and others) with specific criteria and characteristics. These research objects can be tangible or intangible. The population can be described as "a collection of many research samples, so that in research it is very necessary to determine the sample as a way to facilitate the reading of existing phenomena or realities. The population in this study is all culinary MSMEs in Pangururan District, Samosir Regency. Based on data from the Samosir Regency Cooperative and MSME Office in 2025, the number of culinary MSMEs in the region is 152 business units. A sample is a part of the totality and characteristics possessed by the entire population (Sugiyono, 2019). The sample in this study was determined by applying the Slovin formula with a margin of error set at 10% (0.10). To determine the sample size of a population, the following Slovin formula can be used with a total sample of:

$$n = \frac{N}{1 + Ne^2}$$

Where:

n = Sample Size

N = Population Size (152 MSMEs)

e = Percentage margin of inaccuracy due to sampling error (0.10) Based on this calculation:

$$n = \frac{152}{1 + 152(0,10)^2} = \frac{152}{1 + 1,52} = \frac{152}{2,52} = 60,31$$

Based on these calculations, the sample size was rounded to 60 respondents to facilitate proportional data distribution. This technique ensured that every category of food business, from food stalls to cottage industries, was fairly represented in the study. This study used the Proportional Stratified Random Sampling technique to ensure sample validity. First, the population was divided into several strata (groups) based on business categories, such as restaurants, coffee shops, and home industries. Then, from each group, a random sample was drawn in proportion to the size of the original group. This technique was chosen to ensure that each business unit's characteristics were fairly represented, allowing the research results to be generalized to the entire population of culinary MSMEs in Pangururan. Although the sampling technique was systematically designed, the researchers acknowledge the potential for sampling bias that could impact the generalizability of the results. The use of a 10% margin of error and limited access to businesses without a digital presence may have skewed the data toward MSMEs with basic technological literacy. Furthermore, the potential for non-response bias among highly mobile businesses in the Pangururan tourist area was mitigated by conducting repeat visits to business locations to ensure the collected data remained representative of the population of 152 businesses.

Table 2. Number of Samples per MSME Actor

No	Culinary Business Category	Number of MSMEs	Number of Samples
1	Food stalls	47	$47/152 \times 60=19$
2	Snacks and light meals	38	$38/152 \times 60=15$
3	Beverages/Coffee shops	26	$26/152 \times 60=10$
4	Baking and Pastry Business	21	$21/152 \times 60=8$
5	Catering/Food Orders	12	$12/152 \times 60=5$
6	Home-based Culinary Business (home industry)	8	$8/152 \times 60=3$
TOTAL		152	60

The data collection process in this study was conducted through a survey method by distributing structured questionnaires to culinary MSME owners as food businesses. This questionnaire was designed using a 1-5 Likert scale to measure respondents' perceptions of social media usage (X_1), product quality (X_2), and marketing performance (Y). Data collection was conducted offline by directly visiting business locations in Pangururan District to ensure a high response rate and accuracy of filling in the questionnaires. In addition to the questionnaire, researchers also conducted field observations to verify statistical data related to the frequency of content uploads on respondents' social media platforms. Data for this research was collected using a primary survey method, where structured questionnaires were the main tool for gathering information from the 60 sampled food business owners. To ensure the authenticity and integrity of the data, this study implemented a strict primary data collection procedure through a structured questionnaire distributed directly to respondents at their business locations to prevent data manipulation. Furthermore, the ethical aspects of the study were strictly adhered to by implementing the principle of informed consent, where each MSME owner was provided with an explanation of the research objectives and guaranteed the anonymity and confidentiality of their personal data. All participation was voluntary, and the researchers ensured that the data was used solely for academic purposes, which collectively strengthens the authenticity and credibility of the study's findings.

