



Digital Marketing Capability as a Strategic Driver of Firm Performance: Evidence from Culinary MSMEs in Medan City

Genesis Sembiring Depari^{1*}, Jenny Halim²

¹Universitas Sumatera Utara

²Universitas Pelita Harapan

Corresponding Author: Genesis Sembiring Depari: genesissembiring@usu.ac.id

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ABSTRACT

This study investigates the influence of Digital Marketing Capability, Organizational Agility, and Human Capital on Firm Performance among culinary MSMEs in Medan City. Using a quantitative approach, primary data were obtained from ninety-seven respondents, including business owners, managers, and employees, through structured questionnaires. The data were analyzed using descriptive statistics and multiple linear regression with SPSS version 25. The findings reveal that Digital Marketing Capability has a positive and significant effect on Firm Performance, while Organizational Agility and Human Capital show no significant influence. Simultaneously, the three variables collectively have a positive impact on performance. These results suggest that mastering digital marketing strategies plays a dominant role in enhancing competitiveness and business success. The study supports the Resource Based View (RBV) theory, emphasizing that internal digital competence serves as a strategic asset for achieving sustainable firm performance among culinary MSMEs in Medan City.

development programs, and overall enterprise performance. A high number of MSMEs in certain districts does not necessarily reflect stronger business performance, as enterprises may face challenges related to limited managerial capability, human capital constraints, and adaptability to market changes. These conditions highlight the importance of examining the factors that influence MSME performance in Medan City, particularly in understanding how internal capabilities and organizational practices contribute to business sustainability and regional economic development (Satudata Medan, 2025)

Organizational agility represents a critical determinant of firm performance, particularly within MSMEs, as it enables enterprises to promptly recalibrate their strategies, restructure operational frameworks, and assimilate innovations with efficiency. This construct encapsulates a company's capacity to anticipate and respond to market dynamics in a timely and effective manner, which is indispensable for sustaining competitiveness in an ever-evolving business environment. The accelerating pace of economic shifts, technological progress, and customer behavioral changes necessitates immediate and well-orchestrated strategic adjustments; failure to do so may imperil an organization's viability and compromise its long-term endurance (Bekos et al., 2025).

The optimization of these internal capabilities enables MSMEs to expand market reach beyond their immediate locations, respond more effectively to dynamic business conditions, and improve the utilization of workforce potential. Improvements in these areas not only enhance firm performance at the enterprise level but also contribute to reducing performance disparities among districts and supporting sustainable regional economic development. Based on the aforementioned discussion, this study aims to examine whether these variables significantly influence firm performance, under the title: "The Influence of Digital Marketing Capability, Organizational Agility, and Human Capital on Firm Performance in Culinary MSMEs in Medan City."

HYPOTHESES DEVELOPMENT

The Influence of Digital Marketing Capability on Firm Performance

Digital marketing capability (DMC) encompasses a firm's proficiency in utilizing digital tools, platforms, and strategies such as social media, digital content, customer data analytics, and online communication to enhance marketing outcomes. (Song & Liu, 2024) highlighted that DMC comprises several dimensions including digital relationship capability, digital selling, and digital leadership which collectively contribute to better market reach, improved customer engagement, and strategic flexibility. In the context of culinary MSMEs in Medan, where digital channels are essential for customer interaction, brand visibility, and service delivery (e.g., food ordering platforms), DMC becomes a pivotal factor in enhancing competitiveness and sustaining growth. Firms that possess strong digital marketing capabilities are more likely to attract customers, respond to market shifts, and improve overall business performance, thus justifying the hypothesis that:

H₁: Digital marketing capability has a positive and significant effect on firm performance.

The Influence of Organizational Agility on Firm Performance

Organizational agility refers to a firm's dynamic capability to sense environmental changes, respond swiftly, and reconfigure its resources effectively to maintain strategic advantage. While (Hariandja et al., 2020) found that agility did not significantly mediate the relationship between network resources and firm performance, they acknowledged its potential value, especially in volatile industries. Agility enables businesses to rapidly innovate, adjust offerings, and navigate uncertainty, traits particularly vital in the culinary industry where customer preferences, supply chain conditions, and market dynamics evolve quickly. For MSMEs in Medan, organizational agility can manifest in adjusting menus based on seasonal demand, shifting marketing strategies, or adopting new delivery methods. Agility also fosters resilience, allowing firms to sustain operations and performance amid disruptions such as economic downturns or changing consumer behavior. Thus, it is hypothesized that higher levels of organizational agility will lead to better firm performance within the culinary MSME sector.

H₂: Organizational agility has a positive and significant effect on firm performance.

