



## Exploring the impact of consumer behavior and innovation orientation on business strategy and firm performance: Insights from MSMEs in Indonesia

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### ABSTRACT

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#### Keywords

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The purpose of this research is to examine and analyse the influence of consumer behaviour and innovation orientation on firm performance through business strategy, impacting the performance of MSMEs in Karanganyar, Indonesia. The study utilizes a quantitative approach, collecting data through questionnaires and semi-structured interviews with 80 owners of *Mbangun Makhutoromo* MSMEs Cluster in Karanganyar, Indonesia. The collection data were analysed using linear regression and path analysis with SPSS 24 software. The results indicate that consumer behaviour and innovation orientation significantly impact business strategy. Consumer behaviour has both direct and indirect effects on firm performance through business strategy. On the other hand, innovation orientation affects company performance indirectly through business strategy rather than directly. Enhancing company performance is more effective through direct consumer behaviour analysis. Additionally, well-formulated business strategies can leverage innovation orientation to achieve indirect improvement. For MSMEs to improve performance, a focus on understanding and analysing consumer behaviour is crucial. Business strategies should indirectly employ innovation orientation. This approach requires careful adaptation to environmental changes, consumer preferences, and market trends to ensure sustained business growth and competitiveness.

**Contribution/Originality:** This study uniquely integrates consumer behaviour and innovation orientation with business strategy to evaluate their combined effects on MSME performance in Indonesia, providing novel insights into indirect and direct pathways for performance enhancement that have not been extensively explored in existing literature.

## 1. INTRODUCTION

Current economic growth is increasingly competitive, accompanied by increasingly advanced and modern technological developments. This condition forces companies to work harder to improve performance, develop innovation, and develop business strategies, which will be important elements in maintaining the business sustainability. Environmental uncertainty and total changes due to technological advances will make it difficult for companies to manage and run their businesses. This situation must also be faced by MSMEs in Indonesia, which experienced severe shocks after the pandemic of COVID-19.

MSMEs are businesses with limited scale in terms of employees and financial turnover. Indonesia categorizes MSMEs based on criteria like asset value and annual sales. MSMEs are crucial for providing employment opportunities, economic development, and contributing to Gross Domestic Product (GDP). With their role, MSMEs are becoming increasingly important in driving economic growth (Indriyani et al., 2024). The Indonesian government is very aware of the crucial roles of MSMEs and has issued several policies to support and empower them as a key pillar of the national economy (Sugiarto, 2018). In conclusion, MSMEs are a cornerstone of the Indonesian economy, and supporting their growth and development is essential for economic progress, poverty, reduction, and sustainable practices all play significant roles in enhancing the performance and resilience of MSMEs in Indonesia.

In order to compete, MSMEs must develop an integrated strategy to anticipate the impact of environmental changes. With a planned and appropriate strategy, sales of MSME entrepreneurs will get a significant increase in sales in accordance with the business strategy that has been implemented to avoid a decrease in income, maintain a position in the market, maintain competition between MSME entrepreneurs, and be able to attract consumers and then make consumers become customers. To maintain and improve competitive capabilities, hone the ability to find new, innovative breakthrough. Inappropriate strategies are the main reason MSMEs experience a decline in performance and cannot continue their business for long. A crucial element in maintaining the sustainability of a company is having competitive advantages and the ability to conform to the dynamic of changes that will occur (Farida & Setiawan, 2022; Weerasekara & Bhanugopan, 2023). Companies have implemented a variety of activities and strategic steps to improve core competencies in their businesses to compete with competitors (Lee, Wu, & Jong, 2022). MSMEs that have breakthrough innovation in creating new products to support competitive advantage will help them move dynamically in improving marketing skills, adaptability, and improving performance (Octasyulva, Yuliati, Hartoyo, & Soehadi, 2022). Meanwhile, Azizi, Maleki, Moradi-Moghadam, and Cruz-Machado (2016) state that competitive advantage will create a company's defense against its competitors.