IV. Results and Discussion

4.1. Overview of the Research Location

This research was conducted in Pangururan Subdistrict, Samosir Regency. Pangururan Subdistrict is the administrative center of Samosir Regency and one of the strategic areas located in the Lake Toba region. Geographically, Pangururan Subdistrict has fairly good transportation access, both by land and ferry, which

supports the economic and trading activities of the local community. Pangururan Subdistrict is known as an area with high tourism potential, in line with the development of the Lake Toba tourism sector. The diversity of respondents in this study reflects the dynamics of culinary MSMEs as a comprehensive food business in Pangururan. As seen in Table 1, the scope of these food businesses encompasses various categories, ranging from food stalls and coffee shops to catering businesses and even home industries. This classification is important to understand because each type of food business has unique characteristics in maintaining product quality and interacting with customers through social media.

MSMEs in the culinary sector in Pangururan Subdistrict generally engage in various types of businesses, such as food stalls, traditional Batak restaurants, coffee shops, cafes, and light food and beverage businesses. Most of these businesses are independently managed by the local community and are one of the main sources of family income, as well as playing an important role in supporting the regional economy. Along with the development of high tourism potential, culinary MSME players in Pangururan District, Samosir Regency, have begun to utilize digital technology in their business activities, particularly in marketing. The use of social media has become an important tool for culinary MSME players in promoting their products, reaching a wider range of consumers, and building communication with customers. Social media is used as a promotional medium that is relatively easy, inexpensive, and effective in increasing business competitiveness. In addition to the use of social media, product quality is also an important factor that affects the marketing performance of culinary MSMEs. Good product quality, such as taste, cleanliness, presentation, and product consistency, plays a role in increasing customer satisfaction and encouraging repeat purchases. Based on these conditions, Pangururan District, Samosir Regency, was chosen as the research location because it has characteristics that are in line with the research objectives, namely to analyze the influence of social media use and product quality on the marketing performance of culinary MSMEs. The diversity of culinary businesses and the marketing dynamics that occur in this region are expected to provide a representative picture and support accurate research results.

a. Respondent Characteristics

The grouping of respondent identities based on the gender of culinary MSME entrepreneurs in Pangururan Subdistrict, Samosir Regency, is as follows:

Table 3. Respondent Characteristics Based on Gender

Gender	Number	Percentage
Male	28 People	46,67%
Female	32 People	53,33%
Total	60 People	100%

Grouping of respondents based on the age of culinary MSME actors in Pangururan District, Samosir Regency can be seen in the following table:

Table 4. Respondent Characteristics Based on Age

Age (Years)	Number	Percentage
20-40	26	43,33%
41-60	34	56,67%
Total	60	100%

Source: Data processed by researchers

Table 5. Response Characteristics Based on Business Length

Length of Business (Years)	Number	Percentage
1-10 Tahun	38	63,33%

11-20 Tahun	22	36,67%
Total	60	100%

Source: Data processed by researchers

After presenting the respondent profiles and ensuring the research instruments meet the classical assumption test, this section will discuss the results of the data analysis to answer the three previously formulated research questions. The main focus of this discussion is to empirically demonstrate how social media use and product quality influence the marketing performance of culinary MSMEs in Pangururan, both partially and simultaneously.

4.2. Validity Test

Validity testing is conducted on research instruments, namely questionnaires, to determine whether they are valid or not. In this study, the researcher distributed questionnaires to 60 respondents.

Table 6. Validity Test Results

Variabel	Item Statement	Rate Error	r _{table}	r _{value}	Description
Social Media Use X1	X _{1.1}	0,05	0,2542	0,914	Valid
	X _{1.2}	0,05	0,2542	0,892	Valid
	X _{1.3}	0,05	0,2542	0,912	Valid
	X _{1.4}	0,05	0,2542	0,917	Valid
	X _{1.5}	0,05	0,2542	0,893	Valid
Product Quality X2	X _{2.1}	0,05	0,2542	0,852	Valid
	X _{2.2}	0,05	0,2542	0,853	Valid
	X _{2.3}	0,05	0,2542	0,881	Valid
	X _{2.4}	0,05	0,2542	0,882	Valid
	X _{2.5}	0,05	0,2542	0,903	Valid
	X _{2.6}	0,05	0,2542	0,885	Valid
Marketing Performance Y	Y ₁	0,05	0,2542	0,614	Valid
	Y ₂	0,05	0,2542	0,717	Valid
	Y ₃	0,05	0,2542	0,698	Valid
	Y ₄	0,05	0,2542	0,747	Valid
	Y ₅	0,05	0,2542	0,755	Valid
	Y ₆	0,05	0,2542	0,760	Valid

Based on table 5, it shows that the calculated r value of each statement item from each variable has a value greater than r table, so the instrument can be said to be valid.