The Influence of Human Capital on Firm Performance

Human capital, defined as the collective knowledge, skills, competencies, and attributes possessed by employees, is a critical intangible asset for organizational success. (Annu, 2023) emphasized that investment in human capital leads to enhanced innovation, improved problem-solving capabilities, greater employee satisfaction, and ultimately, superior firm performance. The study also noted that human capital contributes to employee retention and organizational creativity, which are essential for sustaining competitiveness. In the culinary MSME context, skilled and motivated employees directly influence product quality, customer service, and operational efficiency, factors that significantly affect performance outcomes. As MSMEs often operate with limited resources, the quality and effectiveness of their human capital can be a key differentiator. Employees who are well-trained, adaptable, and engaged help businesses innovate, improve service standards, and respond to customer needs. Therefore, it is hypothesized that:

H₃: Human capital has a positive and significant effect on firm performance.

The Influence of Digital Marketing Capability, Organizational Agility, and Human Capital on Firm Performance

In addition to examining the partial effects of each independent variable, this study also evaluates the combined influence of digital marketing capability, organizational agility, and human capital on firm performance. These three internal capabilities are interrelated and collectively form a strategic foundation for enhancing competitiveness and organizational outcomes, particularly within the culinary MSME sector in Medan City. Digital marketing capability enables firms to expand market reach and engage with customers more effectively; organizational agility equips businesses with the responsiveness needed to adapt

to dynamic market conditions; and strong human capital contributes to innovation, service quality, and operational efficiency. When developed in an integrated manner, these capabilities are expected to generate a synergistic effect, leading to greater improvements in firm performance than if they were advanced in isolation. Based on this rationale, the following hypothesis is proposed:

H₄: Digital Marketing Capability, Organizational Agility, and Human capital simultaneously influence firm performance.

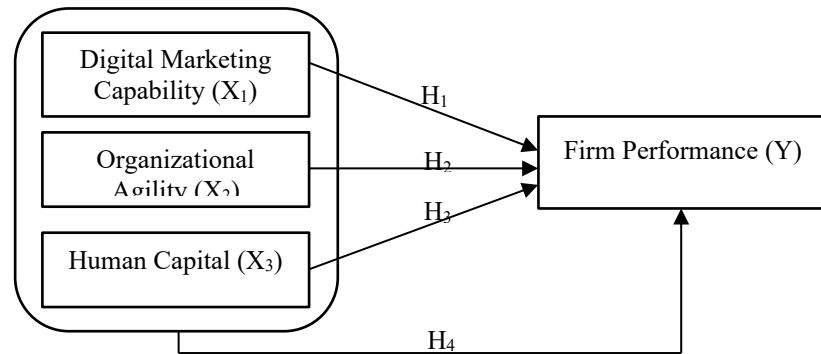


Figure 2.1 Research Model

Source: Prepared by the Writer (2025)

METHOD

This study employs a quantitative explanatory approach to examine the influence of digital marketing capability, organizational agility, and human capital on firm performance among culinary MSMEs in Medan City. The research object consists of MSME owners, managers, and employees who were directly involved in business operations during the data collection period of June–July 2025.

Data were collected through structured questionnaires using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Indicators for each variable were adapted from prior studies – digital marketing capability (Song & Liu, 2024), organizational agility (Hariandja et al., 2020), human capital (Annu, 2023), and firm performance (Richard et al., 2009). Because the total population of culinary MSMEs in Medan is unknown, this study uses non-probability sampling and determines the sample size using the Lemeshow formula, resulting in 97 eligible MSMEs.

Primary data were obtained through questionnaires, non-participant observations, and semi-structured interviews, while secondary data were collected from relevant literature, official reports, and previous research. The analysis includes descriptive statistics, instrument testing, classical assumption testing, and multiple linear regression to evaluate the partial and simultaneous effects of the independent variables on firm performance.

RESULT AND DISCUSSION

Descriptive Statistic

Table 1 Descriptive Statistic

		Statistics			
		TOTAL_DMC	TOTAL_OA	TOTAL_HC	TOTAL_FP
N	Valid	97	97	97	97
	Missing	0	0	0	0
Mean		51.5258	34.0825	42.6804	25.8763
Median		54.0000	36.0000	45.0000	27.0000
Mode		54.00	36.00	46.00	27.00
Std. Deviation		8.44725	5.56528	7.13639	4.51215
Minimum		16.00	10.00	14.00	8.00
Maximum		60.00	40.00	50.00	30.00

Source: Prepared by Writer (2025)