MSME management's ability to carefully and comprehensively evaluate activities in all aspects of the business will be very helpful in producing positive performance that meets targets. Owners and management need to develop various strategies to support this success and create competitive advantages. According to Farida and Setiawan (2022) stated that MSMEs need to carry out innovation as a business strategy aimed at maintaining business resilience.

The *Mbangun Makhutoromo* Cluster is a group of MSMEs located in Karanganyar, Central Java, Indonesia. This cluster consists of MSMEs operating in the culinary, craft, and service sectors. In facing increasingly fierce competition, *Mbangun Makhutoromo* Cluster MSMEs need to develop a business strategy and appropriate steps that must be implemented while continuing to analyse the environment and market share so that it can be accepted by consumers. Reliable market strategies include satisfactory service, cheaper prices, discounts for large purchases, quality products, attractive packaging, and product innovation that keeps up with the times. The results of Matcabha's research, Matchaba-Hove and Farrington (2011) show that innovativeness and competitive aggressiveness have a significant and positive impact on business success, whereas autonomy and risk-taking do not have influence.

Cuevas-Vargas, Parga-Montoya, and Fernández-Escobedo (2019) according to his research, performance and customer satisfaction are significantly improved by entrepreneurial orientation, both directly and indirectly. Kadarusman (2020) added that special entrepreneurial experience strengthens the impact of entrepreneurship and market orientation on company performance growth.

Based on strategic management theory, business strategy is influenced by the environment, and the perceptions of business actors influence the business strategy chosen in achieving business performance. The participation of management who have an entrepreneurial and innovative orientation in decision-making influences the business strategy that will be chosen in continuing the business. Based on the thoughts and phenomena explained above, researchers consider analysing the relationship between the influence of business strategy on business performance and the variables consumer behaviour and innovation orientation as independent variables.

## 2. LITERATURE REVIEW

Firm performance is often used as relevant construct variable related to management strategic research. One type of organizational goal is to improve firm performance, which includes improving quality, becoming more creative and improvisatory, and achieving both financial and non-financial results. Understanding company performance is very broad in terms of dimensions and measurement models, so finding an accurate and clear explanation is very difficult. Even though company performance is closely related to strategic management, there are limitations in conceptual terms, there is no proper consideration of its dimensions, and the indicators used are only for convenience (Selvam, Gayathri, Vasanth, Lingaraja, & Marxiaoli, 2016). Many factors influence firm performance, including; productivity, company resources, innovation, customer service, and marketing. Different and highly contrasting measures may be employed in the observation or research process. Researchers may focus on analysing employment growth, but from an entrepreneur's perspective, they may focus on increasing profits. Chandler and Lyon (2001) argued that a fundamental element of corporate performance is a strong temporal component, which in the subsequent process encourages in-depth observation of the nature of company performance. The theoretical and empirical aspects that may or may not influence each other are multifaceted elements that are relevant to company performance (Golubeva, 2021).

Of course there is a correlation between different performance measures, but the relationship may not be very strong. Profitable companies may not have significant employment, while highly innovative companies may not have high sales levels. Firm performance includes managerial, economic, and marketing performance, which contributes to the efficiency, effectiveness, and structure of the company (Taouab & Issor, 2019). Jauch and Glueck (1988) mentioned that company performance can be analysed based on sales level, turnover level, market share controlled, profit level, and return of capital. Firm performance explains the company's capacity to create effective use of its resources, ability to adapt to change, and achieve predetermined targets (Schleicher, Baumann, Sullivan, & Yim, 2019).

Consumer behaviour is not an easy thing to deal with and hard to predict. It is obvious that consumer behaviour is the pattern that is followed by the consumer in the process of purchasing, using, or evaluating goods, service, and ideas that except to satisfy his needs (Nelson, 2021). Companies can gain a competitive advantage by understanding how consumers choose and select goods or services (Singh, Arora, & Choudhry, 2022).