4.3. Reliability Test

Reliability testing is conducted to measure the consistency of a measuring instrument. If the measuring instrument is used with the same instrument over time, it will show the same measurement results.

Table 7. Reliability Test of Social Media Usage (X)

Cronbach's Alpha	N of Items
.945	5

Based on Table 6, the reliability test results show that the 5 items of the Social Media Use variable (X1) have a Cronbach's alpha value of 0.945. Therefore, it can be concluded that the Social Media Use variable (X1) is reliable or acceptable because Cronbach's alpha is $0.945 > 0.60$.

Table 8. Product Quality Reliability Test (X2)

Cronbach's Alpha	N of Items
.939	6

Based on Table 7, which shows the reliability results, the six items of the Product Quality variable (X2) have a Cronbach's alpha value of 0.939. Therefore, it can be concluded that the statements of the Product Quality variable (X2) are reliable or acceptable because Cronbach's alpha is $0.939 > 0.60$.

Table 9. Marketing Performance Reliability Test (Y)

Cronbach's Alpha	N of Items
.810	6

Based on Table 8, which shows the reliability test results, where 6 items of the Marketing Performance (Y) variable statement with a Cronbach's alpha value of 0.810, it can be concluded that the Marketing Performance (Y) variable statement is reliable or acceptable because Cronbach's alpha $0.810 > 0.60$.

4.4. Normality Test

Table 10. Normality Test with Kolmogorov-Smirnov

		Unstandardized Residual
N		60
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.60634100
Most Extreme Differences	Absolute	.148
	Positive	.077
	Negative	-.148
Kolmogorov-Smirnov Z		1.147
Asymp. Sig. (2-tailed)		.144

Based on Table 9, above, the significance value is 0.144, which means it is > 0.05 . Therefore, it can be concluded that the data above is normally distributed because the value of $0.144 > 0.05$.

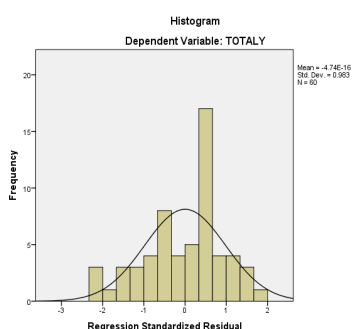


Figure 1. Histogram Graph

Based on Figure 1, above, it shows a distribution pattern that is close to normal, which is characterized by a histogram shape resembling a bell curve and a normal curve line that follows the data distribution. Thus, it can be concluded that the assumption of normality in the regression model is fulfilled or normally distributed.

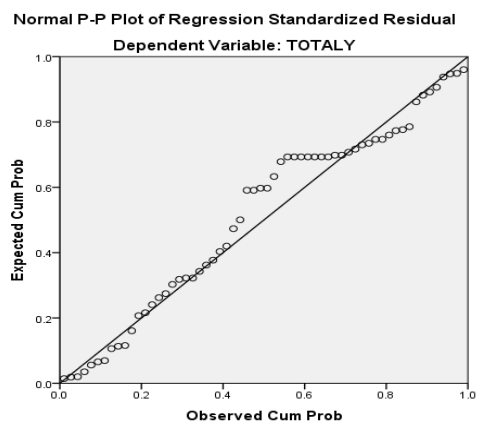


Figure 2. Histogram Graph

Based on Figure 2, the curve graph shows that the standardized residual points are scattered and follow the diagonal, and do not show any significant deviation from the line. Therefore, it can be concluded that the data has a normal distribution.

4.5. Multicollinearity Test

Table 11. Multicollinearity Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	9.074	1.757		5.164	.000		
	TOTALX1	.378	.057	.537	6.580	.000	1.000	1.000
	TOTAL X2	.355	.051	.566	6.942	.000	1.000	1.000

Based on the results of the multicollinearity test in Table 10, above, the values of VIF and Tolerance can be determined. The test results are then compared with the test criteria in measuring multicollinearity. In the table above, it can be seen that the independent variables in the regression model have tolerance values > 0.10 and < 10. These results indicate that there is no multicollinearity in the regression model in this study.