1. The mean value of 51.53 indicates that respondents' overall digital marketing capability is relatively high, approaching the maximum observed value of 60. The median and mode, both at 54, demonstrate that the majority of respondents scored around this level, reflecting consistency in digital marketing practices. The standard deviation of 8.45 suggests a moderately wide dispersion among responses, implying noticeable variability in the implementation of digital marketing strategies. The observed range, from 16 to 60, further highlights the heterogeneity in the respondents' digital marketing proficiency.
2. The mean score of 34.08, with both the median and mode equal to 36, reflects a generally high level of organizational agility, nearing the maximum possible score of 40. The standard deviation of 5.57 suggests moderate variability, indicating that most respondents share similar perceptions of their organizations' adaptive capability. The minimum value of 10 and maximum of 40 reveal that while some respondents perceive relatively low agility, the overall trend demonstrates a strong organizational ability to respond effectively to changes.
3. The mean value of 42.68 demonstrates that respondents possess relatively high levels of human capital compared to the maximum score of 50. The median (45) and mode (46) show that most respondents reported scores near the upper range, signifying well-developed competencies, knowledge, and experience. The standard deviation of 7.14 indicates moderate variability, implying that while most respondents possess strong human capital attributes, there remains some variation across individuals. The range between 14 and 50 further reflects differing levels of expertise and professional capability among the participants.
4. The mean of 25.88, along with a median and mode of 27, indicates that the distribution of firm performance scores is relatively symmetrical. The maximum value of 30 and minimum of 8 reveal moderate differences in firm outcomes across respondents. The standard deviation of 4.51 signifies a reasonable level of variation in performance levels. Overall, these findings suggest that the firms represented in this study generally exhibit satisfactory performance levels.

Validity Test

Table 2 Digital Marketing Capability Validity Test

No. Item	R	R Tabel	Description
1	0.801	0.1975	Valid
2	0.821	0.1975	Valid
3	0.744	0.1975	Valid
4	0.660	0.1975	Valid
5	0.761	0.1975	Valid
6	0.731	0.1975	Valid
7	0.787	0.1975	Valid
8	0.772	0.1975	Valid
9	0.782	0.1975	Valid
10	0.799	0.1975	Valid
11	0.785	0.1975	Valid
12	0.801	0.1975	Valid

Source: Prepared by Writer (2025)

Table 2 displays the results of the validity test for the Digital Marketing Capability variable, analyzed using the Pearson Product Moment correlation method. The test compares the correlation coefficient (*r-count*) of each item with the *r-table* value of 0.1975 at a significance level of $\alpha = 0.05$ and a sample size of 97 respondents. The results show that all twelve items have *r-count* values greater than 0.1975, confirming that every item is valid and effectively measures the same construct. The highest validity coefficient is found in item 2 ($r = 0.821$), indicating that this item most strongly represents the digital marketing capability construct among respondents. Meanwhile, the lowest coefficient appears in item 4 ($r = 0.660$), which still exceeds the critical threshold and is therefore considered valid. Overall, the *r-values* ranging from 0.660 to 0.821 suggest a strong positive correlation between each item and the total variable score, meaning that all items consistently capture the intended dimension of digital marketing capability and can be retained for further statistical analysis.

Table 3 Organizational Agility Validity Test

No. Item	R	R Tabel	Description
1	0.792	0.1975	Valid
2	0.765	0.1975	Valid
3	0.774	0.1975	Valid
4	0.707	0.1975	Valid
5	0.765	0.1975	Valid
6	0.722	0.1975	Valid
7	0.801	0.1975	Valid
8	0.793	0.1975	Valid

Source: Prepared by Writer (2025)

Table 3 presents the validity test results for the Organizational Agility variable. The analysis employed the Pearson Product Moment correlation method, with the obtained *r-count* values compared to the *r-table* value of 0.1975 at a significance level of $\alpha = 0.05$ and a sample size of 97 respondents. The results show that all eight items have *r-count* values greater than the *r-table*, confirming that each indicator is valid and capable of measuring the construct accurately. The highest correlation coefficient is found in item 7 ($r = 0.801$), signifying that this item most strongly reflects the construct of organizational agility among respondents. Conversely, the lowest coefficient is identified in item 4 ($r = 0.707$), which still exceeds the critical threshold, thereby maintaining its validity. The range of correlation coefficients between 0.707 and 0.801 indicates a strong and positive relationship between each item and the overall variable score. These results imply that the instrument items for the Organizational Agility variable are consistent, theoretically sound, and can be confidently used for further reliability testing and hypothesis analysis.