Companies are interested in every human activity, in this system, consumer behaviour is a human activity, discussing consumer behaviour means discussing the scope of human activity only in a more limited scope. Consumers who need products or services have special behaviour that reflects their behaviour as humans. The aim of management science and theory that studies consumer behaviour is to determine changes in consumer tastes and how to influence consumers to decide whether to purchase products or services. According to Kotler and Armstrong (2014), consumer behaviour is a study that examines how people decide to make purchases, what they buy, when they buy, and the reasons behind the purchase. Armstrong (1991) states that studies related to customer behaviour are based on purchasing behaviour carried out by consumers involving payers, users, and buyers. Meanwhile, Blackwell, Miniard, Engel, and Rahman (2017) explains the processes and actions of people to purchase goods and/or services to fulfil personal needs.

Innovation orientation is the tendency of an organization to accept and promote new ideas for the organization (Vij & Bedi, 2016). The aim of this orientation is to produce continuous innovation, which in turn has a double impact both internally and externally on the company's performance in achieving its goals (Fernandes, Ferreira, Lobo, & Raposo, 2020).

Previous studies stated that innovation orientation influences company performance (Arshad, Sulaiman, & Yusr, 2023; Farooq, Vij, & Kaur, 2021; Rajapathirana & Hui, 2018; Zehir, Altindag, & Acar, 2011). Gomes, Seman, Berndt, and Bogoni (2022) state that innovation orientation and the ongoing innovation process provide encouragement in creating value for MSMEs, new businesses, and established businesses. However, it must be acknowledged that the

research that has been carried out does not cover all aspects of existing relationship. Duong (2022) argued that there are limitations in innovation research, which only explains innovation phenomena.

Fleisher (2018) defines business strategy as a series of specific and targeted actions related to organizational goals that are necessary to achieve those goals. Business strategy is how someone can make the right decisions in advancing their company (Mia & Bangchokdee, 2013). Business strategies can also assist entrepreneurs in mitigating risks and increasing business success. Türkeş, Stăncioiu, Băltescu, and Marinescu (2021) stated that business strategies are implemented to increase the competitive level of products and services offered in certain market segments. Business strategy guides the company's goals towards achieving good performance (Latifah, Setiawan, Aryani, & Rahmawati, 2020).

Business strategy influences performance (Farida & Setiawan, 2022) cost leadership strategy (McGee & Sammut-Bonnici, 2015), and product differentiation strategy (Pelham, 2015). In the business community, companies are successful and credible because they understand and realize the importance of having goals in their business strategy (Altok, 2011).

### 2.1. Previous Study

Table 1 displays previous studies that provide a foundation for understanding the interplay between business strategy, consumer behaviour, innovation orientation, and firm performance, highlighting various contexts and results from different regions and sectors.

Table 1. Previous research matrix.

No	Title	Author(s)	Result
1	The relationship between business strategy and customer satisfaction: A study of South African business performance	Liu and Wu (2007)	Consumer behaviour has a positive direct and indirect influence on business strategy.
2	business strategy, culture control, and organizational performance	Fazri, Imam, and Lestari (2018)	Conclude that business strategy significantly influences organizational performance and cultural control. Meanwhile, cultural control has a significant influence on organizational performance
3	Strategic orientation, innovation performance, and the moderating influence of marketing management	Adams, Bodas Freitas, and Fontana (2019)	Companies with a combination of orientation between customer orientation and technology orientation tend to achieve better performance than those with only one orientation.
4	The impact of innovation on the firm performance and corporate social responsibility of Vietnamese manufacturing	Canh, Liem, Thu, and Khuong (2019)	Regarding market share, product and process innovation provides benefits to company performance, but regarding profits and total assets, it does not. Innovation can make a company opaquer, especially when external parties are involved.
5	The effect of innovation capability on business performance: A focus on it and business service companies	Jin and Choi (2019)	The results found that increasing product innovation by the company had a positive impact on company performance related to employee productivity and profit income

## 3. CONCEPTUAL FRAMEWORK AND HYPOTHESIS

### 3.1. Conceptual Framework

Figure 1 outlines the conceptual framework of this research, which explains the relationship between consumer behaviour, innovation orientation, business strategy, and company performance as the variables used. It can be

explained that consumer behaviour and innovation orientation both directly and indirectly influence company performance, which is mediated by business strategy on company performance. Meanwhile, business strategy is a mediation that has an indirect influence on company performance. The arrow indicates the direction of the influence that underlies the hypothesis developed in this study.

