

Analysis of Factor Affecting MSME Performance in Medan Petisah District, Medan City

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Abstract

This study examines the determinants of the performance of Micro, Small, and Medium Enterprises (MSMEs) in Medan Petisah District, Medan City. The independent variables analyzed include digital marketing (X1), price (X2), and service quality (X3), whereas MSME performance (Y) functions as the dependent variable. A quantitative research methodology was utilized with 100 respondents chosen by chance sampling. Data were gathered using surveys and processed with Structural Equation Modeling – Partial Least Squares (SEM-PLS). The findings demonstrate that digital marketing has a positive and significant impact on MSME performance (t -statistic = 4.215; $p = 0.000$), while pricing also has a positive and significant impact (t -statistic = 3.233; $p = 0.001$). In contrast, service quality does not exhibit a significant effect (t -statistic = 1.693; $p = 0.090$). All three variables concurrently exert a positive and significant influence on MSME performance, evidenced by an F -value of 22.9 and an Adjusted R -Square of 32.3%.

Keywords: Digital Marketing; Price; Service Quality; MSME Performance; SEM-PLS

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) in Medan City are essential for stimulating regional economic development, generating employment, and enhancing community welfare. As the third-largest city in Indonesia, Medan serves as a strategic center for trade and services, offering significant opportunities for MSME actors to grow. MSME sectors in Medan span a wide range of fields, including culinary, craft, fashion, and creative services that continuously innovate in response to changing times. The city government actively supports MSME development through training programs, business mentoring, access to capital, and trade exhibitions.

Digital marketing leverages digital technology and the internet to broaden

promotional reach and enhance consumer interaction. Through social media, websites, marketplaces, and online advertising, businesses can engage in two-way communication with customers more quickly and efficiently. This strategy also enables more measurable, cost-effective promotion targeted at consumers based on their needs and behavior (Sharabati et al., 2024)

Price is a critical factor considered by consumers before purchasing a product or service. Pricing decisions must account for production costs, consumer purchasing power, market conditions, and competitor strategies. If prices are set too high, consumer purchase intent may decline, while excessively low prices may raise doubts about product quality. Therefore, businesses must strike a balance between

profitability and the value perceived by consumers (Maharani & Wiyadi, 2024).

Service quality plays a major role in building customer satisfaction and loyalty. Friendly, responsive service that addresses consumer needs creates positive experiences that encourage repeat purchases. Beyond building trust, service quality also serves as a competitive advantage, as consumers evaluate not only the product but also how they are treated by the business (Fahrizal et al., 2024).

MSME performance reflects the extent to which small and medium enterprises achieve their sales targets, sustain profit growth, and strengthen their market competitiveness. This is demonstrated through effective resource management, consistent product or service quality, and strong customer relationships. The performance of MSMEs is demonstrated by their capacity to adapt to evolving business contexts, including technological innovations and changing consumer tastes (Koerniawan et al., 2024).

MSMEs in Medan Petisah District continue to face several challenges affecting their performance. Key issues include limited capital, insufficient utilization of digital technology, low financial literacy, competition from large enterprises and imported goods, and inadequate human resource skills in both production and service delivery. Despite their considerable potential, these constraints have hindered the optimal development of MSMEs in the area.

According to data from the Medan City Bureau of Statistics (medankota.bps.go.id), the number of MSMEs in Medan Petisah District fluctuated: 252 in 2022, declining to 246 in 2023, before rising significantly to 372 in 2024.

This dynamic motivates the present study, which is titled: "Analysis of Factors Affecting MSME Performance in Medan Petisah District, Medan City."

Based on the background above, the problem statements of this study are: (1) Does digital marketing have a significant effect on MSME performance in Medan Petisah District? (2) Does price have a significant effect on MSME performance in Medan Petisah District? (3) Is there a substantial impact of service quality on the success of MSMEs in the Medan Petisah District? Do digital marketing, pricing, and service quality concurrently exert a major influence on the performance of MSMEs in the Medan Petisah District?

METHOD

This research utilizes a quantitative methodology. Ghozali (2021) defines quantitative research as a systematic inquiry into phenomena through the collection of measurable data utilizing statistical, mathematical, or computer methods. The research was conducted in Medan Petisah District, Medan City, with the object of study being MSME actors operating in the area.

The population consists of all MSME operators in Medan Petisah District. Probability sampling was used to determine the sample, yielding 100 respondents. Data were collected through (1) questionnaires as the primary instrument, (2) interviews for obtaining more detailed and in-depth information, and (3) observation to complement the primary data collection.