Table 4 Human Capital Validity Test

No. Item	R	R Tabel	Description
1	0.858	0.1975	Valid
2	0.726	0.1975	Valid
3	0.796	0.1975	Valid
4	0.733	0.1975	Valid
5	0.810	0.1975	Valid
6	0.742	0.1975	Valid
7	0.701	0.1975	Valid
8	0.762	0.1975	Valid
9	0.823	0.1975	Valid
10	0.781	0.1975	Valid

Source: Prepared by Writer (2025)

Table 4 displays the validity test results for the Human Capital variable. Using the Pearson Product Moment correlation method, each item's *r-count* value was compared with the *r-table* value of 0.1975 at a significance level of $\alpha = 0.05$ and with 97 respondents. The results reveal that all ten items have *r-count* values exceeding the *r-table*, indicating that each statement is valid and accurately measures the construct of human capital. The highest correlation coefficient is recorded for item 1 ($r = 0.858$), demonstrating that this item most strongly represents the human capital dimension among respondents. Meanwhile, the lowest coefficient is observed in item 7 ($r = 0.701$), which still surpasses the critical value, confirming its validity. The correlation values ranging from 0.701 to 0.858 suggest a strong positive relationship between each item and the total construct score, indicating internal consistency among the indicators. Therefore, all items under the Human Capital variable are considered valid and suitable for further analysis in reliability testing and hypothesis evaluation.

Table 5 Firm Performance Validity Test

No. Item	R	R Tabel	Description
1	0.745	0.1975	Valid
2	0.781	0.1975	Valid
3	0.805	0.1975	Valid
4	0.709	0.1975	Valid
5	0.867	0.1975	Valid
6	0.874	0.1975	Valid

Source: Prepared by Writer (2025)

Table 5 presents the validity test results for the Firm Performance variable. The analysis was carried out using the Pearson Product Moment correlation method, where each item's *r-count* value was compared to the *r-table* value of 0.1975 at a significance level of $\alpha = 0.05$ with 97 respondents. The results show that all six items have *r-count* values greater than the *r-table*, confirming that all statements are valid and effectively measure the construct of firm performance. The highest correlation coefficient is found in item 6 ($r = 0.874$), indicating that this item most strongly represents the firm performance construct among respondents. In contrast, the lowest correlation coefficient appears in item 4 ($r = 0.709$), which still exceeds the minimum threshold and thus remains valid. The correlation range of 0.709 to 0.874 reflects a strong and positive relationship between each item and the total score of the variable, demonstrating that all indicators are consistent and theoretically coherent. Consequently, all six items under the Firm Performance variable are declared valid and appropriate for inclusion in further reliability and hypothesis testing stages.

Reliability Test

Table 6 Reliability Test

Digital Marketing Capability Reliability Statistics	
Cronbach's Alpha	N of Items
.937	12
Organizational Agility Reliability Statistics	
Cronbach's Alpha	N of Items
.898	8
Human Capital Reliability Statistics	
Cronbach's Alpha	N of Items
.925	10
Firm Performance Reliability Statistics	
Cronbach's Alpha	N of Items
.886	6

Source: Prepared by Writer (2025)

The reliability test aims to determine the internal consistency of the measurement instruments used in this study. Reliability was assessed using Cronbach's Alpha, with a coefficient value above 0.60 indicating that an instrument is considered reliable and consistent in measuring a particular construct. As shown in Table 6, the Digital Marketing Capability variable obtained a Cronbach's Alpha value of 0.937 across 12 items, signifying an excellent level of reliability and a high degree of internal consistency among the indicators. The Organizational Agility variable recorded a Cronbach's Alpha of 0.898 for 8 items, also falling into the category of very reliable. Meanwhile, the Human Capital variable achieved a Cronbach's Alpha of 0.925 for 10 items, confirming that the items used to measure human capital are highly consistent. Lastly, the Firm Performance variable produced a Cronbach's Alpha of 0.886 for 6 items, which likewise demonstrates strong reliability. Based on these results, all variables in this research exhibit Cronbach's Alpha values well above the minimum threshold of 0.60, thereby confirming that the questionnaire items are reliable, consistent, and suitable for further statistical analyses such as regression and hypothesis testing.

Normality Test

Table 7 Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual	
N		89	
Normal Parameters ^{a,b}	Mean	.0000000	
	Std. Deviation	.16515175	
Most Extreme Differences	Absolute	.073	
	Positive	.053	
	Negative	-.073	
Test Statistic		.073	
Asymp. Sig. (2-tailed)		.200 ^{c,d}	
Monte Carlo Sig. (2-tailed)	Sig.	.692 ^e	
	99% Confidence Interval	Lower Bound	.680
	Upper Bound	.704	

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

e. Based on 10000 sampled tables with starting seed 926214481.