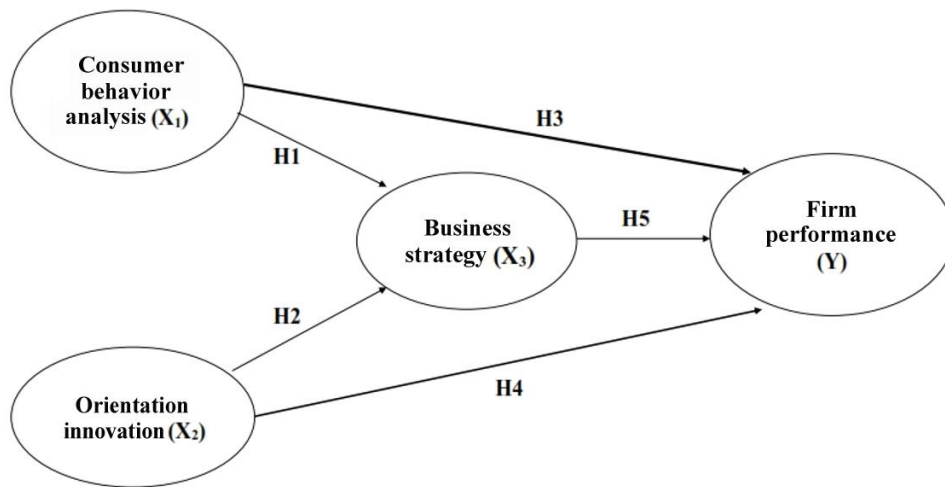


Figure 1. Conceptual framework.

### 3.2. Hypothesis

*H<sub>1</sub>: Consumer behaviour has a significant impact on the business strategy of the MSMEs of Mbangun Makhutoromo Cluster in Karanganyar r, Indonesia.*

*H<sub>2</sub>: Innovation orientation has a significant impact on the business strategy of the MSMEs of Mbangun Makhutoromo Cluster in Karanganyar, Indonesia.*

*H<sub>3</sub>: Consumer behaviour has a significant impact on the performance of the MSMEs of Mbangun Makhutoromo Cluster in Karanganyar, Indonesia.*

*H<sub>4</sub>: Innovation orientation has a significant impact on the performance of the MSMEs of Mbangun Makhutoromo Cluster in Karanganyar, Indonesia.*

*H<sub>5</sub>: Business strategy has a significant impact on the performance of the MSMEs of Mbangun Makhutoromo Cluster in Karanganyar, Indonesia.*

## 4. METHODOLOGY

The research is a quantitative investigative approach based on observational time utilizing convenient sampling methods. The aim of this research is to examine and test the direct and indirect influence of consumer behaviour and innovation orientation on company performance with business strategy as mediation that impact the performance of the *Mbangun Makhutoromo* Cluster MSMEs in Karanganyar, Central Java, Indonesia.

### 4.1. Population and Sample

This study collects data from 80 owners of MSMEs in Karanganyar Regency in Central Java, Indonesia. The MSMEs are part of *Mbangun Makhutoromo* Cluster. The selected respondents are truly representative sample because the cluster has demonstrated innovation and business strategy. Sample data are divided according to categories; gender, age, education level, and marital status. Table 2 displays the results.

### 4.2. Data Collection

Data was collected by observing the activities of MSME leaders. The data used is primary data from respondents regarding questionnaire answers given directly in the period September – November 2023. The

questionnaire given is open and closed questions, which are taken on a Likert scale of 1 - 5.