The research variables and their operationalization are as follows. Digital Marketing (X1) is defined as marketing or promotional activities for a brand or product using digital media or the internet (Sharabati et al., 2024), measured by six indicators: accessibility, interactivity, entertainment, credibility, irritation, and informativeness. Price (X2) is defined as the monetary sum and/or other valuable items required to acquire a product, evaluated using four indicators: price affordability, price-quality correlation, price competitiveness, and price-benefit correlation (Maharani & Wiyadi, 2024). Service Quality (X3) is defined as activities or services offered to consumers through interaction between service providers and consumers (Fahrizal et al., 2024), measured by five indicators: reliability, responsiveness, assurance, empathy, and tangibles. MSME Performance (Y) is defined as the extent to which MSMEs achieve business objectives measured from both financial and non-financial aspects (Koerniawan et al., 2024), measured by four indicators: customer satisfaction, product innovation, business competitiveness, and networking and partnerships. All variables were measured using a Likert scale.

Data analysis was performed with SEM-PLS (Structural Equation Modeling – Partial Least Squares). According to (Hair & Alamer, 2022), SEM-PLS is an iterative approach-based technique that maximizes the variance explained in each endogenous variable, and does not require data to be normally distributed. The analysis includes convergent validity assessment (outer loadings > 0.7 and AVE > 0.5), reliability evaluation (Cronbach's alpha and composite reliability > 0.7), partial hypothesis testing (t-tests), and simultaneous testing (F-tests).

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics results show that all items have excess kurtosis and skewness values between -2 and 2, confirming that the data are normally distributed. Mean scores for Digital Marketing items range from 3.40 to 4.10; Price items from 3.14 to 3.82; Service Quality items from 3.44 to 3.90; and MSME Performance items from 3.16 to 3.84. Median values are predominantly 4 (Agree), indicating generally positive respondent perceptions across all variables.

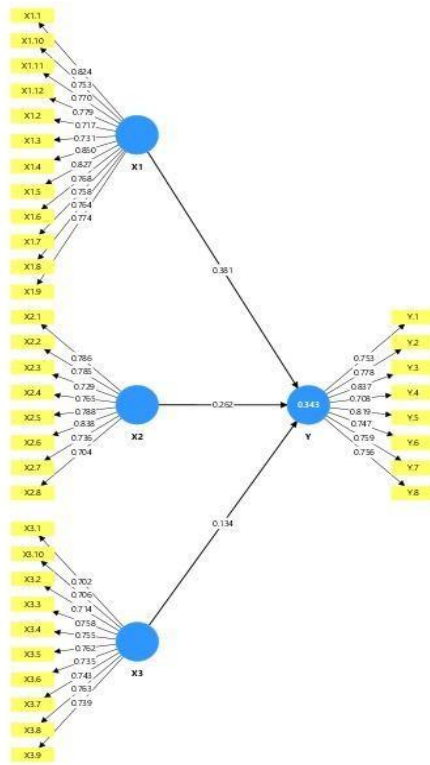


Figure 1. Example of Image Caption

Table 1. Respondent Tabulation Combined Table

Name	SS	S	N	TS	STS
X1.1	37	36	13	8	6
X1.2	25	34	22	12	7
X1.3	34	16	21	24	5
X1.4	41	42	5	5	7
X1.5	33	52	3	9	3
X1.6	48	29	12	7	4
X1.7	31	32	17	12	8
X1.8	41	41	6	4	8
X1.9	25	25	23	19	8
X1.10	40	28	15	9	8
X1.11	34	24	21	11	10
X1.12	40	41	7	7	5
X2.1	31	41	5	14	9
X2.2	33	22	17	17	11
X2.3	24	26	24	17	9
X2.4	30	40	11	15	4
X2.5	37	27	19	15	2
X2.6	24	26	25	17	8
X2.7	27	19	24	18	12

Name	SS	S	N	TS	STS
X2.8	30	10	21	22	17
X3.1	40	22	12	11	15
X3.2	27	27	21	16	9
X3.3	39	25	16	11	9
X3.4	34	36	12	11	7
X3.5	28	33	16	15	8
X3.6	28	39	12	13	8
X3.7	38	26	18	13	5
X3.8	43	30	10	8	9
X3.9	36	27	12	16	9
X3.10	31	24	17	14	14
Y.1	22	25	14	25	14
Y.2	34	27	14	16	9
Y.3	32	48	3	6	11
Y.4	37	23	11	15	14
Y.5	28	45	10	5	12
Y.6	31	22	12	18	17
Y.7	29	20	17	22	12
Y.8	20	35	16	16	13

Source: Processed by Researcher (2026)