4.6. Heteroscedasticity Test

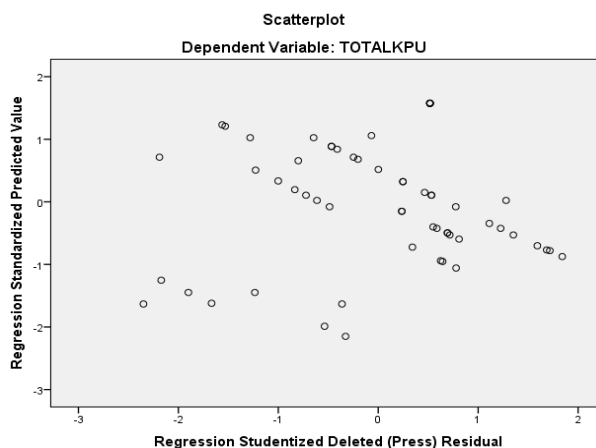


Figure 3. Heteroscedasticity Test

The heteroscedasticity test is one of the classical assumption tests in regression analysis that aims to identify whether the residual variance (error) in the regression model is unequal or varies between observations. This test is conducted to ensure that the errors in the regression model have a diverse variance distribution across all data. Based on Figure 3, above, which shows the heteroscedasticity test using the scatterplot method, it can be observed that the distribution of residual points is scattered randomly above and below the zero value on the Y-axis and does not show a specific pattern. This indicates that there is no heteroscedasticity in the regression model, so it can be concluded that the residual variance is constant.

4.7. Multiple Linear Regression Analysis

Table 12. Multiple Linear Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.074	1.757		5.164	.000
	TOTALMS	.378	.057	.537	6.580	.000
	TOTALKP	.355	.051	.566	6.942	.000

Based on the regression results in Table 11, above the multiple linear regression equation in this study can be obtained as follows:

$$Y=9.074+0.378X1+0.355X2+e$$

The regression equation above shows the relationship between the independent variables and the dependent variable. From this equation, we can conclude that:

- a. The constant value is 9.074, indicating that if Social Media Usage and Product Quality are zero or unchanged, then Marketing Performance will be 9.074.
- b. The coefficient value for Social Media Usage (X1) is 0.378, meaning that every 1-unit increase in Social Media Usage will increase Marketing Performance (Y) by 0.378. Therefore, the Social Media Usage variable (X1) has a positive effect on Marketing Performance (Y) with a coefficient of 0.378.
- c. The Product Quality Coefficient (X2) value is 0.355, meaning that every 1-unit increase in Product Quality will increase Marketing Performance (Y) by 0.355 units, assuming that the other independent variables remain constant.

4.8. Hypothesis Testing

- a. t-test (partial)

Table 13. t-Test Results (Partially)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.074	1.757		5.164	.000
	TOTALMS	.378	.057	.537	6.580	.000
	TOTALKP	.355	.051	.566	6.942	.000

Source: Results of Primary Data

Based on the results of the test in Table 13 above, it can be seen how much each independent variable partially influences the dependent variable.

- a. The t-value for the social media usage variable is 6.580 with a significance value of 0.000. This significance value is smaller than $\alpha=0.05$ ($0.000 < 0.05$), so it can be concluded that H_0 is rejected and H_1 is accepted. Thus, the hypothesis stating that social media usage has a positive and significant effect on marketing performance is accepted.
- b. The t-value for the Product Quality variable is 6.942 with a significance value of 0.000. This significance value is smaller than $\alpha=0.05$ ($0.000 < 0.05$), so it can be concluded that H_0 is rejected and H_1 is accepted. Thus, the hypothesis stating that Product Quality has a positive and significant effect on Marketing Performance is accepted.

b. F-test (simultaneous)

Table 14. F-Test Results (simultaneous)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	249.494	2	124.747	46.706	.000 ^b
	Residual	152.240	57	2.671		
	Total	401.733	59			