**Table 2.** Demographic data result.

No	Category	Quantity	Percentage (%)
Gender			
1	Male	55	68.75
2	Female	25	31.25
Age			
1	21 – 30	17	21.25
2	31 – 40	28	35
3	41 – 50	20	25
4	>51	15	18.75
Education			
1	Senior high school	45	56.25
2	Diploma	5	6.25
3	Bachelor degree	20	25
4	Master degree	10	12.5
Marital status			
1	Married	65	81.25
2	Unmarried	15	18.75

#### 4.3. Data Analysis

Validity test uses Pearson's product moment method. A valid value to use is if  $r_{\text{count}} > r_{\text{table}}$ . (Ghozali, 2018). Meanwhile, reliability testing was measured using the Cronbach's Alpha technique with a value of  $> 0.60$ . To test the linear status of the research data distribution, this study used the Multivariate Lagrange test. Data analysis test processing uses SPSS 25 software. SPSS is software that has been widely used by researchers in studying and analysing statistics in various fields, especially the social sciences. It facilitates data management, statistical analysis, and graphical representation, enabling researchers to perform complex statistical calculations and visualize data efficiently (Abidin, 2022; Primasari, Herwiyanti, Widianingsih, & Lestari, 2021; Sijabat, Lionora, Hirawati, Hartono, & Giovanni, 2022; Tahir & Inuwa, 2019; Zelalem & Wubante, 2019).

#### 4.4. Hypothesis Test

The hypothesis testing model in this research adopts a path regression analysis equation model. The  $R^2$  test is determined by the value  $0 \leq R^2 \leq 1$  where the greater the  $R^2$  value, the more precise the linear regression line used as the approach, and if the  $R^2$  value is equal to 1, then it is declared perfect. The correlation coefficient value can be obtained from the product moment person value with a value  $< \alpha = 0.05$ , so there is no relationship.

## 5. RESULT AND DISCUSSION

### 5.1. Validity Test

The validity test serves to determine whether the items used to measure reliability are accurate and reliable. This test ensures that the questionnaire items genuinely reflect the construct being studied and are suitable for statistical analysis. In this research, each variable was measured using 5 question items. The  $r$  values, derived from SPSS Cronbach's Alpha output in the correlation item total correlation column, were used to assess validity. To be considered valid, the  $r$  values must be positive and greater than the critical value of 0.217.

The results show that all the indicators tested are positive and exceed the critical value of 0.217. This confirms that all the indicator items are valid and can accurately measure the intended variables in the study.



5.2. Reliability Test

Cronbach's alpha  $\Rightarrow$  0.6 was used to test the reliability of all items in this study. Table 3 shows the result of the reliability test, where it is known that the Cronbach's alpha value of all tested variables is  $>$  0.6. This study concludes that all variables tested are reliable.

Table 3. Reliability test.

Variable	Cronbach's alpha	Result
Consumer behaviour	0.709	Reliable
Innovation orientation	0.759	Reliable
Business strategy	0.834	Reliable
Firm performance	0.808	Reliable

5.3. Linearity Test

The results of the linearity test are displayed in Table 4, which explains the relationship between all variable components tested in this study. The R<sup>2</sup> value is 0.001 with a sample size of 80 respondents. This result test indicates that the model accounts for only a small portion of the variance in the data. The chi-square  $\chi^2$  calculation reveals  $\chi^2$  count as 0.08, which is less than the critical chi—squares ( $\chi^2$ ) table values of 84.82. Therefore, the data distribution ID was confirmed to follow a linear model.

Table 4. Linearity test.

Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.037 <sup>a</sup>	0.001	-0.038	1.327

Note: <sup>a</sup> Predictors: (Constant), business strategy, consumer. Behaviour, Innovation orientation.

It can be seen that the R<sup>2</sup> value with a sample size of 80 is 0.001. So  $c^2_{count}$  is 0.08 and the  $c^2_{table} = 84.82$ . Then, the calculated  $c^2_{count} < c^2_{table}$ , the correct code is a linear model.

5.4. Partial Test

This can be seen in Table 5, which shows the results of the subtests assessing the impact of consumer behaviour and innovation orientation on business strategy. From the results of the coefficient test, it is known that consumer behaviour has a negative effect on business strategy with a constant coefficient value (Beta) of -0.298 and a known significance value of 0.004, which is below the threshold of 0.05. So it can be said that when consumer behaviour improves, business strategies generally worsen. On the other hand, innovation orientation has a positive effect on business strategy. The standardized coefficient (beta) is 0.626 and the significance value is 0.000, which is a significant positive effect. Thus, increasing innovation orientation leads to improvement of business strategy.