Table 2 Validity Convergen

Variable	Indicator	Outer Loading	AVE	Result
Digital Marketing (X ₁)	X1.1	0.735	0.677	Valid
	X1.2	0.763		
	X1.3	0.762		
	X1.4	0.838		
	X1.5	0.776		
	X1.6	0.872		
	X1.7	0.888		
	X1.8	0.828		
	X1.9	0.869		
	X1.10	0.883		
	X1.11	0.887		
	X1.12	0.746		
Price (X ₂)	X2.1	0.799	0.698	Valid
	X2.2	0.899		
	X2.3	0.748		
	X2.4	0.830		
	X2.5	0.761		
	X2.6	0.851		
	X2.7	0.914		
	X2.8	0.866		
Service Quality (X ₃)	X3.1	0.878		
	X3.2	0.803		
	X3.3	0.912		
	X3.4	0.898		
	X3.5	0.865		

Variable	Indicator	Outer Loading	AVE	Result
	X3.6	0.720	0.714	Valid
	X3.7	0.794		
	X3.8	0.831		
	X3.9	0.859		
	X3.10	0.871		
MSME Performance (Y)	Y.1	0.868	0.663	Valid
	Y.2	0.809		
	Y.3	0.874		
	Y.4	0.819		
	Y.5	0.771		
	Y.6	0.759		
	Y.7	0.811		
	Y.8	0.796		

Table 3. Composite reliability & Cronbach's alpha

Variabel	Cronbach's alpha	Composite reliability	Information
Digital Marketing (X ₁)	0.956	0.958	Reliabel
Price (X ₂)	0.937	0.946	Reliabel
Service Quality (X ₃)	0.955	0.958	Reliabel
MSME Performance (Y)	0.928	0.937	Reliabel

Source: Processed by Researcher (2026)

Structural Model (Inner Model – R-Square)

Table 7 displays the R-Squared results. The Adjusted R-Squared score of 0.323 signifies that 32.3% of the volatility in MSME is explained.

Table 4 R Square Values

	R-Square	Adjusted R-Square
MSME Performance (Y)	0.343	0.323

Source: Processed by Researcher (2026)

Hypothesis Testing – Partial Test (t-Test)

Table 8 presents the results of the partial hypothesis test (t-test) for each variable.

Table 5. T-Statistic Test Result

	Original sample	Sample mean	Standard deviation	T statistics (O/STDEV)	P values
Digital Marketing -> MSME Performance	0.381	0.381	0.090	4.215	0.000
Price -> MSME Performance	0.262	0.270	0.081	3.233	0.001
Service Quality -> MSME Performance	0.134	0.153	0.079	1.693	0.090

Source : Processed by Researcher (2026)

Effect of Digital Marketing on MSME Performance

The digital marketing variable (X1) produces a t-statistic of 4.215 (> 1.96) and a p-value of 0.000 (< 0.05), indicating that digital marketing exerts a positive and substantial influence on MSME performance in Medan City. This finding is consistent with (Hafeez et al., 2025), who emphasized that digital transformation including digital marketing capabilities serves as a key enabler of SME performance improvement within competitive business ecosystems. The use of digital platforms such as social media, marketplaces, and online advertising has proven effective in broadening market reach, increasing brand visibility, and ultimately improving sales performance. MSMEs that actively engage in digital marketing are better positioned to compete in an increasingly connected marketplace (Setiawan et al., 2025).

Effect of Price on MSME Performance

The price variable (X2) yields a t-statistic of 3.233 (> 1.96) with a p-value of 0.001 (< 0.05), confirming that price has a positive and significant effect on MSME performance in Medan City. This outcome aligns with the

findings of Astuti et al. (2023), who reported that pricing had a favorable, significant impact on purchasing decisions in e-commerce settings. Competitive, accurately adjusted pricing that mirrors customers' purchasing capacity is a crucial factor in the success of MSMEs. When prices are regarded as equitable and commensurate with product quality and benefits, people are more inclined to purchase, thereby enhancing business performance. This is further supported by (Anjani & Simamora, 2022) and (Daud & Sirait, 2026), who similarly found that price significantly influences consumer purchase decisions in MSME and digital commerce contexts.

Effect of Service Quality on MSME Performance

The service quality variable (X3) produces a t-statistic of 1.693 (< 1.96) and a p-value of 0.090 (> 0.05), suggesting that service quality does not significantly impact MSME performance in Medan City. This result contrasts with findings by (Ardiansyah & Praswati, 2024), who found that service quality significantly influences purchase decisions among MSMEs in Surakarta. The non-significant result in this study may be attributed

to the fact that consumers in Medan Petisah District prioritize digital accessibility and price competitiveness over service interactions when making purchasing decisions, particularly given the increasingly transactional nature of digital commerce.

Simultaneous Effect – F-Test

Based on the R-Square value of 0.323, with $n = 100$ and $k = 3$ variables, the calculated F-value is 22.9. Since $F\text{-calculated} (22.9) > F\text{-table} (2.46)$, the null hypothesis is rejected. This confirms that digital marketing, price, and service quality simultaneously have a positive and significant effect on MSME performance in Medan City. Although service quality alone does not demonstrate significant individual impact, its combined contribution within the model remains meaningful. This is consistent with (Harini, 2023), who identified multiple determinants—including marketing and pricing strategies—as collectively significant predictors of SME performance in Indonesia.