Source: Results of Primary Data

Based on Table 14, above it can be seen that the Fcount value is 46.706 and the significance value is 0.000. This means that the Fcount value is greater than the Ftable value of 3.09 and the significance value is less than 0.05. Therefore, it can be concluded that the use of social media (X1) and product quality (X2) simultaneously have a significant effect on marketing performance (Y).

c. Coefficient of Determination Test (R Square)

Table 15. Results of the Coefficient of Determination (R2) Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.788 ^a	.621	.608	1.634

Source: Results of Primary Data

Based on the results in Table 15, above it can be seen that the coefficient of determination (R2) is 0.621, meaning that the use of social media (X1) and product quality (X2) can explain 62.1% of the MSME marketing performance variable (Y), while the remaining 37.9% is explained by other variables outside the scope of this study. The findings of this study have strategic significance for various stakeholders in the MSME sector. For culinary MSMEs or food businesses, these results confirm that investing in product quality and digital marketing skills is not merely an option, but a necessity to increase sales volume and customer loyalty in Pangururan. For the Samosir Regional Government and Cooperative/MSME Office, these data provide an empirical basis for designing more intensive digital marketing training programs and technical assistance for food hygiene standardization to strengthen the region's tourism competitiveness. Theoretically, this study contributes to the marketing management literature by demonstrating how the synergy between social media and product quality is a key pillar of marketing performance in areas with limited distribution infrastructure.

4.9. Discussion

a. The Effect of Social Media Use on Marketing Performance

Based on the results of the t-test that has been conducted, the variable of Social Media Use has a t-value of 6.580 with a significance value of 0.000. Because the significance value is less than 0.05, it can be concluded that the use of social media has a positive and significant effect on the marketing performance of culinary MSMEs in Pangururan. These results indicate that the active, consistent, and interactive use of digital

platforms such as Facebook, WhatsApp, and Instagram can expand market reach, attract new customers, and encourage increased sales volume. Social media acts as a two-way communication tool that allows business actors to build closer relationships with consumers, which is consistent with Kotler & Keller's theory regarding the effectiveness of digital marketing. The results of this study are consistent with the theory proposed by Kotler & Keller, (2016), which indicates that digital marketing through social media platforms can increase marketing success and strengthen interactions with consumers. In addition, this study is also in line with the findings obtained by (Sukri, 2017) and (Waruwu, 2023) which show that the use of social media has a positive and significant impact on marketing performance for SMEs in the culinary sector.

b. The Influence of Product Quality on the Marketing Performance of Culinary MSMEs

Based on the partial t-test results, the Product Quality variable (X₂) has a t-count of 6.942 with a significance value of 0.000. This significance value is less than 0.05 ($0.000 < 0.05$), thus it can be concluded that product quality has a positive and significant effect on the marketing performance of culinary MSMEs. The multiple linear regression results show a regression coefficient of Product Quality of 0.355, which means that Marketing Performance is 0.355 units, assuming other variables are held constant. This indicates that product quality has a significant influence on increasing sales of culinary MSMEs. Good product quality, reflected in consistent taste, cleanliness, attractive product appearance, and hygienic packaging, can increase customer satisfaction and encourage repeat purchases. Satisfied consumers will become loyal customers and provide positive recommendations to other consumers, thus impacting business marketing performance. These research results align with Tjiptono, (2015) who stated that product quality is a crucial factor in creating customer satisfaction and loyalty. This study also confirms the research results of (Azzahra, 2023) and (Khalisa, 2024) which show that product quality has a major influence on the results and development of MSMEs in the culinary sector.

c. The Influence of Social Media Use and Product Quality on the Marketing Performance of Culinary MSMEs