Table 5. t test.

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	Consumer behaviour	-0.364	0.123	-0.298	-2.954	0.004
	Innovative orientation	0.445	0.073	0.626	6.095	0.000

Note: <sup>a</sup>Dependent variable: Business strategy.

The first equation is:

$$Y_1 = -0,298 X_1 + 0,616 X_2 + \epsilon_1$$

Table 5 indicates that  $\beta_1 = -0.298$ , demonstrating that consumer behaviour negatively influences MSME business strategies. Therefore, if consumer behaviour improves, MSME business strategies will decrease. The significance value is 0.004, which is less than 0.05, so Hypothesis 1 is accepted.

For  $\beta_2 = 0.616$ , this shows that innovation orientation positively affects MSME business strategies. Hence, if the innovation orientation of MSME leaders improves, their business strategies will also improve. The significance value is 0.000, which is less than 0.05, so Hypothesis 2 is accepted.

Table 6. Result of t test.

Coefficients <sup>a</sup>						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
	Consumer behaviour	0.626	0.088	0.618	7.073	0.000
	Innovative orientation	-0.061	0.060	-0.102	-1.007	0.317
	Business strategy	0.462	0.078	0.557	5.958	0.000

Note: <sup>a</sup>Dependent variable: Firm performance.

The second equation is:

$$Y_2 = 0.618 X_1 - 0.102 X_2 + 0.557 X_1 + \epsilon_2$$

This can be referred to Table 6 which evaluating the influence of consumer behaviour, innovation orientation, and business strategy on firm performance. The coefficients indicate that:

1. Consumer Behaviour: The standardized coefficient (Beta) is 0.618 with a significance value of 0.000, indicating a significant positive effect on firm performance. Thus, if consumer behaviour improves, firm performance will also improve. This supports Hypothesis 3.
2. Innovation Orientation: The standardized coefficient (Beta) is -0.102 with a significance value of 0.317, indicating no significant direct effect on firm performance. Therefore, Hypothesis 4 is not supported.
3. Business Strategy: The standardized coefficient (Beta) is 0.557 with a significance value of 0.000, indicating a significant positive effect on firm performance. Thus, if business strategy improves, firm performance will also improve. This supports Hypothesis 5.

The second equation is:

$$Y_2 = 0.618 X_1 - 0.102 X_2 + 0.557 X_1 + \epsilon_2$$

The findings show that  $\beta_3 = 0.618$ , suggesting that consumer behavior positively impacts MSME performance. Hence, an improvement in consumer behavior will lead to a boost in the performance of MSMEs. Hypothesis 3 receives support due to the significance level of 0.000 being below 0.05. An innovation orientation negatively impacts the performance of MSMEs when  $\beta_4 = -0.102$ . This implies that the influence of innovation orientation on performance is not substantial, as the significance value of 0.317 is higher than 0.05. Therefore, Hypothesis 4 is rejected. Lastly, a  $\beta_5$  value of 0.557 indicates that the performance of MSMEs benefits from a positive impact of business strategy. The significance level of 0.000 indicates acceptance of Hypothesis 5 as it is below 0.05.

### 5.5. Simultaneous Test

The score of  $F = 31,464$  is significant to  $0.000 < 0.05$  which means that the independent variables together have a significant effect on the performance of *Mbangun Makhutoromo* MSMEs.



Table 7. F test result.

ANOVA <sup>b</sup>						
Model		Sum of squares	Degrees of freedom (df)	Mean squares	F	Sig.
1	Regression	166.406	3	55.469	31.464	0.000 <sup>a</sup>
	Residual	133.982	76	1.763		
	Total	300.387	79			

Note: <sup>a</sup> Predictor: (Constant), business strategy, consumer behaviour, innovation orientation.  
<sup>b</sup>Dependent variable: Firm performance.