Source: Prepared by Writer (2025)

To verify compliance with the normality assumption in the regression model, the distribution of residual data was examined using the One Sample Kolmogorov-Smirnov test, as presented in Table 7. The obtained Asymp. Sig. (2-tailed) value of 0.200, which exceeds the 0.05 significance threshold, confirms that the residuals follow a normal distribution pattern. This conclusion is further reinforced by the Monte Carlo Sig. (2-tailed) value of 0.692, with a 99 percent

confidence interval ranging from 0.680 to 0.704, indicating the absence of any notable deviation from normality. Moreover, the mean value of the unstandardized residuals (0.0000000) and the standard deviation (0.16515175) signify a symmetrical dispersion around the central mean, suggesting that the residuals conform to the characteristics of a normal distribution, thereby satisfying a fundamental prerequisite for valid parametric analysis.

Multicollinearity Test

Table 8 Multicollinearity Test

Model	Coefficients ^a					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Std. Error	Beta				
1 (Constant)	-.179	.057		-3.150	.002		
Lg10_DMC	.444	.107	.459	4.145	.000	.310	3.222
Lg10_OA	.240	.121	.207	1.984	.050	.348	2.873
Lg10_HC	.223	.127	.219	1.749	.084	.242	4.137

a. Dependent Variable: Lg10_FP
 Source: Prepared by Writer (2025)

The multicollinearity test is conducted to examine whether the independent variables in the regression model exhibit a high degree of intercorrelation, which may compromise the precision of the regression estimates. This assessment employs Tolerance and Variance Inflation Factor (VIF) values as diagnostic indicators. As presented in Table 8, all independent variables—Digital Marketing Capability, Organizational Agility, and Human Capital—display Tolerance values exceeding 0.10 and VIF values below 10, thereby confirming the absence of multicollinearity among the predictors. Specifically, Digital Marketing Capability records a Tolerance value of 0.310 with a VIF of 3.222, Organizational Agility yields a Tolerance value of 0.348 and a VIF of 2.873, while Human Capital demonstrates a Tolerance value of 0.242 and a VIF of 4.137, indicating that the regression model satisfies the assumption of multicollinearity-free variables. These results fall within the acceptable criteria, showing that the independent variables do not influence each other excessively. Therefore, it can be concluded that the regression model is free from multicollinearity, meaning each independent variable provides unique information that contributes to explaining the dependent variable.

Heteroskedasticity Test

Table 9 Heteroskedasticity Test

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1 (Constant)	.198	.035		5.641	.000
Lg10_DMC	-.087	.066	-.248	-1.312	.193
Lg10_OA	.008	.075	.018	.100	.920
Lg10_HC	-.005	.079	-.014	-.064	.949

a. Dependent Variable: Abs_RES
 Source: Prepared by Writer (2025)

The heteroskedasticity test aims to identify whether there is a variance inequality in the residuals of the regression model. This assumption must be fulfilled to ensure that the estimated parameters remain efficient and unbiased. The test was carried out using the Glejser method, as shown in Table 9, where the significance values of each independent variable were compared to the significance level of 0.05.

The results show that the significance values for Digital Marketing Capability (0.193), Organizational Agility (0.920), and Human Capital (0.949) are all greater than 0.05, indicating that none of the independent variables have a significant effect on the absolute residual value. This means the variance of the residuals is consistent across observations. Therefore, it can be concluded that the regression model in this study does not exhibit heteroskedasticity, and the model meets the assumption of homoscedasticity required for multiple linear regression analysis.

Linearity Test

Table 10 Digital Marketing Capability Linearity Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Lg10_FP *	Between	(Combined)	5.773	19	.304	12.608	.000
Lg10_DMC	Groups						
		Linearity	4.636	1	4.636	192.365	.000
		Deviation from Linearity	1.137	18	.063	2.621	.002
	Within Groups		1.663	69	.024		
	Total		7.436	88			

Source: Prepared by Writer (2025)

To ascertain the presence of linearity between the independent and dependent variables, a linearity assessment was executed. As illustrated in Table 10, the ANOVA Linearity Test between Digital Marketing Capability and Firm Performance yielded a significance value of 0.002, which falls below the 0.05 probability threshold. This outcome implies the absence of a linear association between the two constructs. Furthermore, the computed F value of 2.621, surpassing the critical F-table value of 1.755, reinforces this inference by indicating a nonlinear relational pattern between Digital Marketing Capability and Firm Performance.