Based on the results of the F test (simultaneous), the Fcount value obtained was 46.706 with a significance value of 0.000. The F-count value is greater than the F-table (3.09) and the significance value is less than 0.05 ($0.000 < 0.05$). This indicates that the use of social media and product quality simultaneously have a significant effect on the marketing performance of culinary MSMEs. The R Square test results show an R² value of 0.621, which means that 62.1% of the variation in culinary MSME marketing performance can be explained by the use of social media and product quality, while the remaining 37.9% is influenced by other factors outside the scope of this study, such as price, service, business location, and competition. These results indicate that the combination of digital marketing strategies through social media and good product quality is an important factor in improving the marketing performance of culinary MSMEs. Social media serves as a means of promotion and communication, while product quality plays a role in maintaining customer satisfaction and loyalty. The findings of this study carry strategic significance for various stakeholders in the MSME ecosystem. For culinary MSME entrepreneurs, these results provide an empirical roadmap that business survival in tourism areas like Pangururan depends on the synchronization of digital engagement and product hygiene. For local government agencies, such as the Samosir Cooperative and MSME Office, this data serves as a basis for designing targeted digital literacy programs and food safety certifications to enhance regional tourism competitiveness. Furthermore, for financial institutions, the identified R² value of 0.621 offers a measurable indicator of business performance potential, which can be utilized to refine credit risk assessments for small-scale food businesses.

d. Research Limitations

The researchers acknowledge several limitations that could affect the generalizability of the results. First, the use of a 10% margin of error in the Slovin formula calculation provides a higher uncertainty threshold

than the standard 5%. Second, there is potential sampling bias, where limited access to businesses without a digital presence or basic technological literacy may have skewed the data toward groups that have already begun adopting technology. Third, because this study is cross-sectional, the findings only reflect conditions at the time of data collection and may not capture fluctuations in marketing performance during the holiday season or changes in tourism trends in Pangururan. Finally, this study focuses only on two independent variables, while other external factors such as pricing strategy, business location, and service innovation have not been explored in depth.

V. Conclusion

Based on the data analysis, this study concludes that social media use and product quality, both partially and simultaneously, have a positive and significant impact on the marketing performance of culinary Micro, Small, and Medium Enterprises (MSMEs) in the Pangururan District. These findings demonstrate that the success of marketing strategies in the food business depends heavily on the entrepreneur's ability to manage digital interactions and consistently maintain product quality standards. This finding is reinforced by a coefficient of determination (R^2) value of 0.621, which shows that these two variables are able to explain 62.1% of the variation in marketing performance. Specifically, active and consistent use of digital platforms and maintaining product quality through taste and hygiene have proven effective in expanding market reach, increasing customer satisfaction, and driving a significant increase in sales volume.

As a practical suggestion, culinary MSMEs or food businesses in Pangururan are expected to further optimize social media features such as engaging visual content and active interaction to build customer loyalty, while maintaining product quality standards that include taste and hygiene. Furthermore, future researchers are advised to explore additional variables beyond this model, such as price factors or service innovation, to obtain a more comprehensive picture of marketing dynamics in the food business sector. Local governments and related agencies also need to take a strategic role by conducting digital marketing training and technical guidance on product quality to strengthen the competitiveness of local businesses. Meanwhile, for future researchers, it is recommended to explore additional variables beyond this model, such as price factors, business location, or service innovation, to obtain a more comprehensive picture of marketing dynamics in the culinary sector.

References

- Azzahra, I. (2023). Pengaruh penggunaan media sosial dan inovasi produk terhadap perkembangan usaha UMKM dimsum di Medan. *Jurnal Manajemen Dan Bisnis*, 8(2), 45–56.
- Chaffey, D. (2019). *Digital marketing: Strategy, implementation and practice* (7th ed.). Pearson Education.
- Hoe, L. C., & Mansori, S. (2018). The effects of product quality on customer satisfaction and loyalty: Evidence from Malaysian engineering industry. *International Journal of Industrial Marketing*.
- Išoraitė, M. (2018). Increasing marketing effectiveness. *Saudi Journal of Business and Management Studies*, 3(8), 917–921.
- Jayadi, M. Z., Setiawan, R., & Maulani, G. A. F. (2025). Survey on Compass Shoes: The Influence of Social Media Marketing and Product Design on Repurchase Intention with Consumer Satisfaction as Mediator. *Golden Ratio of Mapping Idea and Literature Format*, 6(1). <https://doi.org/10.52970/grmilf.v6i1.1625>
- Kaplan, A. M., & Haenlein, M. (2016). *Social media: Applications, technologies, and implications for firms*.
- Khalisa, N. R. P. (2024). Pengaruh e-commerce, inovasi produk, dan strategi pemasaran media sosial terhadap peningkatan pendapatan UMKM kuliner di Kota Malang. *Jurnal Ekonomi Dan Bisnis*, 12(1), 1–12.
- Kotler, P., & Armstrong, G. (2018). *Principles of marketing* (17th ed.). Pearson.
- Kotler, P., & Keller, K. L. (2016a). *Marketing management* (15th ed.). Pearson Education Limited.
- Kotler, P., & Keller, K. L. (2016b). *Marketing management* (15th ed.). Pearson Education Limited.