Table 7 presents the results of the simultaneous test, which assesses the combined effect of consumer behaviour, innovation orientation, and business strategy on the performance of MSMEs. The F-value is 31.464 with a significance level of 0.000, indicating that the independent variables, when taken together, have a significant impact on MSME performance. This significance level, being less than 0.05, confirms that the model is statistically significant.

Table 8. Determinant coefficient (R)<sup>2</sup>.

Model summary <sup>*</sup>				
Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.573 <sup>a</sup>	0.328	0.311	1.952
2	0.744 <sup>b</sup>	0.554	0.536	1.328

Note: <sup>a</sup> Predictor: (Constant). Innovation orientation, consumer behaviour.  
<sup>b</sup> Predictor: (Constant), business strategy, consumer behaviour, innovation orientation.  
<sup>\*</sup> Dependent variable: Firm performance.

Table 8 presents the results of the R<sup>2</sup> test, which measures the proportion of variance in firm performance explained by the independent variables (consumer behaviour, innovation orientation, and business strategy).

In Model 1, the R<sup>2</sup> value is 0.328, indicating that 32.8% of the variance in firm performance can be explained by consumer behaviour and innovation orientation alone. In Model 2, when business strategy is included, the R<sup>2</sup> value increases to 0.554, indicating that 55.4% of the variance in firm performance can be explained by all three variables together. This increase in the R<sup>2</sup> value from Model 1 to Model 2 demonstrates the significant contribution of business strategy in explaining the variance in firm performance.

### 5.6. R<sup>2</sup> Test

The equation of R<sup>2</sup> is  $e_1^2 = 1 - R_1^2 = 0.558$  and  $e_2^2 = 1 - R_2^2 = 0.482$

The total R<sup>2</sup> =  $1 - (e_1^2 \times e_2^2) = 0.897$

The combined impact of consumer behavior and innovation orientation along with business strategy on the performance of the *Mbangun Makhutoromo* Cluster MSMEs accounts for 89.7% of the total value of R<sup>2</sup>, leaving 10.3% influenced by unexamined variables.

### 5.7. Coefficients Correlation Analysis

Table 9 presents the results of the correlation analysis, indicating the relationships between consumer behaviour, innovation orientation, business strategy, and firm performance:

- The correlation between **\*\*Consumer behaviour\*\*** and **\*\*Business Strategy\*\*** is very low, with a Pearson correlation of -0.064, and is not statistically significant ( $p = 0.573$ ).

- The correlation between **Innovation Orientation** and **Business Strategy** is moderate, with a Pearson correlation of 0.502, and is statistically significant ( $p = 0.000$ ).
- The correlation between **Consumer Behaviour** and **Firm Performance** is moderate, with a Pearson correlation of 0.544, and is statistically significant ( $p = 0.000$ ).
- The correlation between **Innovation Orientation** and **Firm Performance** is moderate, with a Pearson correlation of 0.413, and is statistically significant ( $p = 0.000$ ).
- The correlation between **Business Strategy** and **Firm Performance** is also moderate, with a Pearson correlation of 0.466, and is statistically significant ( $p = 0.000$ ).

**Table 9.** The result of correlation test.

Correlation					
Variables		Consumer behaviour	Innovation orientation	Business strategy	Firm performance
Consumer behaviour	Pearson correlation	1	0.381**	-0.064	0.544**
	Sig. (2-tailed)		0.000	0.573	0.000
	N	80	80	80	80
Innovation orientation	Pearson correlation	0.381**	1	0.502**	0.413**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	80	80	80	80
Business strategy	Pearson correlation	-0.064	0.502**	1	0.466**
	Sig. (2-tailed)	0.573	0.000		0.000
	N	80	80	80	80
Firm performance	Pearson correlation	0.544**	0.413**	0.466**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	80	80	80	80

Note: \*\* Correlation is significant at the 0.01 level (2-tailed).

Based on the correlation test, it is found that the correlation between consumer behaviour and business strategy is very low = -0.064. The relationship between the innovation orientation variable and business strategy is quite strong, with a correlation value of 0.502. The relationship between consumer behaviour variables and MSME performance is 0.554. We can state that this relationship is fairly strong. Innovation orientation is strongly related to MSME performance, with a correlation value of 0.413. Finally, the correlation between business strategy variables and MSME performance is known to be strong, with a correlation of 0.446.