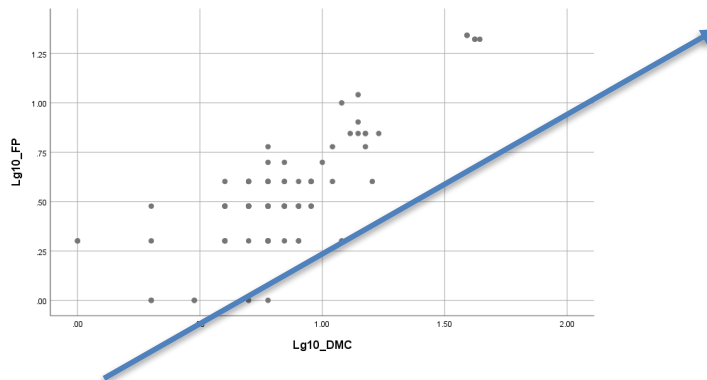


Figure 1 Digital Marketing Capability Scatterplot

Source: Prepared by Writer (2025)

However, the scatterplot shown in Figure 1 illustrates a pattern of data points forming a straight line that rises from the lower left to the upper right, which visually indicates a positive and linear relationship between the two variables. Thus, while the statistical test suggests a deviation from linearity, the visual analysis of the scatterplot implies that Digital Marketing Capability tends to have a positive association with Firm Performance in this research context.

Table 11 Organizational Agility Linearity Test

			ANOVA Table				
			Sum of Squares	df	Mean Square	F	Sig.
Lg10_FP *	Between	(Combined)	4.831	13	.372	10.696	.000
Lg10_OA	Groups	Linearity	3.813	1	3.813	109.766	.000
		Deviation from Linearity	1.017	12	.085	2.440	.010
	Within Groups		2.606	75	.035		
	Total		7.436	88			

Source: Prepared by Writer (2025)

Based on Table 11, the results of the ANOVA Linearity Test between Organizational Agility (Lg10_OA) and Firm Performance (Lg10_FP) show a significance value of 0.010, which is smaller than 0.05. This means that Organizational Agility and Firm Performance do not have a linear relationship. The calculated F value of 2.440 is greater than the F table value of 1.884, confirming that there is no linear relationship between the two variables.

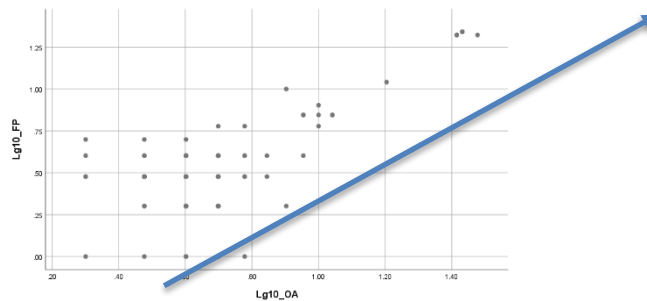


Figure 2 Organizational Agility Scatterplot

Source: Prepared by Writer (2025)

However, as illustrated in Figure 2, the scatterplot displays data points that generally form an upward straight-line pattern from the lower left to the upper right. This visual trend indicates a positive and linear association between Organizational Agility and Firm Performance. Therefore, although the statistical test results suggest the absence of a linear relationship, the graphical output indicates that an increasing level of Organizational Agility tends to be associated with higher Firm Performance, suggesting a positive tendency in the relationship between both variables.

Table 12 Human Capital Linearity Test

			ANOVA Table				
			Sum of Squares	df	Mean Square	F	Sig.
Lg10_FP *	Between	(Combined)	5.628	18	.313	10.628	.000
Lg10_HC	Groups	Linearity	4.582	1	4.582	155.730	.000
		Deviation from Linearity	1.047	17	.062	2.093	.016
	Within Groups		2.089	71	.029		
	Total		7.717	89			

Source: Prepared by Writer (2025)

Based on Table 12, the results of the ANOVA Linearity Test between Human Capital (Lg10_HC) and Firm Performance (Lg10_FP) show a significance value of 0.016, which is smaller than 0.05. This means that Human Capital and

Firm Performance do not have a linear relationship. The calculated F value of 2.093 is greater than the F table value of 1.769, which also indicates that there is no linear relationship between the two variables.