- Kowiyanto, K., Dewi, H. M. F., Sedyastuti, K., & Nurhasan, R. (2024). Pengaruh konten visual dan media sosial terhadap keputusan penggunaan jasa jeep Bromo. *Journal of Entrepreneurship and Strategic Management*, 4(1). <https://doi.org/10.52434/jesm.v4i01.597>
- Leonidou, L. C., Katsikeas, C. S., & Morgan, N. A. (2013). Greening the marketing mix: Do firms do it and does it pay off? *Journal of the Academy of Marketing Science*, 41(2), 151–170.
- Mala, I. K., Sudarmiatin, & Wardana, L. W. (2023). The Effect of Social Media Marketing, E-WoM on Purchase Intention Mediated by Brand Image and Brand Trust: Halal Product FnB MSMEs in Malang City. *Indonesian Journal of Business Analytics*, 3(5). <https://doi.org/10.55927/ijba.v3i5.6358>
- Nuraini, M. W., Qur'anna, W. W., Nurjanah, D., Sekarkinasih, J., Firnanda, D. Y., & Fazlurrahman, H. (2019). Measuring intention to buy air freshener product based on brand name, packaging, product quality, price, and advertising in Indonesia. *International Journal of Academic Research in Business and Social Sciences*.
- Pradana, A. F. P., Hasan, S., Putra, A. H. P. K., & Kalla, R. (2021). Moderating of SERVQUAL on E-WOM, Product Quality, and Brand Image on and E-commerce Purchase Intention. *Golden Ratio of Mapping Idea and Literature Format*, 2(1). <https://doi.org/10.52970/grmilf.v2i1.135>
- Purwanto, A., Ardiyanto, J., & Sudargini, Y. (2021). Intention factors of halal food purchase among student consumers: An explanatory sequential mixed methods study. *Journal of Industrial Engineering & Management Research*, 2(2).
- Sadeghpour, A. (2020). Social media usage in micro and small business marketing.
- Salam, K. N., Singkeruang, A. W. T. F., Husni, M. F., Baharuddin, B., & A.R, D. P. (2024). Gen-Z Marketing Strategies: Understanding Consumer Preferences and Building Sustainable Relationships. *Golden Ratio of Mapping Idea and Literature Format*, 4(1). <https://doi.org/10.52970/grmilf.v4i1.351>
- Siagian, N. (2021). *Statistika dasar*. Prenada Media Group.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sukri, A. (2017). Analisis strategi pemasaran dengan media sosial produk kuliner pada UMKM di Pekanbaru. *Jurnal Manajemen Dan Kewirausahaan*, 4(2), 60–69.
- Tjiptono, F. (2015). *Strategi pemasaran (4th ed.)*. Andi.
- Waruwu, A. R. L. (2023). Pengaruh pemanfaatan digital marketing, kualitas produk, dan relationship marketing terhadap keputusan pembelian pada UMKM kuliner di Surabaya Utara. *Jurnal Ilmu Manajemen*, 11(3), 201–213.
- Zulfikar. (2018). Marketing performance as an evaluation of organizational value creation. *Amkop Management Accounting Review*, 4(2).
- Rohmah, N. A., Wusko, A. U., Pasuruan, U. Y., & Wusko, A. U. (2025). Pengaruh Media Sosial dan Customer Engagement Terhadap Keunggulan Bersaing dan Kinerja Pemasaran UMKM di Prigen. 1(2).