The result also shows the direct and indirect effects. The direct influence value is determined by the value of the path coefficient of the independent variable, whereas the indirect influence is determined by multiplying the path coefficient between the independent variables in one direction.

**Table 10.** Path analysis result.

Variable	Path coefficient	
	Direct effect	Indirect effect
Consumer behaviour → Firm performance	$P_3 = 0.618$	-
Innovation orientation → Firm performance	$P_4 = -0.102$	-
Consumer behaviour → Business strategy → Firm performance	-	$P_1 \times P_5 = -0.298 \times 0.557^{**} = -0.165$
Innovation orientation → Business strategy → Firm performance	-	$P_2 \times P_5 = 0.616 \times 0.557^{**} = 0.343$

Note: \*\* Correlation is significant at the 0.05 level (2-tailed).

Table 10 presents the results of the path analysis, showing the direct and indirect effects of consumer behaviour and innovation orientation on firm performance through business strategy.

## Direct Effect

- Consumer behaviour directly influences firm performance with a path coefficient of 0.618.
- Innovation orientation has a direct effect on firm performance with a path coefficient of -0.102.

## Indirect Effect through Business Strategy

- The indirect effect of consumer behaviour on firm performance through business strategy is calculated by multiplying the path coefficients: ( $P1 \times P5 = -0.298 \times 0.557 = -0.165$ ). The total effect of consumer behaviour on firm performance is ( $0.618 + (-0.165) = 0.783$ ).
- The indirect effect of innovation orientation on firm performance through business strategy is ( $P2 \times P5 = 0.616 \times 0.557 = 0.343$ ). The total effect of innovation orientation on firm performance is ( $-0.102 + 0.343 = 0.241$ ).

This table highlights the combined direct and indirect effects of consumer behaviour and innovation orientation on firm performance, illustrating how business strategy mediates these relationships and contributes to the overall performance of MSMEs.

It is found that consumer behaviour has a direct effect on firm performance with a value of 0.618. Innovation orientation also has a direct impact on firm performance, with a negative coefficient value of -0.102. Additionally, consumer behaviour indirectly affects firm performance through business strategy with a value of -0.165, while the indirect effect of innovation orientation on firm performance through business strategy is 0.343. The total effect of consumer behaviour on firm performance, including the indirect pathway through business strategy, is  $0.618 + (-0.165) = 0.783$ . The total influence of innovation orientation on firm performance, including the indirect effect via business strategy, is  $-0.102 + 0.343 = 0.241$ .

## 6. CONCLUSION AND SUGGESTION

The purpose of this study is to identify and analyse the impact of consumer behaviour and innovation orientation on firm performance and business strategies that affect the performance of MSMEs located in the *Mbangun Makhutoromo* area in Karanganyar, Central Java, Indonesia. The analysis results reveal that consumer behaviour and innovation orientation significantly influence the business strategy of these MSMEs. Additionally, consumer behaviour and innovation orientation significantly affect the performance of *Mbangun Makhutoromo* MSMEs. Furthermore, business strategy has a significant impact on the performance of *Mbangun Makhutoromo* MSMEs. We concluded that both direct and indirect influences exist between variables. The direct influence of consumer behaviour on MSME performance is greater than the indirect influence. MSMEs can leverage these results to enhance their performance through more effective use of the direct route. Meanwhile, the direct and indirect effects of innovation orientation show that the direct influence is smaller than the indirect influence. MSMEs will be more effective at using indirect channels to improve their performance. The author suggests that MSMEs need to analyse environmental changes, market tastes, and changes in market share carefully and precisely. MSMEs need to provide space to hear and receive suggestions, complaints, and input from consumers. Then, MSMEs need to analyse environmental changes, consumer tastes, and changes in market share carefully and precisely. A limitation in this study is the lack of variables tested; it only involves four variables. The author hopes that future research can add wider variables and reach more respondents.

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**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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