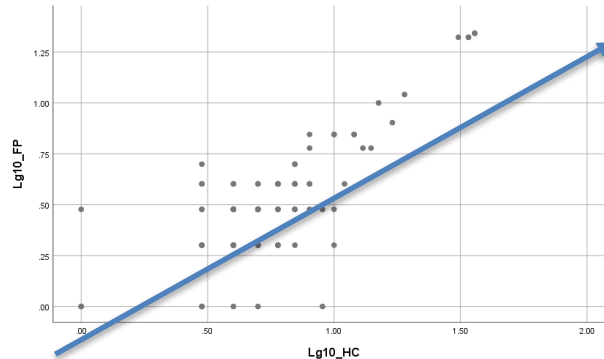


Figure 3 Human Capital Scatterplot

Source: Prepared by Writer (2025)

However, the scatterplot in Figure 3 displays data points that generally form a straight-line pattern ascending from the lower left to the upper right. This visual representation demonstrates that there is a positive and linear trend between Human Capital and Firm Performance. Therefore, although the statistical test results indicate a deviation from linearity, the graphical output suggests that as Human Capital increases, Firm Performance also tends to increase, implying a positive association between both variables in practical terms.

Linear Regression

Table 13 Linear Regression

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.179	.057		-3.150	.002
	Lg10_DMC	.444	.107	.459	4.145	.000
	Lg10_OA	.240	.121	.207	1.984	.050
	Lg10_HC	.223	.127	.219	1.749	.084

a. Dependent Variable: Lg10_FP
 Source: Prepared by Writer (2025)

The multiple linear regression analysis was conducted to examine the influence of Digital Marketing Capability, Organizational Agility, and Human Capital on Firm Performance. The interpretation of each coefficient is explained as follows:

$$Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + e$$

$$Y = -0.179 + 0.444 X_1 + 0.240 X_2 + 0.223 X_3$$

1. The negative constant value indicates that when all independent variables are equal to zero, the logarithmic value of Firm Performance will be - 0.179, assuming other variables remain constant.
2. The regression coefficient for Digital Marketing Capability is 0.444 with a significance value of 0.000, which is smaller than 0.05. This means that every one-unit increase in Digital Marketing Capability will increase Firm Performance by 0.444 logarithmic units, assuming other variables remain constant.
3. The regression coefficient of 0.240 this result suggests that a higher level of Organizational Agility leads to an increase of 0.240 logarithmic units in Firm Performance, assuming other variables remain constant.
4. The regression coefficient for Human Capital is 0.223, meaning that every one-unit increase in Human Capital will increase Firm Performance by 0.223 logarithmic units, assuming other variables remain constant.

Partial Significant Test (T Test)

Table 14 T Test

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.179	.057		-3.150	.002
	Lg10 DMC	.444	.107	.459	4.145	.000
	Lg10 OA	.240	.121	.207	1.984	.050
	Lg10 HC	.223	.127	.219	1.749	.084

a. Dependent Variable: Lg10_FP
 Source: Prepared by Writer (2025)

The t-test was administered to ascertain the individual explanatory potency of each independent construct on the dependent variable, while maintaining the other predictors in a constant state. As delineated in Table 13, the critical t-value at a 5 percent significance threshold ($\alpha = 0.05$) with degrees of freedom ($df = (n - k) = (97 - 4) = 93$) is 1.98580. The interpretative exposition for each variable is articulated as follows:

1. Digital Marketing Capability yielded a t-statistic of 4.145, surpassing the critical benchmark of 1.98580, with a probability value of $0.000 < 0.05$. This substantiates that Digital Marketing Capability exerts a positive and statistically consequential influence on Firm Performance, thereby validating H1.
2. Organizational Agility produced a t-statistic of 1.984, marginally inferior to the critical threshold of 1.98580, accompanied by a significance level of $0.050 = 0.05$. This denotes that Organizational Agility does not manifest a statistically discernible impact on Firm Performance, leading to the refutation of H2.
3. Human Capital registered a t-statistic of 1.749, falling below the critical value of 1.98580, with a significance probability of $0.084 > 0.05$. This outcome infers that Human Capital bears a positive but statistically inconsequential relationship with Firm Performance, resulting in the rejection of H3.

Simultaneous Significant Test (F Test)

Table 15 F Test

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.036	3	1.679	59.447	.000 ^b
	Residual	2.400	85	.028		
	Total	7.436	88			

a. Dependent Variable: Lg10_FP

b. Predictors: (Constant), Lg10_HC, Lg10_OA, Lg10_DMC

Source: Prepared by Writer (2025)

The F-test serves to evaluate whether all independent variables collectively exert a significant influence on the dependent variable. As presented in Table 14, the computed F-value is 59.447, exceeding the critical F-table value of 2.70 at a significance level of 0.05 with $df_1 = 3$ and $df_2 = 97$. Given that F-count (59.447) > F-table (2.70) and the p-value (0.000) < 0.05, it can be inferred that Digital Marketing Capability, Organizational Agility, and Human Capital collectively exert a positive and statistically significant impact on Firm Performance. Accordingly, hypothesis H4 is empirically substantiated.