CONCLUSION

Based on the results and discussion, the following conclusions are drawn: (1) Digital marketing has a positive and significant effect on MSME performance in Medan City ($t = 4.215$; $p = 0.000$); (2) Price has a positive and significant effect on MSME performance ($t = 3.233$; $p = 0.001$); (3) Service quality does not have a significant effect on MSME performance ($t = 1.693$; $p = 0.090$); and (4) Digital marketing, price, and service quality simultaneously have a positive and significant effect on MSME performance, with an Adjusted R-Square of 32.3%. For future researchers, it is

recommended to expand the scope of variables studied—such as product innovation, financial management, technology adoption, and customer loyalty—and to broaden the research area beyond Medan City for comparative analysis. For MSME practitioners, it is advisable to maximize the use of digital marketing strategies through social media, marketplaces, and other digital platforms, and to establish competitive and well-considered pricing policies. While service quality was not statistically significant in this study, MSME actors are still encouraged to maintain and continuously improve service standards to build long-term customer relationships and enhance overall consumer satisfaction.

REFERENCE

- Anjani, E. R., & Simamora, V. (2022). PENGARUH INFLUENCER, HARGA DAN KUALITAS PRODUK SKINCARE SCARLETT WHITENING TERHADAP KEPUTUSAN PEMBELI GENERASI Z, DKI JAKARTA. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 6(3), 1293–1308. <https://doi.org/https://doi.org/10.31955/mea.v6i3.2547>
- Ardiansyah, G., & Praswati, A. N. (2024). Pengaruh Kualitas Produk, Kualitas Layanan, dan Harga Terhadap Minat Keputusan Pembelian pada UMKM Surakarta. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 5(7), 3919–3935. <https://doi.org/1047467/elmal.v5i7.4146>
- Astuti, W. S., Reny, A., Tandiono, D., & Calvin.
-

- (2023). Harga, Promosi, Ulasan, dan Foto Produk Terhadap Keputusan Pembelian E-Commerce. *Journal of Management and Business (JOMB)*, 5, 159–176. <https://doi.org/10.31539/jomb.v5i1.5246>
- 159
- Daud, S., & Sirait, U. A. (2026). *The Influence of Social Media and Price on Purchase Decisions (A Case Study of the Bakso Apak MSME in Pahoman , Bandar Lampung)*. 7(4), 930–938.
- Fahrizal, M., Komariah, N. S., & Faeni, D. P. (2024). *Pengaruh Kualitas Pelayanan dan Kualitas Produk terhadap Kepuasan Pelanggan Melalui Word Of Mouth Pada UMKM Bakso Perintis Bogor*. 1(3), 201–215.
- Ghozali, I. (2021). Structural Equation Modeling: Metode Alternatif dengan Partial Least Squares (PLS). In *Badan Penerbit Universitas Diponegoro* (5th ed.).
- Hafeez, S., Shahzad, K., & Silva, M. De. (2025). Enhancing digital transformation in SMEs : The dynamic capabilities of innovation intermediaries within ecosystems. *Long Range Planning*, 58(3), 102525. <https://doi.org/10.1016/j.lrp.2025.102525>
- Hair, J., & Alamer, A. (2022). Research Methods in Applied Linguistics Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research : Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027. <https://doi.org/10.1016/j.rmal.2022.100027>
- 27
- Harini, S. (2023). *Determinants of SME performance : Evidence from Indonesia*. [https://doi.org/10.21511/ppm.21\(1\).2023.40](https://doi.org/10.21511/ppm.21(1).2023.40)
- 40
- Koerniawan, I., Triatmanto, B., & Zuhroh, D. (2024). *Increasing SME Performance Through Quality Information Technology and Top Management Support*. 3(1), 63–69.
- Maharani, P. S., & Wiyadi. (2024). PRICE PERCEPTION, PRODUCT VARIETY, SERVICE QUALITY, AND PROMOTION: THEIR INFLUENCE ON CONSUMER PURCHASE DECISIONS AT SUPERINDO BOYOLALI. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)*, 7(2), 2731–2749. <https://e-journal.uac.ac.id/index.php/ijse/article/view/4895>
- Setiawan, R., Prasetyo, P. T., Yuniawan, A., & Diponegoro, U. (2025). *Research Horizon*. 0696.
- Sharabati, A. A., Ali, A., Ali, A., Allahham, M. I., Hussein, A. A., Alheet, A. F., & Mohammad, A. S. (2024). *The Impact of Digital Marketing on the Performance of SMEs : An Analytical Study in Light of Modern Digital Transformations*. 1–25.
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