Adjusted R² Test

Table 16 Adjusted R² Test

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823 ^a	.677	.666	.16804

a. Predictors: (Constant), Lg10_HC, Lg10_OA, Lg10_DMC

Source: Prepared by Writer (2025)

The Model Summary indicates a strong positive correlation (R = 0.823) between Digital Marketing Capability, Organizational Agility, and Human Capital with Firm Performance. The R² value of 0.677 shows that 67.7% of the variation in firm performance is explained by these predictors, while the remaining 33.3% is influenced by other variables not included in this study.

DISCUSSION

Digital Marketing Capability on Firm Performance

With a t-count value of 4.145 surpassing the t-table benchmark of 1.98580 and a significance level of 0.000, which is below the 0.05 threshold, the results affirm that Digital Marketing Capability exerts a statistically significant and positive impact on Firm Performance. In practical terms, this shows that when a company manages digital marketing effectively through social media, online promotion, and customer data analysis, the company can attract more consumers and strengthen its brand image. Companies with strong digital marketing skills are able to reach their target market faster and adapt to market trends, which in turn improves company performance. Therefore, strengthening digital marketing capability is one of the most effective ways to enhance overall business results.

Organizational Agility on Firm Performance

The regression analysis demonstrates that Organizational Agility recorded a t-count value of 1.984, marginally lower than the t-table value of 1.98580, with a significance level of $0.050 = 0.05$. This outcome signifies that Organizational Agility does not exert a statistically significant influence on Firm Performance. The result implies that although flexibility and responsiveness may contribute to operational improvement, their effect is not substantial enough to be recognized as statistically significant in enhancing overall company performance. This finding suggests that although organizations may be flexible, quick to adapt, and responsive to change, these characteristics do not provide a statistically significant contribution to improving firm performance in this study. This may occur because agility alone is not sufficient to influence overall company outcomes without being supported by other factors such as digital capability or human resource quality. Therefore, even though agility is conceptually important for managing dynamic market conditions, its effect on firm performance in this context is not statistically proven.

Human Capital on Firm Performance

The results reveal that Human Capital obtained a t-count value of 1.749, which is lower than the t-table value of 1.98580, with a significance level of $0.084 > 0.05$. This denotes that Human Capital exerts a positive yet statistically insignificant influence on Firm Performance. The regression coefficient of 0.223 implies that an enhancement in human capital tends to improve firm performance; however, the association lacks sufficient statistical strength. This outcome suggests that while employee competence, knowledge, and expertise contribute to organizational advancement, their impact remains incremental rather than decisive in determining firm performance. This may occur because employee potential has not been fully optimized or the impact of human capital improvement requires time to be reflected in measurable company results. Even though it is not significant, human capital remains a key element that supports the success of business operations. Continuous training, motivation, and skill development programs are necessary to ensure long term improvements in performance.

Digital Marketing Capability, Organizational Agility, and Human Capital on Firm Performance

The F-test results indicate that the calculated F-value of 59.447 exceeds the F-table value of 2.70, with a significance level of $0.000 < 0.05$, confirming that Digital Marketing Capability, Organizational Agility, and Human Capital simultaneously exert a significant impact on Firm Performance. In support of this, the Adjusted R^2 value of 0.666 demonstrates that about 66.6% of the variation in Firm Performance can be explained by these three variables, while the remaining 33.4% is attributed to other factors not included in the model. This finding highlights the importance of developing digital capability, organizational agility, and human capital in a coordinated manner, as their synergy enhances operational efficiency, responsiveness to change, and the firm's capacity to achieve long-term, sustainable growth in a competitive environment.

CONCLUSION

This study finds that Digital Marketing Capability has a positive and significant effect on Firm Performance among culinary MSMEs in Medan City. MSMEs operating in districts with high business concentration are better able to overcome location-based limitations and competitive pressures when they effectively utilize digital platforms such as social media and online marketing channels. Strong digital marketing capability enables businesses to expand market reach, enhance competitiveness, and sustain performance despite the uneven distribution of MSMEs across districts.

Conversely, Organizational Agility and Human Capital show positive but insignificant effects on Firm Performance, suggesting that flexibility, adaptability, and workforce quality have not yet been sufficiently institutionalized to generate measurable performance improvements. Many MSMEs continue to rely on informal management practices and limited structured training, which may reduce the effectiveness of these capabilities. However, when examined simultaneously, Digital Marketing Capability, Organizational Agility, and Human Capital collectively exert a significant influence on Firm Performance, highlighting that MSME performance is shaped by the integrated development of internal capabilities rather than by individual factors alone.

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